

VITA
Lorraine E. Bahrck

Professor of Psychology
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Education

Hampshire College: B.A. 1971-1975
Cornell University: Ph.D. 1975-1979
Major field: Experimental/Cognitive Psychology (Dr. Ulric Neisser)
Minor field: Developmental Psychology (Dr. Eleanor Gibson)
Minor field: Motivation (Dr. A. Wade Boykin)
University of California, Berkeley: Postdoctoral Fellow, 1979-1981 (Dr. John S. Watson)

Academic Positions

Professor of Psychology - Florida International University, 1997- present
Director, Infant Development Research Consortium – Florida International University, 2013-present
Director, Infant Development Research Center - Florida International University, 2002-2013
Visiting Scholar, Department of Psychology, Stanford University, Spring 2010
Associate Professor of Psychology - Florida International University, 1988-1997
Assistant Professor of Psychology - Florida International University, 1983-1988
Director, Infant Development Lab - Florida International University, 1983-present
Assistant Research Psychologist II, University of California, Berkeley, 1981-1983

Awards and Honors

Florida International University Top Scholar Award, 2016
NIH K02 Independent Scientist Award, 2010-2016
Fellow: Association for Psychological Science 2013-present
Florida International University Faculty Award for Excellence in Research, 2013
Florida International University Top Scholar Award, 2011
Florida International University, Competitive Sabbatical Award, Spring 2008
Cognitive Development Society (October 2007) – Editor’s Choice Award for Best Article in *Journal of Cognition and Development*, 2005
Florida International University Foundation Excellence in Research Award, 1987
Postdoctoral Fellow - University of California, Berkeley NICHD training program grant, 1979-1981

Teaching Interests

Developmental psychology, infant development, perceptual learning and development, cognitive psychology, memory, experimental design and research methods, seminars in infant/child attention, perception, and learning, face perception across the life span, autism, the development of intermodal perception, and development of knowledge about the self.

Funded Grants and Fellowships

- NICHHD RO1, *Intersensory Processing, Developmental Trajectories, and Longitudinal Outcomes*. (Principal Investigator). National Institutes of Child Health and Human Development (RO1 HD053776-06). Florida International University, 2013-2018.
- NICHHD RO3, *Effects of Social Cues on Learning and Memory during Early Infancy* (Co-I; Reeb-Sutherland, PI). National Institutes of Child Health and Human Development (RO3 HD082636). Florida International University, 2015-2017.
- NICHHD KO2, *Intersensory Perception of Social Events: Typical and Atypical Development*. (Principal Investigator) National Institutes of Child Health and Human Development (KO2 HD064943). Florida International University, 2010-2017.
- NSF, *Looking Ahead: Previous Gaze Durations Predict Next Gaze Durations in Infancy*. (Co-Investigator). National Science Foundation (BCS-1323927). University of Miami with subcontract to Florida International University, 2013-2016.
- NICHHD RO1, *Development of Intermodal Perception of Social Events: Infancy to Childhood*: (Principal Investigator) National Institutes of Child Health and Human Development (RO1 HD053776). Florida International University, 2008-2014.
- Autism Speaks Research Award, *Attention to Social and Nonsocial Events in Children with Autism* (Principal Investigator) #1906. Florida International University, 2007- 2010.
- NICHHD RO3, *Audiovisual Interactions in Categorization* (Principal Investigator) RO3-HD052602. Florida International University, 2006-2009.
- MARI, *Perception and attention in children with autism*. (Principal Investigator). Marino Autism Research Institute, 2006-2016.
- National Science Foundation, Centers for Science of Learning Catalyst Proposal, *South Florida Research Consortium on the Development of Attention, Perception, Learning, and Memory* (Principal Investigator and Director of Consortium) Florida International University, 2004-2007.
- NIMH RO1, *Intersensory Redundancy and the Development of Perception and Memory* (Principal Investigator) National Institutes of Mental Health (NIMH RO1 MH62226) Florida International University, 2000-2007.
- NICHD RO1, *Intermodal Learning in Infancy II*: (Principal Investigator) RO1 25669 Florida International University, 1996-2002.
- NSF, *Young Children's Reaction to a Natural Disaster: Memory and Stress* (Principal Investigator; Janat Parker, co-investigator). Florida International University, Jan 1993- Jan 1996.
- NICHD RO1, *Intermodal Learning in Infancy*: (Principal Investigator) Florida International University, 1990-1996.
- NIMH, ADAMHA Small Grants Program, "Long-Term Memory for Dynamic Aspects of Visual Events in Infancy." (Principal Investigator). Florida International University, 1988-1989.
- NICHD RO1, *Development of Audio-Visual Event Perception in Infancy*. (Principal Investigator). Florida International University, 1984-1987.

NICHD RO1, *Development of Sensitivity to Temporal Structure in Infancy*. (with John S. Watson as sponsor), University of California, Berkeley, 1981-1983.

Membership in Professional Societies

American Psychological Association
Association for Psychological Science
International Society for Developmental Psychobiology
International Society for Ecological Psychology
International Society for Infant Studies
Society for Research in Child Development
International Society for Autism Research

Editorial Boards

Infancy (2004-present)
Developmental Psychobiology (2009-present)

Ad Hoc Reviewer

Brain and Behavioral Science
Child Development
Cognition
Cognitive Research: Principles and Implications
Current Biology
Developmental Psychology
Developmental Review
Developmental Science
European Journal of Developmental Psychology
Infant Behavior and Development
Infant and Child Development
Journal of Autism and Developmental Disorders
Journal of Experimental Child Psychology
Journal of Experimental Psychology: Human Perception and Performance
Neuropsychologia
NeuroReport
Neuroscience and Biological Reviews
PLoS ONE
Psychological Science
Psychological Bulletin
Psychological Review
National Science Foundation -- research proposals
National Institutes of Health -- research proposals

Grant Review Panel Participation

NIH Behavioral and Biobehavioral Processes study section panel (BBBP-4)
NIH Behavioral and Biobehavioral Processes panel: Special Emphasis Panel (BBBP-5)
NIH Cognition and Perception study section panel

Refereed Publications

Heyduk, R.G. & Bahrnick, L.E. (1977). Complexity, response competition, and preference; implications for affective consequences of repeated exposure. *Motivation and Emotion, 1*, 249-259. DOI: 10.1007/BF00998863

Walker, A.S., Owsley, C.J., Megaw-Nyce, J., Gibson, E.J., & Bahrnick, L.E. (1980). Detection of elasticity as an invariant property of objects. *Perception, 9*, 713-718. DOI: 10.1068/p090713 PMID: 7220243

Bahrnick, L.E., Walker, A.S., & Neisser, U. (1981). Selective looking by infants. *Cognitive Psychology, 13*, 377-390. DOI: 10.1016/0010-0285(81)90014-1

Bahrnick, L.E. (1983). Infants' perception of substance and temporal synchrony in multimodal events. *Infant Behavior and Development, 6*, 429-451. DOI: 10.1016/S0163-6383(83)90241-2

Bahrnick, L.E. & Watson, J.S. (1985). Detection of intermodal proprioceptive-visual contingency as a potential basis of self-perception in infancy. *Developmental Psychology, 21*, 963-973. DOI: 10.1037/0012-1649.21.6.963

Bahrnick, L.E. (1987). Infants' intermodal perception of two levels of temporal structure in natural events. *Infant Behavior and Development, 10*, 387-416. DOI: 10.1016/0163-6383(87)90039-7

Bahrnick, L.E. (1988). Intermodal learning in infancy: Learning on the basis of two kinds of invariant relations in audible and visible events. *Child Development, 59*, 197-209. DOI: 10.2307/1130402 PMID: 3342712

Bahrnick, L.E. & Pickens, J.N. (1988) Classification of bimodal English and Spanish language passages by infants. *Infant Behavior and Development, 11*, 277-296. DOI: 10.1016/0163-6383(88)90014-8

Walker-Andrews, A., Bahrnick, L.E., Raglioni, S.S., & Diaz, I. (1991). Infants' bimodal perception of gender. *Ecological Psychology, 3*, 55-75. DOI: 10.1207/s15326969eco0302_1

Bahrnick, L.E. (1992). Infants' perceptual differentiation of amodal and modality-specific audio-visual relations. *Journal of Experimental Child Psychology, 53*, 180-199. DOI: 10.1016/0022-0965(92)90048-B PMID: 1578197

Bahrnick, H.P., Bahrnick, L.E., Bahrnick, A.S., & Bahrnick, P.O. (1993). Maintenance of foreign language vocabulary and the spacing effect. *Psychological Science, 4*, 316-321. DOI: 10.1111/j.1467-9280.1993.tb00571.x

Bahrick, L.E. (1994). The development of infants' sensitivity to arbitrary intermodal relations. *Ecological Psychology*, 6, 111-123. DOI: 10.1207/s15326969eco0602_2

Bahrick, L.E. & Pickens, J.N. (1994). Amodal relations: The basis for intermodal perception and learning. In D. Lewkowicz and R. Lickliter, (Eds.), *The development of intersensory perception: Comparative perspectives*, (pp. 205-233). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bahrick, H.P., Hall, L.E., Goggin, J.P., Bahrick, L.E., & Berger, S.A. (1994). Fifty years of language maintenance and language dominance in bilingual Hispanic immigrants. *Journal of Experimental Psychology: General*, 123, 264-283. DOI: 10.1037/0096-3445.123.3.264 PMID: 7931092

Fernandez, M. & Bahrick, L.E. (1994). Infants' sensitivity to arbitrary object-odor pairings. *Infant Behavior and Development*, 17, 463-466. DOI: 10.1016/0163-6383(94)90040-X

Bahrick, L.E. & Pickens, J.N. (1995). Infant memory for object motion across a period of three-months: Implications for a four-phase attention function. *Journal of Experimental Child Psychology*, 59, 343-371. DOI: 10.1006/jecp.1995.1017 PMID: 7622984

Bahrick, L.E. (1995). Intermodal origins of self-perception. In P. Rochat (Ed.), *The self in infancy: Theory and research* (pp. 349-373). North Holland, The Netherlands: Elsevier Science. DOI: 10.1016/S0166-4115(05)80019-6

Pickens, J.N. & Bahrick, L.E. (1995). Infants' discrimination of bimodal events on the basis of rhythm and tempo. *British Journal of Developmental Psychology*, 13, 223-236. DOI: 10.1111/j.2044-835X.1995.tb00676.x

Bahrick, L.E., Moss, L., & Fadil, C. (1996). The development of visual self-recognition in infancy. *Ecological Psychology*, 8, 189-208. DOI: 10.1207/s15326969eco0803_1

Bahrick, L.E., Hernandez-Reif, M., & Pickens, J.N. (1997). The effect of retrieval cues on visual preferences and memory in infancy: Evidence for a four-phase attention function. *Journal of Experimental Child Psychology*, 67, 1-20. DOI: 10.1006/jecp.1997.2399 PMID: 9344484

Pickens, J.N. & Bahrick, L. E. (1997). Do infants perceive invariant tempo and rhythm in auditory-visual events? *Infant Behavior and Development*, 20, 349-357. DOI: 10.1016/S0163-6383(97)90006-0

Parker, J., Bahrick, L.E., Lundy, B., Fivush, R., & Levitt, M. (1998). Effects of stress on children's memory for a natural disaster. In C.P. Thompson, D.J. Hermann, J.D. Read, D. Bruce, D.G., Payne, and M.P. Togli (Eds.), *Eyewitness Memory: Theoretical and Applied Perspectives*, (pp 31-54). Mahwah, NJ: Erlbaum Associates.

Gogate, L.J. & Bahrick, L.E. (1998). Intersensory redundancy facilitates learning of arbitrary relations between vowel sounds and objects in seven-month-old infants, *Journal of Experimental Child Psychology*, 69, 1-17. DOI: 10.1006/jecp.1998.2438 PMID: 9637756

Bahrick, L.E., Netto, D., & Hernandez-Reif, M. (1998). Intermodal perception of adult and child faces and voices by infants. *Child Development*, 69, 1263-1275. DOI: 10.2307/1132264 PMID: 9839414

Bahrnick, L.E., Parker, J., Fivush, R., & Levitt, M. (1998). The effects of stress on young children's memory for a natural disaster. *Journal of Experimental Psychology: Applied*, 4, 308-331. DOI: 10.1037/1076-898X.4.4.308

Bahrnick, L.E. (2000). Increasing specificity in the development of intermodal perception. In D. Muir & A. Slater (Eds.), *Infant Development: The Essential Readings*, (pp.117-136). Oxford, England: Blackwell.

Bahrnick, L.E. & Lickliter, R. (2000). Intersensory redundancy guides attentional selectivity and perceptual learning in infancy. *Developmental Psychology*, 36, 190-201. DOI: 10.1037/0012-1649.36.2.190 PMID: PMC2704001

Lickliter, R. & Bahrnick, L.E. (2000). The development of infant intersensory perception: Advantages of a comparative convergent-operations approach. *Psychological Bulletin*, 126, 260-280. DOI: 10.1037/0033-2909.126.2.260 PMID: 10748643

Gogate, L., Bahrnick, L.E., & Watson, J.D. (2000). A study of multimodal motherese: The role of temporal synchrony between verbal labels and gestures. *Child Development*, 71, 878-894. DOI: 10.1111/1467-8624.00197 PMID: 11016554

Bahrnick, L. E. (2001). Increasing specificity in perceptual development: Infants' detection of nested levels of multimodal stimulation. *Journal of Experimental Child Psychology*, 79, 253-270. DOI: 10.1006/jecp.2000.2588 PMID: 11394929

Hernandez-Reif, M. & Bahrnick, L.E. (2001). The development of visual-tactile perception of objects: Amodal relations provide the basis for learning arbitrary relations. *Infancy*, 2, 51-72. DOI: 10.1207/S15327078IN0201_4

Gogate, L. & Bahrnick, L.E. (2001). Intersensory redundancy and seven-month-old infants' memory for arbitrary syllable-object relations. *Infancy*, 2, 219-231. DOI: 10.1207/S15327078IN0202_7

Gogate, L., Walker-Andrews, A.S., & Bahrnick, L.E. (2001). Intersensory origins of word comprehension: An ecological-dynamic systems view (Target Article). *Developmental Science*, 4, 1-37. DOI: 10.1111/1467-7687.00143

Lickliter, R. & Bahrnick, L.E. (2001). The salience of multimodal sensory stimulation in early development: Implications for the issue of ecological validity. *Infancy*, 2, 451-467. DOI: 10.1207/S15327078IN0204_04

Walker-Andrews, A. & Bahrnick, L.E. (2001). Perceiving the real world: Infants' detection of and memory for social information. *Infancy*, 2, 469-481. DOI: 10.1207/S15327078IN0204_05

Flom, R. & Bahrnick, L.E. (2001). The global array: Not new to infant researchers (Commentary). *Behavioral and Brain Sciences*, 24, 221-222. DOI: 10.1017/S0140525X01303941

Lickliter, R., Bahrnick, L.E., & Honeycutt, H. (2002). Intersensory redundancy facilitates prenatal perceptual learning in bobwhite quail (*Colinus virginianus*) embryos. *Developmental Psychology*, 38, 15-23. DOI: 10.1037/0012-1649.38.1.15 PMID: 11806697

Bahrnick, L.E. (2002). Generalization of learning in three-and-a-half-month-old infants on the basis of amodal relations. *Child Development, 73*, 667-681. DOI: 10.1111/1467-8624.00431 PMID: 12038544

Bahrnick, L.E., Flom, R., & Lickliter, R. (2002). Intersensory redundancy facilitates discrimination of tempo in 3-month-old infants. *Developmental Psychobiology, 41*, 352-363. DOI: 10.1002/dev.10049 PMID: 12430159

Bahrnick, L.E., Gogate, L.J., & Ruiz, I. (2002). Attention and memory for faces and actions in infancy: The salience of actions over faces in dynamic events. *Child Development, 73*, 1629-1643. DOI: 10.1111/1467-8624.00495 PMID: 12487483

Bahrnick, L.E. & Lickliter, R. (2002). Intersensory redundancy guides early perceptual and cognitive development. In R. Kail (Ed.), *Advances in Child Development and Behavior, Vol. 30* (pp. 153-187). New York: Academic Press. DOI: 10.1016/S0065-2407(02)80041-6

Bahrnick, L.E. (2003). Development of intermodal perception. In L. Nadel (Ed.) *Encyclopedia of Cognitive Science, Vol.2₂* (pp.614-617). London: Nature Publishing Group. DOI: 10.1002/0470018860.s00518

Bahrnick, L.E. (2004). The development of perception in a multimodal environment. In G. Bremner, & A. Slater, (Eds.), *Theories of infant development* (pp. 90-120). Malden, MA: Blackwell. DOI: 10.1002/9780470752180.ch4

Lickliter, R. & Bahrnick, L.E. (2004). Perceptual development and the origins of multisensory responsiveness. In G. Calvert, C. Spence, & B.E. Stein (Eds). *Handbook of multisensory processes* (pp. 643-654). Cambridge, MA: MIT.

Fivush, R., Sales, J.M., Goldberg, A., Bahrnick, L., & Parker, J. (2004). Weathering the storm: Children's long-term recall of Hurricane Andrew. *Memory, 12*, 104-118. DOI: 10.1080/09658210244000397 PMID: 15098624

Bahrnick, L.E., Lickliter, R., & Flom, R. (2004). Intersensory redundancy guides the development of selective attention, perception, and cognition in infancy. *Current Directions in Psychological Science, 13*, 99-102. DOI: 10.1111/j.0963-7214.2004.00283.x

Lickliter, R., Bahrnick, L.E., & Honeycutt, H. (2004). Intersensory redundancy enhances memory in bobwhite quail embryos. *Infancy, 5*, 253-269. DOI: 10.1207/s15327078in0503_1

Bahrnick, L.E. & Lickliter, R. (2004). Infants' perception of rhythm and tempo in unimodal and multimodal stimulation: A developmental test of the intersensory redundancy hypothesis. *Cognitive, Affective, and Behavioral Neuroscience, 4*, 137-147. DOI: 10.3758/CABN.4.2.137 PMCID: PMC2738586

Bahrnick, L.E., Hernandez-Reif, M., & Flom, R. (2005). The development of infant learning about specific face-voice relations. *Developmental Psychology, 41*, 541-552. DOI: 10.1037/0012-1649.41.3.541 PMID: 15910161

Bahrick, L.E., Vaillant-Molina, M., Shuman, M.A., Batista, L.C., Newell, L.C., Castellanos, I., & Williams, T.S. (2005). The salience of actions over faces for young infants. In H. Heft & K.L. Marsh (Eds.), *Studies in Perception and Action XIII*, (pp. 1-4). Lawrence Erlbaum Associates.

Sales, J.M., Fivush, R., Parker, J., & Bahrick, L.E. (2005). Stressing memory: Long-term relations among children's stress, recall and psychological outcome following Hurricane Andrew. *Journal of Cognition and Development*, 6, 529-545. DOI: 10.1207/s15327647jcd0604_5

Bahrick, L.E., Lickliter, R., & Flom, R. (2006). Up versus down: The role of intersensory redundancy in the development of infants' sensitivity to the orientation of moving objects. *Infancy*, 9, 73-96. DOI: 10.1207/s15327078in0901_4 PMCID: PMC2705130

Lickliter, R., Bahrick, L.E., & Markham, R.G. (2006). Intersensory redundancy educates selective attention in bobwhite quail embryos. *Developmental Science*, 9, 604-615. DOI: 10.1111/j.1467-7687.2006.00539.x PMCID: PMC1813927

Parker, J.F., Bahrick, L.E., Fivush, R., & Johnson, P. (2006). The impact of stress on mothers' memory of a natural disaster. *Journal of Experimental Psychology: Applied*, 12, 142-154. DOI: 10.1037/1076-898X.12.3.142 PMID: 16953741

Flom, R. & Bahrick, L.E. (2007). The development of infant discrimination of affect in multimodal and unimodal stimulation: The role of intersensory redundancy. *Developmental Psychology*, 43, 238-252. DOI: 10.1037/0012-1649.43.1.238 PMCID: PMC2704007

Lickliter, R. & Bahrick, L.E. (2007). Thinking about development: The value of animal-based research for the study of human development. *European Journal of Developmental Science*. 1, 172-183. DOI: 10.3233/DEV-2007-1210 PMCID: PMC2930799

Bahrick, L.E. & Hollich, G. (2008). Intermodal perception. In M. M. Haith & J. B. Benson, (Eds.), *Encyclopedia of Infant and Early Childhood Development (Vol. 2, pp. 164-176)*. San Diego, CA: Academic Press.

Bahrick, L.E. & Newell, L. (2008). Infant discrimination of faces in naturalistic events: Actions are more salient than faces. *Developmental Psychology*, 44, 983-996. DOI: 10.1037/0012-1649.44.4.983 PMCID: PMC2738585

Bahrick, L.E., & Lickliter, R. (2009). Perceptual development: Intermodal perception. In B. Goldstein (Ed.), *Encyclopedia of Perception, Vol. 2*, (pp. 753-756). Newbury Park, CA: Sage Publishers.

Bahrick, L.E. (2009). Perceptual development: Amodal perception. In B. Goldstein (Ed.), *Encyclopedia of Perception, Vol. 1*, (pp. 44-46). Newbury Park, CA: Sage Publishers.

Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., Bahrick, L., Andrews, H., & Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction. *Attachment and Human Development*, 12, 3-141. DOI: 10.1080/14616730903338985 PMCID: PMC3763737

Jaime, M., Bahrick, L.E., & Lickliter, R. (2010). The critical role of temporal synchrony in the salience of intersensory redundancy during prenatal development. *Infancy, 15*, 61-82. DOI: 10.1111/j.1532-7078.2009.00008.x PMID: PMC3071537

Bahrick, L.E., Lickliter, R., Castellanos, I., & Vaillant-Molina, M. (2010). Increasing task difficulty enhances effects of intersensory redundancy: Testing a new prediction of the Intersensory Redundancy Hypothesis. *Developmental Science, 13*, 731-737. DOI: 10.1111/j.1467-7687.2009.00928.x PMID: PMC2931424

Bahrick, L.E. (2010). Intermodal perception and selective attention to intersensory redundancy: Implications for typical social development and autism. In G. Bremner & T.D. Wachs (Eds.), *Blackwell handbook of infant development* (2nd ed., pp.120-166). Oxford, England: Blackwell.

Flom, R. & Bahrick, L.E. (2010). The effects of intersensory redundancy on attention and memory: Infants' long-term memory for orientation in audiovisual events. *Developmental Psychology, 46*, 428-436. DOI: 10.1037/a0018410 PMID: PMC2897054

Bahrick, L.E. & Lickliter, R. (2012). The role of intersensory redundancy in early perceptual, cognitive, and social development. In A. Bremner, D.J. Lewkowicz, & C. Spence (Eds.), *Multisensory development* (pp. 183-205). Oxford, England: Oxford University.

Bahrick, L.E. & Todd, J.T. (2012). Multisensory processing in autism spectrum disorders: Intersensory processing disturbance as a basis for atypical development. In B. E. Stein, (Ed.), *The new handbook of multisensory processes* (pp. 657-674). Cambridge, MA: MIT.

Vaillant-Molina, M., & Bahrick, L.E. (2012). The role of intersensory redundancy in the emergence of social referencing in 5.5-month-old infants. *Developmental Psychology, 48*, 1-9. DOI: 10.1037/a0025263 PMID: PMC3966294

Beebe, B., Lachmann, F., Markese, S., & Bahrick, L.E. (2012). On the origins of disorganized attachment and internal working models: Paper I. A dyadic systems approach. *Psychoanalytic Dialogues: The International Journal of Relational Perspectives, 22*, 253-272. DOI: 10.1080/10481885.2012.666147

Beebe, B., Lachman, F., Markese, S., Bruck, K.A., Bahrick, L.E., Chen, H., Cohen, P., Andrews, H., Feldstein, S., & Jaffe, J. (2012). On the origins of disorganized attachment and internal working models: Paper II: An empirical microanalysis of 4-month-mother-infant interaction. *Psychoanalytic Dialogues: The International Journal of Relational Perspectives, 22*, 352-374. DOI: 10.1080/10481885.2012.679606 PMID: PMC3469312

Lickliter, R., & Bahrick, L.E. (2013). The concept of homology as a basis for evaluating developmental mechanisms: Exploring selective attention across the life-span. *Developmental Psychobiology, 55*, 76-83. DOI: 10.1002/dev.21037 PMID: PMC3962041

Bahrick, L.E., Lickliter, R., & Castellanos, I. (2013). The development of face perception in infancy: Intersensory interference and unimodal visual facilitation. *Developmental Psychology, 49*, 1919-1930. DOI: 10.1037/a0031238 PMID: PMC3975831

Bahrick, L.E. (1995, November). Amodal relations and intermodal learning in infancy. Emory University, Atlanta, GA, Department of Psychology, Colloquium Series.

Bahrick, L.E. (1996, February). Amodal relations and intermodal learning in infancy. University of Miami, Miami, FL, Department of Psychology Colloquium Series.

Bahrick, L.E. (1996, February). Amodal relations as a basis for intermodal learning in infancy. Rutgers University, New Brunswick, NJ, Department of Psychology, Developmental Program Colloquia.

Parker, J., Bahrick, L.E., Fivush, R., & Levitt, M. (1996, June). Children's memory for the Hurricane: A content analysis. Presented at NATO, Advanced Study Institute, Italy: *Recollections of Trauma: Scientific Research and Clinical Practice*.

Bahrick, L.E. (1996, October). Amodal relations and intermodal learning in infancy. Florida International University, Miami, FL, Department of Psychology Colloquium Series.

Bahrick, L.E. (1997, January). Intersensory perception in human infants. *Twelfth Annual Winter Conference on Current Issues in Developmental Psychobiology*, Anguilla, British West Indies.

Bahrick, L.E. (1999, March). The development of intersensory perception: Increasing specificity and intersensory redundancy. Florida Atlantic University, Boca Raton, FL, Department of Psychology Colloquium Series.

Lickliter, R. & Bahrick, L. (2002, January). Perceptual development and origins of multisensory responsiveness. *Sixteenth Annual Winter Conference on Current Issues in Developmental Psychobiology*. Palm Beach, Aruba.

Bahrick, L. (2002, January). Intersensory redundancy and the development of attention and perception in human infants. *Sixteenth Annual Winter Conference on Current Issues in Developmental Psychobiology*. Palm Beach, Aruba.

Bahrick, L.E. (2004, January). The development of intersensory perception of faces and voices. *Eighteenth Annual Winter Conference on Current Issues in Developmental Psychobiology*. St. Croix, U.S. Virgin Islands.

Bahrick, L.E. (2004, February). The development of intersensory perception: The role of intersensory redundancy. Department of Psychology, Infant Development Research Center, Florida International University.

Bahrick, L.E. (2004, March). The development of intersensory perception: The importance of intersensory redundancy. Indiana University School of Medicine: DeVault Otologic Research Lab, Department of Otolaryngology, Indianapolis, IN.

Bahrick, L. E. (2005, May). The role of intersensory redundancy in the development of perception and cognition. International Workshop: Processing of Multimodal Information in Animals and Humans. Vannes, Brittany, France.

Bahrick, L.E. (2007, April). The role of intersensory redundancy in the development of attention, perception, and cognition. New York University, Department of Psychology.

Bahrick, L.E. (2008, January). Attention and intersensory perception of social and nonsocial events in children with autism. Marino Autism Research Institute Meeting, Plantation, FL.

Bahrick, L.E. (2009, April). Development of attention, intersensory perception, and social orienting in typical infants and children with autism. Florida International University, Office of Sponsored Research Activities, Meet the FIU Researchers Forum.

Bahrick, L.E., & Lickliter, R. (2009, August). Prenatal sensory experience: Implications for Infant development. Presented at the *International Ethological Conference*, Rennes, France.

Bahrick, L. E. (2010, February). Intersensory redundancy, selective attention, and autism. The Center for Infant Studies, Department of Psychology, Stanford University, Stanford, CA.

Bahrick, L. E. (2010, March). Workshop: Applications of the intersensory redundancy hypothesis to research on early development. Cognitive/developmental graduate student reading group, Department of Psychology, Stanford University, Stanford, CA.

Bahrick, L. E. (2011, February). Development of attention, intersensory perception, and social orienting in typical infants and children with autism. *FAU/FIU Conference on Cognition and Cognitive Development*, Boca Raton, FL.

Lickliter, R. & Bahrick, L. E. (2011, August). Development across the life-span: The case of intersensory perception. Invited speakers, NSF sponsored workshop, *Exploring the Concept of Homology in Developmental Psychology*, Dalhousie University, Halifax, Nova Scotia.

Bahrick, L. E., Todd, J.T. (2013, November). Individual differences in developmental trajectories of attention and intersensory processing. Paper presented at the meeting of the *Society for the Study of Human Development*, Fort Lauderdale, FL.

Soska, K.C. and Bahrick, L. E. (2015, April). Individual differences in infant attention and intersensory processing predict cognitive and language skills. Colloquium, *Brown Bag Series*, Department of Psychology, University of Miami, Miami FL.

Bahrick, L. E. (2016, March). The Development of Intersensory Perception: New Methods and New Directions. Colloquium, Department of Psychology, University of Tennessee.

Conference Presentations and Published Abstracts

Bahrick, L.E. & Walker, A.S. (1978, April). Infants' perception of amodal information in natural events. Paper presented at *Eastern Psychological Association Meetings*, Washington, D.C.

Bahrick, L. E. (1980). Infants' perception of properties of objects as specified by amodal information in auditory-visual events. Doctoral dissertation, Cornell University, Ithaca, N.Y. Abstract published in *Dissertation Abstracts International*, 1980, 41, (No.01), 374B.

Walker, A.S., Bahrick, L.E., & Neisser, U. (1980, April). Selective looking to multimodal events by infants. Paper presented at the *International Conference on Infant Studies*, New Haven, CT.

Bahrick, L.E. (1980, April). Infants' perception of substance and temporal synchrony information in multimodal events. Paper presented at the *International Conference on Infant Studies*, New Haven, CT.

Bahrick, L.E. & Watson, J.S. (1983, April). Contingency perception as a basis for early self-perception. Paper presented at the *Society for Research in Child Development*, Detroit, MI. Abstract published in the *Society for Research in Child Development: Abstracts*, 1983, 4, 8.

Bahrick, L.E. (1984, April). Perceptual learning of intermodal relations in infancy. Paper presented at the *International Conference on Infant Studies*, New York, NY. Abstract published in *Infant Behavior and Development*, 1984, 7 (Special ICIS Issue), 18.

Bahrick, L.E., Pickens, J., Szuchman, L., & Ott, D.M. (1987, April). Classification of bimodal, naturalistic speech on the basis of language membership by five-month-old infants. Paper presented at the *Society for Research in Child Development*, Baltimore, MD. Abstract published in the *Society for Research in Child Development: Abstracts*, 1987, 6, 11.

Pickens, J.N. & Bahrick, L.E. (1988, April). Infants' perception of invariant rhythm and tempo. *International Conference on Infant Studies*, Washington, D.C. Abstract published in the Special ICIS issue, *Infant Behavior and Development: Abstracts*, 11, 259.

Bahrick, L.E. & Pickens, J.N. (1989, April). Infant memory for object motion across a one-month period as indexed by a familiarity preference. *Society for Research in Child Development*, Kansas City, MO. Abstract published in the *Society for Research in Child Development Abstracts*, 6, 183.

Bahrick, L.E. (1989, July). Perceptual differentiation of audio-visual events by infants. Invited presentation: *International Conference on Event Perception and Action*, Oxford, Ohio.

Bahrick, L.E. & Pickens, J.N. (1990, April). Reactivation of infant memory for object motion: Evidence for a 3-phase model of infant attention. *International Conference on Infant Studies*, Montreal, Canada. Abstract published in the Special ICIS issue, *Infant Behavior and Development Abstracts*, 13, 251.

Bahrick, L.E. (1992, May). The development of infants' detection of arbitrary audio-visual relations. *International Conference on Infant Studies*, Miami Beach, FL. Abstract published in the Special ICIS issue, *Infant Behavior and Development*, 15, 276.

Soutollo, D., Hernandez-Reif, M., & Bahrick, L.E. (1992, May). Infants' bimodal perception of adult and child faces and voices. *International Conference on Infant Studies*, Miami Beach, FL. Abstract published in the Special ICIS issue, *Infant Behavior and Development*, 15, 707.

Bahrick, L.E. (1993, March). Intermodal learning and transfer in three-month-old infants. *Society for Research in Child Development*, New Orleans, LA. Abstract published in *60th Anniversary Meeting of the Society for Research in Child Development*, 9, 243.

Fadil, C.A., Moss, L.E., & Bahrick, L.E. (1993, March). Infants' visual recognition of their own faces. *Society for Research in Child Development*, New Orleans, LA. Abstract published in *60th Anniversary Meeting of the Society for Research in Child Development*, 9, 345.

Bahrick, L.E. (1993, August). Amodal relations and intermodal learning in infancy. Invited address: *International Conference on Event Perception and Action*, Vancouver, BC, Canada.

Bahrick, L.E. (1994, June). Infant memory after a 3-month delay: Familiarity versus null preferences. *International Conference on Infant Studies*, Paris, France. Abstract published in the Special ICIS issue, *Infant Behavior and Development*, 17, 507.

Hernandez-Reif, M., Soutollo, D., Bahrick, L.E., & Fernandez, I. (1994, June). Infants' matching of adult and child faces and voices. *International Conference on Infant Studies*, Paris, France. Abstract published in the Special ICIS issue, *Infant Behavior and Development*, 17, 697.

Parker, J., Bahrick, L.E., Lundy, B., Fivush, R., & Levitt, M.J. (1994, August). The effects of stress on memory for a natural disaster. *Practical Aspects of Memory Conference*, College Park, MD.

Bahrick, H.P., Hall, L.K., Goggin, J.P., Bahrick, L.E., & Berger, S.A. (1994, August). Fifty years of language maintenance in bilingual Hispanic immigrants. *Practical Aspects of Memory Conference*, College Park, MD.

Hernandez-Reif, M. & Bahrick, L. (1995, March). Infants' visual-tactual perception of amodal and arbitrary relations. *Society for Research in Child Development*, Indianapolis, IN.

Parker, J., Bahrick, L.E., Lundy, B.L., Levitt, M.J., & Fivush, R. (1995, July). Young children's memory for Hurricane Andrew: Relations between memory and stress. *Society for Applied Research in Memory and Cognition*, Vancouver, BC.

Gogate, L.J., & Bahrick, L. E. (1996, April). Learning of arbitrary vowel-object relations by 7-month-old infants. *International Conference on Infant Studies*, Providence, RI.

Hernandez-Reif, M. & Bahrick, L.E. (1996, April). Perceiving visual-tactile relations in infancy. *International Conference on Infant Studies*, Providence, RI.

Bahrick, L.E. (1996, April). Increasing specificity in the development of two nested amodal relations. *International Conference on Infant Studies*, Providence, RI.

Parker, J., Bahrick, L.E., Fivush, R., & Levitt, M. (1996, June). Children's memory for the Hurricane: A content analysis. NATO, Advanced Study Institute: *Recollections of Trauma: Scientific Research and Clinical Practice*.

Bahrick, L.E. (1996, August). Increasing specificity in the development of intermodal perception. *International Society for the Study of Behavioral Development*, Quebec City, Canada.

Bahrick, L.E. (1997, April). Intermodal learning and transfer in 4 1/2-month-old infants. *Society for Research in Child Development*, Washington, D.C.

Gogate, L.J. & Bahrick, L.E. (1997, April). Synchrony facilitates learning of arbitrary vowel-object relations by 7-month-old infants. *Society for Research in Child Development*, Washington, D.C.

Ruiz, Y., Gogate, L.J., & Bahrick, L.E. (1997, May). Infants' memory for actions and faces at 5-months. Convention of the *American Psychological Society*, Washington, D.C.

Lickliter, R., Bahrick, L.E., Columbus, M., & Sleigh, M. (1997, October). Augmented unimodal sensory experience alters perceptual responsiveness to maternal cues in bobwhite quail chicks. *International Society for Developmental Psychobiology*, New Orleans, LA.

Soza, R. & Bahrick, L.E. (1998, March). The effects of stress on young children's memory for free and cued recall action sequences. *Florida Cognition Conference*, Miami, FL.

Del Pino, N. & Bahrick, L.E. (1998, March). Intermodal self-perception: Seven-month-old infants match their voices with their faces. *Florida Cognition Conference*, Miami, FL.

Bahrick, L.E. & Lickliter, R. (1998, April). Intersensory redundancy guides infant attention. *International Conference on Infant Studies*, Atlanta, GA.

Bahrick, L.E. (1998, April). Increasing specificity in the development of intermodal perception. Symposium presentation at the *International Conference on Infant Studies*, Atlanta, GA.

Del Pino, N., Gogate, L., & Bahrick, L.E. (1998, April). Intermodal self-perception: Infants match their voices with their faces. *International Conference on Infant Studies*, Atlanta, GA.

Gogate, L., Bahrick, L.E., & Watson, J.S. (1998, April). Maternal bimodal communication style matches the infant's level of lexical comprehension. *International Conference on Infant Studies*, Atlanta, GA.

Bahrick, L.E. & Lickliter, R. (1998, July). Spatial incongruity interferes with intermodal learning in 3-month-old infants. *International Society for Developmental Psychobiology*, Orleans, France.

Lickliter, R. & Bahrick, L.E. (1998, July). Effects of augmented unimodal sensory experience on bobwhite quail chicks' preference for spatially collocated maternal stimulation. *International Society for Developmental Psychobiology*, Orleans, France.

Bahrick, L.E. (1999, January). The salience of intersensory redundancy for perceptual development. *Winter Conference on Current Issues in Developmental Psychobiology*, Grenada, British West Indies.

Soza, R.M., Bahrick, L.E., & Parker, J.F. (1999, April). The debilitating effects of stress on preschoolers' memory for free and cued recall action sequences. *Society for Research in Child Development*, Albuquerque, NM.

Walker-Andrews, A. S., & Bahrick, L.E. (1999, April). The ecological approach to the study of behavioral development: Infants' detection and memory for social information. *Society for Research in Child Development*, Albuquerque, NM.

Lickliter, R. & Bahrick, L.E. (1999, April). Implications of multimodal sensory stimulation for experimental design. *Society for Research in Child Development*, Albuquerque, NM.

Bahrick, L.E. & Lickliter, R. (1999, October). Effects of unimodal versus multimodal stimulation on attentional selectivity in infancy. *International Society for Developmental Psychobiology*, Miami, FL.

Lickliter, R., Bahrick, L.E., Flom, R., Pena, V., Bolzani, L., Ungaro, R.A., Murray, A., & Castillo, R. (1999, October). Infant attention and memory for unimodally and bimodally specified object motion. *International Society for Developmental Psychobiology*, Miami, FL.

McDermott, J., Park, S., Goldberg, A., Fivush, R., Bahrick, L., & Parker, J. (1999, October). Effects of stress on children's long-term memory of a natural disaster. *Cognitive Development Society*, Chapel Hill, NC.

Parker, J. F., Bahrick, L.E., & Fivush, R. (2000, June). Young mothers' memory for a natural disaster: The effects of stress. *Society for Applied Research on Memory and Cognition*, Miami Beach, FL.

Gogate, L.J. & Bahrick, L.E. (2000, July). Infants' learning of arbitrary relations between minimal and non-minimal syllable pairs in the absence of synchrony. *International Conference on Infant Studies*, Brighton, UK.

Bahrick, L.E. (2000, July). The role of attentional salience in infants' detection of arbitrary intermodal relations. *International Conference on Infant Studies*, Brighton, UK.

Lickliter, R. & Bahrick, L.E. (2000, July). Reduction of multimodal sensory stimulation following hatching alters intramodal and intermodal perceptual responsiveness of bobwhite quail chicks. *International Conference on Infant Studies*, Brighton, UK.

Bahrick, L.E., Lickliter, R., & Flom, R. (2000, October). Intersensory redundancy guides perceptual learning: Discrimination of tempo in 3-month-old infants. *Multisensory Research Conference*, Tarrytown, NY.

Bahrick, L.E., Lickliter, R., & Flom, R. (2000, November). Intersensory redundancy: Infants' detection of unimodal properties of events. *International Society for Developmental Psychobiology*, New Orleans.

Flom, R., Gogate, L.J., & Bahrick, L. E. (2001, April). Infant discrimination of faces in the context of dynamic activities: The effects of familiarization. *Society for Research in Child Development*, Minneapolis, MN.

Lickliter, R., Honeycutt, H., & Bahrick, L. (2001, April). Intersensory redundancy facilitates prenatal auditory learning in bobwhite quail chicks. *Society for Research in Child Development*, Minneapolis, MN.

Gogate, L.J., Bahrick, L.E., Friedman, A., & Bewley, S. (2001, April). Cross-cultural evidence for multimodal motherese: The role of temporal synchrony between verbal labels and gestures. *Society for Research in Child Development*, Minneapolis, MN.

Flom, R. & Bahrick, L. E. (2001, April). Is featural information necessary for 5-month-olds' perception of motion specifying the self? *Society for Research in Child Development*, Minneapolis, MN.

Bahrick, L. E. & Lickliter, R. (2001, April). Increasing specificity in intermodal learning: Infant sensitivity to the spatial congruity of audio-visual events. *Society for Research in Child Development*, Minneapolis, MN.

Bahrick, L. E. & Flom, R. (2001, November). Infant discrimination of faces in the context of action: The role of attention. *International Society for Developmental Psychobiology*, San Diego, CA.

Bahrick, L. E., Lickliter, R., & Flom, R. (2002, April). Intersensory redundancy is most effective when skills are first learned. *International Conference on Infant Studies*, Toronto, Canada.

Gogate, L.J. & Bahrick, L. E. (2002, April). Infants' matching of preteen versus preschool children's faces and voices. *International Conference on Infant Studies*, Toronto, Canada.

Lickliter, R., Bahrick, L. E., & Honneycutt, H. (2002, April). Intersensory redundancy enhances memory in bobwhite quail embryos. *International Conference on Infant Studies*, Toronto, Canada.

Lickliter, R. & Bahrick, L. E. (2002, May). Intersensory redundancy facilitates perceptual discrimination, learning, and memory in infancy. *International Multisensory Research Forum*, Geneva, Switzerland.

Anasagasti, K., Bahrick, L.E., & Batista, L.C. (2002, October). Perception of the affordances of everyday objects by human infants. *International Society for Developmental Psychobiology*, Orlando, FL.

Flom, R., Hernandez-Reif, M., and Bahrick, L.E. (2002, October). Person perception: The development of infant learning about unique face-voice relations. *International Society for Developmental Psychobiology*, Orlando, FL.

Bahrick, L., Lickliter, R., Shuman, M., Batista, L., & Grandez, C. (2003, April). Infant discrimination of voices: Predictions from the intersensory redundancy hypothesis. *Society for Research in Child Development*, Tampa, FL.

Anasagasti, K., Bahrick, L.E., & Batistal, L. (2003, April). Infants' detection of the affordances of everyday objects. *Society for Research in Child Development*, Tampa, FL.

Vaillant, M. & Bahrick, L.E. (2003, April). Five-month-old infants match facial and vocal expressions of other infants. *Society for Research in Child Development*, Tampa, FL.

Allen, M., Dodd, K., Flom, R., & Bahrick, L.E. (2003, April). Intersensory redundancy: Five- and seven-month-olds' perception of affect. *Society for Research in Child Development*, Tampa, FL.

Anasagasti, K., Batista, L., & Bahrick, L. E. (2003, November). The importance of motion for the perception of affordances of everyday objects by human infants. *International Society for Developmental Psychobiology*, New Orleans, LA.

Lickliter, R., Bahrick, L.E., & Markham, R. (2003, November). Intersensory redundancy educates attention to amodal information during prenatal development. *International Society for Developmental Psychobiology*, New Orleans, LA.

Bahrick, L.E., Lickliter, R., Vaillant, M., Shuman, M., & Castellanos, I. (2004, May). Infant discrimination of faces in the context of dynamic, multimodal, events: Predictions from the intersensory redundancy hypothesis. *International Conference on Infant Studies*, Chicago, IL.

Castellanos, I., Shuman, M., & Bahrick, L.E. (2004, May). Intersensory redundancy facilitates infants' perception of meaning in speech passages. *International Conference on Infant Studies*, Chicago, IL.

Lickliter, R., Bahrick, L.E., Markham, R. (2004, May). Intersensory redundancy can educate selective attention during prenatal development. *International Conference on Infant Studies*, Chicago, IL.

Bahrick, L.E., Lickliter, R., Vaillant, M., Shuman, M., & Castellanos, I. (2004, June). The development of face perception in dynamic, multimodal events: Predictions from the intersensory redundancy hypothesis. *International Multisensory Research Forum*, Barcelona Spain.

Bahrick, L.E. & Lickliter, R. (2004, June). The development of infants' sensitivity to the orientation of object motion: Predictions of the intersensory redundancy hypothesis. *International Society for Developmental Psychobiology*, Aix, France.

Bahrick, L.E., Lickliter, R., Batista, L., & Vaillant, M. (2004, June). The development of infants' discrimination of tempo in unimodal and bimodal stimulation. *International Society for Developmental Psychobiology*, Aix, France.

Bahrick, L.E., & Lickliter, R. (2005, January). The South Florida Research Consortium on the Development of Attention, Perception, Learning, and Memory. *National Science Foundation Science of Learning Initiative*. Washington, D.C.

Parker, J.F., Bahrick, L. E., & Fivush, R. (2005, March). The impact of stress on mothers' memory for a natural disaster. *American Psychology-Law Society*, La Jolla, CA.

Bahrick, L. E., Vaillant-Molina, M., Shuman, M.A., Castellanos, I., Batista, L.C., and Wehrhahn, M. (2005, April). The role of multisensory information in infant attention to faces of speakers versus the rhythm of speech. *Society for Research in Child Development*, Atlanta, GA.

Lickliter, R. & Bahrick, L.E. (2005, April). Integrating research on unimodal and multimodal perceptual development: The intersensory redundancy hypothesis. (Symposium: Multiple perspectives on multimodal contributions to cognitive development). *Society for Research in Child Development*, Atlanta, GA.

Anasagasti, K., Batista, L.C., & Bahrick, L.E. (2005, April). Detection of familiar object-action relations by 3 1/2-month-old infants. *Society for Research in Child Development*, Atlanta, GA.

Vaillant, M. & Bahrick, L.E. (2005, April). Infants' perception of object-affect relations. *Society for Research in Child Development*, Atlanta, GA.

Bahrick, L. E., Vaillant-Molina, M., Shuman, M.A., Batista, L. C., Newell, L.C., Castellanos, I., & Williams, T.S. (2005, July). The salience of actions over faces for young infants. *International Conference on Perception and Action*, Monterey, CA.

Vaillant-Molina, M., Ibanez, L.V., Messinger, D. S., & Bahrick, L.E. (2005, July). Young infants' perception of emotional expressions of other infants. *International Society for Research on Emotion Conference*, Bari, Italy.

Bahrick, L. E., Lickliter, R., Shuman, A., Batista, L.C., Castellanos, I., & Newell, L.C. (2005, November). The development of infant voice discrimination: From unimodal auditory to bimodal audiovisual presentation. *International Society for Developmental Psychobiology*, Washington, D.C.

Molina, M., Gutierrez, M., & Bahrick, L.E. (November, 2005). Infant memory for modality specific properties of contingent and non-contingent events: The role of intersensory redundancy in self perception. *International Society for Developmental Psychobiology*, Washington, D.C.

Shuman, M., Castellanos, I., & Bahrick, L.E. (2005, November). Infant detection of prosodic information conveying approval vs prohibition was facilitated by intersensory redundancy in audiovisual speech. *International Academy of Linguistics, Behavioral, and Social Sciences Annual Meeting*, Miami, FL.

Parker, J.F., Bahrick, L.E., & Vento, R.S. (2006, March). The effects of swimming lesson stress on young children's memory for action sequences. *American Psychology and Law Society*, St. Petersburg, FL.

Jaime, M. Bahrick, L. E., & Lickliter, R. (2006, July). Exploring the temporal boundaries of intersensory redundancy during prenatal development. *International Conference on Infant Studies*, Kyoto, Japan.

Vaillant-Molina, M., Newell, L., Castellanos, I., Bahrick, L.E., & Lickliter, R. (2006, July). Intersensory redundancy impairs face perception in early development. *International Conference on Infant Studies*, Kyoto, Japan.

Flom, R. & Bahrick, L.E. (2006, October). Intermodal perception of self: Infants' sensitivity to temporal and spatial contingencies. *International Society for Developmental Psychobiology*, Atlanta, GA.

Harshaw, D., Bahrick, L.E., & Lickliter, R. (2006, October). Effects of intersensory redundancy and stimulus contingency on early perceptual learning. *International Society for Developmental Psychobiology*, Atlanta, GA.

Castellanos, I., Vaillant-Molina, M., Lickliter, R., & Bahrick, L.E. (2006, October). Intersensory redundancy educates infants' attention to amodal information in unimodal stimulation. *International Society for Developmental Psychobiology*, Atlanta, GA.

Bahrnick, L.E., & Lickliter, R. (2006, October). South Florida Research Consortium on the Development of Attention, Perception, Learning, and Memory. *National Science Foundation, Science of Learning Initiative*. Washington, D.C.

Vaillant-Molina, M., & Bahrnick, L.E. (2007, March). Detection of multimodal affect-object relations guides young infants' manual exploration of objects. *Society for Research in Child Development*, Boston, MA

Shuman, M.A., & Bahrnick, L.E. (2007, March). Infants' perception of face-affect relations in multimodal events. *Society for Research in Child Development*, Boston, MA

Castellanos, I. & Bahrnick, L.E. (2007, March). Intersensory redundancy educates infants' attention to the amodal properties of speech during early development. *Society for Research in Child Development*, Boston, MA

Newell, L.C., Bahrnick, L.E., & Sternstein, M.L. (2007, March). Face recognition in preschool-aged children. *Society for Research in Child Development*, Boston, MA

Bahrnick, L.E., Newell, L.C., Shuman, M., & Ben, Y. (2007, March). Three-month-old infants recognize faces in unimodal visual but not bimodal audiovisual stimulation. *Society for Research in Child Development*, Boston, MA.

Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., Feldstein, S., Andrews, H., Moore, M.S., & Bahrnick, L.E. (2007, March). Four-month mother-infant regulation and 12-month infant attachment. *Society for Research in Child Development*, Boston, MA.

Newell, L. C., Bahrnick, L.E., Vaillant-Molina, M., Shuman, M., & Castellanos, I. (2007, May). Intersensory Perception and Attention Disengagement in Young Children with Autism. *International Meeting for Autism Research*, Seattle, WA.

Jaime, M., Bahrnick, L.E., & Lickliter, R. (2007, November). Audiovisual temporal synchrony facilitates prenatal perceptual learning in bobwhite quail embryos. *International Society for Developmental Psychobiology*, San Diego, CA.

Bahrnick, L. E., Lickliter, R., Vaillant-Molina, M. & Castellanos, I. (2008, March). Tempo discrimination in infants: The roles of intersensory redundancy, task difficulty, and expertise. *International Conference on Infant Studies, Vancouver, Canada*.

Bahrnick, L. E., Shuman, M. A., & Castellanos, I. (2008, March). Face-voice synchrony directs selective listening in four-month-old infants. *International Conference on Infant Studies, Vancouver, Canada*.

Bahrnick, L. E., Castellanos, I., Shuman, M., Vaillant-Molina, M., Newell, L.C., & Sorondo, B.M. (2008, May). Self-perception and social orienting in young children with autism. *International Meeting for Autism Research, London, England*.

Castellanos, I. & Bahrnick, L.E. (2008, November). Educating infants' attention to amodal properties of speech: The role of intersensory redundancy. *International Society for Developmental Psychobiology*, Washington, D. C.

Bahrnick, L.E., Sorondo, B. M., Castellanos, I., Todd, J.T., Argumosa, M. & Vaillant-Molina, M. (2008, November). The development of basic indices of attention to bimodal and unimodal social events across infancy. *International Society for Developmental Psychobiology*, Washington.

Vaillant, J., Bahrnick, L.E., & Lickliter, R. (2008, November). Detection of modality-specific properties in unimodal and bimodal events. *International Society for Developmental Psychobiology*, Washington, D. C.

Bahrnick, L. E., Todd, J., Vaillant-Molina, M., Sorondo, B. M., Castellanos, I., & Argumosa, M.A. (2009, March). Development of basic indices of attention to nonsocial events: Effects of unimodal versus bimodal stimulation. *Society for Research in Child Development*, Denver, CO.

Newell, L. C., Castellanos, I., Grossman, R., & Bahrnick, L. E. (2009, March). Bimodal, synchronous displays, but not unimodal, visual displays, elicit gender discrimination in 6-month-old infants. *Society for Research in Child Development*, Denver, CO.

Vaillant, J., Bahrnick, L.E., & Lickliter, R. (2009, March). Detection of modality specific stimulus properties are enhanced by unimodal exposure during prenatal development. *Society for Research in Child Development*, Denver, CO.

Bahrnick, L. E., Todd, J. T., Vaillant-Molina, M., Sorondo, B. M., & Castellanos, I. (2009, May). Social orienting Impairment in autism: Relations among look length, disengagement, and symptom severity. *International Meeting for Autism Research*, Chicago, IL.

Bahrnick, L. E., Todd, J. T., Castellanos, I., Sorondo, B.M., Valliant-Molina, M., & Argumosa, M. (2009, May). The role of intersensory redundancy in the typical development of social orienting across infancy: A new hypothesis for autism. *International Meeting for Autism Research*, Chicago, IL.

Bahrnick, L. E., Todd, J. T., Argumosa, M. A., Grossman, R., Castellanos, I., & Sorondo, B. M. (2009, July). Intersensory facilitation across the life-span: Adults show enhanced discrimination of tempo in bimodal vs. unimodal stimulation. *International Multisensory Research Forum*, New York, NY.

Lickliter, R., & Bahrnick, L. E. (2009, July). A framework for the development of intersensory perception: Four predictions of the intersensory redundancy hypothesis. Paper presented at the *International Multisensory Research Forum*, New York, NY.

Cadavid, S., Abdel-Mottaleb, M., Messinger, D.S., Mahoor, M.H., and Bahrnick, L.E. (2009, September). Detecting local audio-visual synchrony in monologues utilizing vocal pitch and facial landmark trajectories. *British Machine Vision Conference*, London, England.

Bahrnick, L.E., Argumosa, M.A., Lopez, H., Todd, J. T. (2009, October). Face discrimination in preschool-aged children. *Cognitive Development Society*, San Antonio, TX.

Ford-Barash, C., Harshaw, C., Bahrnick, L.E., & Lickliter, R. (2009, October). Effects of lateralization and intersensory redundancy on contingency based perceptual learning. *International Society for Developmental Psychobiology*, Chicago, IL

Vaillant, J., Harshaw, C., Bahrick, L.E., & Lickliter, R. (2009, October). Distribution of sensory stimulation affects prenatal auditory learning in bobwhite quail chicks. *International Society for Developmental Psychobiology*, Chicago, IL

Bahrick, L.E., Grossman, R., Castellanos, I., Argumosa, M.A., & Newell, L.C. (2010, March). Audiovisual interactions in infant categorization: Voice gender biases face categorization. *International Conference for Infant Studies*, Baltimore, MD.

Bahrick, L.E., Todd, J.T., & Ronacher, C.H. (2010, March). Infant attention to intersensory redundancy in social and nonsocial events is enhanced even in early processing. *International Conference for Infant Studies*. Baltimore, MD.

Reynolds, G.D., Bahrick, L.E., Lickliter, R., & Riggs, M. (2010, March). Intersensory redundancy and infant event-related potentials. *International Conference on Infancy Studies*, Baltimore, MD.

Bahrick, L. E., Todd, J. T., Vaillant-Molina, M., Sorondo, B. M., & Ronacher, C. H. (2010, May). Impaired detection of temporal synchrony for social and nonsocial events in children with autism spectrum disorder. *International Meeting for Autism Research*, Philadelphia, PA.

Todd, J. T., & Bahrick, L. E. (2010, May). Intersensory processing and social orienting in children with autism spectrum disorder: Integrating typical and atypical development. *International Meeting for Autism Research*, Philadelphia, PA.

Vaillant, J., Harshaw, C., Jaime, M., Bahrick, L.E., & Lickliter, R. (2010, November). Selective attention during prenatal development: Redundancy across auditory and vibro-tactile stimulation facilitates learning in Bobwhite quail embryos. *International Society for Developmental Psychobiology*, San Diego, CA.

Bahrick, L. E., Todd, J., & Vaillant-Molina, M. (2011, March). A new measure for assessing four fundamental aspects of attention: The behavioral attention assessment protocol (BAAP). *Society for Research in Child Development*, Montreal, Canada.

Todd, J.T., Ronacher, C.H., & Bahrick, L.E. (2011, March). Assessing the development of infant attention to dynamic events: A simple procedure. *Society for Research in Child Development*, Montreal, Canada.

Bahrick, L. E., Argumosa, M., Castellanos, I., & Naclerio, C. (2011, March). Audiovisual interactions in infant categorization of gender neutral faces. *Society for Research in Child Development*, Montreal, Canada.

Bahrick, L.E., & Todd, J.T. (2011, March). The role of intersensory redundancy in the typical development of social orienting across infancy. In J.T. Todd & R. Lickliter (Chairs), The organizing role of intersensory perception in neural, social, cognitive, and language development. Paper presented at the *Society for Research in Child Development*, Montreal, Canada.

Curtindale, L. M., Bahrick, L. E., Lickliter, R., & Colombo, J. (2011, March). Infant attention to multimodal synchrony in social and nonsocial stimuli. *Society for Research in Child Development*,

Montreal, Canada.

Reynolds, G.D., Bahrick, L.E., Lickliter, R., Guy, M. G., & Zhang, D. (2011, March). Neural correlates of multimodal stimulation in infancy. In J.T. Todd & R. Lickliter (Chairs), The organizing role of intersensory perception in neural, social, cognitive, and language development. *Society for Research in Child Development*, Montreal, Canada.

Castellanos, I., Krogh-Jespersen, S., & Bahrick, L. E. (2011, March). Eye tracking speaking faces: Predictions from the Intersensory Redundancy Hypothesis. *International EyeTracKids Conference*, Montreal, Quebec, Canada.

Bahrick, L.E., Todd, J.T., and Vasquez, J. (2011, May). The Multisensory Attention Assessment Protocol (MAAP): Indices of attention predict diagnostic status and symptom severity in children with autism spectrum disorders. *International Meeting for Autism Research*, San Diego, CA.

Sorando, B.M., Bahrick, L.E., and Vasquez, J. (2011, May). Attention to social and nonsocial events in children with autism spectrum disorders: The role of stimulus variability. *International Meeting for Autism Research*, San Diego, CA.

Bahrick, L.E., Lickliter, R., & Castellanos, I. (2011, November). Intersensory redundancy educates infants' attention to the amodal property of tempo. *International Society of Developmental Psychobiology*, Washington, D.C.

Vaillant, J., Bahrick, L.E., & Lickliter, R. (2011, November). Testing the intersensory redundancy hypothesis during early postnatal development. *International Society of Developmental Psychobiology*, Washington, D.C.

Bahrick, L. E., Todd, J. T., Vasquez, J., & Yusko, B. (2012, May). "Sticky Attention" in Autism: Children who fail to disengage show greater symptoms and more impaired social attention and intersensory processing. Paper presented at the *International Meeting for Autism Research*, Toronto, CA.

Todd, J. T., Bahrick, L.E., Vasquez, J. & Yusko, B. (2012, May). Developmental trajectories of attention to social and nonsocial events as a function of chronological and mental age in children with autism and typical development. Paper presented at the *International Meeting for Autism Research*, Toronto, CA.

Bahrick, L.E., Krogh-Jespersen, S., Todd, J.T., Naclerio, C., & Lau, Y. (2012, June). Intersensory redundancy facilitates infant discrimination of tempo of speech. *International Conference on Infant Studies*, Minneapolis, MN.

Bahrick, L.E., Lickliter, R., & Castellanos, I. (2012, June). The effectiveness of intersensory vs. intrasensory redundancy in facilitating discrimination of tempo in 2-month-old infants. *International Conference on Infant Studies*, Minneapolis, MN.

Bahrick, L.E., Todd, J. T., Rodriguez, M.N., Sorondo, B. M., Vasquez, J., & Yusko, B. (2012, June). 4.5-month-old infants prefer nonsocial over social events when event variability is manipulated. *International Conference on Infant Studies*, Minneapolis, MN.

Beebe, B., Messinger, D., Bahrick, L.E., Margolis, A., Markese, S., Chen, H., Buck, K., Cohen, P., & Jaffe, J. (2012, June). Self-regulation is dependent on partner influence: The dyad as the unit of analysis. Paper presented at the *International Conference on Infant Studies*, Minneapolis, MN.

Guy, M.W., Reynolds, G., Bahrick, L.E., Lickliter, R., Zhang, D., Jewett, C.R., & Whitfield, A.C. (2012, June). Neural correlates of redundant and non-redundant multimodal stimulus processing in 5-month-old infants. *International Conference on Infant Studies*, Minneapolis, MN.

Vaillant-Molina, M., & Bahrick, L.E. (2012, June). The emergence of social referencing in young infants: The roles of contingency and gaze direction in regulating object exploration. *International Conference on Infant Studies*, Minneapolis, MN.

Raju, N., Bahrick, L.E., & Lickliter, R. (2012, October). Social contingency enhances postnatal memory in northern bobwhite quail. *International Society for Developmental Psychobiology*, New Orleans, LA.

Bahrick, L. E., Castellanos, I., Frame, E. A., Todd, J. T., Campey, M., & Krogh-Jespersen, S. (2013, April). Selective looking by young children: A new test of sensitivity to intersensory redundancy during competing visual stimulation. *Society for Research in Child Development*, Seattle, WA.

Bahrick, L. E., Todd, J. T., Vasquez, J., Rodriguez, M. N., & Sorondo, B. M. (2013, April). The role of stimulus variability in infancy preferences for social and nonsocial events. *Society for Research in Child Development*, Seattle, WA.

Castellanos, I., & Bahrick, L. E. (2013, April). Face perception is impaired by audiovisual speech and repetitive actions and enhanced by silent dynamic displays in early development. Paper presented at the *Society for Research in Child Development*, Seattle, WA.

Frame, E. A., Yusko, B., Rivas, R., Krogh-Jespersen, S., Todd, J. T., Saunders, J. F., Martin, K., Wurts, P., Joyas, Y., & Bahrick, L. E. (2013, April). Intersensory redundancy facilitates discrimination of the tempo of speech in difficult tasks for preschool-aged children. *Society for Research in Child Development*, Seattle, WA.

Raju, N., Bahrick, L.E., & Lickliter, R. (2013, April). The effects of atypical perinatal sensory stimulation on contingency learning in bobwhite quail neonates. *Society for Research in Child Development*, Seattle, WA.

Lickliter, R., & Bahrick, L. E. (2013, April). Selective attention and multisensory perception: Comparative evidence for four principles of the intersensory redundancy hypothesis. Paper presented at the *Society for Research in Child Development*, Seattle, WA.

Mattson, W. I., Bahrick, L. E., Todd, J. T., Stone, W., Beebe, B., Yee-Nicholson, N. D., & Messinger, D. S. (2013, April). Infant interest: Patterns of gaze in the face-to-face/still-face paradigm. *Society for Research in Child Development*, Seattle, WA.

Todd, J. T., & Bahrick, L. E. (2013, April). Assessing the limits of infant sensitivity to audiovisual temporal synchrony: A new, simple procedure. *Society for Research in Child Development*, Seattle, WA.

Mattson, W. I., Bahrick, L. E., Todd, J. T., Beebe, B., Stone, W. L., & Messinger, D.S. (2013, May). 'Look ma, no interaction!' Infants structure their own gaze durations in the absence of parental scaffolding. *Association for Psychological Science Annual Convention*, Washington, D.C.

Bahrick, L. E. & Todd, J. T. (2013, May). Relation among speed of attention shifting, background noise, and symptom severity in children with autism spectrum disorder. *International Meeting for Autism Research*, San Sebastian, Spain.

Bahrick, L. E., Todd, J. T., Martin, K. B. (2013, November). When Adults Act Like Babies: Intersensory Facilitation for Tasks of High Difficulty. *Society for the Study of Human Development*, Fort Lauderdale, FL.

Messinger, D. S., Mattson, W. I., Todd, J. T., Myers, N. D., Gangi, D. N., & Bahrick, L. E. (2013, November). Temporal dependency and the structure of early infant looking. Learning to Attend, Attending to Learn Workshop, La Jolla, CA.

Bahrick, L. E., Todd, J. T., Saunders, J. F., & Wurts, P. (2013, November). The development of intersensory processing of social and nonsocial events from infancy through childhood. *International Society for Developmental Psychobiology*, San Diego, CA.

Raju, N., Bahrick, L.E., & Lickliter, R. (2013, November). Prenatal visual stimulation interferes with contingency learning in bobwhite quail neonates. *International Society for Developmental Psychobiology*, San Diego, CA.

Todd, J.T., Saunders, J.F., Bein, V., Soska, K.C., & Bahrick, L.E. (2014, May). Relations between basic indices of attention to social events and language in children with Autism Spectrum Disorders and typically developing children. *International Meeting for Autism Research*, Atlanta GA.

Bahrick, L.E., Soska, K.C., Todd, J.T., Saunders, J.F., & Bein, V. (2014, July). Assessing individual differences and age-related changes in intersensory processing across infancy: A new method. *International Conference on Infant Studies*, Berlin, Germany.

Gangi, D., Messinger, D., Mattson, W., Todd, J.T., Myers, N., & Bahrick, L.E. (2014, July). Temporal dependency in the context of infant habituation. *International Conference on Infant Studies*, Berlin, Germany.

Bahrick, L. E., Saunders, J. F., Bein, V., Todd, J. T., & Soska, K. C. (2015, March). The development of infant discrimination of the tempo of speech: An extended reliance on temporal synchrony. *Society for Research in Child Development Meeting*, Philadelphia, PA.

Messinger, D., Mattson, W., Todd, J. T., Gangi, D., Myers, N., & Bahrick, L. E. (2015, March). Rhythms of looking: Temporal dependency in visual information sampling. In C. Fausey (Chair), Rhythms of experience: Building knowledge through sequences of stability and change. *Society for Research in Child Development*. Philadelphia, PA.

Soska, K. C., Todd, J. T., Costales, A., & Bahrick, L. E. (2015, March). Individual differences in intersensory processing efficiency for social events predict infant language and cognitive functioning. *Society for Research in Child Development Meeting*, Philadelphia, PA.

Todd, J. T., Soska, K. C., Costales, A., & Bahrick, L. E. (2015, March). The emergence of social attention: Maintenance and disengagement of attention to social and nonsocial events from 3 to 6 months. *Society for Research in Child Development Meeting*, Philadelphia, PA.

Bahrick, L. E., Soska, K. C., & Todd, J. T. (2015, October). Selective looking to audiovisual redundancy: A new method demonstrates fine-grained, acoustically-driven visual exploration in young children. *Cognitive Development Society*, Columbus, OH.

Todd, J. T., Soska, K. C., & Bahrick, L. E. (2016, May). Attention to multimodal events from 3 to 12 months: Developmental differences are magnified by competing stimulation. *International Conference on Infant Studies*, New Orleans, LA.

Soska, K. C., Todd, J. T., & Bahrick, L. E. (2016, May). Individual differences in growth rate of intersensory processing are related to early language skills. *International Conference on Infant Studies*, New Orleans, LA.

Bahrick, L. E., Zuraw-Moya, R. M., Pruden, S. M., & Todd, J. T. (2016, May). Temporal synchrony as a foundation for language learning: 13-month-olds learn novel label-object relations. *International Conference on Infant Studies*, New Orleans, LA.