Cambridge Elements

Elements in Research Methods for Developmental Science
edited by
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NEW APPROACHES TO ASSESSING BEHAVIORAL AND BRAIN SYNCHRONY IN INFANT-PARENT DYADS

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CAMBRIDGE UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

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www.cambridge.org
Information on this title: www.cambridge.org/9781009631167

DOI: 10.1017/9781009631174

First published 2025

A catalogue record for this publication is available from the British Library

ISBN 978-1-009-63116-7 Hardback
ISBN 978-1-009-63119-8 Paperback
ISSN 2632-9964 (online)
ISSN 2632-9956 (print)

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Abstract: Historically, infant–parent synchrony has been measured using methods that provide a global assessment of interpersonal synchrony, representing the quality of dyadic interactions. These approaches have illuminated much about synchrony as a broad construct but lack granular details on the temporal dynamics of these interactions. This Element introduces technologically advanced methods for assessing brain and behavior that can offer detailed insights into the dynamic temporal structure of infant–parent social exchanges. These advancements will significantly enhance our understanding of the bidirectional processes that underpin early emerging dyadic exchanges and how these vary across time and context.

Keywords: infant-parent synchrony, hyperscanning, automated coding of behaviour, fNIRS, behavioral synchrony.

ISBNs: 9781009631167 (HB), 9781009631198 (PB), 9781009631174 (OC)
ISSNs: 2632-9964 (online), 2632-9956 (print)

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