

PSYD20: Current Topics in Developmental Psychology Methods in the Study of Infant Development

0.5 credits

University of Toronto, Scarborough

Fall Term, 2017

Wednesdays, 9:10AM-11:00AM

LEC01 (AC334)

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Office Hours: Wednesdays, 11:15AM-12:30PM, and by appointment

Dr. Kyle Danielson is an Assistant Professor (Teaching Stream) in the Department of Psychology at the University of Toronto, Scarborough. He completed his PhD at the University of British Columbia in Vancouver, researching language development among 6- to 12-month-old infants. He is interested in linguistic and cognitive development among typically and atypically developing children. At UTSC, he teaches courses in introductory psychology and child development.



I. Course Description, Prerequisites, and Learning Goals

- “Newborn infants recognize their own mother’s voice as soon as they’re born.”
- “By six months of age, infants know many vocabulary words even though they cannot speak them.”
- “Four-month-old infants prefer characters that are helpful over characters that are unhelpful.”
- “Until they are about a year old, infants have trouble remembering the location of hidden objects.”
- “For the first month of life, an infant’s vision is approximately 20:120, six times worse than that of an adult.”

All of these quotes reflect well-established facts about infants’ perception and cognition. But how do we KNOW all of these things?! We can’t ask infants to explain what they perceive, think, and feel. In this course, we will explore major topics in Developmental

Psychology, doing so through the lens of **methodology**. That is, what **tools** do we use to help us figure out what infants know?

Throughout the course, we will explore topics as diverse as **moral development, linguistic development, emotional development, cognitive development, and social development** by diving deep into the methods that we use to probe infants' knowledge. Because this is a D-level course, the actual topics that we explore will vary somewhat based on the interests of the students in the class.

By the end of this course, you should be able to:

- **Express a deep understanding** of the major behavioural, physiological, and neurological methods used to gain knowledge about infant psychological development
- **Find and read** the full text of scientific journal articles using only a citation
- **Comfortably read and write** a methods section of a scientific journal article
- **Criticize** the major methods in infant research, identifying their strengths and weaknesses overall and for specific types of questions
- **Identify** the best method(s) for testing a specific research question in infancy
- **Propose** and **develop** an original research idea
- **Present your own, original ideas** to a group of peers verbally and visually
- **Critically evaluate** popular media interpretations of scientific data

Prerequisites: PSYC21 or PLIC24 or [PSYB20 plus one C-level half-credit in PSY]

Exclusions: PSY410

II. **Course Readings**

There is no textbook for this course. Instead, the course readings will be comprised of **articles from scientific journals** and **chapters of scientific books**. Most readings can be found online using the University of Toronto library system. If a reading is unavailable from the UofT library, it will be posted on Blackboard at least two weeks in advance of its due date.

Please note: as described above, one of the learning objectives for this course is to **find and read** scientific journal articles. Instead of finding prepared links to the articles on Blackboard, you will need to use the Library's system to find the article. We will review how to do this in class.

III. **Course website**

All information for the course, including this syllabus, updates to the course schedule, assignment submission, and assignment marks will be posted on Blackboard Portal (portal.utoronto.ca). **It is your responsibility to check Blackboard frequently, at least once a week, for important announcements.**

IV. Course requirements (marks)

There are **5 assignments** that comprise your mark in this course.

1. **Presentation of *Developmental Psychology in the News* (8%)**

- For this assignment, you will find and present in class a **popular news article from 2016 or 2017** published in a newspaper, magazine, or website. You may use resources such as CBC, *The Globe and Mail*, *Huffington Post*, *The New York Times*, *Al-Jazeera*, etc. You **may not use** scientific news websites such as *Science Daily* or *Psychology Today*.
- The news article should **report** on a new finding in infant psychological development that has been **published in a scientific journal**, but which is being **explained to a wider audience in the popular media**
- **You will choose a date to present your article using a Doodle poll that will be posted on the Portal**
- **Before 9:00am on the Monday before you present your article in class, you must send the news article to Kyle to be posted on the Portal for others to read.**
- In class, you will take 6 to 9 minutes, using a PowerPoint or Keynote presentation to:
 - **present the major findings of the research paper, as described by the news article**
 - **summarize the actual findings of the research paper, using the original scientific article's methods section**
 - **critique the news article's accuracy in describing the scientific paper**
 - **critique the methods used in the scientific paper**
 - **facilitate a brief discussion among your peers**
- If you have doubts about whether your articles meet the criteria for this assignment, check with Kyle first!

2. **Pair up and lead the classroom discussion of a topic (20%)**

- **With a partner of your choice**, you will lead the discussion of **one reading** from the course schedule, using 40-50 minutes of the class time
- These presentations will start during the third week of classes (September 20)
- There is **no need for a formal PowerPoint presentation to complete this assignment, but you may use one if you wish.**
- Instead, you should work with your partner in advance of your chosen date to:
 - **Develop a set of questions and topics** to be discussed during the class, based your reading
 - **Summarize and take questions** on your assigned reading
 - **Supplement** the assigned reading with information from **at least one other scholarly source**
 - Develop a **supplemental activity** for the class to participate in that relates to the week's topic. Ideas include (but are not limited to!) a video, a game, a writing assignment, or a hands-on activity
- Further expectations for this presentation will be discussed in class. Kyle will use a detailed rubric to mark these presentations.

3. **Write a short research proposal** on a topic of your choosing in infant psychological development, focusing *heavily* on the **method** that you think will best answer your question, and **present** your proposal in a formal, in-class presentation at the end of the term (55%)
- **Independently**, propose a research question that you would like to explore and have that question approved by Kyle by the middle of the term (due on the Portal at 11:59pm on 20 October). The research question need only be a sentence or two long.
 - The research question itself is not marked, but rather simply approved. However, you must turn this question in on time or your mark on the **whole** research proposal will be reduced as per the course late policy (below).
 - **Write a proposal** to answer your research question, in three sections:
 - **Introduction and Background** (due 11:59pm on 3 November, worth 15% of the course mark)
 - What is the hole in the scientific literature that you are attempting to fill?
 - What previous work has been done on this topic?
 - What is your research question?
 - What are your hypotheses?
 - This portion of the assignment should be 750-900 words in length.
 - You must use **at least four** scholarly sources from journal articles or scientific books in this section. If in doubt about the legitimacy of an article, check with Kyle!
 - Your citations and reference list must be in APA style
 - **Methods** (due 11:59pm on 17 November, worth 20% of the course mark)
 - What method(s) do you propose to use to answer your research question?
 - What population will you sample from? What will your sample size and sample characteristics be?
 - What is the independent variable that you will manipulate?
 - What is/are the dependent variable(s) that you will measure?
 - What other variables will you have to control to ensure that your manipulation is successful?
 - Why is this method the most appropriate? What are its strengths? What potential weaknesses does it have? Why is it the best method to use anyway?
 - This section should be 900-1250 words in length
 - **Application and conclusion** (due 11:59pm on 24 November, worth 8% of the course mark)
 - Why is this one an important research question to ask?
 - If the findings are in your hypothesized direction, what will the implications be?
 - How will our understanding of infant development deepen? What will the effects on specific infant populations be?

- What are the potential weaknesses of your proposal? What other options might there be to control these weaknesses, and why did you not choose them?
- This section should be 500-750 words in length
- **Present your research question, methods, and application in a 7- to 10-minute PowerPoint presentation in class** (presentations will be on November 22 and November 29, worth 12% of the course mark)
 - Summarize your research question, methods, and application sections
 - Try to use **as many graphics** as possible and **as few words** as possible in your slides
 - Field questions from classmates and be prepared to answer them
 - Presentations will be marked using a detailed rubric. 75% of the mark will be determined by Kyle's rubric and 25% by **peer evaluations**.

4. **Class participation** (12%)

- Participation in class is essential for you to meet the learning objectives for this course. It also makes class time pass more quickly and is more fun for everyone involved. Throughout the term, you are encouraged to speak up often and whenever you have something valuable to contribute. There are no silly contributions!
- To help you along, your participation mark will be structured as follows:
 - You **must** contribute to **at least two** classmates' **Developmental Psychology in the News** presentations by offering your own perspective on the article that s/he chose and/or posing a question to the class. More frequent and thoughtful participation will be rewarded.
 - You **should** participate **daily** during your classmates' topic presentations throughout the term
 - You **may** also participate by sending discussion questions for each group by email, which Kyle will forward to the presenters to help them facilitate their discussion. These **must be sent by Monday morning at 10:00am at the latest to be included**.
 - You **must** contribute to **at least two** classmates' final research proposal presentations by asking questions in class. More frequent and thoughtful participation will be rewarded.
 - You **must** evaluate each peer's final presentation by filling out peer evaluations for **every** presenter.
- After fall reading week, Kyle will write a brief email to **each student** to give some feedback on your participation in the course so far. This will help you figure out what to change in order to boost your participation mark.

5. **Course reflection** (5%, due by 11:59pm on Friday, December 1)

- On the first day of class, we will spend 10 minutes writing about a major question or interest that we each have in infant psychological development. For this first part of the assignment, no scientific information is required.
- In the final week of the term, you will **revise** this reflection using some of the resources that you have developed throughout the course.
 - How can you translate your original curiosities into a **scientific terms**?

- Based on the experience that you've gained in the course, what additional questions do you have?
- Using the methods that we have discussed in the course, **how might you or another scientist explore the questions that you have raised?**
- What might be some of the main **challenges** in exploring your question?
- How have you personally developed with respect to the learning objectives of the course (at the beginning of this document)?
- For the final version of this reflection, you should write approximately 500 words (+/- 100 words) and draw upon **at least one scholarly source**. The in-text citations and reference list should be in APA style.

V. Course policies

On respect in the classroom

It is expected that we all treat each other respectfully and courteously throughout this term. It can be challenging to feel comfortable speaking in front of a large group, and we should all work hard to make each other feel comfortable doing so. As part of that respect, it is expected that we all will use appropriate, professional language in our interactions with one another, that we will participate fully and genuinely in classroom discussions, and that we will arrive to class on time so as to not interrupt the presenters.

On email

The best way to reach Kyle is via his UofT email address. Please compose emails as follows:

- Include PSYD20 in the subject line of the email
- Include your full name and student ID number in your email
- Check the syllabus before sending an email to make sure that your question isn't already answered there
- Consider using the Portal discussion threads to ask questions of your classmates before sending an email
- Use professional language and adhere to our guidelines on respect in the classroom when composing emails

Kyle will respond to all emails within 2 business days, not including weekends or statutory holidays. For example, if you email on Friday at 12:00pm, you can expect a response by Tuesday at 12:00pm. Please avoid sending last-minute emails immediately before assignments are due, as these may not be answered in time.

On office hours

Office hours are held immediately after class on Wednesdays until 12:30pm. You may also make an appointment by email to see Kyle in his office outside these office hours.

On Portal discussion boards

There are two discussion threads open on Blackboard Portal. One allows you to ask administrative questions (e.g., "How many words long does my application section of my research proposal need to be?" "Where can I figure out how to cite a website in APA format?"). The other thread allows you to discuss class material, such as readings (e.g., "Why did they use NIRS instead of fMRI in this study?" "What does it mean that 7 of the 24 infants in the study did not have enough looking time data to be included in the sample?").

On changes to the course schedule or marking scheme

If there are changes to the course schedule, these will be posted on the Portal. If there are required changes to the marking scheme or assignment due dates, these will be discussed in class and agreed upon by a majority vote.

On tardiness

Please try to be on time to every class. We will be doing *Developmental Psychology in the News* at the beginning of most classes, and it's essential that you be there to participate and ask questions. If you do happen to be late, please try to enter the classroom quietly without disturbing whomever is speaking.

On late work

Most assignments in this course are due on Fridays. This allows you the entire week to complete assignments, and attempts to keep your weekends free for leisure! You are always encouraged to turn in assignments early. However, there is an automatic 12-hour grace period on all assignments, meaning that if an assignment is due at 11:59pm on a Friday, you actually have until 11:59am on Saturday morning to turn it in on the Portal and have it be counted as on time. After the grace period expires, you will lose 10% of your mark on an assignment for each 24-hour period (or portion thereof) that it is late.

Examples: You have an assignment due at 11:59pm on Friday, November 24. You turn it in on Saturday, November 25 at 10:00am. You lose 0%.

You have an assignment due at 11:59pm on Friday, November 24. You turn it in on Saturday, November 25 at 1:00pm. You lose 10%.

On group work

Group work is a valuable exercise in learning to cooperate and share ideas with others. It is an essential part of this course. It is expected that group members will contribute equally to the topical presentation. If you have concerns about your partner's level of commitment to your presentation, please contact Kyle as soon as possible.

On missed term work due to religious obligations

Please review the term calendar to ensure that you do not schedule your presentations on days that you will miss class for religious obligations. Please note that the 12-hour grace period is in part designed to allow students to submit work on time even if there is a certain day of the week on which the student does not do work. If you have additional religious considerations, please bring them to Kyle's attention during the first two weeks of the term.

On missed term work due to medical illness or other emergency

All students citing a documented reason for missed term work must bring their documentation to the Psychology Course Coordinator in SW427C within three (3) business days of the assignment due date. You must bring the following:

1. A completed Request for Missed Term Work form (<http://uoft.me/PSY-MTW>), and
2. Appropriate documentation to verify your illness or emergency, as described below.

- **Appropriate Documentation:** In the case of missed term work due to illness, only an original copy of the official UTSC Verification of Illness Form will be accepted (<http://uoft.me/UTSC-Verification-Of-Illness-Form>). Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.
- In the case of medical emergency, an original copy of the record of visitation to a hospital emergency room should be provided.
- In the case of a death of a family member, a copy of a death certificate should be provided.
- In the case of a disability-related concern, an email communication should be sent directly to the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca) from your Disability Consultant at AccessAbility Services, detailing the accommodations required. The Course Instructor should also be copied on this email.
- For U of T Varsity athletic commitments, an email communication should be sent directly to the Course Coordinator (psychology-undergraduate@utsc.utoronto.ca) from a coach or varsity administrator, detailing the dates and nature of the commitment. The email should be sent well in advance of the missed work.
- Documents covering the following situations are NOT acceptable: medical prescriptions, anything related to personal travel, weddings/personal/work commitments.

Procedure:

- Submit your (1.) request form and (2.) medical/other documents in person within 3 business days of the missed test or assignment.
- Forms should be submitted to SW427C between 9 AM - 4 PM, Monday through Friday.
- If you are unable to meet this deadline for some reason, you must contact the Course Coordinator via email (psychology-undergraduate@utsc.utoronto.ca) within the three business day window. Exceptions to the documentation deadline will only be made under exceptional circumstances.
- Within approximately one week, you will receive an email response from the Course Instructor / Course Coordinator detailing the accommodations to be made (if any).
- You are responsible for checking your official U of T email and Blackboard course announcements daily, as accommodations may be time-critical. The Course Instructor reserves the right to decide what accommodations (if any) will be made for the missed work.
- Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.
- Note that this policy applies only to missed term work (assignments and midterms). Missed final exams are handled by the Registrar's Office (<http://www.utsc.utoronto.ca/registrar/missing-examination>)

On diverse learning styles and needs

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach Kyle and/or AccessAbility Services as soon as possible.

AccessAbility Services staff (located in Rm SW302, Science Wing) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. You may phone them at 416-287-7560 or email them at ability@utsc.utoronto.ca.

On academic integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjuno11995.pdf>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement;
- Submitting your own work in more than one course without the permission of the instructor;
- Making up sources or facts;
- Obtaining or providing unauthorized assistance on any assignment.

In academic work:

- Falsifying institutional documents or grades;
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes; and
- When you knew or ought to have known you were doing so.

If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

Note that you may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the Code of Behaviour on Academic Matters. It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust.

Students for whom English is not their first language should go to the English Language Development Centre (<http://www.utsc.utoronto.ca/eld/>).

VI. Helpful links and resources

UTSC Dates and Deadlines <https://www.utsc.utoronto.ca/registrar/dates-and-deadlines>

Conducting research <https://utsc.library.utoronto.ca/>
<https://www.ncbi.nlm.nih.gov/pubmed/>
<https://scholar.google.ca/>

Academic Advising <http://www.utsc.utoronto.ca/aacc/>

Writing Services <http://www.utsc.utoronto.ca/twc/>
 Presentation Skills <http://www.utsc.utoronto.ca/ctl/presentation-skills>
 Co-op Program <http://www.utsc.utoronto.ca/askcoop/>
 AccessAbility <http://www.utsc.utoronto.ca/~ability/>
 Health and Wellness <http://www.utsc.utoronto.ca/hwc/>
 Test anxiety https://www.anxietybc.com/sites/default/files/Test_Anxiety_Booklet.pdf

Department of Psychology <http://www.utsc.utoronto.ca/psych/>
 UTSC Psychology courses <http://www.utsc.utoronto.ca/psych/courses>
 UTSC Experiential Learning <http://www.utsc.utoronto.ca/psych/experiential-learning>
 Psychology lab positions <http://tinyurl.com/jjq25t7>
 The PDNA <http://www.thepnda.org/>

VII. Course schedule

Week	Meeting Date	Topic and Readings Readings marked in red are required background reading, but they are not available for group presentations	Assignments due
1	6 September	Introduction, Syllabus <i>No readings</i>	<ul style="list-style-type: none"> • Course reflection (first draft) done in class • Choose partner for topical presentation
2	13 September	Methods in Infant Development; How to Read a Methods Section; Reliability and Validity; Independent and Dependent Variables; Correlation and Experimentation <i>Siegler et al., 2014; Cozby & Rawn, 2012; Danielson et al., 2017</i>	<ul style="list-style-type: none"> • Lottery for topical presentation readings (in class)

3	20 September	<p>Ethics; Developmental Designs; Interviews; Naturalistic Observations; Structured Observations</p> <p>Ainsworth et al., 2015; Mischel, Shoda, & Peake, 1988; Tamis-LeMonda et al., in press</p>	
4	27 September	<p>Behavioural and Physiological Methods <i>Choice, Heart Rate, High Amplitude Sucking</i></p> <p>Hamlin et al., 2013; Byers-Heinlein et al., 2010; Byers-Heinlein, 2014</p>	
5	4 October	<p>Looking Time #1 <i>Habituation, Preferential Looking Paradigms</i></p> <p>Kelly et al., 2007; Fernald et al., 2013; Golinkoff et al., 2013</p>	
6	NO CLASS	Reading Week	<ul style="list-style-type: none"> • Kyle will send individual participation feedback this week
7	18 October	<p>Looking Time #2 <i>Head Turn Preference Procedure, Conditioned Head Turn Procedure</i></p> <p>Seidl et al., 2015; Corbeil et al., 2013; Gilbertson et al., 2017</p>	<ul style="list-style-type: none"> • Research question due on the Portal by 11:59pm, October 20
8	25 October	<p>Eyetracking and pupillometry</p> <p>Hepach & Westermann, 2013; Telford et al., 2016; Hepach & Westermann, 2016</p>	<ul style="list-style-type: none"> • Lottery for individual presentation dates (in class)

9	1 November	Electroencephalography (EEG)/Event-related potentials (ERP) Kulke et al., 2016; Bosseler et al., 2016; Munsters et al., in press	• Introduction due on the Portal by 11:59pm, November 3
10	8 November	Functional magnetic resonance imaging (fMRI) Blasi et al., 2015; Sethna et al., 2017; Meltzoff & Kuhl, 2016	
11	15 November	Functional near-infrared spectroscopy (fNIRS) May et al., 2017; Lloyd-Fox et al., 2014; Ferrari & Quaresima, 2012	• Methods section due on the Portal by 11:59pm, November 17
12	22 November	Individual research proposal presentations <i>No readings</i>	• Application/conclusions due on the Portal by 11:59pm, November 24
13	29 November	Individual research proposal presentations <i>No readings</i>	• Course reflection (second draft) due on the Portal by 11:59pm, December 1

VIII. Reading List (in order of assignment)

*can be found on the Portal // articles in red are required background reading, not for presentation

Introduction

*Siegler, R., DeLoache, J., Graham, S., Saffran, J., Campbell, L., & Eisenberg, N. (2014). "An Introduction to Child Development." *How Children Develop*. 4th Canadian Edition. New York: Worth, pp. 25-38.

*Cozby, P.C. & Rawn, C.D. (2012). *Methods in Behavioural Research*. Whitby, ON: McGraw-Hill Ryerson, pp. 67-91, 306-311.

Danielson, D.K., Bruderer, A.G., Kandhadai, P., Vatikiotis-Bateson, E., & Werker, J.W. (2017). The organization and reorganization of audiovisual speech perception in the first year of life.

Sections 1.5, 2.1, 2.2, and 2.3 only.

Ethics, Naturalistic and Structured Observations; Developmental Designs

*Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (2015). *Patterns of Attachment: A Psychological Study of the Strange Situation*. New York: Psychology Press, pp. 1-64.

Mischel, W., Shoda, Y. & Peake, P.K. (1988). The nature of adolescent competencies predicted by preschool delay of gratification. *Journal of Personality and Social Psychology*, 54(4), 687-696.

Tamis-LeMonda, C.S., Kuchirko, Y., Luo, R., Escobar, K., & Bornstein, M.H. (in press). Power in methods: language to infants in structured and naturalistic contexts. *Developmental Science*, in press. doi:10.1111/desc.12456

Behavioural and Physiological Methods

Hamlin, J.K., Mahajan, N., Liberman, Z., & Wynn, K. (2013). Not like me = bad: Infants prefer those who harm dissimilar others. *Psychological Science*, 24(4), 589-594.

Byers-Heinlein, K., Burns, T.C., & Werker, J.F. (2010). The roots of bilingualism in newborns. *Psychological Science*, 21(3), 343-348.

*Byers-Heinlein, K. (2014). High amplitude sucking procedure. In P. J. Brooks, & V. Kempe, [Eds.], *Encyclopaedia of Language Development*. Thousand Oakes, CA: Sage Publications., 263-264.

Looking Time 1

Kelly, D.J., Quinn, P.C., Slater, A.M., Lee, K., Ge, L., & Pascalis, O. (2007). The other-race effect develops during infancy. *Psychological Science*, 18(12), 1084-1089. doi:10.1111/j.1467-9280.2007.02029.x

Fernald, A., Marchman, V.A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, 16(2), 234-248. doi:10.1111/desc.12019

Golinkoff, R.M., Ma, W., Song, L., & Hirsh-Pasek, K. (2013). Twenty-five years using the intermodal preferential looking paradigm to study language acquisition: What have we learned? *Perspectives on Psychological Science*, 8(316), 316-339. doi: DOI: 10.1177/1745691613484936

Looking Time 2

Seidl, A., Tincoff, R., Baker, C., & Cristia, A. (2015). Why the body comes first: effects of experimenter touch on infants' word finding. *Developmental Science*, 18(1), 155-164. doi:10.1111/desc.12182

Corbeil, M., Trehub, S.E., & Peretz, I. (2013). Speech vs. singing: infants choose happier sounds. *Frontiers in Psychology*, 4(372). doi:10.3389/fpsyg.2013.00372

Gilbertson, L.R., Lutfi, R.A., & Weismer, S.E. (2017). Auditory preference of children with autism spectrum disorders. *Cognitive Processing*, 18(2), 205-209. doi:10.1007/s10339-016-0787-0

Eyetracking and Pupillometry

Hepach, R. & Westermann, G. (2013). Infants' sensitivity to the congruence of others' emotions and actions. *Journal of Experimental Child Psychology*, 115(1), 16-29. doi:10.1016/j.jecp.2012.12.013

Telford, E.J., Fletcher-Watson, S., Gillespie-Smith, K., Pataky, R., Sparrow, S., Murray, I.C., O'Hare, A., & Boardman, J.P. (2016). Preterm birth is associated with atypical social orienting in infancy detected using eyetracking. *Journal of Child Psychology and Psychiatry*, 57(7), 861-868. doi: 10.1111/jcpp.12546

Hepach, R. & Westermann, G. (2016). Pupillometry in infancy research. *Journal of Cognition and Development*, 17(3), 359-377. doi:10.1080/15248372.2015.1135801

EEG/ERP

Kulke, L., Atkinson, J., & Braddick, O. (2016). Neural mechanisms of attention become more specialised during infancy: insights from combined eye tracking and EEG. *Developmental Psychobiology*, 59(2), 250-260. doi: 10.1002/dev.21494

Bosseler, A.N., Teinonen, T., Tervaniemi, M., & Huotilainen, M. (2016). Infant directed speech enhances statistical learning in newborn infants: an ERP study. *PLoS ONE*, 11(9), e0162177. doi:10.1371/journal.pone.0162177

Munsters, N.M., van Ravenswaaij, H., van den Boomen, C., & Kemner, C. (in press). Test-retest reliability of infant event related potentials evoked by faces. *Neuropsychologia*, in press. doi: 10.1016/j.neuropsychologia.2017.03.030

fMRI

Blasi, A., Llyod-Fox, S., Sethna, V., ... & Johnson, M.H. (2015). Atypical processing of voice sounds in infants at risk for autism spectrum disorder. *Cortex*, 71, 122-133. doi:10.1016/j.cortex.2015.06.015

Sethna, V., Pote, I., Wang, S., ... & Johnson, M.H. (2017). Mother-infant interactions and regional brain volumes in infancy: an MRI study. *Brain Structure and Function*, 222(5), 2379-2388.

Meltzoff, A.N. & Kuhl, P. (2016). Exploring the infant social brain: what's going on in there? *Zero to Three*, 36(3), 2-9.

fNIRS

May, L., Gervain, J., Carreiras, M., & Werker, J.F. (in press). The specificity of the neural response to speech at birth. *Developmental Science*, in press. 10.1111/desc.12564

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