EMORY INFANT AND CHILD LAB

Developmental Research Lab

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Message from Dr. Philippe Rochat, Director of the Emory Infant and Child Lab:

It is time again to express our gratitude to all parents who participated with their children in past and ongoing studies at the Emory Infant and Child Laboratory. Without your generous contribution, we would not be able to continue capturing important aspects of children's developing minds.

In the past few months, we completed our developmental study on what we call "gift malaise"—the unease we often experience when receiving a gift from, for example, a disadvantaged individual or from someone without any possibility for reciprocation. We also concluded our investigation into when and under what circumstances children may begin to experience positive or "happy" feelings while witnessing the misfortune of others (i.e., so-called "Schadenfreude"). We are currently analyzing the data from both studies for future publications. These findings are promising, and we hope to be able to capture important changes in the development of social cognition, from around five years of age. In particular, we should be able to contribute to the understanding of what lays behind the developmental emergence of new sensitivities and normative ways in response to gifts and the misfortune of others.

Finally, Nikita Agarwal, in pursuit of her Ph.D., continues to investigate how pre-verbal and verbal children begin to interpret their social world by identifying non-obvious essential characteristics that define social groups. Further details about these exciting projects can be found in the following sections. Once again, we thank you for your continued help and support in our efforts to understand infants and children in their social and cognitive development. We look forward to seeing you again at the Lab in the coming academic year—whether in person or remotely. Please feel free to contact us anytime with questions. And now, onward to another exciting year of research! Thank you for your invaluable support.

OUR GRADUATE STUDENT: NIKITA AGARWAL

My name is Nikita Agarwal, and I am a graduate student in the lab. My research focuses on the development of social categories like gender and race. I am particularly intrigued by how these categories shape our biases, influencing who we see as a part of our in-group or out-group. Below, I briefly describe several projects that I am working on!

Intersectionality: Social Identities and Interconnected Systems

By: Nikita Agarwal, Stella Lourenco

Intersectionality examines how overlapping social identities (such as race, gender, and class) create interconnected systems of oppression and privilege. Our research explores how membership in multiple social groups can lead to compounded disadvantages for individuals with multiple subordinate-group identities. We integrate this with cognitive frameworks of categorization, where certain members serve as prototypes, often rendering others invisible. By studying children's early development, we aim to understand if and when they begin to exhibit prototype bias, leading to the invisibility and misjudgment of certain group members. This research highlights the importance of recognizing and addressing intersectional biases from a young age.

Social Categories: Children's Implicit Cues and Decision Making

By: Nikita Agarwal, Philippe Rochat

Social categories are groups formed based on shared qualities and properties among certain entities. Our research delves into understanding how these social categories are shaped, particularly focusing on the cues children rely on to form these categories. We investigate whether exposure to diverse members within a category can update and expand children's category boundaries, allowing them to attribute properties from different members to the category as a whole. This work sheds light on the dynamic nature of social categorization and the developmental processes involved.

Good Trouble in Development: Children's Judgment of Rules and Normativity

By: Nikita Agarwal, Philippe Rochat

Developmental studies have shown that children are highly sensitive to the rules and norms in their immediate environments, quickly learning and endorsing them. They are also inclined to challenge others who do not adhere to these rules. However, it is crucial to recognize that not all rules are created equal; some may disadvantage certain groups. Our research investigates whether children can understand and appreciate the concept of "Good Trouble" as they develop—the idea of challenging rules that are inherently unfair or unjust. We explore how children perceive and respond to the notion of standing up against unfair rules, providing insights into their developing sense of justice and morality.

OUR LAB MANAGER: LIZ KIM

My name is Liz Kim, and I am the new lab manager for the Emory Infant and Child Lab. I am currently working with Dr. Philippe Rochat and Nikita (Ph.D. student) on a research project examining whether infants can use temporal information, supported by multiple modalities, to infer accurate future outcomes.

Time Duration: Infants' Temporal Cues and Quantity Inference

By: Liz Kim, Nikita Agarwal, and Philippe Rochat

In this Zoom-based study, infants watch a video of water being poured into a vase. During the familiarization phase, they see 12 seconds of pouring until the vase is full. In the test phase, one group of infants sees 8 seconds of pouring, while another group sees only 2 seconds. Both groups are then shown possible and impossible final outcomes, and we compare infants' looking times to see whether they can infer the correct final amount. For example, for the 8-second group, a larger final amount would be possible, whereas for the 2-second group, it would be impossible—and vice versa.
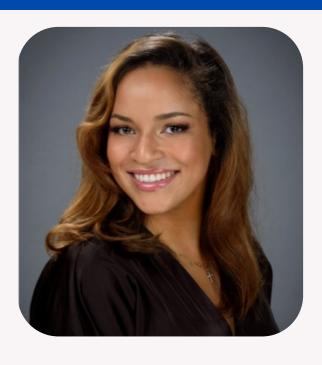We are currently collecting data and are very thankful to the families who have participated so far.
We look forward to sharing updates with you next year! I am also very excited to begin my new role, contribute to ongoing research, and meet new families and babies.

OUR PREVIOUS LAB MANAGER: HANNAH KREUZIGER

Hannah was our previous Lab Manager. During her time in the lab she worked hard to coordinate studies, mentor Research Assistants, and support ongoing projects.
Hannah looked at the development of two social emotions in children, Schadenfreude (the joy in another's misfortune) and Gift Malaise (the discomfort in receiving an unexpected gift), to ultimately understand the holistic contexts in which they develop. She is now pursuing her Ph.D. at the University of Chicago. We are all so proud of her continued accomplishments and grateful for all her contributions to the lab!

Gift Malaise: The Development of Gifting Norms in Children
By: Hannah Kreuziger, Philippe Rochat

Have you ever felt undeserving, pressured, frustrated, or inadequate when receiving a gift? These feelings can all be understood as Gift Malaise – the discomfort in receiving an unexpected gift – and we want to understand how and when this complicated social emotion emerges in development. Moreover, we want to learn how and when children begin to ascribe moral character to others based on how they respond to receiving unexpected gifts in four social contexts. The four social contexts stem from our former Honors Thesis student, Hallie Toren's, Gift Malaise scenarios previously tested with adults: 1) Merit, 2) Inequity Aversion, 3) Social Obligation, and 4) Shortcut of Reciprocity.

Schadenfreude's Developmental Trajectory: A Tripartite Exploration
By: Hannah Kreuziger, Philippe Rochat

Schadenfreude – the joy in another's misfortune – is a highly contentious emotion that evokes social condemnation. However, no one is immune to experiencing it, and it is much more nuanced than debated in current scholarship. Inspired by one of our lab's underlined theoretical articles produced by former Ph.D. student, Shenshang Wang, and Principal Investigator, Dr. Philippe Rochat, we seek to unravel this moral gray area of emotional development by studying how and when this emotion emerges in three various contexts: competition, envy, and justice. We evaluate it in three contexts, because they explore both the prosocial and antisocial expressions of Schadenfreude – a breadth that has not been exhausted in contemporary developmental science.

Gifting Norms in Children: The Moral and Social Consequences of Gifting Behavior

Article by Hannah Kreuziger

Gifts possess and yield social power. They forge social connections through feelings of closeness, obligation, value, generosity and more. Though prosocial, gifting behaviors are also deeply communicative. Depending on how one receives a gift, they may be judged by peers as kind and humble, or aloof and ungrateful. We can see this sensitivity displayed in the phrases that usually follow receiving gifts such as "Thank you, are you sure?" or "That is too much, I can't possibly accept!". We coin this displayed sensitivity to receiving gifts as Gift Malaise – the discomfort in receiving an unexpected gift.

Prior work conducted by visiting researcher, Maxim Ryser and prior undergraduate student, Hallie Toren showed that adults are highly sensitive to this gift malaise. Data from a study with over 200 adults showed that majority adults reported feeling much gift malaise when gift exchanges were not equitable. For instance, when adults were asked to imagine receiving a gift from a poorer gifter, adults stated they would feel a lot of malaise (discomfort) compared to little malaise. Likewise, adults also reported feeling more malaise when hypothetically getting a gift they did not earn relative to peers who did earn a gift. These results showed us that adults felt gift malaise when receiving a gift from someone with less than them (a sensitivity to inequity) and when they did not feel they rightfully earned it (a sensitivity to merit).

To understand how this gift malaise sensitivity emerges in childhood and contributes to social interactions, we had 124 children (5-10 years old) watch various gift exchange scenarios, all of which showing a gifter and a gift recipient. After each scenario played, they were subsequently tasked to choose which gift recipients they would like to be friends with. In each scenario, three "kids" (puppets) were shown getting a gift from another "kid". Out of the three kids getting gifts, one readily accepts a gift, one hesitates but accepts a gift, and one readily rejects a gift. Overall, children preferred and chose to be friends with kids that hesitated or rejected inequitable gifts (kids that showed malaise), especially when the gifter was poorer than the other kids or when the gift recipients did not earn the gift relative to others that did, but got one anyways.

Between the adult and child studies on gift malaise, we can see that a discomfort to receiving unexpected gifts in inequitable circumstances begins in childhood and remains stable throughout adulthood. Moreover, we can see that gift malaise not only exists, but the expression of it functions as a tool for moral discernment and affiliation early in our lives. Thank you to all of the families who participated in our study on gifting behaviors in children and thank you for your contributions to science at large!

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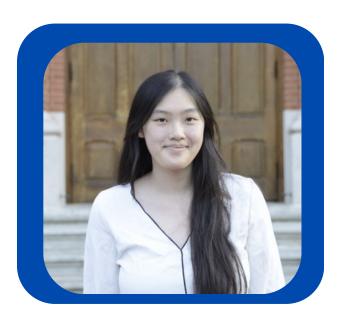# ABOUT THE RESEARCH ASSISTANTS

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