



Emory Infant and Child
Development Research Laboratory
Newsletter
Summer 2019 - 2020

Letter to Parents:

Article by: Philippe Rochat, Ph.D.
Professor of Psychology, Head of the Emory
Infant and Child Lab

As usual, let me start this letter by acknowledging the numerous parents, infants, and children who visited the Lab in the past year. Once again, we could not do this without you. Thank you, also, for the joint effort of many individuals working at our Lab. First, our Coordinator, Natalie Eldred, who left us last month to start a new career as Assistant Director of a nonprofit organization. We will miss her, but life is made of people growing and moving on, following their own professional path. Now, the good news is that we are lucky enough to welcome Amber Wallace, who is our new Lab Coordinator, starting the job with promising colors. Amber comes to us with a B.S. in Psychology from Kennesaw State University and four years of research experience as a research specialist and coordinator at a KSU Psychology Lab.

As always, our goal at the Emory Infant and Child Lab is to contribute to the scientific understanding of how the minds of children grow. We could not do it without any of you: parents, graduate students, lab coordinator, undergraduate research assistants (close to 20 over the past year who learn by helping us run experiments), and certainly not without all the children participating in our studies.

This past spring, one of our four graduate students, Maria Jones, successfully defended her Ph. D. dissertation on the development of implicit racial biases. She is now a Post-Doctoral fellow at Spelman College. ShenSheng Wang, another graduate student associated with the lab, will soon defend his Ph. D. dissertation on face animacy perception.

With Sara Botto, yet another graduate student completing her dissertation work, we published in *Developmental Psychology* and *Perspectives in Child Development* (two flagship journals in our field) her Master's thesis and further theoretical elaboration of work that demonstrates the early manifestation (between 14 and 24 months) of Evaluative Audience Perception; presumably a precursor of the very human concern for reputation. Last spring, Sara presented this work as a TEDx Atlanta talk that went viral. Don't hesitate to google her! We also received quite a bit of media exposure with a Netflix team invading our Lab for a few days to recreate some of our studies for a series scheduled to broadcast next year. Stay tuned! Cynthia Guo, our fourth graduate student, successfully passed her qualifying examination and is embarking in her Ph.D. research on the nature and development of children's propensity to lie and deceive. With Cynthia as first author, we submitted for publication a large cross-cultural study on the topic, comparing children from China, Samoa and the US. Our data demonstrate marked cultural variations in how preschool children understand and evaluate various forms of lying and deception.

We thank you all for helping us in our effort to learn and contribute to the scientific understanding of children in their development, in the US and abroad.

I hope that this newsletter continues to give you a sense of our appreciation, our research effort, and achievement to which you contributed as parents in a fundamental way. Feel free to read our latest publications, all on PDF, on the lab website.

Meet the Lab:
Philippe Rochat

Philippe Rochat was born and raised in Geneva, Switzerland. He was trained by Jean Piaget and his close collaborators, and received his Ph.D. from the University of Geneva, Switzerland in 1984. He then began a series of post-doctoral internships at Brown University, the University of Pennsylvania, and Johns Hopkins. The main focus of his research is the early sense of self, emergence of self-concept, the development of social cognition and relatedness, and the emergence of a moral sense during the preschool years in children from all over the world. His research emphasizes differences in populations growing up in highly contrasted cultural environments, as well as highly contrasted socio-economic circumstances.



What would Children do when they are Implicated in a Third-Party Transgression?

Article by Xinran “Cynthia” Guo, M.A.

Children start to tell lies to cover up their own misdeeds from approximately 2 ½ years of age. Because young children have not yet developed a mature understanding about lies and truth, children’s early lies are more related to their cognitive development than their moral understanding. For preschoolers to lie, they need to: (1) inhibit their desires to spill the truth, and to (2) understand that others do not know what they know. Both abilities are crucial milestones that mark typical development.

In my study, we try to understand whether children would engage in deceptive behaviors when they are not the one committing the transgression. In other words, the study examines whether children would deceive when they are implicated in a third-party transgression. To answer this question, we conducted two studies. In Study 1, child participants were told not to look or touch a gift that’s covered under a towel when the experimenter was outside. In the experimenter’s absence, a stranger (another experimenter) entered the room and uncovered the gift so that children were shown what the gift was. In Study 2, the setting was analogous to Study 1, except that a mechanical fan was the agent that uncovered the gift instead of another person.

We found that children were significantly more likely to cover up the gift with the towel when they were implicated in a third-party transgression (Study 1) than when they were implicated in an accident (Study 2). They were also more likely to deny looking at the gift in Study 1 than in Study 2 when questioned by the experimenter. These results show that preschoolers consider the agency behind the transgressor when engaging in deceptive behaviors. Notably, a lot of children in Study 2 blamed the fan as the agent that was responsible for the accident, whereas only a few children in Study 1 mentioned the stranger who transgressed. It could be the

case that children engaged in deceptive behaviors in Study 1 because they didn’t have a reliable agent to blame as in Study 2. We are currently collecting more data for Study 2 and a follow-up control study to exclude alternative explanations. More comprehensive results will be presented in the next newsletter.

Study 1



Study 2



Meet the Lab: Xinran “Cynthia” Guo

Xinran (Cynthia) Guo was born and raised in Beijing, China. She moved to the U.S. in 2012 and graduated from the University of California, Los Angeles with the highest honors in Psychology in 2016. In the Infant and Child Lab, her research interests involve investigating early deceptive behaviors in childhood.

In addition to her role as a psychology researcher, Cynthia is passionate about teaching and empowering students through knowledge. She taught her first psychology course on Cultural Psychology as part of the Emory Pre-college program this summer. For the upcoming school year, Cynthia has taken upon the role as the president of EPiC, an outreach mentorship program that provides pre-health students in the Atlanta High Schools with college preparation.

Outside of school, Cynthia enjoys the outdoors, reading, barre, and trying out different coffee shops.



Why does it feel Good to see Someone Fail?

Article by ShenSheng Wang, M.A.

In the Pixar animated film “Inside Out,” most of the plot plays out inside protagonist Riley’s head, where five emotions – Joy, Sadness, Fear, Disgust and Anger – direct her behavior.

The film was released to glowing reviews, but director Pete Docter later admitted that he always regretted that one emotion didn’t make the cut: Schadenfreude.

Schadenfreude, which literally means “harm joy” in German, is the peculiar pleasure people derive from others’ misfortune.

You might feel it when the career of a high-profile celebrity craters, when a particularly noxious criminal is locked up, or when a rival sporting team gets vanquished.

Psychologists have long struggled with how to best understand, explain, and study the emotion: It arises in such a wide range of situations that it can seem almost impossible to come up with some sort of unifying framework. Yet, that’s exactly what my colleagues and I have attempted to do.

Schadenfreude’s many faces

One challenge continues to plague those who research schadenfreude: There’s no agreed-upon definition.

Some think it’s best to study the emotion in the context of social comparison, so they’ll tend to focus on the way envy or resentment interacts with schadenfreude.

Others view the emotion through the lens of justice and fairness, and whether the sufferer deserved his or her misfortune.

Finally, the last group thinks that schadenfreude emerges out of intergroup dynamics – members of a group deriving joy out of the suffering of those outside of the group.

In our view, the different definitions point to multiple sides of schadenfreude, each of which might have distinct developmental origins.

The blossoming of schadenfreude

Perhaps the writers of “Inside Out,” when deciding to jettison “Schadenfreude,” thought that it would prove too difficult for children to grasp.

There’s evidence, however, that children begin to experience schadenfreude early in life.

For example, at four years old, children found someone else’s misfortune – like tripping and falling into a muddy puddle – funnier if that person had previously done something to hurt other children, such as breaking their toys.

Researchers have also found that two-year-old kids primed to be jealous of a peer experience glee when that peer suffers a mishap. By the age of seven, children feel more pleased after winning a game if a rival lost than when both won the game.

Finally, in a 2013 study, researchers had nine-month-old infants observe puppets interacting with one another. Some puppets “enjoyed” the same types of food that the infants enjoyed, while others had a different set of tastes. When some puppets “harmed” the other puppets, the researchers discovered that the infants would rather see the puppets who didn’t share their tastes be hurt over the ones who did share their tastes.

Bringing it all together

Together, these studies show that schadenfreude is a complex emotion that seems to be deeply ingrained in the human condition.

Psychologists Scott Lilienfeld, Philippe Rochat, and I wondered if there could be a way to unite the multiple facets of schadenfreude under the same umbrella.

Eventually, we settled on seeing schadenfreude as a form of dehumanization – the act of depicting and viewing another person as less than human.

Meet the Lab: ShenSheng Wang

ShenSheng Wang was born and raised in Tianjin, China. He came to Emory with a Bachelor of Science degree in Psychology from Nankai University (Tianjin) in the Fall of 2012. Since then, he has been studying face perception in infants and adults with the supervision of Dr. Philippe Rochat. ShenSheng received his Master’s Degree in the Spring of 2014. He is now finishing his work examining the complexities of Schadenfreude. ShenSheng will soon defend his dissertation and graduate this fall with his Ph.D. in Psychology.

In his spare time, ShenSheng enjoys music and sports. In college, he was a member of the Student Choir and participated in numerous choir competitions and performances worldwide. At Emory, ShenSheng joined the GSPN and serves as the coordinator of “Thinking Thursday,” an event for promoting intellectual conversation in the psychology community.



When most people hear the term “dehumanization,” they probably go to the worst-case scenario: a complete denial of someone’s humanity; a phenomenon relegated to torture chambers, battlefields, and racist propaganda.

But this is a misconception. Psychologists have shown that people often view their own group in more human terms, and – in subtle ways – can deny the full humanity of those outside of their group.

In our review, we hypothesized that the more empathy someone feels toward another person, the less likely they are to experience schadenfreude when that person suffers.

So, in order for someone to feel schadenfreude

toward another person, – whether it’s a rival, someone in an outgroup, or someone who’s committed a crime – they’ll need to subtly dehumanize them. Only then does the sufferer’s misfortune become rewarding.

This theory hasn’t been tested yet, so at the end of our review, we suggest ways schadenfreude’s early origins and individual differences can be placed under scientific scrutiny to study this novel hypothesis.

Linking schadenfreude with dehumanization might sound dark, especially because schadenfreude is such a universal emotion. But dehumanization occurs more often than most would like to think – and we believe it’s behind the pang of pleasure you feel when you see someone fail.

Meet the Lab: Natalie Eldred

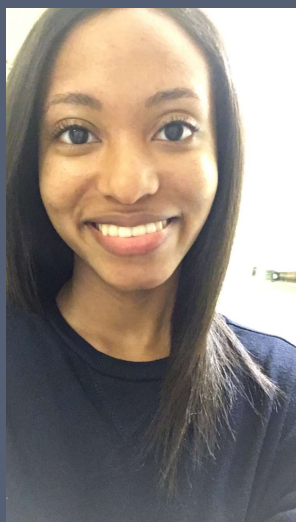
Natalie Eldred is originally from Palm Desert, California. She graduated May 2017 from Emory University with a Bachelor's of Arts Degree in Psychology and a minor in Jewish Studies.

She moved to Atlanta in 2013 and worked as a Research Assistant in the Infant and Child Lab before starting as the Lab Coordinator in August 2016. Broadly, Natalie is interested in and conducts research about social development in children.

Natalie has recently moved on to pursue a full-time position at Jewish Family and Career Services. However, Natalie is still involved in many of the lab’s ongoing projects.



Welcome to the Lab: Amber Wallace



This year our Lab Coordinator, Natalie Eldred, will be leaving to pursue a full-time position at Jewish Family and Career Services. However, we are excited to welcome Amber Wallace, a graduate from Kennesaw State University, where she earned a Bachelor of Science degree in Psychology and a minor in Statistics.

Amber is originally from Illinois, but moved to Georgia during her high school career. Before joining the Infant and Child Lab, she gained four years of experience in a lab researching Interpersonal Violence. She plans to ultimately pursue a graduate degree in Psychology; however, until that time, she will be here at the Infant and Child Lab. When not in the lab, she enjoys crossword puzzles, baking new desserts, watching marathons of Harry Potter or Columbo, and playing with her Standard Poodle, Hannah.

When do Children Begin to be Sensitive to the Evaluation of Others?

Article by Sara Valencia Botto, M.A.

Unlike many other species, humans are prone to tailor their behavior to garner approval; we spend valuable time putting on makeup, choosing the right picture and Instagram filter, or composing ideas that will undoubtedly change the world in 140 characters or less. Clearly, our concern with how others evaluate us is a big part of being human.

Despite this being a central human trait, we actually know relatively little about when and how we come to care about the opinion of others. Specifically, when and how does an infant, who has no problem walking around in their onesie at the grocery store, develop into an adult who fears speaking in public for fear of being negatively judged? To explore this question, we designed a paradigm called the robot task to explore when children would begin to be sensitive to the evaluation of others. Specifically, the robot task captures when children, like adults, begin to strategically modify their behavior when others are watching.

To do this, we showed 14-24-month-old infants how to activate a toy robot by pressing a remote control. Importantly, we would either express a positive value (such as yay! Isn't that great?) or a negative value (oh oh! Oops, oh no!) after pressing the remote. Following this toy demonstration, we invited the child to play with the remotes, and then either watched the child or pretended to read a magazine.

The idea was that, if by 24 months, infants were sensitive to the evaluation of others, then infants' button-pressing behavior would be influenced not only by whether someone was watching, but also by the values that the experimenter had previously expressed after

pressing the remote. For instance, we would expect children to play with the positive remote more if they were being observed, but expected them to explore the negative remote more when no one was watching.

Across four studies, we found that toddlers tended to modify their behavior depending on whether the experimenter was watching, and whether she had positively or negatively valued the remote action. In particular, when the experimenter was watching, most children activated the remote associated with a positive value significantly more frequently. In contrast, if the experimenter previously expressed a negative value, most children waited until she turned her back to activate the remote. Overall, this data suggests that by the age of two, children are sensitive to how others might respond their behavior, and thus consider both the values expressed by others and whether or not they are being observed.

While the past four studies got the question of when we become sensitive to the evaluation of others, it is still unclear how this concern develops. To explore this question, we are currently examining the social and cognitive factors that contribute to our concern for the evaluations of others. Specifically, we are testing 12-24 month-olds, and 4-5 year-olds, to examine what cognitive abilities and social factors influence how much a child cares about others' judgements. These studies are still ongoing, and will continue through the summer.

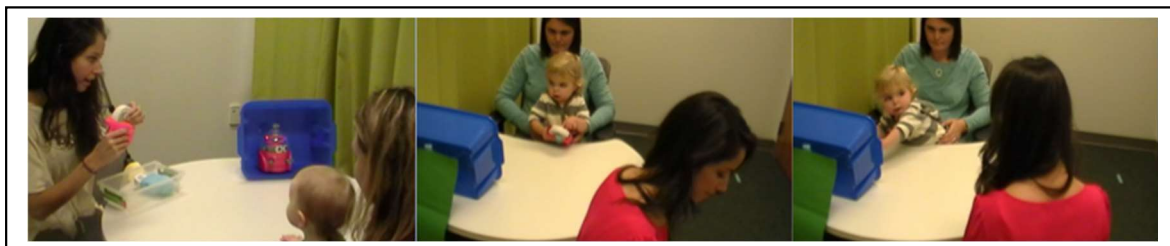
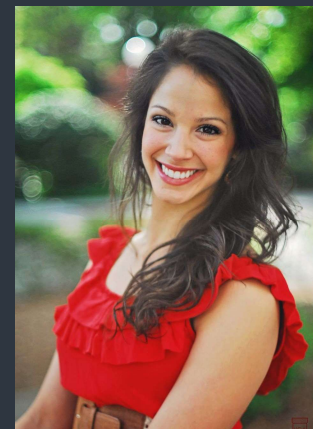
For more information about the toddler study, you can find Sara's recent TEDx talk on the TEDx Talks YouTube channel, or find the published article on our website.

Meet the Lab: Sara Valencia Botto

Sara joined the lab in the fall of 2014. She graduated from the University of Georgia with a B.S. in Psychology in May of 2014, and has since received her Master's degree from Emory University. She will soon defend her dissertation and earn her Ph.D. in Psychology.

While in graduate school, Sara has explored when and how we become sensitive to how we are perceived and evaluated by others. Currently she is running the audience perceptions study that is the feature article of this page.

Sara also passionately encourages young students to pursue careers in STEM by sharing her research in schools. She also participates in "Roots and Shoots," a program that teaches basic science to third-graders.



Do Infants use Size or Group Number to Infer who should win in a Competitive Exchange?

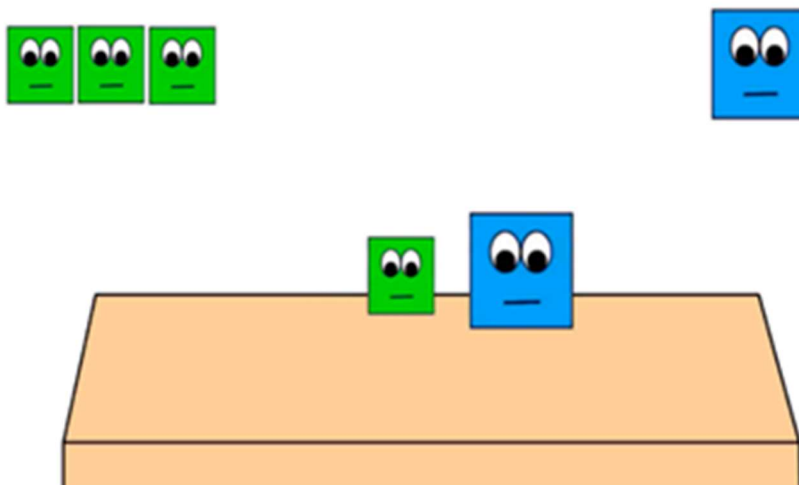
Article by Sara Valencia Botto, M.A.

Inferring who might win in a competitive exchange (i.e., inferring social dominance) is critical for survival. For example, when competing for resources, it is important to gauge an opponent's likelihood of winning to decide on whether to engage in conflict or to retreat. One perceptual cue that is utilized across the animal kingdom to make distinctions in social dominance is size. Research shows that birds, non-human primates, and humans, all use size as a salient perceptual cue to infer social dominance.

In addition to size, research has shown that numerical alliances are another cue used to infer dominance. Indeed, there is "strength in numbers," so to speak, and a bear, for example, is less likely to engage in conflict with a pack of wolves as opposed to a lone wolf. While we know that non-human animals readily use these magnitude cues to infer dominance, it is less clear which of these cues is more privileged by human infants. To answer this question, we are testing 6-11 month-olds in an experiment where we directly pit size and number against each other as a strong test of which cue infants favor when judging social dominance. Specifically, we ask whether infants expect a larger guy, despite having a smaller group, to win in a competitive exchange; or whether they expect a smaller guy to win because they have a larger group.

To examine this, we measure looking time between two scenarios (a big agent versus a small agent yielding) in a violation-of-expectation paradigm. Violation of expectation paradigms capitalize on the fact that infants tend to look longer at scenarios that defies their expectation. For example, if infants see a scenario where the big agent yields for a little agent, longer looking times to the big agent yielding would suggest that infants were not expecting the big agent to yield, and thus look longer to this scenario. On the other hand, if infants looked longer at the scenario where the smaller guy with the larger group yields to the larger agent, then this suggests that they were expecting the smaller guy to win, and thus infants would be using group size to infer social dominance.

So far, we have found an interesting developmental trend, where 6-8 month-olds seem to use an agent's size to determine who should win in a competitive exchange, whereas 9-11 month-olds tend to rely on the agent's number of group members, regardless of their size. This study is currently ongoing, and we will continue to recruit participants through the summer.



Would you like to read more?

You can keep up with the progress of our lab on our website! We regularly update it with our annual newsletters and current staff and students. You can also learn about the many facets of social and cognitive development we study, and the individual research interests and ongoing projects of our graduate students.

We also keep published works of our projects on the site that your children made possible! These articles and books can be found in the "News" tab, organized by research area as well as chronologically. You can also explore the conferences and other events we attend and co-host.

On our site, we also provide information about how to locate our lab, contact us with any questions or interest, as well as information about other Emory labs.

Visit our webpage!
www.psychology.emory.edu/cognition/rochat/lab

How Does your Child Think about Race and Space?

Article by: Maria S. Jones, Ph.D.

The stereotype that people with darker skin are more dangerous has long permeated the culture of the United States. Stereotypes, or assumptions about a person made based on what social group they belong to, have a profound effect on how we view the world and interact with others. Whether it is the belief that boys are better at math or black boys are better at sports, stereotypes exist everywhere and everyone has them. We are more likely to believe that negative stereotypes about others are true if they are members of a social group that is not our own; this is an out-group bias. This bias often happens unconsciously so we are not even aware that it is affecting how we view other social groups like race.

Race is a socially constructed category that is defined by a set of physical features which are thought to be manifestations of inherent differences in intelligence, temperament, and physical prowess. In particular, black men are quickly and quite often described as threatening physical forces in both positive (e.g., athletic) and negative (e.g., criminal) ways. These stereotypes cause people to respond in fear when they encounter a new person, particularly a darker skinned male.

We were interested in examining how fear interacted with racial bias in school-aged children. As even babies are sensitive to physical differences that define social categories, it is important to explore what type of effect racial bias has on the way older children think about the people around them. In particular, the goal of this project was to determine whether spatial perception and racial bias were related in 6- to 10-year-olds. Because interactions with people of different races often happen in close proximity, it is important to understand how space representation is affected by racial bias. We hypothesized that kids who perceived the black

faces as moving faster than the white faces would also have greater racial biases.

The children who participated in this study completed two computerized tasks designed to test spatial perception and implicit racial bias. For the spatial task, children saw faces increasing in size on the screen and were instructed to do a button press response when the face seemed so close to them that it would touch their face. Children were asked to categorize faces of black and white children as well as good and bad words for the racial bias task. The speed and accuracy of their performance allowed us to calculate their individual scores and see if they were related.

Results showed that children did not respond differently to looming faces based on race, gender, or age in the spatial perception task. Contrary to previous research, children did not have a difference in the speed or accuracy in response to black or white faces in the racial bias task overall. There were differences based on the participant's gender in racial bias. Of the children who had a positive association with black faces, black girls showed the strongest association. Scores on the implicit bias task were not related to the space perception task. We believe that because children showed no bias on the spatial perception task, fear may not play a significant role in children's implicit racial attitudes.

Research has previously shown that exposure to people of diverse cultures can help to reduce implicit bias in children. According to the U.S. Census Bureau, the ethnic diversity in Atlanta is 52% Black, 38% White, 5% Hispanic, 4% Asian, and 2% Multi-Ethnic in 2018. We believe that the diverse demographics in our sample, which are representative of Atlanta, GA, may explain the lack of bias in these children.

Meet the Lab: Maria Jones

Maria is originally from Washing DC. She received her Bachelor of Arts Degree in Psychology with honors from Spelman College in 2011. After starting her graduate career, she moved to the RoCHAT Lab in 2015.

Her research interests include the relations between the development of race, space, and memory. Specifically, she aims to determine the mechanism by which children learn and process implicit racial bias and the ways in which this interacts with the development of spatial perception and memory abilities.

During her graduate career, she was awarded the National Science Foundation graduate research fellowship. Maria recently earned her Ph.D. in Psychology and began a post-doctoral position at Spelman College.



Undergraduate Research Assistants



Mia Jin – Class of 2020
Psychology, Quantitative Social Sciences
China



Hanna Lee – Class of 2021
Psychology
Seoul, South Korea



Stephanie Revoredo – Class of 2020
Psychology
Georgia



Anusha Gadipudi – Class of 2021
NBB, WGSS
Hyderabad, India



Dominic Lal – Class of 2021
Psychology, Predictive Health
Georgia



Nicole Penn – Class of 2020
Chinese Studies
Conway, Arkansas

We couldn't do this without you:

You are receiving this newsletter because you and your child have participated in one of our studies or have expressed interest in taking part in one. We invite you to involve yourself in our current studies. If your child is under the age of 10, and you would like to be contacted about our studies, please call or email us at:

(404) 727-6199 or Infant.and.child.lab@gmail.com

Your visit will not take long, and your child will be given a small token of appreciation at the end. Thank you again; we cannot do it without you!

We are located on the Emory Campus, near Druid Hills, Decatur, Candler Park and other nearby Atlanta Neighborhoods.

36 Eagle Row,
Atlanta, GA 30322

Validated parking is available. Check our website for directions: www.psychology.emory.edu/cognition/rochat/lab

Student Research Assistants



Nick Furci – Class of 2020
Psychology/Philosophy
New York



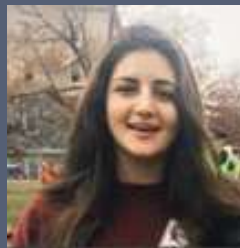
Azar Tuerxuntuoheti – Class of 2019
Psychology/Quantitative Social Science
China



Jisu Lee – Class of 2020
Psychology
South Korea



Maanasa Gade – Class of 2019
Psychology/Nutrition
California



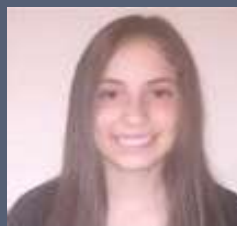
Arielle Kahana – Class of 2019
Psychology/Women's, Gender, and Sexuality Studies
Switzerland



Rylee Hafitz – Class of 2019
Psychology/Human Health
Georgia



Alison Gartley – Class of 2019
Neuroscience & Behavioral Biology
Georgia



Jackie Moses – Class of 2019
Psychology/Russian
New York

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