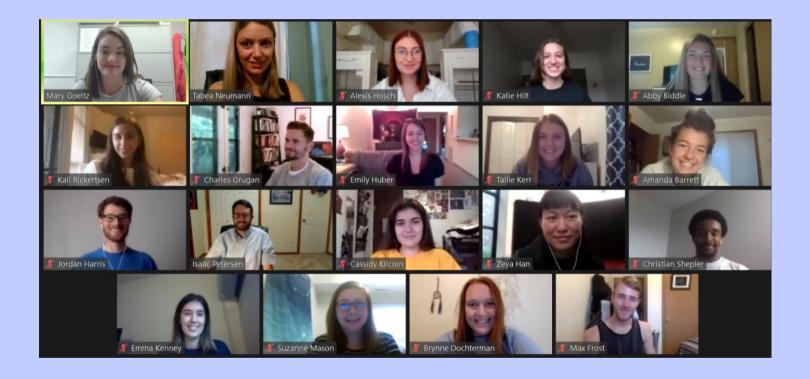
# The Developmental Psychopathology Lab Winter Newsletter



University of Iowa - Department of Psychological and Brain Sciences



### INTRODUCING OUR LAB!

Meet the lab, what we do, and how to support us.

#### **Our First Newsletter!**

By Tallie Ker, Kali Rickertsen, Amanda Barrett, Tabea Neumann



# A Note from Dr. Petersen

#### Principle Investigator



#### Dear Family,

We greatly appreciate your support of research in our lab. You are receiving this newsletter because you are one of the incredible families participating in the School Readiness Study at the University of Iowa's Developmental Psychopathology Lab. Thanks to your participation, the National Institutes of Health (NIH) have recognized the importance of our study and the knowledge to be gained for advancing public health and understanding of how children develop skills to be ready for school. The NIH awarded our lab five years of funding to complete the study.

We are excited to continue this study with your help. We have discovered many important things thanks to the participation of families like you. For instance, we have learned that children's language skills may help them control their behavior (Petersen, Bates, & Staples, 2015) and develop social skills (Petersen & LeBeau, in press), which may make it less likely that they develop aggression. This knowledge may lead to more effective approaches to prevent or treat aggression. We would not be able to conduct our study without the time and hard work that you give. Given the challenging times, our lab felt it was important to communicate with families regarding our response to COVID and our plans moving forward.

The pandemic has affected so many people in so many ways. Families have lost loved ones, school systems have been disrupted, and childcare options have become more restricted. Some have had to work at the frontlines in schools and healthcare systems, while others have had to juggle working from home and trying to ensure their children receive an adequate education. Others have lost jobs or had their hours or pay cut. And people have become more isolated from one another in order to stay safe. This is a difficult and trying time, and we want to do whatever we can to support you. In response to COVID, our lab has moved online. We have postponed in-person data collection until it is safer to do so. We are currently developing cleaning and safety protocols, so that we can keep families and the research team safe when we resume lab visits. In the meantime, we are continuing to collect online questionnaires from participants and you will continue to receive payment for completing these. We hope you are well. Please do not hesitate to reach out if you have questions or if we can help with anything. We are attaching a list of potentially helpful resources. We are a community and we support each other.

All the best wishes,

Isaac T. Petersen, Ph.D.

Principal Investigator of the Developmental Psychopathology Lab, Department of Psychological Brain Sciences, University of Iowa



# **About DevPsy Lab**



#### Mission Statement

We are striving to improve the health and well-being of families and communities by conducting research to advance the understanding of human development.

#### Diversity Statement

We seek to include members of various cultural, ethnic, and socioeconomic backgrounds so that our research might best represent the families which make up our diverse communities. We aim to provide a welcoming and respectful environment for people of all backgrounds.

#### **OUR RESEARCH QUESTION**



How do parenting practices, neural processes, and cognitive control processes promote school readiness in the transition from preschool to school entry?

**Central hypothesis**: Delayed development of cognitive control—at neural and psychological levels—leads to cognitive control deficits in early childhood which prevent automatization and lead to the downstream development of externalizing and academic problems.

# Our Research

#### Our Goals

- find explanations for how our brain processes can predict school readiness
- find how these brain processes predict development
- identify parenting practices that predict development

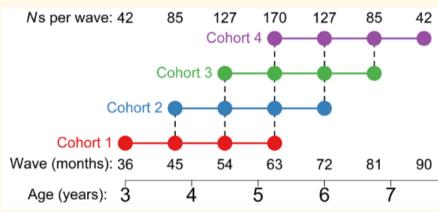
We use an **accelerated**longitudinal design to explore this!

#### WHAT'S THAT?

Instead of following a group of the same age, we pull children from many age points and scatter their data to cover all age points and take less time doing so!



#### Accelerated Longitudinal Design



Circles reflect measurement points (4 waves) for each cohort. Dashed lines indicate common measurement points across cohorts.

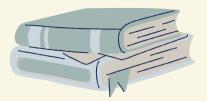
# **Big News!**

NIH Funding

funding at the national level from the National Institute of Health (NIH). This is a huge step for the work that we are doing and will allow the research done to be even

This summer, DevPsy Lab received

more of a contribution.



# School Readiness Study

The purpose of our current research, the School Readiness Study, is to investigate how children develop behavior problems as well as positive adjustment. We are specifically interested in externalizing problems such as aggressive, disruptive, and non-compliant behavior. We focus on the development of individual differences in self-regulation skills and the consequences of children's self-regulation skills for their school readiness. To conduct our research we follow families and children longitudinally, with multiple levels of analysis including how biological, psychological, and social-contextual processes relate to the development of sleep problems.

Early difficulties in cognitive control may predict a delay in school readiness. By exploring the various factors that play a role in determining behavior, school outcomes, and development of internalizing and externalizing problems, we will better establish an understanding of intervention and prevention strategies to help children be successful.

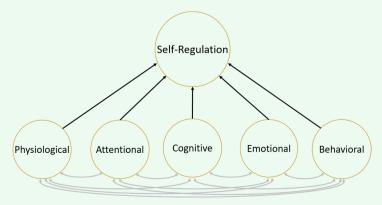
# Independent Project Spotlight

One of the great things about our lab is that it gives students the opportunity to conduct their own individual research projects as part of their undergraduate or graduate degree. Here are two of our students and what they are working on!

#### <u> Jordan Harris - Graduate Student</u>



Child Psychology research has grown increasingly focused on improving understanding for why some kids develop behavior problems, which can include externalizing (aggression, noncompliance) and internalizing (anxiety, depression), but others do not. Children show individual differences in how they regulate their emotions in a frustrating scenario and how they go about making decisions that can delay a small reward in the moment in favor of a larger reward at a later time. We see that some kids are better at either or both of these two things, and we see that some kids develop behavior problems and others don't. The current project seeks to explore how delay preference and emotion regulation are possibly connected to the development of behavior problems. Currently we are hard at work coding videos and analyzing data to investigate this question. The goal of this study is to explore potential key reasons for why some kids develop certain behavior problems and not others in order to inform future treatments to target early warning signs more accurately before they take hold. We think these research guestions are very important and may make an impact on how we better understand behavior problems. We couldn't do it without the help and support of our wonderful research participants!



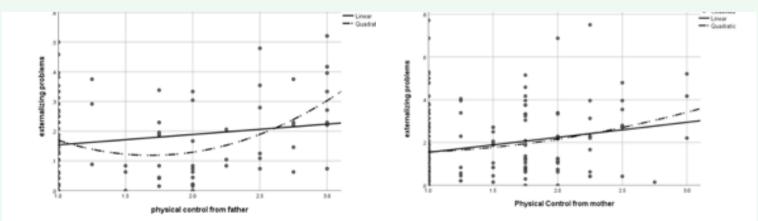


# Independent Project Spotlight





For my honors study I investigated the relationship between parental control and children's risk of externalizing problems, such as rule-breaking and disruptive behaviors. Previous researchers established a detrimental effect of high physical control and overreactive parental control on child behavior. Physical control includes both physical punishment and removing children from a specific situation or stopping certain behaviors forcefully. While the American education system tends to support democratic parenting, I as an Asian student experienced a much higher level of parental control when growing up. Because of these intercultural differences in parenting styles, I am particularly interested in the effect of parental control in early childhood development. For the current study, the data of 68 parent-child dyads was analyzed which included children at age 3 to 7 years. Parents completed questionnaires which assessed children's externalizing and internalizing problems, and aspects of parental control. While there was no correlation between parental control and internalizing problems, we found that both, very high and very low parental physical control, but not general parental control, were associated with an increased risk of externalizing problems. The results suggest that moderate parental physical control is related to a lower risk for children developing externalizing problems.





# Thank You, Families!

# of Families involved in DevPsy Lab:



"I like working with our families because it is rewarding to see how excited they are to be in lab and how much fun they get out of participating in the research"

-Emma Kenney

We want to express our gratitude to all the families that give their time and energy to our lab. Our work would not be possible without you. Your involvement furthers our ability to provide meaningful research.

# How Can I Learn more about the Lab?

#### Follow us!



@dev\_psy\_lab



@devpsylab



@devpsylab



#### **Meet Our Team!**

#### <u>Dr. Isaac Petersen - Principle Invesitgator</u>

Dr. Isaac T. Petersen is interested in how children develop individual differences in adjustment, including behavior problems as well as competencies. He is particularly interested in the development of externalizing behavior problems and underlying self-regulation difficulties. His primary research interests include how children develop self-regulation as a function of bio-psycho-social processes including brain functioning, genetics, parenting,



temperament, language, and sleep, and how self-regulation in turn influences adjustment and school readiness. A special emphasis of his work examines the neural development underlying the development of self-regulation, schoolreadiness, and externalizing problem, with measures of electroencephalography (EEG) and event-related potentials (ERPs). He is also interested in ways to measure change over lengthy spans of development using different measures over time to account for changes in how constructs manifest with development (i.e., heterotypic continuity).

#### **Tabea Neumann - Lab Coordinator**



Tabea Neumann received her B.Sc. (Hons) from the University of Dundee in Scotland, where she explored with Prof. Fabio Sani the structure and correlates of emptiness in psychiatric patients. She worked in multiple clinical settings where she provided care to youth with ASD and externalizing behaviour problems. In addition, she led psychological interventions for mental health patients in Germany and supported individuals suffering from cancer and brain injuries in the UK. Her research interests focus on the effects of biological and environmental factors on brain development and psychopathology. She is excited to join the DevPsy Lab as Lab Coordinator and plans to pursue a doctorate in clinical psychology.

#### **MT Goeltz - Lab Coordinator**

Mary Taylor Goeltz received her B.A. in Psychology from Dickinson College, where she worked with Dr. Suman Ambwani as a research assistant in the CARE (Clinical Assessment and Research) lab. After graduation, MT worked as a lab manager for the Early Social Interaction Lab at UC Santa Cruz. There, under the direction of P.I. Dr. Audun Dahl, she ran multiple projects, including an NIH-funded longitudinal research project investigating the emergence of helping behaviors in infants. She is excited to join the DevPsy lab as a Lab Coordinator, and she plans to pursue a doctorate in clinical psychology following her time at UI.



#### Ph.D. Students

#### <u> Jordan Harris - Graduate Student (Second Year)</u>

Jordan L. Harris received his B.S. in Psychology from the University of Pittsburgh. Upon graduation he worked as a full-time project coordinator on two NIH-funded research projects focused broadly on evidence-based assessments and the integration of smartphone apps to increase skill knowledge and acquisition, specifically for parents and children with Disruptive Behavior disorders (DBDs). He also was a project coordinator for one NIH-funded project on the measurement of motion data from a smartwatch that will be used to differentiate children with/without ADHD Hyperactive type. He is interested in researching psychosocial and biological factors that contribute to the development of behavioral problems in children.















#### <u> Alexis Hosch - Graduate Student (First Year)</u>



Alexis Hosch received her B.S. in Psychology from the University of Wisconsin-Madison. As an undergraduate, she led a project investigating the effects of parenting on the relation between polygenic scores for aggression and externalizing behaviors in children and adolescents. Upon graduation, she worked as a full-time lab manager for Dr. Haley Vlach on projects examining the role of desirable difficulties, e.g., the spacing effect, in children's STEM learning. Broadly, she is interested in researching the interplay between biological processes and environmental factors in the development of self-regulation and externalizing behaviors in children.

## **Undergraduate Research Assistants**



Amanda Barrett



**Abby Biddle** 



**Brynne Dochterman** LV2 Experimenter



**Max Frost** LV1Experimenter



Sidney Swartzbaugh



**Charles Grugan** LV2 Experimenter



**Zeya Han** Data Specialist



**Katie Hilt** 



**Emily Huber** Data Specialist



**Emma Kenney** LV1Experimenter



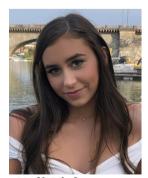
**Tallie Kerr** 



**Cassidy Kilcoin** 



**Suzanne Mason** LV2 Experimenter



Kali Rickertsen



**Ameen Taha** 



## Helpful Resources for Families

#### **Financial Support**

To get help figuring out what financial services might be available to you, call the

General Assistance Specialists at Johnson County Social Services: 319-356-6090

#### **United Way**

Johnson/Washington Counties Community Disaster Relief Fund: 319-259-9218; www.unitedwayjwc.org
Emergency assistance for households impacted by the Corona virus.

**General Assistance** (short term monetary help): 319-356-6090; www.johnson-county.com/ss Assistance with rent, utilities, and medications for eligible participants.

#### **Housing**

**The Housing Fellowship**: 322 East 2nd Street, Iowa City, IA 52240 Phone: (319) 358-9212; www.housingfellowship.com

#### **Housing Choice**

Voucher Program:

https://www.icgov.org/city-government/departments-and-divisions/neighborhood-and-development-services/neighborhood-18

#### Healthcare

**Iowa City Free Medical and Dental Clinic**: 2440 Towncrest Drive, Iowa City, IA 52240-6622; Phone: (319) 337-4459; freemedicalclinic.org Provides free out-patient medical and dental services for uninsured and underinsured members of the community,

#### Hawk-I

Healthcare Coverage: lowa offers hawk-i health care coverage for uninsured children of working families. No family pays more than \$40 a month. Some families even pay nothing at all. Website: http://www.hawk-i.org/

#### **Mental Health:**

**Free Mental Health Clinic** (FMHC): Clinic is held every other Saturday morning with patient appointments scheduled at 9AM and 10AM. FMHC does not offer counseling or therapy services. All appointments are made through the clinic email at freementalhealthclinic@gmail.com.

**University of Iowa Seashore Clinic:** Phone: (319) 335-2467; Department of Psychological and Brain Sciences

University of Iowa Hospitals and Clinics: Department of Psychiatry

- Karen Nelson, Ph.D.: (319) 353-6040
- Beth Troutman, Ph.D.: (319) 384-3236

#### Food

**Coralville Community Food Pantry**: 1002 5th Street, Coralville, IA 52241 Phone: (319) 337-3663; coralvillefoodpantry.org

**CommUnity Crisis Food Bank**: 1121 Gilbert Ct., Iowa City, IA 52240-4528 Phone: (319) 351-0140; builtbycommunity.org

#### **Education & Support Groups**

**Iowa Family Network Parent Education Groups**: Group-based parent education programs are designed to provide support and education in a group setting, helping parents acquire skills needed to help their child reach developmental success. iafamilysupportnetwork@everystep.orgor; Phone: 1-888-425-4371

https://www.iafamilysupportnetwork.org/group-services

**United Action for Youth:** 1700 S 1st Ave., Ste. 14, Iowa City, IA 52240 Phone: (319) 338-7518; unitedactionforyouth.org; offers counseling and youth development programs to teens and families in Johnson County and surrounding communities. UAY offers family mediation and therapy for youth and their parents, to address family conflict, communication, depression,

anxiety, trauma and grief. 355 Iowa Avenue in downtown Iowa City

#### **Crisis Programs & Advocacy:**

**CommUnity Crisis Services:** 1121 Gilbert Ct., Iowa City, IA 52240-4528 Phone: (319) 351-0140; builtbycommunity.org; Provides immediate support through the Food Bank and Crisis Intervention Programs. All services are free and confidential. 24-Hour Crisis Line, Chat, and Text services. Available by phone 24/7; walk-in counseling offered Monday - Friday, 9am - 5pm; mobile crisis outreach offered 24 hours to Iowa and Johnson Counties. Specializes in suicide

prevention and crisis intervention services, and hosts monthly support groups

for individuals with specific needs, with times and locations listed online.

**Domestic Violence Intervention Program (DVIP):** 1105 S. Gilbert Ct., Ste. 300, Iowa City, IA 52240; Phone: (319) 351-1043; dvipiowa.org, provides support and resources to individuals battered by their intimate partner or loved ones. Provides the following confidential crisis intervention services: 24-hour safe shelter and hotline; advocacy with law enforcement, courts, medical and social services; counseling and support groups; youth support services; volunteer opportunities; and community education.

#### **Employment Services:**

Iowa Workforce Development Center: 1700 S 1st Av, Iowa City, IA; Phone: 1.319.351.1035; Provides job information, resumes service, internet access, typing tutorials, word processing, brochures and pamphlets, job placement assistance and unemployment insurance.

**Goodwill Vocational Services**: 1700 S 1st Ave Suite 11A lowa City, IA; Phone: 1.319.337.4889

**Employment Plus:** 1700 S 1st Ave, Suite 15 Iowa City, IA; Phone: 1.319.358.7801

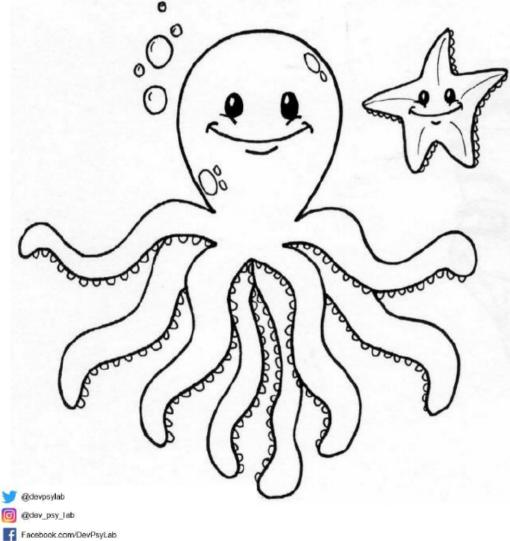
#### Childcare

**Child Care Assistance program (CCA)** helps pay for the care of your child while a parent or caretaker works or attends school. It might also be used to care for children while a parent or caretaker is looking for work or is temporarily unable to care for children because of medical reasons. https://ccmis.dhs.state.ia.us/clientportal/; (866) 448-4605; https://dhs.iowa.gov/child-care

**4Cs Community Coordinated Child Care**: 1500 Sycamore St., lowa City, IA 52240; Phone: (319) 338-7684; iowa4cs.com, Provides education, consultation and resources to home and center-based child care programs.

# Coloring Page

DevPsy Lab
University of lowa



www. psychology.uiowa.edu/developmental-psychopathology-lab

# Happy Holidays from the DevPsy Lab!



# **Contact Us:**



devpsy-lab@uiowa.edu



(319) 353-1977