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- EDP 6263: Behavior Assessment
 - EDP 6443: Capstone in Behavior Analysis
 - EDP 6951: Independent Study in ABA Research
 - EDP 5783: Practicum in ABA
 - EDP 5043: Basic Behavior Analysis

Adjunct Instructor	Behavior Theory <i>Master of Arts in ABA (online)</i> <i>University of South Florida</i>	Summer 2020
Instructor	Observational Methods and Functional Assessment <i>Master of Arts in ABA (online)</i> <i>University of South Florida</i>	Fall 2019; Spring 2020
Instructor	ABA in Complex Community Environments <i>Master of Arts in ABA (online)</i> <i>University of South Florida</i>	Spring 2019
Instructor	Research Methods Design and Ethics <i>Undergraduate ABA Minor (in-person)</i> <i>University of South Florida</i>	Spring 2018; Summer 2018
Graduate Teaching Associate	Research Methods Design and Ethics <i>Undergraduate ABA Minor (in-person)</i> <i>University of South Florida</i>	Fall 2017
Graduate Teaching Associate	ABA Practicum <i>ABA Master of Science (in-person)</i> <i>University of South Florida</i>	Fall 2017

Research Experience

Primary Investigator Severe Behavior Laboratory <i>University of Texas at San Antonio</i>	2020- Current
Faculty Researcher San Antonio Applied Behavior Analysis Project (SAABA) <i>Autism Treatment Center, Children's Hospital of San Antonio</i>	2020- Current
Research Coordinator USF- Engage Behavioral Health	July 2018- February 2019
Graduate Research Assistant	2015- 2016

Department of Interdisciplinary Learning and Teaching
University of Texas at San Antonio

Clinical Experience

Faculty Supervisor (BCBA-D) San Antonio Applied Behavior Analysis Project (SAABA) <i>Autism Treatment Center, Children's Hospital of San Antonio</i>	2020- Current
Registered Behavior Technician Collaborative Autism Resources and Education (CARE)	2015- 2018
Specialist in School Psychology Intern Montgomery Independent School District	2016- 2017
School Psychology Practicum Student San Antonio Independent School District	2015- 2016
Behavioral Intern San Antonio Independent School District Arc of San Antonio	2015- 2016

Publications

* *Indicates student co-author*

12. **MacNaul, H.**, Nguyen, A., Wilson, S., Cividini-Motta, C., & Mandel, N. (2023). Evaluating two iterations of a paired stimulus preference assessment. *Behavioral Interventions*, 1-11. <https://doi.org/10.1002/bin.1977>
11. Thompson, C. & **MacNaul, H.** (2023). Using pyramidal training to address challenging behavior in an early childhood education classroom. *Education Sciences* (13), 539. <https://doi.org/10.3390/educi13060539>
10. Neely, L., Carnett, A., Quarles, J., **MacNaul, H.**, Park, S., Oyama, S., Chen, G., Desai, K., & Najafirad, P. (2022). The case for integrated advanced technology in applied behavior analysis. *Advances in Neurodevelopmental Disorders*. <https://doi.org/10.1007/s41252-022-00309-y>
9. **MacNaul, H.**, Wimberley, J., Labay, A., Neely, L., Novotny, M., & Morgan, B. (2022). Effects of an adapted telehealth training curriculum for registered behavior technicians. *Advances in Neurodevelopmental Disorders*, 1-12. <https://doi.org/10.1007/s41252-022-00285-3>
8. Mandel, N. R., Cividini-Motta, C., Schram, J., & **MacNaul, H.** (2022). Emergence of auditory-visual discrimination and tacts through exclusionary responding. *Journal of Applied Behavior Analysis*, 55(3), 919-933. <https://doi.org/10.1002/jaba.927>

7. **MacNaul, H.**, Cividini-Motta, C., *Wilson, S., & *Di Paola, H. (2021). A systematic review of research on stability of preference assessment outcomes across repeated administrations. *Behavioral Interventions*, 36(4), 962-983. <https://doi.org/10.1002/bin.1797>
6. **MacNaul, H.**, Garcia, R., Cividini-Motta, C., & Thacker, I. (2021). Effect of assignment choice on student academic performance in an online class. *Behavior Analysis in Practice*, 14(4), 1074-1078. <https://doi.org/10.1007/s40617-021-00566-8>
5. Neely, L. C., **MacNaul, H.**, Gregori, E., & Cantrell, K. (2021). Effects of telehealth-mediated behavioral assessments and interventions on client outcomes: A quality review. *Journal of Applied Behavior Analysis*, 54(2), 484-510. <https://doi.org/10.1002/jaba.818>
4. Schulz, T.J., Cividini-Motta, C., Blair, K., & **MacNaul, H.** (2020). A comparison of high-tech and low-tech response modalities to improve student classroom behavior. *Journal of Behavioral Education*, 31, 243-264. <https://doi.org/10.1007/s10864-020-09393-3>
3. O'Connor, E., Cividini-Motta, C., & **MacNaul, H.** (2019). Treatment of food selectivity: An evaluation of video modeling of contingencies. *Behavioral Interventions*, 35(1), 57-75. <https://doi.org/10.1002/bin.1693>
2. Cividini-Motta, C., Garcia, A. R., Livingston, C., & **MacNaul, H.** (2019). The effect of response interruption and redirection with and without a differential reinforcement of alternative behavior component on stereotypy and appropriate responses. *Behavioral Interventions*, 34(1), 3-18. <https://doi.org/10.1002/bin.1654>
1. **MacNaul, H. L.**, & Neely, L. C. (2018). Systematic Review of Differential Reinforcement of Alternative Behavior Without Extinction for Individuals with Autism. *Behavior Modification*, 42(3), 398-421. <https://doi.org/10.1177/0145445517740321>

Book Chapters

- Cividini-Motta, C., **MacNaul, H.**, Steihauser, H. M. K., & Ahearn, W. (2022). Response interruption and redirection. In J. B. Leaf, J. Cihon, J. Ferguson, & M. J. Weiss (eds.), *Handbook of Applied Behavior Analysis Interventions for Autism* (1st ed.). Springer Nature.
- Cividini-Motta, C., **MacNaul, H.**, Mandel, N., Rojas, A., & Ahearn, W. (2023). Automatic reinforcement. In Matson, J. L. (eds.), *Handbook of Applied Behavior Analysis: Integrating Research into Practice*. Autism and Child Psychopathology Series. *Springer*, 79-104. https://doi.org/10.1007/978-3-031-19964-6_5

Invited Presentations

MacNaul, H. (June 2023). Challenging behavior and autism: What we know, what we don't know and what caregivers should know. *31st Texas Autism Conference*. Austin, TX.

MacNaul, H. (February 2023). Challenging behavior and autism: What we know, what we don't know and what caregivers should know. *Seminars Across the Spectrum: Autism Society of Texas*. Online.

MacNaul, H. (June 2022). Data collection and technology: Using Countee to collect behavioral data and reliability. *Strategies to Support School-aged Children with Severe Emotional and Behavioral Disorders: 2022 Summer Institute*. Online.

MacNaul, H. (April 2022). Behavior analysis: A comprehensive approach to the assessment and treatment of severe challenging behavior. *PSYC 619: Learning and Cognition*. Virginia Commonwealth University.

MacNaul, H. (April 2022). Single-case research methods. *EDP 6203: Research Methods and Statistics II*. University of Texas at San Antonio.

MacNaul, H. (June 2021). Data collection and technology: Using Countee to collect behavioral data and reliability. *Strategies to Support School-aged Children with Severe Emotional and Behavioral Disorders: Virtual 2021 Summer Institute*. Online.

Conference Presentations

* Indicates Student Co-Author

+ Indicates Student Presenter

Morgan, M-C., Khokhar, N., Cox, A., & **MacNaul, H.** (2023, May). *On the development and validation of an objective severity tool to classify severe problem behavior*. Symposium presented at the 49th Annual Association of Behavior Analysis International Convention. Denver, CO.

*+Duarte, I., **MacNaul, H.**, & Davis, H. (2023, April 28). *Comparing the effectiveness of in vivo and video modeling in teaching caregivers to implement mand training* [Poster presentation]. Texas Association for Behavior Analysis, San Antonio, TX.

*+Hollenbeck, F., **MacNaul, H.**, & Davis, H. (2023, April 28). *Token economy: An intervention for property destruction in structured settings* [Poster presentation]. Texas Association for Behavior Analysis, San Antonio, TX.

*+Nguyen, A., & **MacNaul, H.** (2023, April 28). *Antecedent interventions for challenging behavior in naturalistic contexts* [Poster presentation]. Texas Association for Behavior Analysis, San Antonio, TX.

- *+Tankersley, M. E., Kirkpatrick, M., & MacNaul, H. L. (2023, April 28). *Using a video activity schedule to teach cooperative games to autistic children* [Poster presentation]. Texas Association for Behavior Analysis, San Antonio, TX.
- *+Corvington, J. S., Neely, L., & **MacNaul, H.** (2023, March 3). *A retrospective study of latency as a predictor of responsiveness to treatment* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Duarte, I., **MacNaul, H. L.**, & Davis, H. (2023, March 3). *Comparing the effectiveness of in vivo and video modeling in teaching caregivers to implement mand training* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Gonzales, L. N., Neely, L., & **MacNaul, H.** (2023, March 3). *Comparing the rate of skill acquisition when presumed reinforcers are based off of direct and indirect assessments* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Hollenbeck, F., **MacNaul, H.**, & Davis, H. (2023, April 28). *Token economy: An intervention for property destruction in structured settings* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Nguyen, A., & **MacNaul, H.** (2023, April 28). *Antecedent interventions for challenging behavior in naturalistic contexts* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Tankersley, M. E., Kirkpatrick, M., & **MacNaul, H.** (2023, March 3). *Using a video activity schedule to teach cooperative games to autistic children* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- *+Williamson, M., Kirkpatrick, M., & **MacNaul, H.** (2023, March 3). *Evaluation of an intervention package with written feedback to reduce vocal protests during chores for a young adult with a developmental disability* [Poster presentation]. Annual College of Education and Human Development Research Colloquium, San Antonio, TX.
- MacNaul, H.**, Garcia, R., Cividini-Motta, C., & Thacker, I. (2023, January). *Evaluating the effect of assignment choice on student academic performance in an online class*. Poster presented at the 45th annual National Institute for the Teaching of Psychology. St. Petersburg, FL.
- Svoboda, M., **MacNaul, H.**, & *Corvington, J. (2022, October). *Challenging case of severe self-injurious behavior in a child with autism caused by idiopathic intracranial hypertension*. Symposium and poster presented at the 8th Annual Children's Hospital of San Antonio Research Symposium. San Antonio, TX.

MacNaul, H., *Nguyen, A., & *Carr, M. (2022, May). *Reducing challenging behavior without extinction and promoting delay tolerance through contingency-based progressive delays*. Symposium presented at the Association for Behavior Analysis International. Boston, MA.

MacNaul, H. (2022, May). *Recent advances in the measurement, assessment, and treatment of stereotypy*. Symposium presented at the Association for Behavior Analysis International. Boston, MA.

**** Bah, L. & MacNaul, H.** (2022, May). *Examining critical multicultural pedagogy in graduate-level coursework across related disciplines serving minoritized and high-needs populations*. Symposium presented at the Association for Behavior Analysis International. Boston, MA.

Kirkpatrick, M., Neely, L., **MacNaul, H.**, & Cantrell, K. (2022, May). *A proposed method for supporting special education teachers in becoming board certified behavior analysts*. Symposium presented at the Association for Behavior Analysis International. Boston, MA.

**** Thompson, C., & MacNaul, H.** (2022, May). *Using pyramidal training to coach educators on reinforcement-based interventions to decrease student challenging behavior*. Poster presented at the Association for Behavior Analysis International. Boston, MA.

**** Wilson, S., Cividini-Motta, C., MacNaul, H., *Nguyen, A.** (2022, May). *Evaluation of a brief paired stimulus preference assessment*. Poster presented at the Association for Behavior Analysis International. Boston, MA.

**** Wilson, S., Cividini-Motta, C., MacNaul, H., *Ferrer, G., & *Salinas, R.** (2022, May). *Preference for social stimuli: A comparison of stimulus modes used in preference assessments*. Poster presented at the Association for Behavior Analysis International. Boston, MA.

**** Nguyen, A. & MacNaul, H.** (2022, May). *Reducing challenging behavior without extinction and promoting delay tolerance*. Symposium presented at the University of Texas Special Education Conference. Austin, TX.

**** Carvajal, I., *Wilson, S., MacNaul, H., & Cividini-Motta, C.** (2021, May). *Preference for social stimuli: A comparison of stimulus modes used in preference assessments*. Poster presented at San Antonio Military Health System (SAMHS) and Universities Research Forum. Online.

MacNaul, H. & Cividini-Motta, C. (2021, May). *Differential reinforcement without extinction: An assessment of sensitivity to and effects of reinforcer parameter manipulations*. Symposium presented at Association for Behavior Analysis International. Online.

- *+ Smith, K. & **MacNaul, H.** (2021, May). *Using behavior skills training and a group contingency to promote mask-wearing in an early-education classroom*. Poster presented at Association for Behavior Analysis International. Online.
- *+ Immenschuh, L., **MacNaul, H.**, *Stegemann, S., & *Nguyen, A. (2021, February). *FCT without extinction plus a contingency-based progressive delay*. Poster presented at Texas Association for Behavior Analysis. Online.
- *+ Nguyen, A., **MacNaul, H.**, *Wilson, S., & Cividini-Motta, C. (2021, February). *Evaluation of a brief paired-stimulus preference assessment*. Poster presented at Texas Association for Behavior Analysis. Online.
- *+ Iqbal, M., **MacNaul, H.**, Wimberly, J., Novotny, M., Morgan, B., Labay, A., & Neely, L. (2021, February). *Training direct service providers in telehealth service model*. Poster presented at Texas Association for Behavior Analysis. Online.
- *+ Di Paola, H., **MacNaul, H.**, Cividini-Motta, C., & *Wilson, S. (2021, February). *A systematic review of research on stability of preference across repeated assessments*. Poster presented at Texas Association for Behavior Analysis. Online.
- MacNaul, H.** & Cividini-Motta, C. (2021, June). *Kahoot! A fun way to incorporate active responding in the classroom*. Symposium presented at Sunshine State Teaching and Learning Conference. Online.
- MacNaul, H. L.**, Scalzo, R., Cividini-Motta, C., & *+ Wilson, S. (2020, May). *Evaluating the effect of assignment choice on student academic performance in an online class*. Symposium presented at Association for Behavior Analysis International. Online.
- MacNaul, H. L.**, Cividini-Motta, C., & *+ Williams, K. (2020, May). *Evaluating the effect of active student responding and competition on student academic performance*. Symposium presented at Association for Behavior Analysis International. Online.
- Singer, L., Schulz, T., Cividini-Motta, C., Blair, K. C., & **MacNaul, H. L.** (2020, May). *A comparison of high-tech and low-tech response modalities to improve student performance and classroom behavior*. Symposium presented at Association for Behavior Analysis International. Online.
- MacNaul, H. L.**, *+ Wilson, S., & Cividini-Motta, C. (2019, September). *Preference stability across repeated administrations: A systematic review and meta-analysis*. Symposium presented at the Florida Association for Behavior Analysis conference. Ponte Vedra, FL.
- MacNaul, H. L.** & Cividini-Motta, C. (2019, September). *An evaluation of magnitude and delay value sensitivity assessments*. Poster presented at the Florida Association for Behavior Analysis conference. Ponte Vedra, FL.

MacNaul, H. L., ^{*,†} Wilson, S., & Cividini-Motta, C. (2019, May). *Preference stability across repeated administrations: A systematic review and meta-analysis*. Symposium presented at the Association for Behavior Analysis International conference. Chicago, IL.

MacNaul, H. L., Cividini-Motta, C., Garcia, A. R., & Livingston, C. (2018, September). *Response interruption & redirection (RIRD): A comparison of iterations of RIRD and evaluation of their effects on play and appropriate communication*. Symposium presented at Florida Association for Behavior Analysis conference. Bonita Springs, FL.

MacNaul, H. L., Cividini-Motta, C., Garcia, A. R., & Livingston, C. (2018, March). *Response interruption & redirection (RIRD): A comparison of iterations of RIRD and evaluation of their effects on play and appropriate communication*. Symposium presented at the Association for Behavior Analysis International conference. San Diego, CA.

MacNaul, H. L., Cividini-Motta, C., Garcia, A. R., & Livingston, C. (2018, March). *Response interruption & redirection (RIRD): A comparison of iterations of RIRD and evaluation of their effects on play and appropriate communication*. Poster presented at the 10th Annual Graduate Student Research Symposium. University of South Florida, Tampa, FL.

MacNaul, H. L., & Neely, L. C. (2017, March). *Systematic review of differential reinforcement without extinction*. Poster presented at Texas Association of Behavior Analysis, Austin, TX.

MacNaul, H. L., & Neely, L. C. (2017, May). *Systematic review of differential reinforcement without extinction*. Poster presented at Association of Behavior Analysis International, Chicago, IL.

Funded Grant Activities

27502 MacNaul (PI) 08/2022-04/2024

Texas Higher Education Coordinating Board
Autism Grant Program – Parent Training Category

Project FIESTA

The goal of Project FIESTA (Family Intervention and Educational Services to Treat Autism) is to serve 250 child-caregiver dyads that engage in challenging behavior through a progressive researcher-service model with direct intervention and caregiver coaching. A series of research studies will focus on the treatment of severe challenging behavior and communication delays in the context of telehealth, clinic, and home environments.

Role: PI

Budget: \$500,000 over 2 years

27502 Kirkpatrick (PI) 08/2022-04/2024

Texas Higher Education Coordinating Board
Autism Grant Program – Teacher Training Category

Project ABA TEACHER

The ABA TEACHER project aims to conduct research in the implementation of behavior analysis interventions for children and adolescents with and at risk for autism while providing supervision to active teachers. ABA TEACHER researchers work collaboratively with teachers across Texas to engage them in data collection, data analysis, graphing, and reporting. Teachers will receive ongoing BCBA supervision and coursework to ensure they graduate ready to take the BCBA exam and become scientist-practitioners.

Role: Co-PI

Budget: \$400,000 over 2 years

UTSA Internal Award MacNaul (PI) 07/2022-07/2023

College of Education and Human Development Faculty Research Award

Examining the Validity of an Objective Severity Tool to Classify Severe Challenging Behavior for Individuals with Disabilities

The purpose of the current study is to evaluate the effectiveness of three levels of intervention for the treatment of challenging behavior, progressing from least to most intrusive (Level 1: Telehealth Behavior Analysis; Level 2: In-patient Severe Behavior Lab; Level 3: Outpatient services) and 2) compare the outcomes from the in-vivo triage model to an objective severity scale that measures mild, moderate, and severe challenging behavior. The overall goal of this project is to develop a reliable and validated tool that can define, measure, and classify degrees of challenging behavior to appropriately triage families into services without first conducting unnecessary assessments and ineffective treatments, leading to more efficient and appropriate treatment for individuals that engage in challenging behavior.

Role: PI

Budget: \$5,000 over 1 year

27836 Vela (PI) 02/2022-09/2022

Texas Higher Education Coordinating Board Work-based Learning Opportunity Grants- Internships

Bolder Futures: Expanding UTSA's Classroom to Career Initiative

The purpose of Bolder Futures is to build UTSA's Classroom to Career Initiative by further developing and expanding experiential learning opportunities for students including those that occur outside the classroom. This project converted non-paid internship programs to paid work-based learning opportunities for students, increased the number of students participating in paid work-based learning opportunities, and increased wages for students participating in paid internships. Bolder futures converted 48 unpaid internships to paid, increased pay for 35 student-interns to \$20/ hour and created new internship opportunities for 7 undergraduate behavior analysis students.

Role: Co-PI

Budget: \$250,000 for 9 months

H325K210002 Neely (PI) 10/2021-09/2026

U.S. Department of Education, Office of Special Education Programs

Project EARLY

The goal of Project EARLY (Evidence-based Action, Research, & Learning for Young children with or at-risk for autism) is to increase the quantity and quality of culturally responsive early childhood specialists (i.e., BCBA's and school psychologists) trained to identify and provide interventions for young children at-risk or diagnosed with autism.

Role: Co-PI

Budget: \$1.2 million over 5 years

222987 Neely (PI) 04/2020-04/2022

Texas Higher Education Coordinating Board
Autism Grant Program – Teacher Training Category

Project ABA TEACHER

The ABA TEACHER project aims to conduct research in the implementation of behavior analysis via telehealth for children and adolescents with and at risk for autism while providing supervision to active teachers. ABA TEACHER researchers work collaboratively with teachers across Texas to engage them in study design, data collection, data analysis, graphing, and reporting. A series of research studies will focus on the treatment of severe challenging behavior and communication delays in the context of home and classroom environments. Teachers will receive ongoing BCBA supervision and coursework to ensure they graduate ready to take the BCBA exam and become scientist-practitioners.

Role: Co-PI

Budget: \$474,921 over 2 years

H325K170085 Blair (PI) 10/2018-09/2023

U.S. Department of Education, Office of Special Education Programs

Project Enhancing Behavior Analytic Services (EBAS) for Children with Emotional and Behavioral Disorders

Role: Advisory Board Member
Budget: \$1.1 million over 5 years

Professional Memberships

Association for Behavior Analysis International	2015- current
National Association of School Psychologists	2014- current
Texas Association for Behavior Analysis	2017- current

Service Activities

1. Service at UTSA

a. University

University Faculty Awards Committee, Member 2020- Current

b. College

COEHD Scholarship Committee, Member 2021- Current

c. Department

Graduate Advisor of Record, ABA Program 2022- Current

EDP Merit Review Committee, Chair (2022) 2020- Current

Faculty Advisor, ABA 2020- Current

Search Committee Member

Assistant Professor of Practice Fall 2022

Assistant Professor of Educational Psychology (TT) Fall 2021

Assistant Professor of Practice Summer 2021

d. Program

ABA Comprehensive Concentration Coordinator 2021- Current

2. Professional Service Activities

Ad Hoc Reviewer 2019- Current

Behavioral Interventions

Journal of Developmental and Physical Disabilities

Poster Judge: Student Research Presentations 2022

Texas Association for Behavior Analysis

Poster Discussant May 2021

Association for Behavior Analysis International

Poster Reviewer 2018-2020

Community Applications of Behavior Analysis

Supervision of Students Thesis and Dissertations

Autumn Kozluk Master of Arts Thesis Committee Member; Brock University;
St. Catharines, Ontario

Evaluating Preference Stability Across Psychotropic Medication Changes in Persons with Intellectual and Developmental Disabilities

Brittany Pearson	Master of Science Thesis Committee Member; University of South Florida; Tampa, Florida <i>Using Active Student Responding and Competition via Kahoot! to Improve Student Learning at the College Level</i>
Courtney Thompson	Ph.D. Dissertation Co-Chair & Outside Committee Member; University of Texas at San Antonio <i>DisCrit: A Lens for Classroom Ecology and Challenging Behavior</i>
Shannon Wilson	Master of Science Thesis Committee Member; University of South Florida; Tampa, Florida <i>Preference for Social Stimuli: A Comparison of Stimulus Modes Used in Preference Assessments</i>

Awards and Honors

President's Distinguished Achievement Award—Research Achievement (Nominee, Under Review) <i>University of Texas at San Antonio</i>	2023
President's Distinguished Achievement Award—Faculty Mentoring Award (Nominee) <i>University of Texas at San Antonio</i>	2021
Innovation Academy <i>University of Texas at San Antonio</i>	Fall 2021 \$1,000
Online Course Design Incentive <i>University of Texas at San Antonio</i>	Fall 2020 \$500
Tampa Bay Rotary Scholar- Research for Individuals with Autism <i>University of South Florida</i>	2018- 2019 \$19,500
