

How Social Exclusion Impacts the Cognitive Development of Students with Intellectual and Developmental Disabilities

Presented by: Eli Dreilinger

Major: Adolescent Education, concentration in English

Minor: Deaf Studies

Advisors: Dr. Coughlin & Dr. Books

WHAT ARE INTELLECTUAL AND DEVELOPMENTAL DISABILITIES (IDD)?

- “IDDs are differences that are usually present at birth and that uniquely affect the trajectory of the individual’s physical, intellectual, and/or emotional development” (About)
- Wide array of disabilities
 - Autism, down syndrome, ADHD, cerebral palsy, traumatic brain injury.
- Students are often placed into self-contained special education classes
- Students are often socially excluded by peers

“About Intellectual and Developmental Disabilities (IDDs).” *Eunice Kennedy Shriver National Institute of Child Health and Human Development*, U.S. Department of Health and Human Services, <https://www.nichd.nih.gov/health/topics/idds/conditioninfo>.

WHY STUDY THE IMPACTS OF EXCLUSION?

- Exclusion is everywhere.
 - Classes, social circles, society.
- These cause subliminal messages to be given to the individual
- Powerful, life-long affects on the well-being and development
- Underdiscussed, universal problem amongst schools

THIS RESEARCH ATTEMPTS TO SIGNIFY WHY DISCUSSION OF EXCLUSION IS ESSENTIAL.

It's been engrained in our society.

- In Ancient Greece, a baby with a disability meant the Gods were displeased with you (Schur)
- In early 1900s America, asylums and residential treatment centers were created (Schur)
- Teachers view students with disabilities as “challenging” and “obstacles”

CHANGING PERSPECTIVES DURING RESEARCH

- I started off with an ableist, tunnel-vision point of view
- Realized I needed to change the scope of my research
 - People with disabilities are not necessarily affected differently than people without
- Exclusion will affect everyone the same, but what matters is the frequency
- People with disabilities will experience exclusion at a significantly higher rate

FOUNDATIONS OF MY RESEARCH: DISABILITY STUDIES

- Disability Studies: Used to “explore models and theories that examine social, political, cultural, and economic factors that define disability and help determine personal and collective responses to difference”
- Exclusion is frequent
 - 50% of people with an IDD reported they felt lonely
 - 33% of people with an IDD reported they had trouble making friends
 - 25% of people with an IDD reported seeing their family once a year or less
 - 75% of people with IDD reported that the person they confide in the most is a support person who specializes in their disability (Amado)

Amado, Angela Novak, et al. “Social Inclusion and Community Participation of Individuals with Intellectual/Developmental Disabilities.” *Intellectual and Developmental Disabilities*, vol. 51, no. 5, American Association on Intellectual and Developmental Disabilities, 2013, pp. 360–75, doi:10.1352/1934-9556-51.5.360.

“What Is Disability Studies?” *Society for Disability Studies*, Society for Disability Studies a Non-Profit Organization That Promotes the Study of Disability in Social, Cultural, and Political Contexts., 6 Nov. 2017, <https://disstudies.org/index.php/about-sds/what-is-disability-studies/>.

FOUNDATIONS OF MY RESEARCH: SOCIAL BRAIN HYPOTHESIS

- The brain is incredibly malleable.
- Started off as an evolutionary theory, but can be further applied
 - How are we different from primates?
 - It shows how due to different stimuli, our brain will adapt and change over time
- Short term:
 - Prolonged exposure to exclusion will affect the development of the brain

THE ACADEMIC EFFECTS

- Baumeister (2002) discovered that exclusion can negatively influence test scores
- The burden of exclusion and the fear of being alone prevents the individual from focusing on tasks
- Inhibits brain function by monopolizing important resources

EFFECTS OF OSTRACIZATION IN SCHOOLS

- Hinders a student's basic needs such as **belonging**, self-esteem, control, and meaningfulness
- Lack of relatedness impacts motivation
- Reduces feelings of positive mood

HOW EXCLUSION IMPACTS BRAIN FUNCTION

- Affects the parietal and prefrontal cortex region
 - Parietal Cortex: Maintaining attention
 - Prefrontal Cortex: Self-Control
- Reduces storage capacity, makes it hard to filter out irrelevant information
- Overstimulates the parahippocampal gyrus
 - Supports “proposed psychological processes” (Kiat), AKA predicting other’s behaviors

HOW EXCLUSION IMPACTS BRAIN FUNCTION (CONT.)

- Impacts the anterior cingulate cortex (ACC), posterior cingulate cortex (PCC) and the insula
 - ACC- Controls and manages uncomfortable emotions, can permanently be affected
 - PCC- Regulates the focus of attention and emotional processing
 - Insula- Emotional experience and understanding the feelings of others
- Causes a surplus of oxytocin- Affects emotional reactions, social perception, trust, and cooperative behavior.
- ASIDE: Exclusion has physical affects, as well:
 - It impairs immune system functioning, poor blood pressure regulation, reduces sleep efficiency, increases morbidity and mortality

EFFECTS ON MENTAL HEALTH

- Over-anticipation leads to social anxiety disorders
- Chronic self-isolation
 - Self-fulfilling, negative feedback loops due to anticipation
- Depression
 - Internalization of feelings and symptoms
- Self-harm, suicidal ideation
- These effects on mental health are long-lasting and can last lifetimes.

UTILIZING COVID-19 TO STUDY EFFECTS OF EXCLUSION

- How COVID-19 is impacting young people:
 - Increase in loneliness
 - Hopelessness for the future
 - Increase in anxiety, depression, eating disorders, and addiction
- How COVID-19 is impacting young people with disabilities:
 - Lack of virtual support from school staff
 - Exacerbated achievement gaps between students with and without disabilities
 - “52% of general education students met or exceeded the proficiency standard compared to just 14% of students with disabilities” (DiNapoli)

BUILDING INCLUSIVE SCHOOLS

- Here are just a few tips on how to make your school more inclusive.
- For teachers:
 - “Remember that it is much better to over-plan than to under-plan” (Valle and Connor)
 - Utilize Universal Design for Learning (UDL)
 - Consider co-taught inclusive classrooms that include students with disabilities
 - Differentiate instruction
 - Have discussions about disabilities
 - Listen.
- For principals and school leaders:
 - Work with all members of the staff on principles of inclusion
 - Engage in challenging conversations, question biases, emphasize the importance of inclusion
 - Lessen and/or remove self-contained and separate classes

FINAL PIECES OF ADVICE

- Be prepared to manage the change you make
- Adapting your school for better inclusive principles requires major changes
- Transform archaic school traditions
- There is no model, it depends on the needs of your school
- It will not change in a day, will require generations of support

THANK YOU!