Igniting Passion
Looking Beyond Disabilities to What Children Can Do!

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CONFERENCE OF THE MONTANA COUNCIL FOR EXCEPTIONAL CHILDREN
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The presenter’s son has Trisomy 21. She has endured courtesy stigma from educators, medical providers, and others related to her son’s capabilities—and her advocacy for his civil rights.

The presenter is a Ph.D. Candidate at Fielding Graduate University, Adjunct Professor of Psychology at Divine Mercy University, and lead on the Part C early intervention eligibility team at Benchmark Human Services. The views expressed herein are the presenter’s own and do not represent the views of any of those institutions.

She has no other disclosures, either financial or nonfinancial.
LEARNING OBJECTIVES

Participants will be able to:

(1) list two potential developmental impacts of implicit bias in educational settings; and

(2) name one way that identifying and reducing such bias might better support children with disability-related conditions.
AGENDA—THE 3 R’S

1. **Role Play** being a young student with a disability-related condition.

2. **Review** data from two small studies.

3. **Reflect** on ways that the role play and the data might change what you do in your early childhood classroom.
Finding your way around the world with a label...
Role Play
“Put on your label and let’s go!”

1. Put a label on your forehead
2. Pick up three 3” x 4” cards and a pen/pencil.
3. Walk up to others in the room and write on a card the first thoughts you have about their label. Give them the card.
4. Sit down when you have given cards to 3 people.
I think that what people think about young children who have problems makes a difference in how those children learn and grow.
Babies seeing of adults’ facial and body cues affects how their brains grow and develop.
Reflections on the Social Model of Disability

AMERICAN WITH DISABILITIES ACT
(1990)

Section 504
Reflections on the Social Model of Disability

Social Model of Disability

1. Differences do not create disability
2. Impairments do not cause disability

Rather, “disability” results when barriers prevent persons’ free access to opportunity & growth.
Reflections on the Social Model of Disability

Potential Barriers to a fully functioning, meaningful life

1. physical restrictions and
2. social attitudes (e.g., stigma or bias).
The developing brain is affected by experiences and interactions.
Experiences Shape the Structure and Functioning of the Brain

- 1 million neural connections per second
- Influenced by early experiences
Baby Tanika

- Positive early experiences lead to strong neural networks and healthy development.
- Negative experiences lead to challenges in many areas of functioning.
Plasticity

- Neuroplasticity is the brain’s ability to change itself based on an individual’s experience.
- Early childhood is a period of both opportunity and vulnerability.
- The longer children have been exposed to negative experiences, the harder it is and the longer it takes for brain circuitry to become reorganized when exposed to new experiences.
Use It or Lose It

- The brain has more connections than it can use.
- \textit{Pruning}—connections that are not used
Attachment

- Babies are wired to connect.
- Quality caregiving allows secure attachment.
- Secure attachment allows exploration.
- Pattern of interactions → child’s expectations for relationships (Ainsworth, Blehar, Waters, & Wall, 1978)
Early Social Interactions

- Social partners
- Communication and positive emotions
- Children who expect to be treated lovingly, respectfully, and sensitively are more likely to develop relationships that are characterized by these attributes (Lamb, Morrison, & Malkin, 1987).
The Impact of Stress on Social–Emotional Development

- Emotionally unavailable or unsupportive caregivers
- Stressed caregivers pass stress to children (Cummings & Davies, 2010).
- Changes in routines can cause stress (Schechter et al., 2004; Schwerdtfeger & Goff, 2007).
- Stress $\rightarrow$ challenging behaviors $\rightarrow$ parental stress
Experience of Stress

- Parents’ responsiveness to children
- A “secure base” for children
- Damage to children’s feelings of trust and security (Ainsworth et al., 1978; Bowlby, 1988)
- Affects long-term neurological and physiological health
Stress and the Brain

Hypothalamus

Stress

Hypothalamus

Pituitary

Kidneys

Adrenal Cortex

Cortisol
Strategies to Help Calm the Stress-Response System

Group 1: Michael’s stress-response system
Group 2: Mom’s and Dad’s stress-response systems
Group 3: Provider’s stress-response system
Empathy

- Recognize/imagine the emotions and feelings of others and respond sensitively
- Requires “shared interpersonal experiences” (Decety, 2010)
Examples of Empathy

- Sharing a toy
- Laughing or smiling
- Calm response

Remember to validate ALL emotions, including the difficult or challenging ones.
Examples of Empathy

- Sharing a toy.
- Laughing or a smiling.
- Calm response.

Remember to validate ALL emotions, including the difficult or challenging ones.
Strategies for Supporting Empathy and Social–Emotional Development

- Birth–12 months
- 12–24 months
- 24–36 months
- 3–5 years

Break into 4 groups.

2. Discuss how to support socioemotional growth for children who might encounter implicit bias due to a disability.
Emerging Research on Bias
Two Studies of Implicit Bias

Study 1 — pediatricians \((N = 56)\)

Study 2 — early intervention workers \((N = 42)\)

1. Implicit association test of bias against persons with disabilities.

2. Relative time for sorting images linked to ‘disability’ or ‘no disability’ when paired with ‘positive’ or ‘negative’ words.
Pediatricians’ (N = 56) IAT D-scores Bias Toward Persons with Learning Disability

<table>
<thead>
<tr>
<th>d-Score</th>
<th>Description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2 to -0.65</td>
<td>Strong negative</td>
<td>47</td>
<td>83.93</td>
</tr>
<tr>
<td>-0.65 to -0.36</td>
<td>Moderate negative</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>-0.36 to -0.15</td>
<td>Slight negative</td>
<td>3</td>
<td>5.36</td>
</tr>
<tr>
<td>-0.15 to 0.15</td>
<td>No preference/neutral</td>
<td>1</td>
<td>1.78</td>
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<tr>
<td>0.15 to 0.36</td>
<td>Slight positive</td>
<td>0</td>
<td>0.00</td>
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<tr>
<td>0.36 to 0.65</td>
<td>Moderate positive</td>
<td>0</td>
<td>0.00</td>
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<tr>
<td>0.65 to 2</td>
<td>Strong positive</td>
<td>0</td>
<td>0.00</td>
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</tbody>
</table>
Early Intervention Workers (N = 42)

- Baseline = 95.24% high neg bias
- No significant by person change
- Post-training = 72.24% high neg bias
- Reduced by 26.25% sample-wide
Early Intervention Workers (Study 2)

Additional Results

• Less explicit bias \[ t(29) = 1.892, p = 0.0345 \] after training

• More openness to change \[ t(29) = -4.029, p < 0.0001 \].

• No change in awareness of implicit bias and how it affects one’s work \[ t(35) = 0.572, p = 0.285 \].
STUDY 1: Doctors rated babies with Trisomy 21 based on visible symptoms

*Bonferroni correction \( p < .05 \) becomes \( p < .007 \)

\[ p < .000, \eta_p^2 > .3 \]

Tukey’s HSD Post Hoc Comparisons

<table>
<thead>
<tr>
<th>Infant Rating</th>
<th>Dx1</th>
<th>Dx2</th>
<th>( p )</th>
<th>Cohen’s d</th>
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</thead>
<tbody>
<tr>
<td>FEDC 1-4_Qual</td>
<td>T21</td>
<td>CP</td>
<td>.012</td>
<td>1.14</td>
</tr>
<tr>
<td>Learning Dis</td>
<td>T21</td>
<td>MAS</td>
<td>.000</td>
<td>3.05</td>
</tr>
<tr>
<td>No Disability</td>
<td>T21</td>
<td>MAS</td>
<td>.000</td>
<td>0.89</td>
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<tr>
<td>DLS Childhood</td>
<td>T21</td>
<td>MAS</td>
<td>.000</td>
<td>1.64</td>
</tr>
<tr>
<td>DLS Adolescent</td>
<td>T21</td>
<td>MAS</td>
<td>.000</td>
<td>2.47</td>
</tr>
<tr>
<td>DLS Adult</td>
<td>T21</td>
<td>MAS</td>
<td>.000</td>
<td>1.70</td>
</tr>
</tbody>
</table>
Responses to: “What would you want ___’s parents to know about him?”
### Doctors’ Expected Advice for Parents by Infant Condition

<table>
<thead>
<tr>
<th>Apparent Infant Dx</th>
<th>Life quality</th>
<th>Needs</th>
<th>Support</th>
<th>Has potential</th>
<th>Can’t predict</th>
<th>Disability</th>
<th>Medical condition</th>
<th>Monitor</th>
<th>Healthy newborn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T21</strong> (n = 16)</td>
<td>63%</td>
<td>44%</td>
<td>38%</td>
<td>25%</td>
<td>19%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>CP</strong> (n = 14)</td>
<td>36%</td>
<td>57%</td>
<td>21%</td>
<td>29%</td>
<td>57%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td><strong>FAE</strong> (n = 14)</td>
<td>14%</td>
<td>64%</td>
<td>14%</td>
<td>22%</td>
<td>71%</td>
<td>7%</td>
<td>21%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td><strong>MAS</strong> (n = 16)</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>6%</td>
<td>6%</td>
<td>13%</td>
<td>0%</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Infant Dx</td>
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<tr>
<td>T21 ((n = 16))</td>
<td>Intellectual disability does not define one's emotional and social abilities. He is a loving/lovable human being capable of many things.</td>
<td>Joey has the potential to be a happy &amp; productive &amp; giving member of your family &amp; society.</td>
<td>We can't predict Joey's potential very accurately from today.</td>
<td>He has a higher likelihood of facing mental, social, &amp; cognitive issues.</td>
<td>[T21] can be associated with several medical conditions that...need chronic care management over...his lifetime.</td>
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<tr>
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<tr>
<td>CP (n = 14)</td>
<td>[H]is intelligence, sense of humor and personality are unaffected by his physical limitations.</td>
<td>Frank will benefit from close attention to his development and support from family and therapists.</td>
<td>[T]hrough intervention he can achieve his goals and [his] parents goals or at least attempt to get there!</td>
<td>It's hard to predict the severity of his mental and physical limitations right now.</td>
<td>[H]e will have physical and mental handicaps and will never be independent.</td>
<td>—</td>
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</tbody>
</table>
## Doctors’ Expected Advice for Parents by Infant Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Life Quality</th>
<th>Has Potential</th>
<th>Can’t Predict</th>
<th>Disability</th>
<th>Medical Condition</th>
<th>Monitor</th>
<th>Healthy Newborn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dx</strong></td>
<td>He may require assistance into and adulthood and throughout his life.</td>
<td>[He could] catch up to his peers and lead a &quot;normal&quot;, fulfilling life.</td>
<td>Hard to know at birth if [attention problems] will affect him and... [to what] degree.</td>
<td>At risk of learning problems, especially executive thinking at high school...</td>
<td>[E]xplore...[a] genetic diagnosis/reason for his dysmorphic features.</td>
<td>[C]lose monitoring by a development specialist...</td>
<td></td>
</tr>
<tr>
<td><strong>FAE (n = 14)</strong></td>
<td>He has an excellent potential. Andrew can be anything he wants.</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>MAS (n = 16)</strong></td>
<td>—</td>
<td>—</td>
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</table>
Implications for Clinical Practice

– Do families get a different experience if their child is labeled early on with delays (Carroll et al., 2018)?

– Might doctors’ bias change an infant’s early experience of the world by altering how the parents feel about the infant (Karmiloff-Smith et al., 2012)?

– Could how the infant learns and grows become an interpersonal expectancy effect (Rosenthal et al., 2002) through downward spiraling cascades (Masten, 2010)?

– Could bias cause parents to give up on thinking their child can learn and grow like other children (Abramson et al., 1978)?
How Reflection Helps the Parallel Process

https://www.youtube.com/watch?v=M9hyWVEG2x0
Parallel Process Means Reflecting
Use of Self

(Heffron, Ivins, & Weston, 2005)
“Use of Self” Skillset

∗UNDERSTAND that one’s personal traits, the setting, and one’s professional role affect the interactive process through conscious and unconscious means.

∗OBSERVE individual behavior and one’s interactive exchange with others, reflect on these dyadic and systems process, and give them relational meaning.

WHERE DOES COMPASSION REALLY COME FROM?

NARRATED BY SHARON SALZBERG
ANIMATION BY KATY DAVIS

Parallel Process & Growing Compassion
Reflections on the Social Model of Disability

CASE EXAMPLE
“...here is a baby with... Trisomy 21 & she brings a lot of joy & love to the world... those are her gifts.
Does he have “Double Scoop”?
We also show that this bias can coexist with negative evaluations at the implicit level (with large effect sizes), even among professional caregivers.

Abstract

Background: Stigmatization is one of the greatest obstacles to the successful integration of people with Trisomy 21 (T21 or Down syndrome), the most frequent genetic disorder associated with intellectual disability. Research on attitudes and stereotypes toward these people still focuses on explicit measures subjected to social-desirability biases, and neglects how variability in facial stigmata influences attitudes and stereotyping.

Methodology/Principal Findings: The participants were 165 adults including 55 young adult students, 55 non-student adults, and 55 professional caregivers working with intellectually disabled persons. They were faced with implicit association tests (IAT), a well-known technique whereby response latency is used to capture the relative strength with which some groups of people—here photographed faces of typically developing children and children with T21—are automatically (without conscious awareness) associated with positive versus negative attributes in memory. Each participant also rated the same photographed faces (consciously accessible evaluations). We provide the first evidence that the positive bias typically found in explicit judgments of children with T21 is smaller for those whose facial features are highly characteristic of this disorder, compared to their counterparts with less distinctive features and to typically developing children. We also show that this bias can coexist with negative evaluations at the implicit level (with large effect sizes), even among professional caregivers.

Conclusion: These findings support recent models of feature-based stereotyping, and more importantly show how crucial it is to go beyond explicit evaluations to estimate the true extent of stigmatization of intellectually disabled people.

Introduction

Trisomy 21 (T21) or Down syndrome is the most frequent genetic disorder associated with intellectual disability, affecting between 1.0 and 2.2 of every 1000 live births according to statistics on prenatal testing and selective abortion [1–4]. Because this chromosomal disorder is also associated with various health problems (e.g., hypotonia, congenital heart defects, gastrointestinal diseases) and distinctive physical stigmata (e.g., round face, regular schools (e.g., [8], [10], [11]). Based on a recent survey, Pace et al showed that whereas 45% of adult respondents (N= 5399) from the general (U.S.) population agreed with inclusive education for students with T21, 25% disagreed (considering for example that such students are “distracting”) and 29% abstained [11]. Likewise, about one-third of adolescent respondents (N= 1704) reported they were not willing to work on a class project or spend time outside of school with a student with T21. Although these negative attitudes are not majority rule, and can
What can this child do?
“I want to make it to the Junior Varsity in basketball next year...”
For Achieving
Honor Roll
First Semester 2015-2016
V. Donisthorpe
Principal

Honor Roll
First Quarter 2015-2016
V. Donisthorpe
Principal
Key Messages

• The developing brain is affected by children’s experiences and interactions with the important people in their lives.

• Adults play a critical role in supporting young children’s social and emotional development.

• Brain connections are experience dependent; early experiences last a lifetime.
In the next ___ days,
I aim to ____________________.

One thing that will help me achieve my
goal is to ____________________.
SELECTED REFERENCES


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