Background

Objective: We compared stigma towards college students with 10 distinct diagnostic labels, unlabeled behaviors indicative of each disorder (including two types of autistic behaviors: disruptive or withdrawn) and labeled behaviors and examined factors that contribute to stigma towards autism in particular.

Hypothesis 1: We expected stigma to be highest towards disorders perceived as more dangerous to others (e.g., psychopathy and schizophrenia) relative to developmental disorders like autism. However, we expected stigma to be higher towards disruptive behaviors associated with autism relative to withdrawn behaviors.

Hypothesis 2: We expected stigma to be highest towards behaviors associated with a disorder and lowest towards behaviors plus labels (Matthews et al., 2015). However, we hypothesized that labels for disorders commonly perceived as dangerous (e.g., schizophrenia and psychopathy) would be more stigmatized than behaviors associated with those disorders (Link, 1987).

Methods

Participant Characteristics

- U.S. Participants: 643 undergraduates recruited from a large urban public university (Mean age: 19.8 years old).
- Lebanese Participants: 137 students were recruited from a private university where English is the language of instruction (Mean age: 18.7).

Measures

- Participants completed rating scales after reading information about college students with ten distinct disorders (autism, eating disorder, social anxiety, addiction to pain medication, psychopathy, schizophrenia, LD, depression, mania, and ADHD).
- Students were randomly assigned to read either diagnostic labels (e.g. “college student with autism”), disorder behaviors, or unlabeled vignettes describing core behaviors of each disorder, for labeled vignettes that included core behaviors and diagnostic labels. Given the diversity of the spectrum, we included two vignettes about autism: mild (withdrawn) and severe (disruptive).

Example Vignettes

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Labeled Vignette</th>
<th>Unlabeled Vignette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism</td>
<td>A student [with subthreshold] recently met the diagnostic criteria for autism.</td>
<td>A student met the diagnostic criteria for autism.</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>A student [with childhood psychotic experiences] recently went to the hospital.</td>
<td>A student went to the hospital.</td>
</tr>
</tbody>
</table>

Psychopathy Vignette

<table>
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Analytic Approach

- Given the large number of comparisons, \( p = .001 \) considered significant.
- Conducted repeated-measures ANOVA with stigma towards the 10 disorders (and 2 types of autism) and group (label, vignette, or label plus vignette), country, and gender as independent variables with follow-up ANCOVAs.
- Used follow-up regressions to identify predictors of stigma towards autism in particular.

Results

- Analyses revealed a main effect of disorder (Type, F(1, 889) = 298.61, information condition, F(1, 889) = 18.68, self-reported stigma was generally higher for behaviors than labels), and gender, F(1, 889) = 24.71 (self-reported stigma was higher among men), but not country and interaction effects.
- Post-hoc tests revealed that psychiatry was most stigmatized. The other conditions were stigmatized in the following order: schizophrenia \( \text{pain medication addiction} \) \( \text{manic} \) \( \text{disruptive autism} \) \( \text{ADHD and depressed disorder} \) \( \text{social anxiety} \) \( \text{drug and eating disorders} \) \( \text{LD} \).
- Interactions between disorder type and information condition, F(20, 889) = 17.12, and disorder type and country, F(10, 889) = 7.08, were also observed. Post-hoc tests revealed that pain medication addiction was less stigmatized in Lebanon than the US with no other country differences observed in this data set.

Discussion & Conclusions

Hypothesis 1: Is stigma higher towards disorders perceived as more dangerous?

- Consistent with one of Feldman & Crandall’s key findings and our hypothesis, students reported more stigma towards disorders commonly perceived as dangerous like psychopathy, schizophrenia and pain and medication addiction relative to development disorders like autism.
- Similarly, people expressed more stigma towards behaviors associated with autism that are disruptive to others relative to withdrawn autism behaviors.
- Perceived dangerousness also predicted stigma towards the label “autism” but not behaviors associated with autism.

- The only significant cross-country difference in stigma in the current study was in reduced stigma towards pain medication addition in Lebanon relative to the US. Where the US data was collected is in a borough of NYC with a major opioid problem and frequent news stories about problems arising from this crisis. In contrast, it is possible to purchase opioid medications over the counter in Lebanon and use of pain medication is not generally considered particularly problematic. Therefore, what is more stigma towards disorders perceived as dangerous?

Hypothesis 2: Is stigma higher towards unlabeled behaviors associated with disorders relative to labels?

- Consistent with prior work evaluating stigma towards autism and other conditions (Link, 1987; Matthews et al., 2015; Saxon & Morrison, 2017) our hypothesis, stigma was higher towards unlabeled behaviors associated with conditions than it was towards labels.
- Although our hypothesis that labels perceived as particularly dangerous would be more stigmatized than behaviors was not supported, labels only conferred protective benefits for conditions with labels that were not significantly stigmatized (e.g., autism) and not with more stigmatized labels (e.g., psychopathy).
- Consistent with contact theory, which states that high-quality contact with diverse others is the most effective way to decrease stigma (Corrigan et al., 2012), quality of prior contact with autism compared to contact with other conditions was the most consistent predictor of labels towards labels and behaviors associated with autism in this study.

- Implications

- We suggest that trainings are needed to reduce stigma towards neurodiverse peers more generally, rather than focusing only on autism.
- Future interventions to make college communities more supportive of neurodiversity should use inclusive ways of engaging in high-quality contact with neurodiverse peers (e.g., theater and mentorship programs) to understand what others think about which neurodiverse students are dangerous to others and to provide strategies to help community members understand why neurodiverse peers act as they do and set up environments that promote mutual self-education.

References

- Feldman, J. S., & Crandall, C. S. (2007). The student never admits to having been wrong. When the class watches a documentary about war crimes, the student, who is known for intellectual brilliance, makes it clear that he would never have been “wrong.” The student answers questions about the documentary with choices that are clearly wrong. What might be the reason for the student’s behavior? What possible explanations might the student be using to justify his incorrect answers? What possible explanations might the class be using to justify their incorrect answers? How might the teacher respond to the student’s incorrect answers? How might the teacher respond to the class’s incorrect answers? How might the teacher respond to the student’s correct answers? How might the teacher respond to the class’s correct answers?


