

The Impact of COVID-19 on the Mental Health of Children with Down Syndrome



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INTRODUCTION

- COVID-19 has had a negative impact on the mental health of children and adolescents in part due to changes in education, physical activity, and socialization.¹
- Children with intellectual and developmental disabilities (IDD) may be at greater risk for poor mental health due to changes related to the pandemic, as a result of loss of routine and disruptions to services.^{2,3}
- Currently, there is a lack of literature specifically focused on the impact of the pandemic on the mental health of children with Down syndrome (DS).^{4,5}

OBJECTIVE

- To characterize the mental health of children with DS during the COVID-19 pandemic
 - Characterize change in mental health compared to before the pandemic
 - Characterize indicators of mental health
- Examine whether a change in the overall mental health of children with DS is associated to change in specific mental health indicators

METHOD

Data were collected through an online questionnaire which was distributed to all regions of California in June 2021.

Participants

- $n=53$ children with Down syndrome (males=26)
- $M_{age}=9.38$ years
- 47.2% White, 24.5% Multiracial, 20.8% Hispanic/Latino, 5.7% Asian, 1.9% Black/African American

Measures

Caregiver report questionnaire, adapted from publicly available CRISIS survey

- Overall Mental Health
 - How would you rate your child's overall mental health/wellbeing *before* the beginning of the COVID-19 crisis?
 - How would you rate your child's overall mental health/wellbeing *during* the beginning of the COVID-19 crisis?
- Mental Health Indicators
 - Compared to before the beginning of the COVID-19 crisis, how often has [child] exhibited the following behaviors?

Analyses

- Exploratory analyses were conducted and showed no systematic differences as a function across age, gender, and race/ethnicity
- Descriptive Analyses were conducted for all variables of interest (Overall mental health change and indicators of mental health)
 - Change in mental health was calculated (MH during-MH before)
- Pearson Correlation

RESULTS

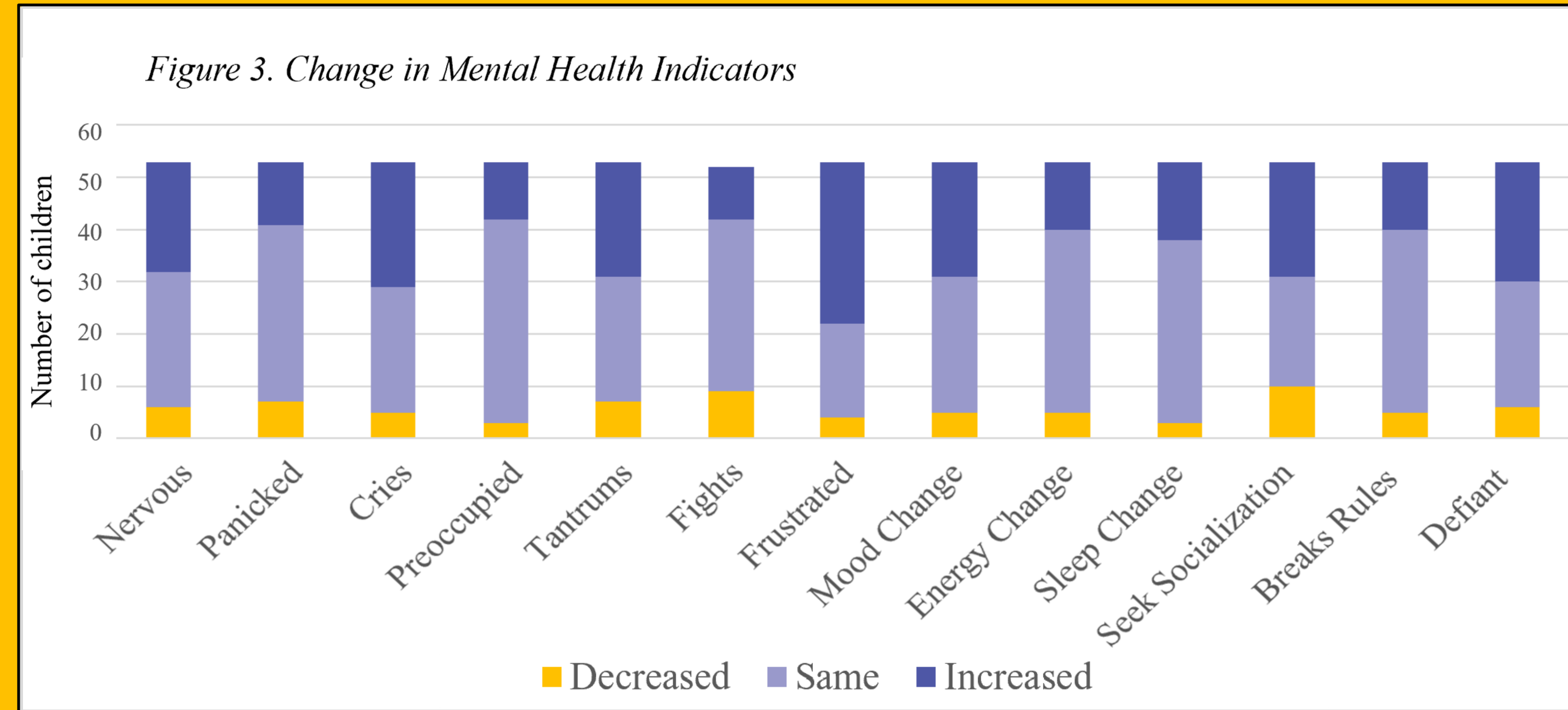
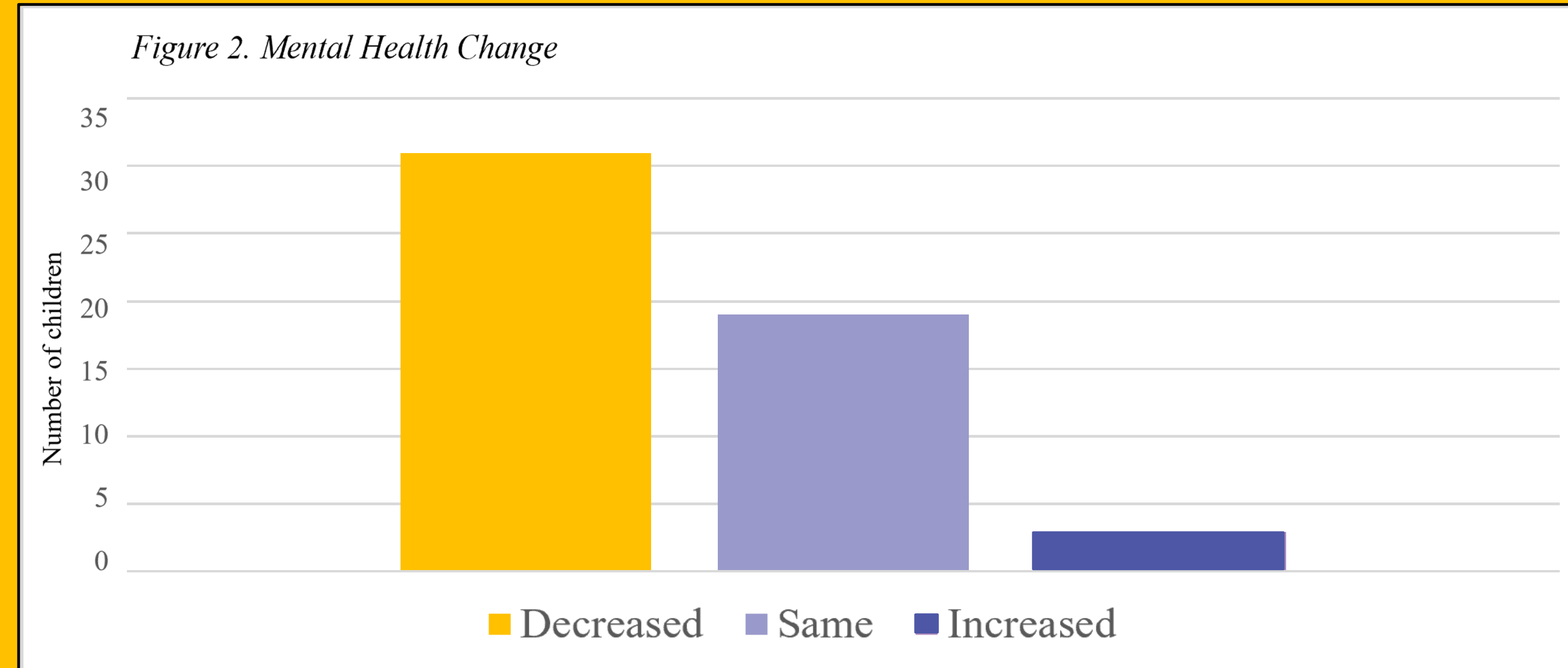
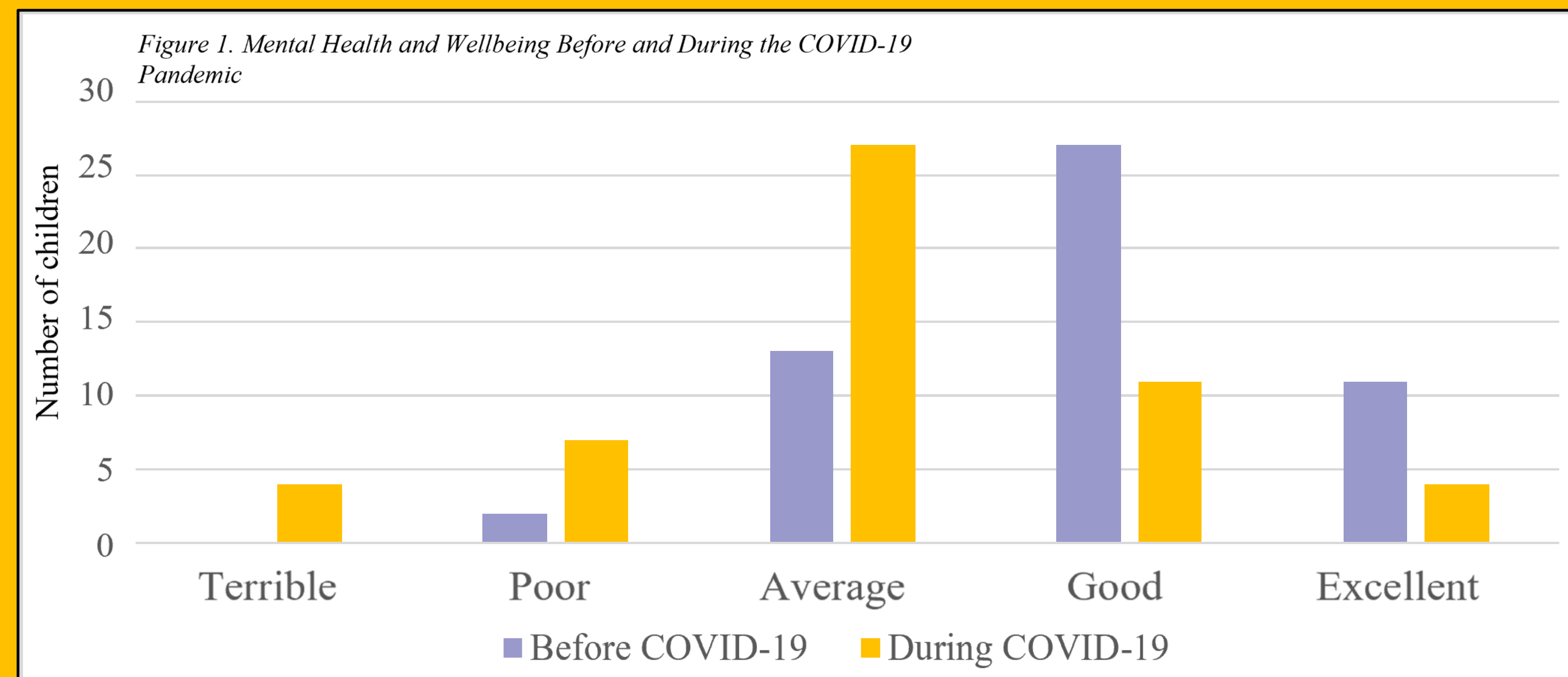


Figure 4. Correlation Between MH Change and MH Indicators

	Nervous	Panicked	Cries	Preoccupied	Tantrums	Fights	Frustrated	Mood Change	Energy Change	Sleep Change	Seek Socialization	Breaks Rules	Defiant
Mental Health Change	.371**	.372**	.453**	.307*	.370**	.166	.639**	.237	.324*	-.001	.158	.324*	.341*

** p<0.01
* p<0.05

DISCUSSION

- During the pandemic, more children reported “terrible” and “poor” MH in comparison to before the pandemic
- For most children with DS, MH worsened during the pandemic
- Change in anxiety-related MH indicators were most common among children
- Children’s frustration and crying were most strongly related to MH change while changes in sleep and mood were not
- For those children with worsening MH change, they had a worsening across most MH indicators

STRENGTHS & LIMITATIONS

- Among first to look at effects of COVID-19 on children with DS specifically
- Caregiver-report
- Small sample size
- Lack of racial/ethnic diversity

FUTURE DIRECTIONS

- Implications of these findings include the need for more research and resources related to the mental health of children with DS
- More research is needed related to the mental health and coping skills of children with DS
- Look at the long-term impact of the pandemic on the MH of children with DS

ACKNOWLEDGMENTS

Thank you to Dr. Amanda Nunnally, Dr. Angela Thurman, Dr. Leonard Abbeduto, Kendra Phillips, the UC Davis 2022 RISE-UP program, and the KKI RISE-UP Program.

REFERENCES

1. Singh et al. (2020)
2. Doody & Keenan (2021)
3. Espinosa (2020)
4. Lunksy et al. (2022)
5. Wilner et al. (2020)

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Figure 1. Mental Health and Wellbeing Before and During the COVID-19 Pandemic

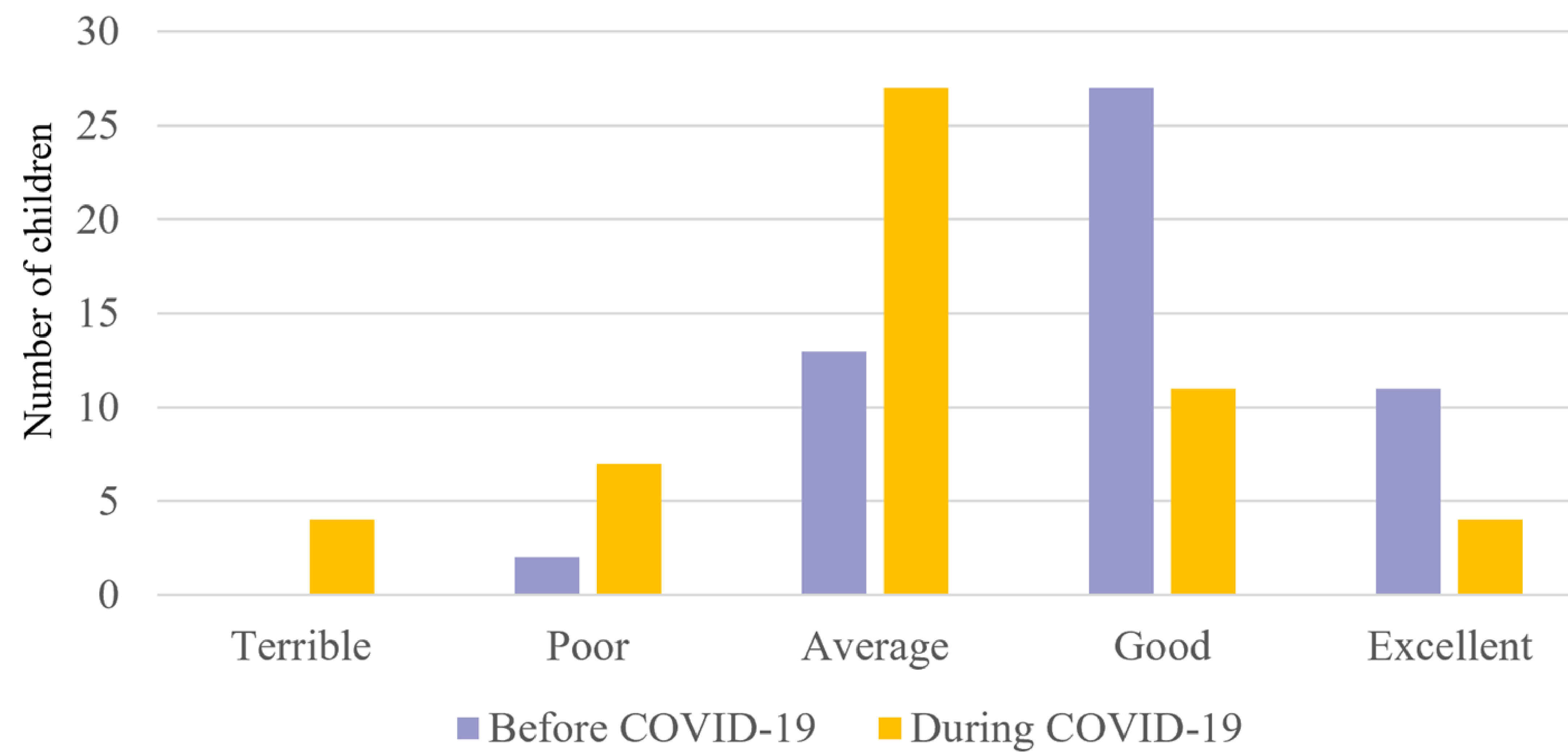
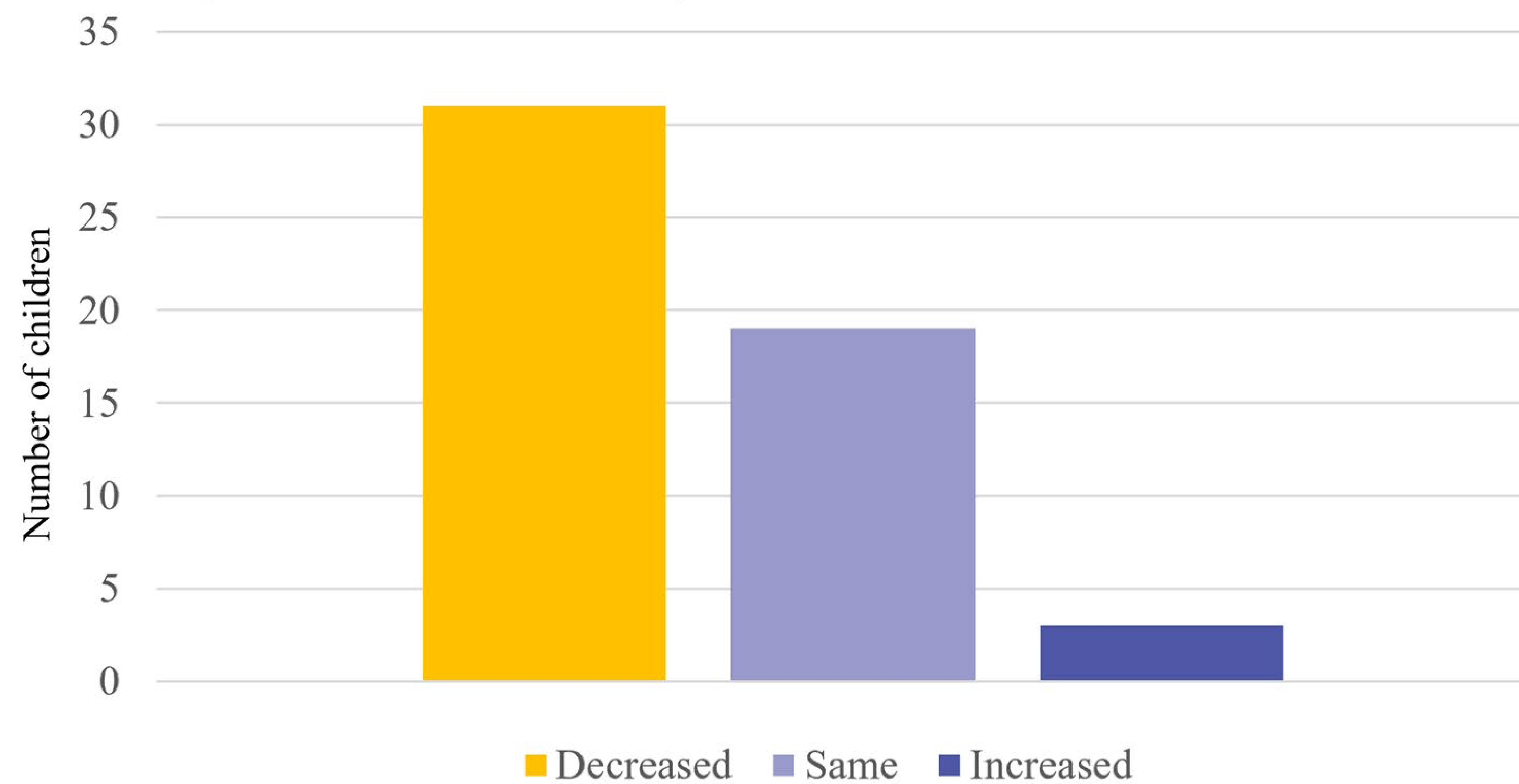


Figure 2. Mental Health Change



RESULTS

Figure 3. Change in Mental Health Indicators

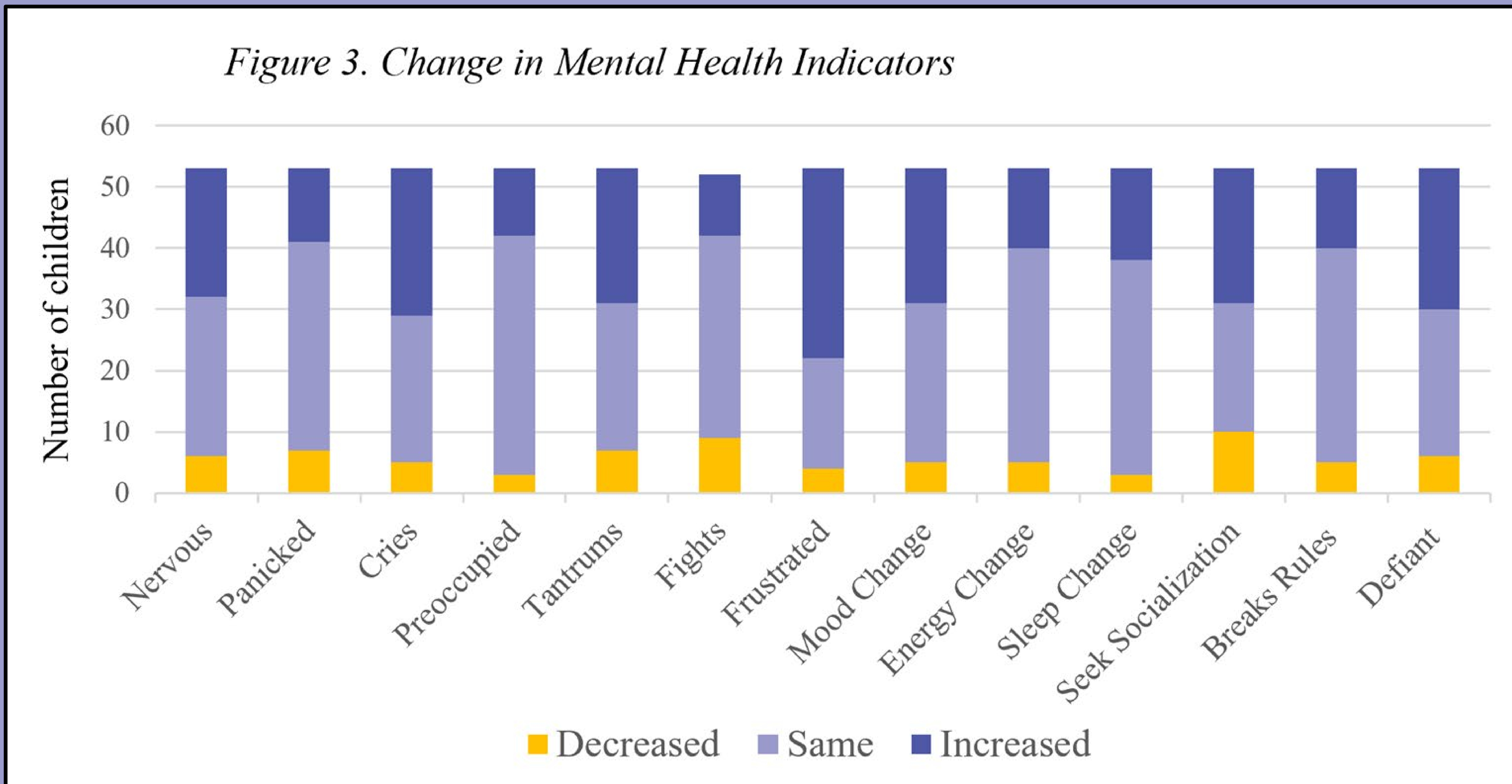


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FUTURE DIRECTIONS

- Implications of our findings include the need for more research and resources related to the mental health of children with DS
- More research is needed related to the coping skills of children with DS use to deal with stress
- Look at the long-term impact of the pandemic on the MH of children with DS

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