Pandemic Impact Report 2019-20

Children, Youth, & Families Behavioral Health Services

Report Date: 7/7/2021

CASRC
Child and Adolescent Services Research Center

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

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Introduction

This report examines the impact of the first 10 months of the pandemic, beginning with the stay-at-home order in March 2020, by comparing San Diego County Behavioral Health data* from March to December of 2020 to the same time frame in 2019. This report includes Medi-Cal and unfunded clients.

Topics Reviewed:
- Demographics and service system information
    - Length of stay
    - Levels of care
    - Telehealth
- Satisfaction
- Symptom severity as measured by the PSC and CANS
- Client outcomes as reported on the PSC and CANS
- Crisis services
- Additional outcomes

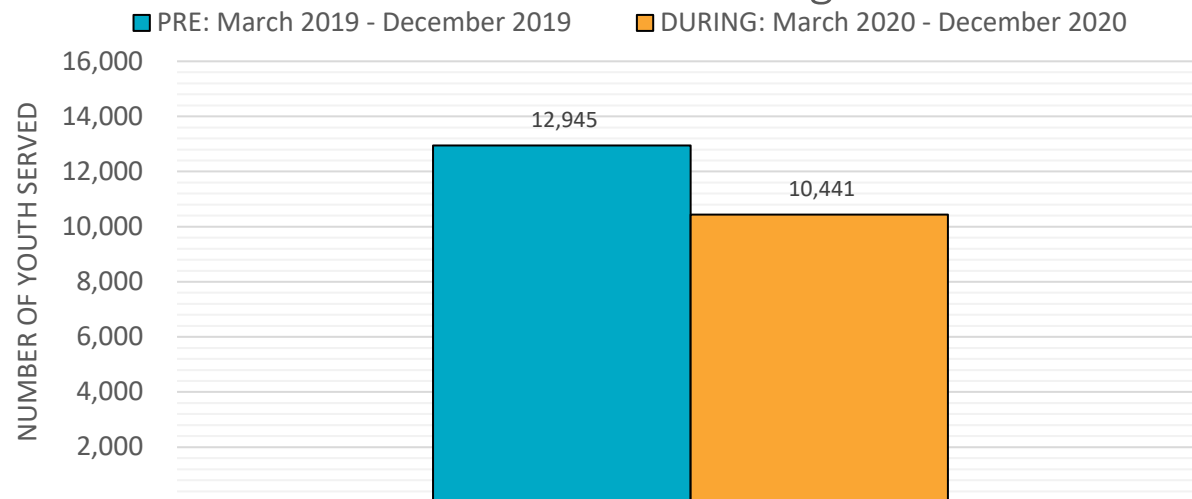*The majority of the data comes from the county mental health organizational provider system.

Demographics

Clients Served

Before the pandemic, there were **12,945 clients served** in County of San Diego Children, Youth, and Families Behavioral Health Services (CYFBHS). During the pandemic, there were **10,441 clients,** which is a **decrease of 19.3%.**
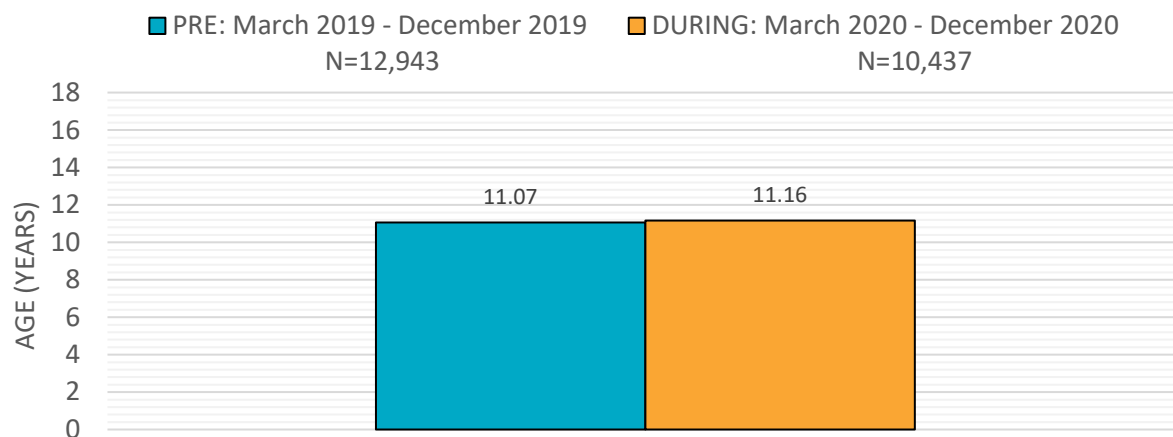
During the pandemic, the average **age of clients receiving services stayed the same**.

Clients Served Before and During Pandemic*

Legend:
- PRE: March 2019 - December 2019 (teal)
- DURING: March 2020 - December 2020 (orange)

NUMBER OF YOUTH SERVED

	PRE	DURING
	12,945	10,441

Y-axis: -, 2,000, 4,000, 6,000, 8,000, 10,000, 12,000, 14,000, 16,000

*These numbers represent unique clients within this timepoint that received any service (except FFS IP)

Age of Clients Before and During Pandemic*†‡

Legend:
- PRE: March 2019 - December 2019 — N=12,943 (teal)
- DURING: March 2020 - December 2020 — N=10,437 (orange)

AGE (YEARS)

	PRE	DURING
	11.07	11.16

Y-axis: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18

*These numbers represent unique clients within this timepoint that received any service (except FFS IP) within each time period.

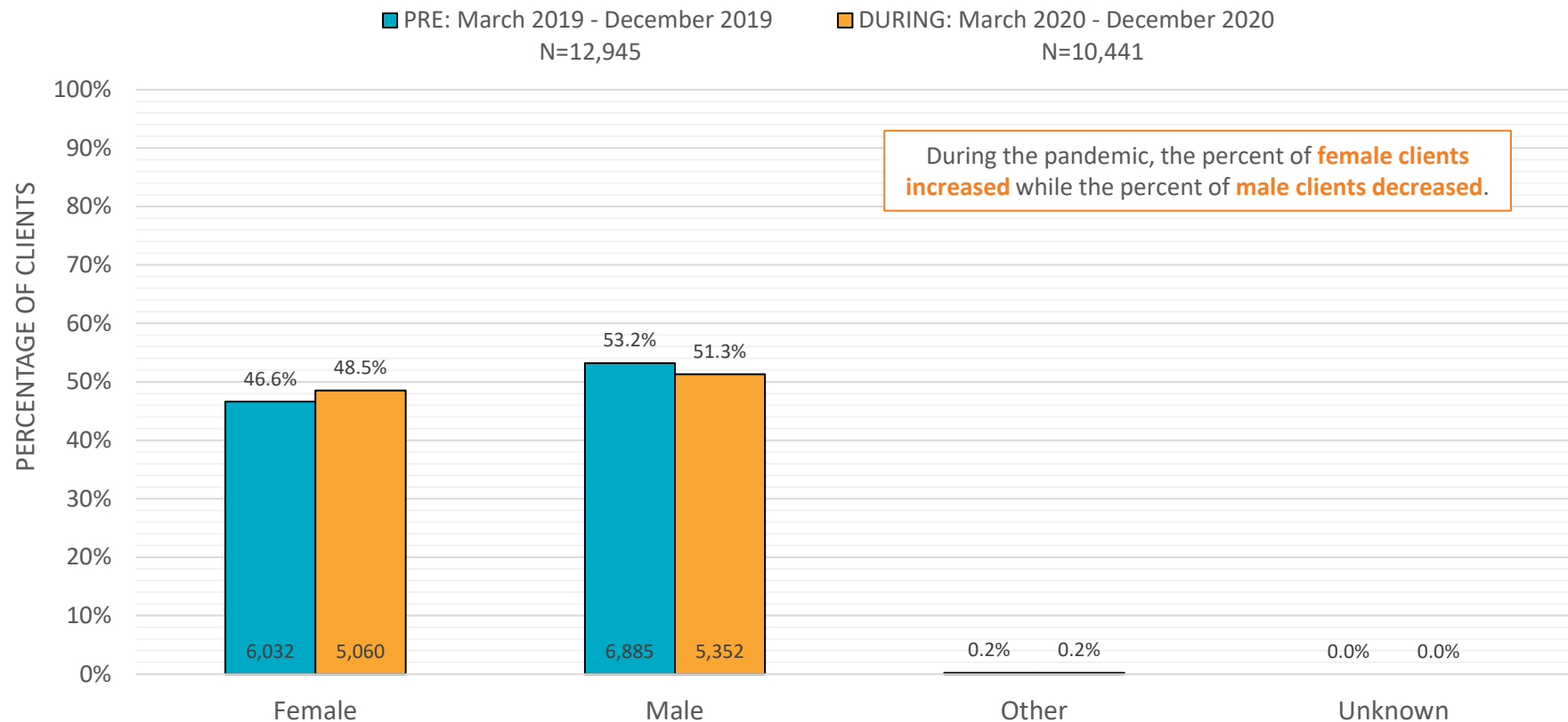†Age is calculated based on the FY for that timepoint (1/1/19 or 1/1/20).

‡Missing or inaccurate data was excluded.

Data Source: CCBH

Clients Served: Gender

Gender disparities in access decreased a small amount during the pandemic. The proportion of females served by CYFBHS has increased since FY 2015-16 (44%) to 46.6% in the months before the pandemic and 48.5% during the pandemic

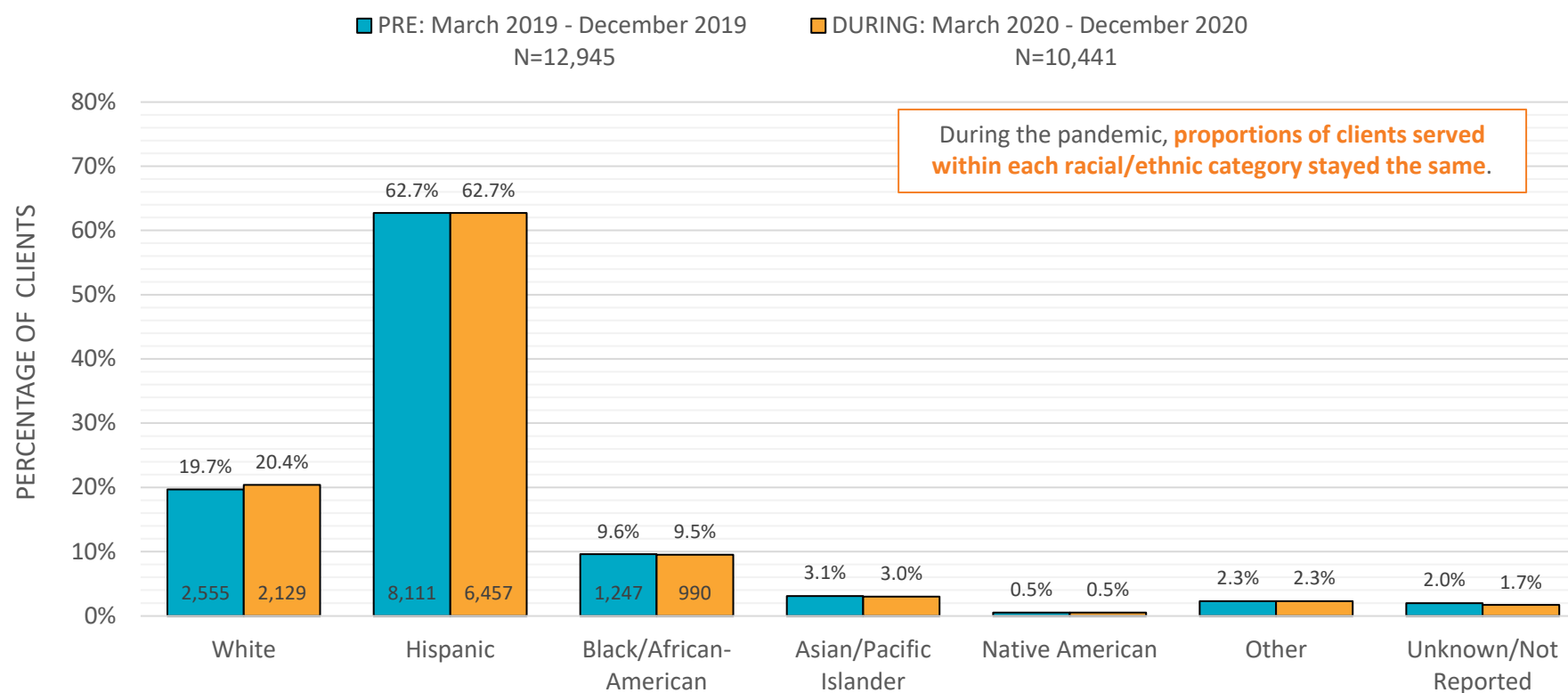## Gender of Clients Before and During Pandemic*

■ PRE: March 2019 - December 2019
N=12,945

■ DURING: March 2020 - December 2020
N=10,441

During the pandemic, the percent of **female clients increased** while the percent of **male clients decreased**.

Category	Female	Male	Other	Unknown
PRE %	46.6%	53.2%	0.2%	0.0%
DURING %	48.5%	51.3%	0.2%	0.0%
PRE N	6,032	6,885		
DURING N	5,060	5,352		

Y-axis: PERCENTAGE OF CLIENTS (0% to 100%)

*These numbers represent unique clients within this timepoint that received any service (except FFS IP) within each time period.

Data Source: CCBH

Clients Served: Race and Ethnicity

There **did not appear to be any racial/ethnic differences** in accessing services during the pandemic.

Race/Ethnicity of Clients Before and During Pandemic*†‡

■ PRE: March 2019 - December 2019
N=12,945

■ DURING: March 2020 - December 2020
N=10,441

During the pandemic, **proportions of clients served within each racial/ethnic category stayed the same**.

Category	PRE %	DURING %	PRE N	DURING N
White	19.7%	20.4%	2,555	2,129
Hispanic	62.7%	62.7%	8,111	6,457
Black/African-American	9.6%	9.5%	1,247	990
Asian/Pacific Islander	3.1%	3.0%		
Native American	0.5%	0.5%		
Other	2.3%	2.3%		
Unknown/Not Reported	2.0%	1.7%		

PERCENTAGE OF CLIENTS

*These numbers represent unique clients within this timepoint that received any service (except FFS IP) within each time period.

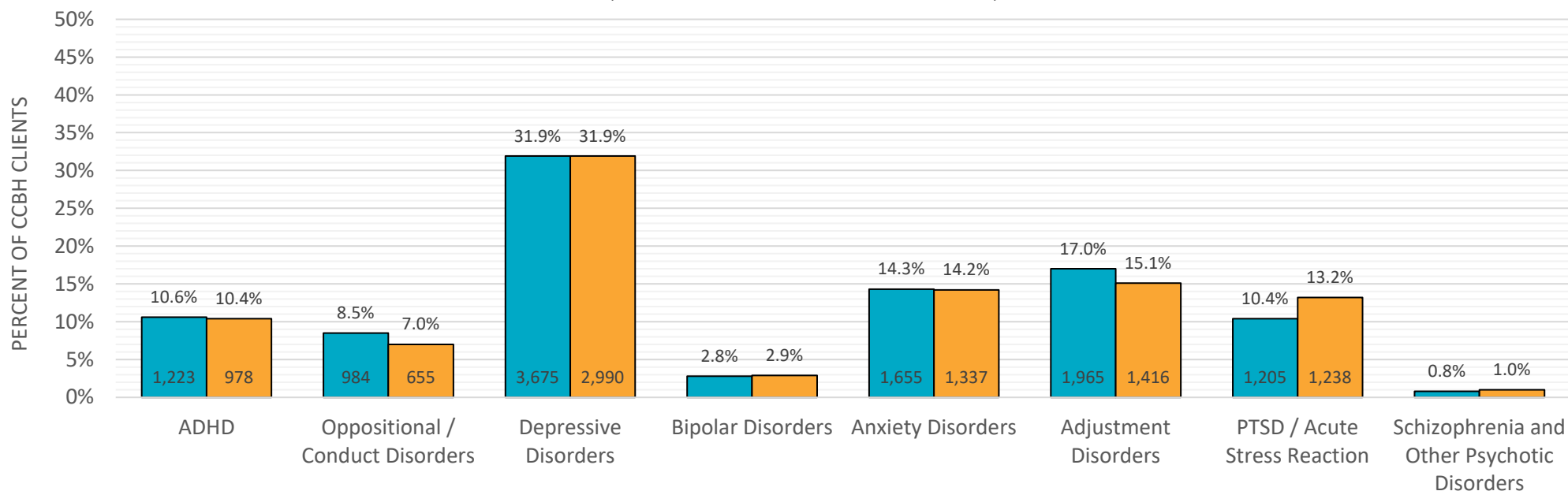†Race is the most recent for each timepoint (cutoff of 12/31/19 or 12/31/20).

‡Missing or inaccurate data was excluded.

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Clients Served: Primary Diagnosis

During the pandemic, **the proportion of clients diagnosed with an oppositional/conduct disorder or adjustment disorder decreased, while the proportion of clients diagnosed with a stressor disorder increased.** This may be a result of traumatic stress stemming from the pandemic, or it might be a part of a larger trend of stressor disorders increasing steadily in the last 3 years.

Primary Diagnosis*†‡ Before and During Pandemic

■ PRE: March 2019 - December 2019   ■ DURING: March 2020 - December 2020
N=11,132   N=8,977

Diagnosis	PRE %	PRE N	DURING %	DURING N
ADHD	10.6%	1,223	10.4%	978
Oppositional / Conduct Disorders	8.5%	984	7.0%	655
Depressive Disorders	31.9%	3,675	31.9%	2,990
Bipolar Disorders	2.8%		2.9%	
Anxiety Disorders	14.3%	1,655	14.2%	1,337
Adjustment Disorders	17.0%	1,965	15.1%	1,416
PTSD / Acute Stress Reaction	10.4%	1,205	13.2%	1,238
Schizophrenia and Other Psychotic Disorders	0.8%		1.0%	

PERCENT OF CCBH CLIENTS

*These numbers represent unique clients within this timepoint that received any service (except FFS IP) within each time period.

†Diagnosis is the most recent for each timepoint (cutoff of 12/31/19 or 12/31/20).

‡Invalid, Excluded, and Missing Diagnoses are not represented.

Data Source: CCBH

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Clients Served by Geographic Region

There are 41 sub-regional areas (SRAs) in San Diego. SRAs are aggregations of census blocks that approximate HHSA regions (which are based on zip codes). Data were available for 39 out of the 41 neighborhoods (no clients were served in the Miramar or Camp Pendleton regions). The Anza-Borrego Springs, Palomar-Julian, Central San Diego, Oceanside and Coastal San Diego areas appear to have lost the greatest percentage of clients during the pandemic. **On average, neighborhood clinics served 19% fewer clients during the pandemic.**
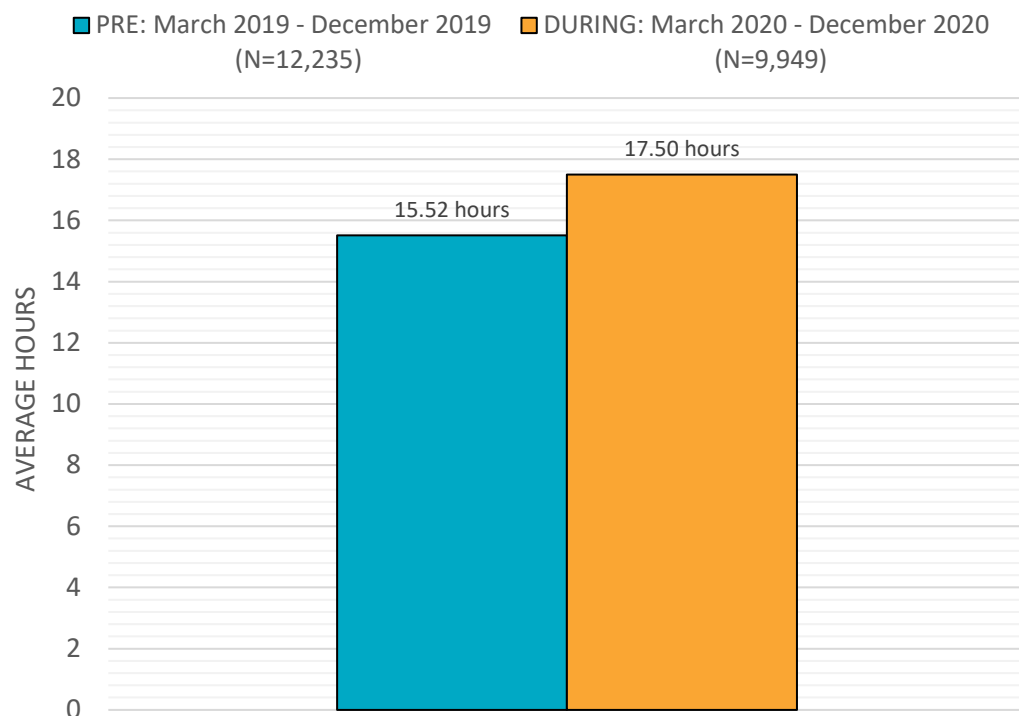
Neighborhoods	PRE: March - December 2019	DURING: March - December 2020	Percent Change	Clients Served Change
Southeast SD	1118	866	-22.5%	-252
Mid-City	957	712	-25.6%	-245
Central SD	648	425	-34.4%	-223
Oceanside	697	486	-30.3%	-211
South Bay	965	754	-21.9%	-211
Chula Vista	893	756	-15.3%	-137
Vista	696	568	-18.4%	-128
Kearny Mesa	1143	1021	-10.7%	-122
Harbison Crest	379	275	-27.4%	-104
El Cajon	431	327	-24.1%	-104
Escondido	990	887	-10.4%	-103
Ramona	275	195	-29.1%	-80
Spring Valley	389	309	-20.6%	-80
Fallbrook	279	213	-23.7%	-66
National City	329	277	-15.8%	-52
Lemon Grove	152	118	-22.4%	-34
Santee	179	146	-18.4%	-33
San Marcos	333	300	-9.9%	-33
Lakeside	198	166	-16.2%	-32
Del Mar-Mira Mesa	216	185	-14.4%	-31

Neighborhoods	PRE: March - December 2019	DURING: March - December 2020	Percent Change	Clients Served Change
Carlsbad	136	109	-19.9%	-27
Coastal	80	56	-30.0%	-24
Anza-Borrego Springs	45	25	-44.4%	-20
North SD	142	122	-14.1%	-20
Elliott-Navajo	160	140	-12.5%	-20
Mountain Empire	69	52	-24.6%	-17
Jamul	59	47	-20.3%	-12
University	41	30	-26.8%	-11
Palomar-Julian	24	14	-41.7%	-10
Alpine	48	41	-14.6%	-7
Peninsula	49	46	-6.1%	-3
Pauma	16	14	-12.5%	-2
Valley Center	46	44	-4.3%	-2
Laguna-Pine Valley	8	8	0.0%	0
San Dieguito	65	67	3.1%	2
La Mesa	209	212	1.4%	3
Coronado	13	16	23.1%	3
Sweetwater	216	222	2.8%	6
Poway	113	124	9.7%	11

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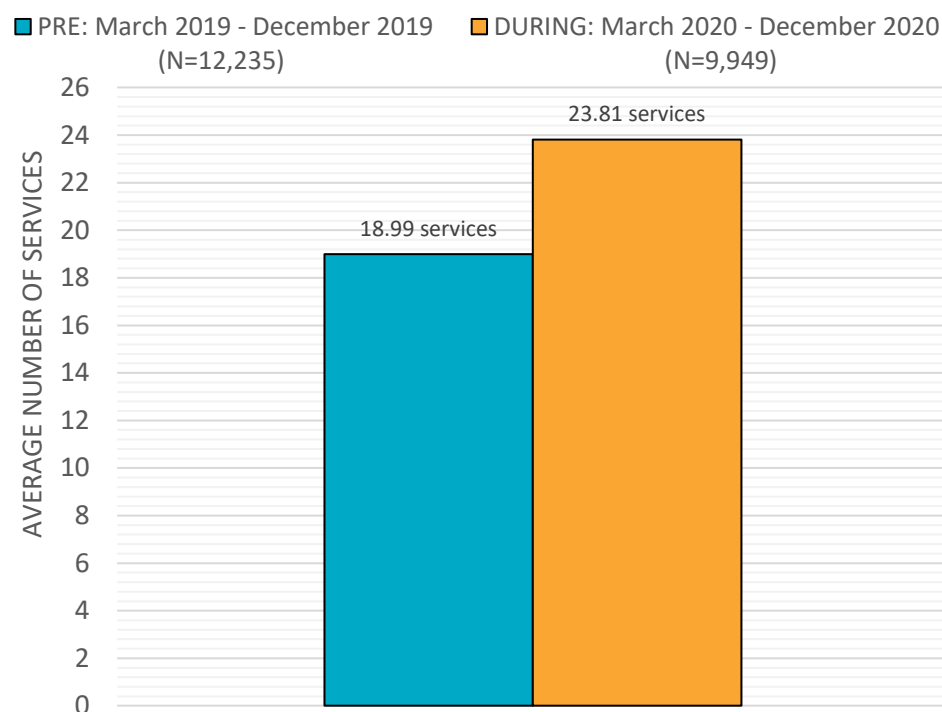# Outpatient Services: Service Hours and Counts

Average outpatient service hours **increased 13%** during the pandemic, while the average number of outpatient service counts **increased 25%**.

Average **Hours of Outpatient Service** for Unique Clients*: Before and During the Pandemic

- PRE: March 2019 - December 2019 (N=12,235)
- DURING: March 2020 - December 2020 (N=9,949)

15.52 hours
17.50 hours

AVERAGE HOURS

*This data represents unique outpatient clients within each timeperiod.

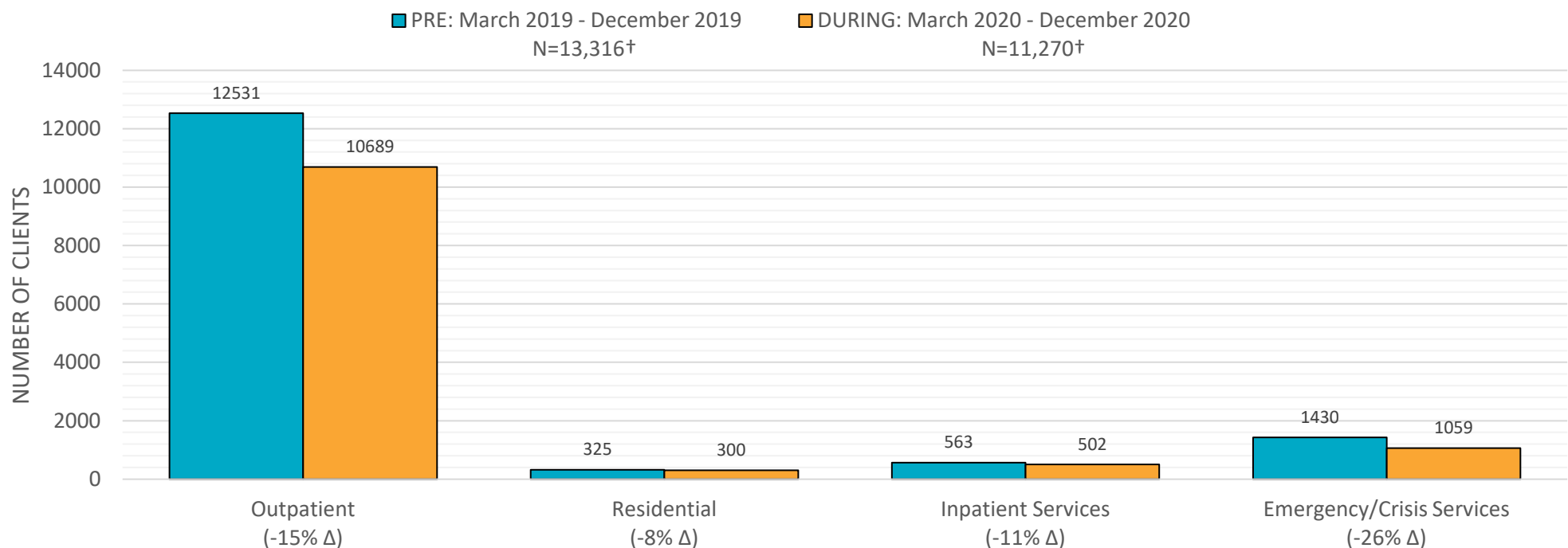Average **Outpatient Service Count** for Unique Clients*: Before and During The Pandemic

- PRE: March 2019 - December 2019 (N=12,235)
- DURING: March 2020 - December 2020 (N=9,949)

23.81 services
18.99 services

AVERAGE NUMBER OF SERVICES

*This data represents unique outpatient clients within each timeperiod.

Data Source: CCBH

Levels of Care

During the pandemic, **fewer clients were served across all levels of care**. However, **emergency/crisis services saw the largest reduction in clients served**. This may be due to fear of going to a medical setting during a pandemic as well as national and local advisories to stay at home. It is unlikely to be caused by a true reduction of need, since clients entered outpatient services with significantly more severe mental health symptoms during the pandemic.

Clients by Level of Care: Before and During Pandemic*

■ PRE: March 2019 - December 2019
N=13,316†

■ DURING: March 2020 - December 2020
N=11,270†

Level of Care	PRE	DURING
Outpatient (-15% Δ)	12531	10689
Residential (-8% Δ)	325	300
Inpatient Services (-11% Δ)	563	502
Emergency/Crisis Services (-26% Δ)	1430	1059

NUMBER OF CLIENTS (y-axis: 0 to 14000)

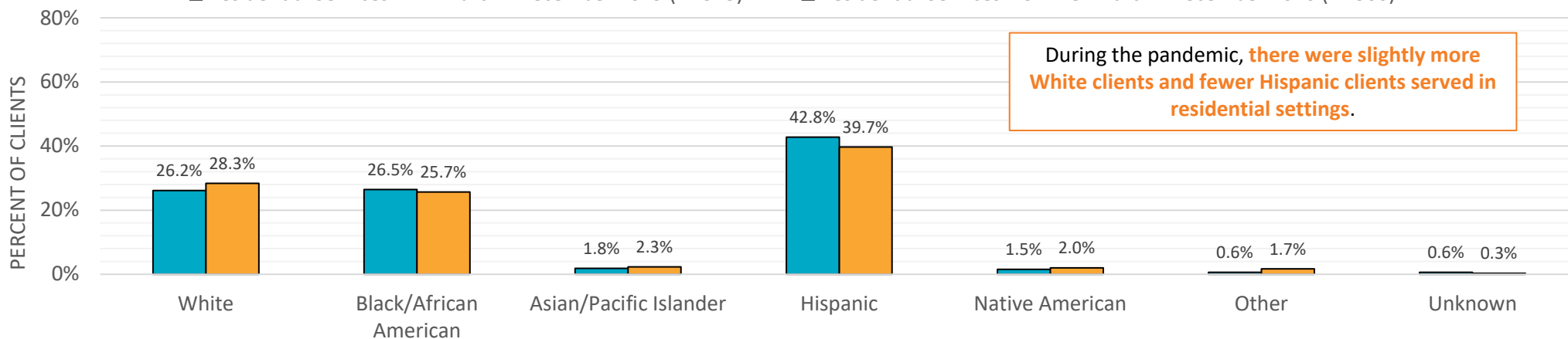*Clients may have received services from more than one level of care.
†Data is unduplicated within each of the LOC, but not across them. As such, the Ns for each LOC will not add up to the total LOC per year.

Data Source: Optum Assignments Table as of June 10, 2021

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Levels of Care: Racial/Ethnic Differences

Residential Services Clients by Race/Ethnicity: Before and During Pandemic*

■ Residential Services PRE: March - December 2019 (N=325)   ■ Residential Services DURING: March - December 2020 (N=300)
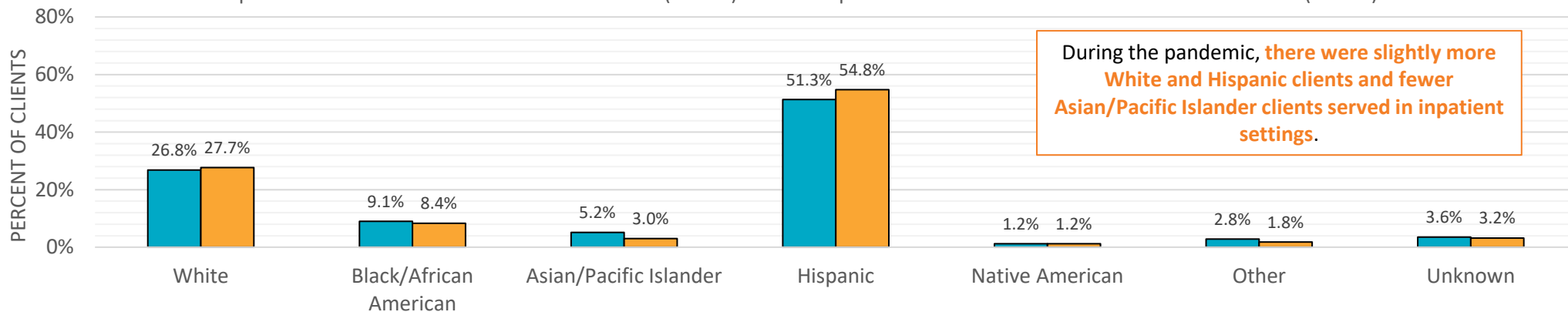
During the pandemic, **there were slightly more White clients and fewer Hispanic clients served in residential settings**.

PERCENT OF CLIENTS

Race/Ethnicity	PRE	DURING
White	26.2%	28.3%
Black/African American	26.5%	25.7%
Asian/Pacific Islander	1.8%	2.3%
Hispanic	42.8%	39.7%
Native American	1.5%	2.0%
Other	0.6%	1.7%
Unknown	0.6%	0.3%

*Clients may have received services from more than one level of care.

Inpatient Services Clients by Race/Ethnicity: Before and During Pandemic*

■ Inpatient Services PRE: March - December 2019 (N=563)   ■ Inpatient Services DURING: March - December 2020 (N=502)

During the pandemic, **there were slightly more White and Hispanic clients and fewer Asian/Pacific Islander clients served in inpatient settings**.

PERCENT OF CLIENTS

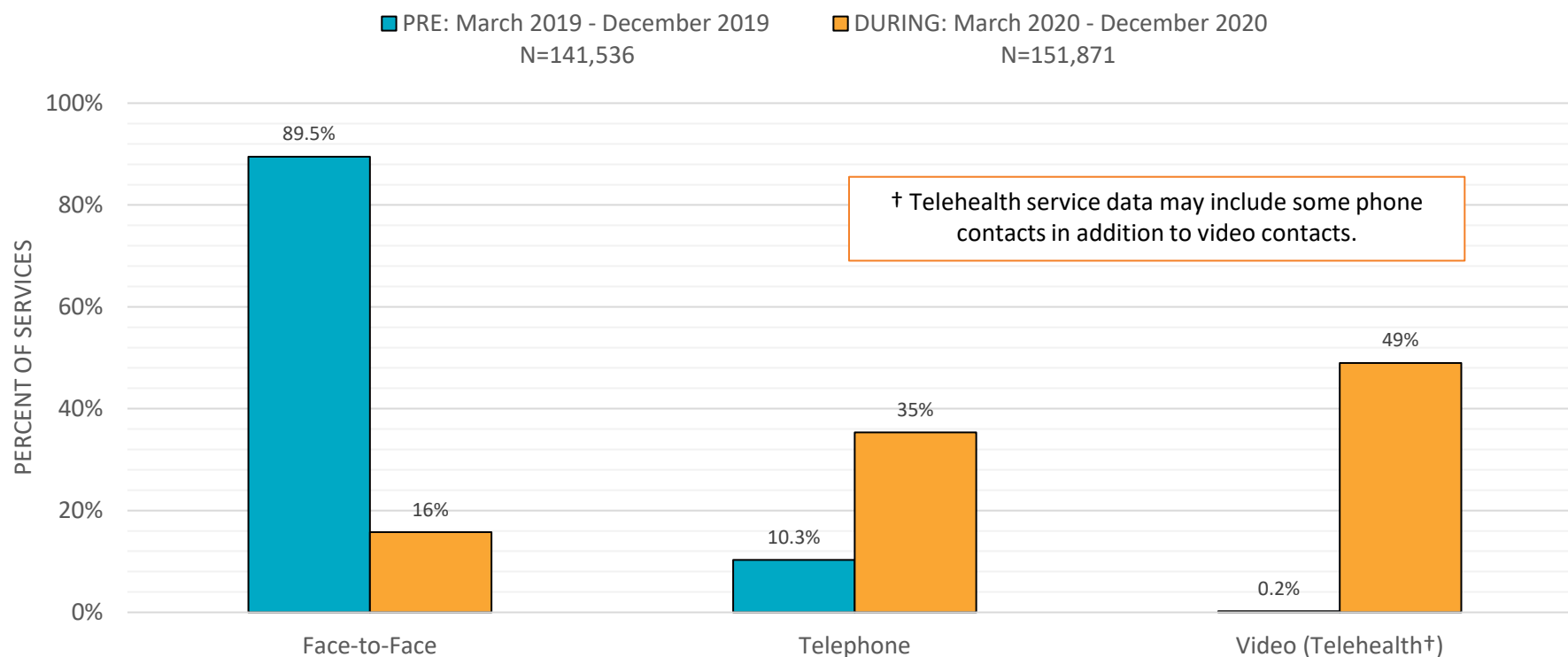| Race/Ethnicity	PRE	DURING
White	26.8%	27.7%
Black/African American	9.1%	8.4%
Asian/Pacific Islander	5.2%	3.0%
Hispanic	51.3%	54.8%
Native American	1.2%	1.2%
Other	2.8%	1.8%
Unknown	3.6%	3.2%

*Clients may have received services from more than one level of care.

There were no differences in the racial/ethnic breakdown of clients served before and during the pandemic in **Outpatient** or **Emergency/Crisis** services settings.

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Data Source: Optum Assignments Table as of June 23, 2021

All Telehealth Contacts

As expected, the **proportion of outpatient phone and video services increased dramatically** during the pandemic.

All Services: Before and During the Pandemic*

■ PRE: March 2019 - December 2019
N=141,536

■ DURING: March 2020 - December 2020
N=151,871

† Telehealth service data may include some phone contacts in addition to video contacts.

PERCENT OF SERVICES

Face-to-Face: 89.5% (PRE), 16% (DURING)
Telephone: 10.3% (PRE), 35% (DURING)
Video (Telehealth†): 0.2% (PRE), 49% (DURING)

*Services refer to outpatient billable contacts (e.g., therapy, case management, medication check, etc.) where the client and family or the client and family/legal guardian were contacted.
†Telehealth can include both video and telephone services.

Data Source: CCBH

YSS - Satisfaction

The Youth Services Survey (YSS)—Satisfaction By Domain

The Youth Services Survey (YSS) is a biennial state-mandated survey administered to all mental health clients ages 13 and older, as well as the parents/caregivers of all youth receiving mental health services regardless of age. The YSS was administered to clients during three 1-week periods within our study timeframe: November 2019 (pre-pandemic), June 2020 (during pandemic), and December 2020 (during pandemic). The June and December 2020 YSS surveys were administered entirely online due to the COVID-19 pandemic; satisfaction results may not be directly comparable to previous years.
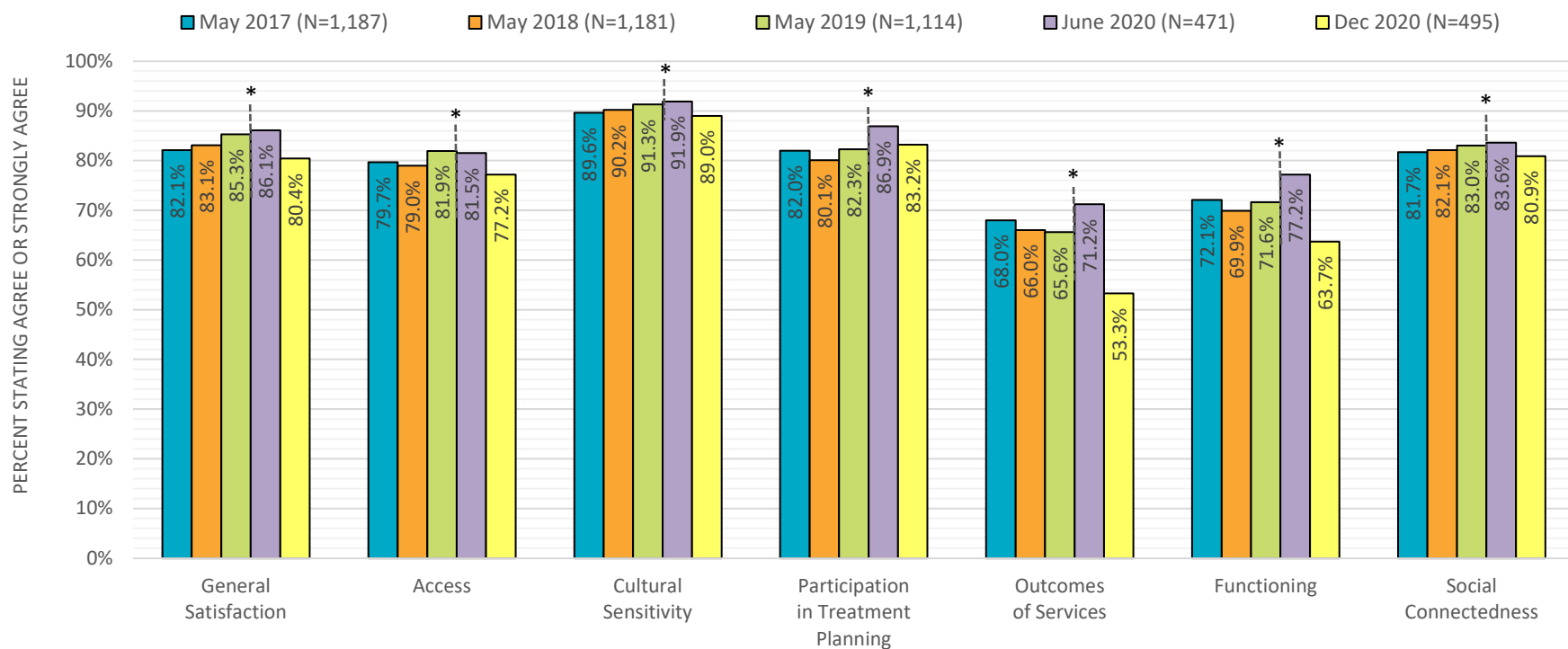
YSS Satisfaction questions were grouped into seven domains:

1. General Satisfaction
2. Perception of Access
3. Perception of Cultural Sensitivity
4. Perception of Participation in Treatment Planning
5. Perception of Outcomes of Services
6. Perception of Functioning
7. Perception of Social Connectedness

Youth Satisfaction

During the pandemic, **satisfaction briefly rose in June 2020, followed by a decrease in December 2020 across all racial/ethnic groups**, especially in the **Functioning** and **Outcomes** domains. Youth satisfaction rarely changes from year-to-year, so any large changes like these are meaningful.
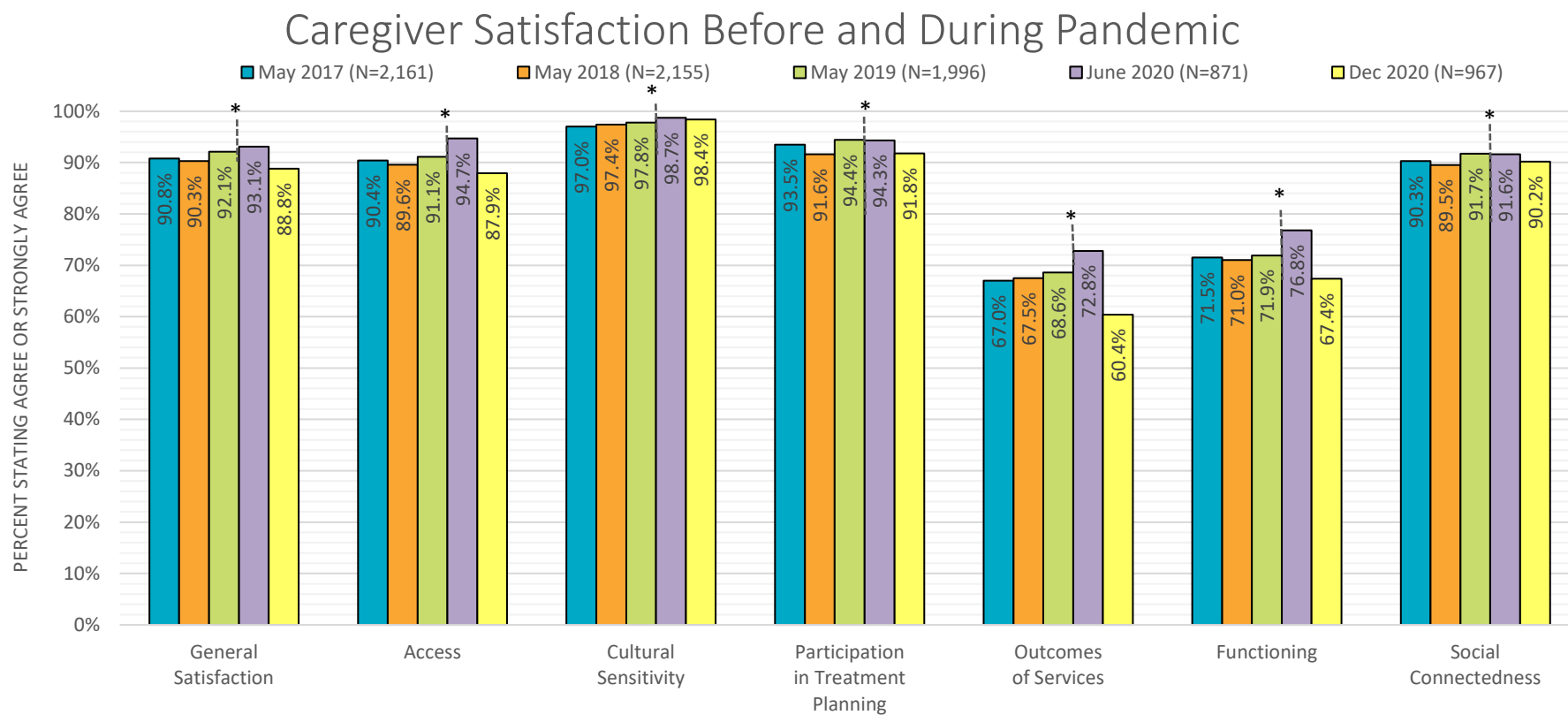
Youth Satisfaction Before and During Pandemic

Legend: May 2017 (N=1,187) | May 2018 (N=1,181) | May 2019 (N=1,114) | June 2020 (N=471) | Dec 2020 (N=495)

Y-axis: PERCENT STATING AGREE OR STRONGLY AGREE

Domain	May 2017	May 2018	May 2019	June 2020	Dec 2020
General Satisfaction	82.1%	83.1%	85.3%	86.1%	80.4%
Access	79.7%	79.0%	81.9%	81.5%	77.2%
Cultural Sensitivity	89.6%	90.2%	91.3%	91.9%	89.0%
Participation in Treatment Planning	82.0%	80.1%	82.3%	86.9%	83.2%
Outcomes of Services	68.0%	66.0%	65.6%	71.2%	53.3%
Functioning	72.1%	69.9%	71.6%	77.2%	63.7%
Social Connectedness	81.7%	82.1%	83.0%	83.6%	80.9%

*Bars to the left of this line indicate time periods pre-COVID. Bars to right of this line indicate time periods during the pandemic.

Data Source: San Diego Youth Services Survey

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Caregiver Satisfaction

Similar to youth report, during the pandemic caregiver satisfaction **briefly rose in June 2020** then **decreased in December 2020, especially in the Outcomes and Functioning domains**. Given that caregiver satisfaction rarely changes from year-to-year, this change is notable.

Caregiver Satisfaction Before and During Pandemic

Legend: May 2017 (N=2,161) · May 2018 (N=2,155) · May 2019 (N=1,996) · June 2020 (N=871) · Dec 2020 (N=967)

Y-axis: PERCENT STATING AGREE OR STRONGLY AGREE (0% to 100%)

General Satisfaction *
- 90.8%
- 90.3%
- 92.1%
- 93.1%
- 88.8%

Access *
- 90.4%
- 89.6%
- 91.1%
- 94.7%
- 87.9%

Cultural Sensitivity *
- 97.0%
- 97.4%
- 97.8%
- 98.7%
- 98.4%

Participation in Treatment Planning *
- 93.5%
- 91.6%
- 94.4%
- 94.3%
- 91.8%

Outcomes of Services *
- 67.0%
- 67.5%
- 68.6%
- 72.8%
- 60.4%

Functioning *
- 71.5%
- 71.0%
- 71.9%
- 76.8%
- 67.4%

Social Connectedness *
- 90.3%
- 89.5%
- 91.7%
- 91.6%
- 90.2%

*Bars to the left of this line indicate time periods pre-COVID. Bars to right of this line indicate time periods during the pandemic.

Data Source: San Diego Youth Services Survey

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Satisfaction by Race/Ethnicity

During the pandemic, there were no racial/ethnic differences on the **General Satisfaction, Cultural Sensitivity, Outcomes, Functioning, or Social Connectedness** domains.

However, Hispanic and Multiracial clients reported decreased **Access** while White and Asian/Pacific Islander clients endorsed more. Further, White, Black/African-American, and Asian/Pacific Islander clients reported more **Participation in Treatment Planning**, while Hispanic clients reported less during the pandemic.

Access Domain by Race/Ethnicity* Before and During Pandemic
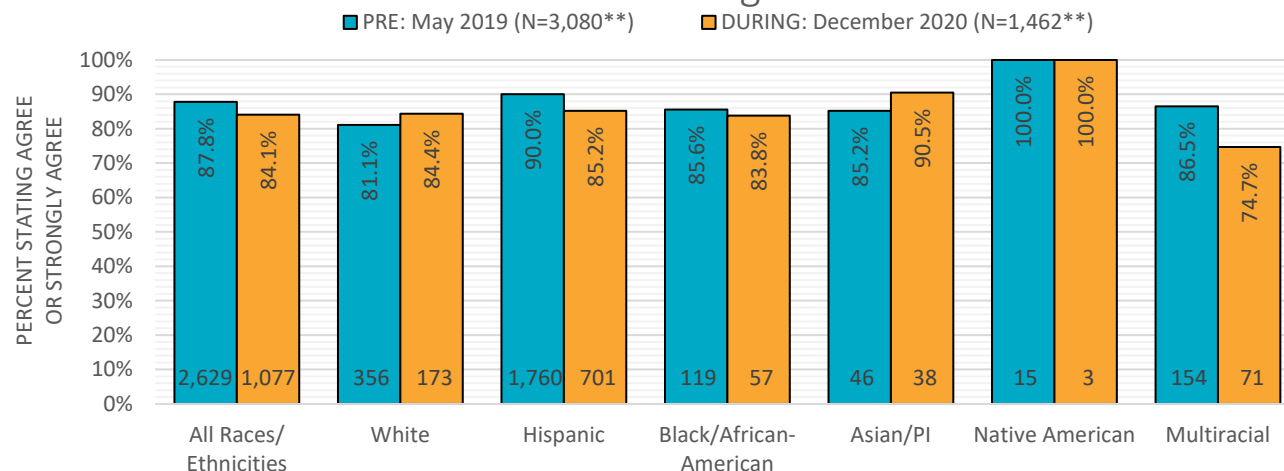
■ PRE: May 2019 (N=3,080**)   ■ DURING: December 2020 (N=1,462**)

*Combined Parent/Youth data based on Youth race/ethnicity. Other and Unknown categories are not presented here.
**Not every youth/caregiver completed responses for every domain.

Participation in Treatment Planning Domain by Race/Ethnicity* Before and During Pandemic
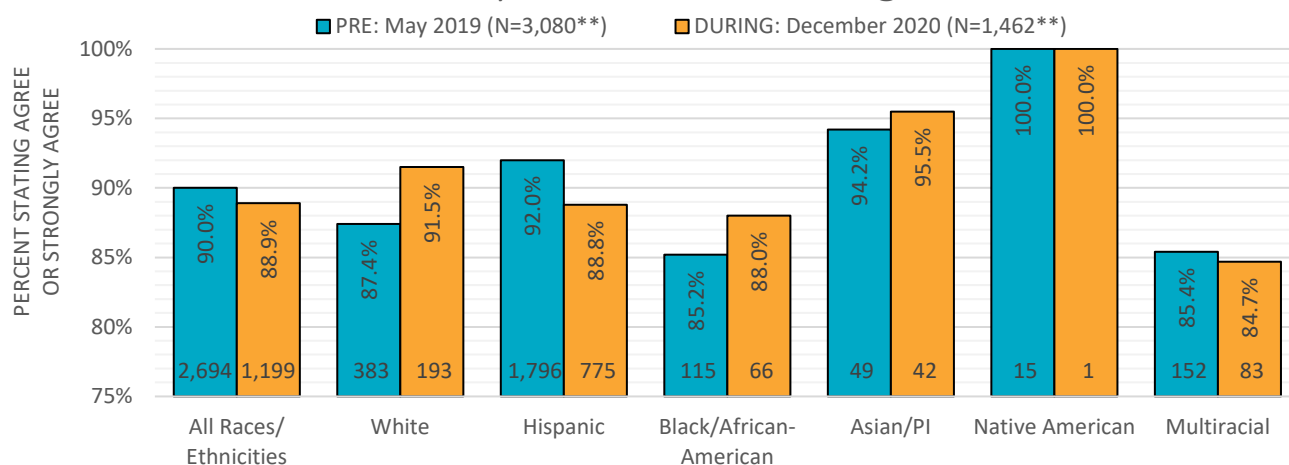
■ PRE: May 2019 (N=3,080**)   ■ DURING: December 2020 (N=1,462**)

*Combined Parent/Youth data based on Youth race/ethnicity. Other and Unknown categories are not presented here.
**Not every youth/caregiver completed responses for every domain.

Data Source: San Diego Youth Services Survey

Client Severity at Intake

Intake Severity: PSC and CANS

- **The Pediatric Symptom Checklist (PSC)** is a psychosocial screening tool

  - The PSC identifies emotional and behavioral problems

  - The Caregiver Form is completed by caregivers of clients ages 3 through 18 years old

  - The Pediatric Symptom Checklist for youth (PSC-Y) is completed by clients ages 11 through 18 years old

- **Child and Adolescent Needs and Strengths (CANS)** is a structured assessment to identify strengths and needs in youth and families

  - Three domains: Child Behavioral and Emotional Needs, Risk Behaviors, and Life Functioning

  - Needs are areas where a child or youth requires help or serious intervention

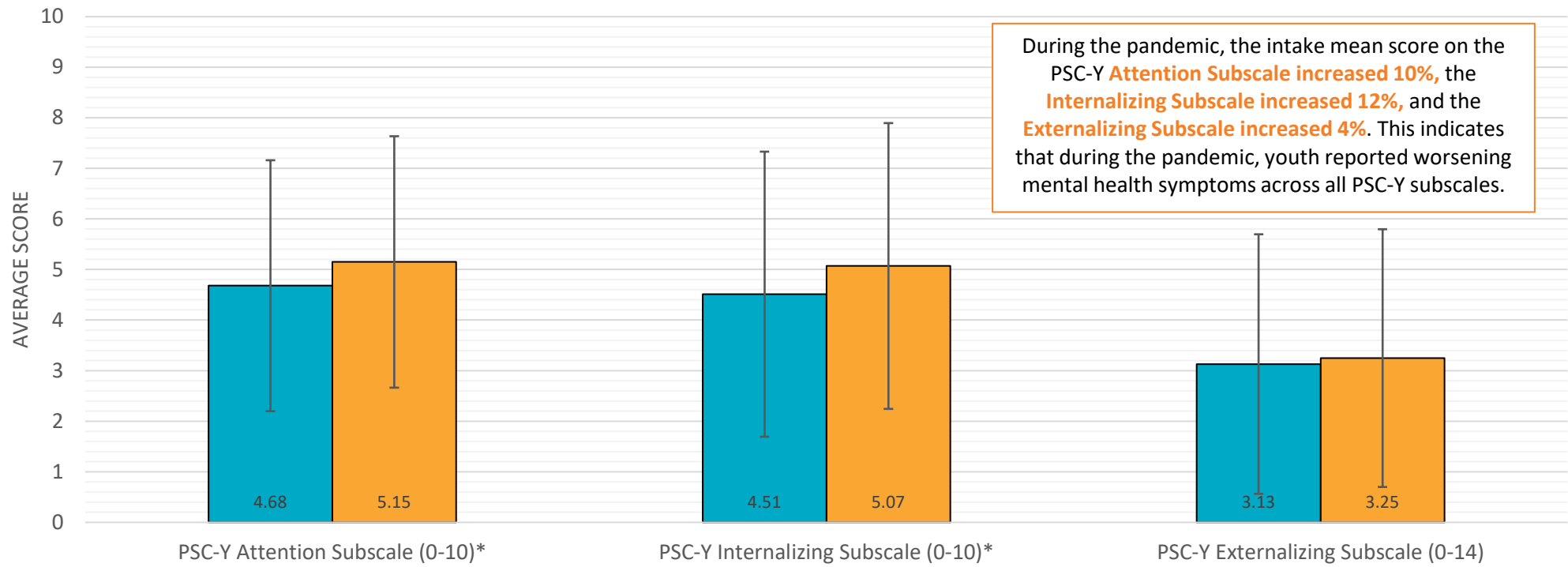 - Completed by clinicians for clients ages 6 through 21 years old

PSC Youth Intake Subscale Averages

During the pandemic, **youth reported worsening mental health symptoms upon entering services**. Youth PSC **trends remained approximately the same across the largest racial/ethnic groups**: Hispanic, White, Black/African American, and Asian/Pacific Islander.

Intake: Youth PSC Before and During Pandemic

■ PRE: April - December 2019 ■ DURING: April - December 2020
N=3,410   N=2,600

During the pandemic, the intake mean score on the PSC-Y **Attention Subscale increased 10%,** the **Internalizing Subscale increased 12%,** and the **Externalizing Subscale increased 4%**. This indicates that during the pandemic, youth reported worsening mental health symptoms across all PSC-Y subscales.

AVERAGE SCORE

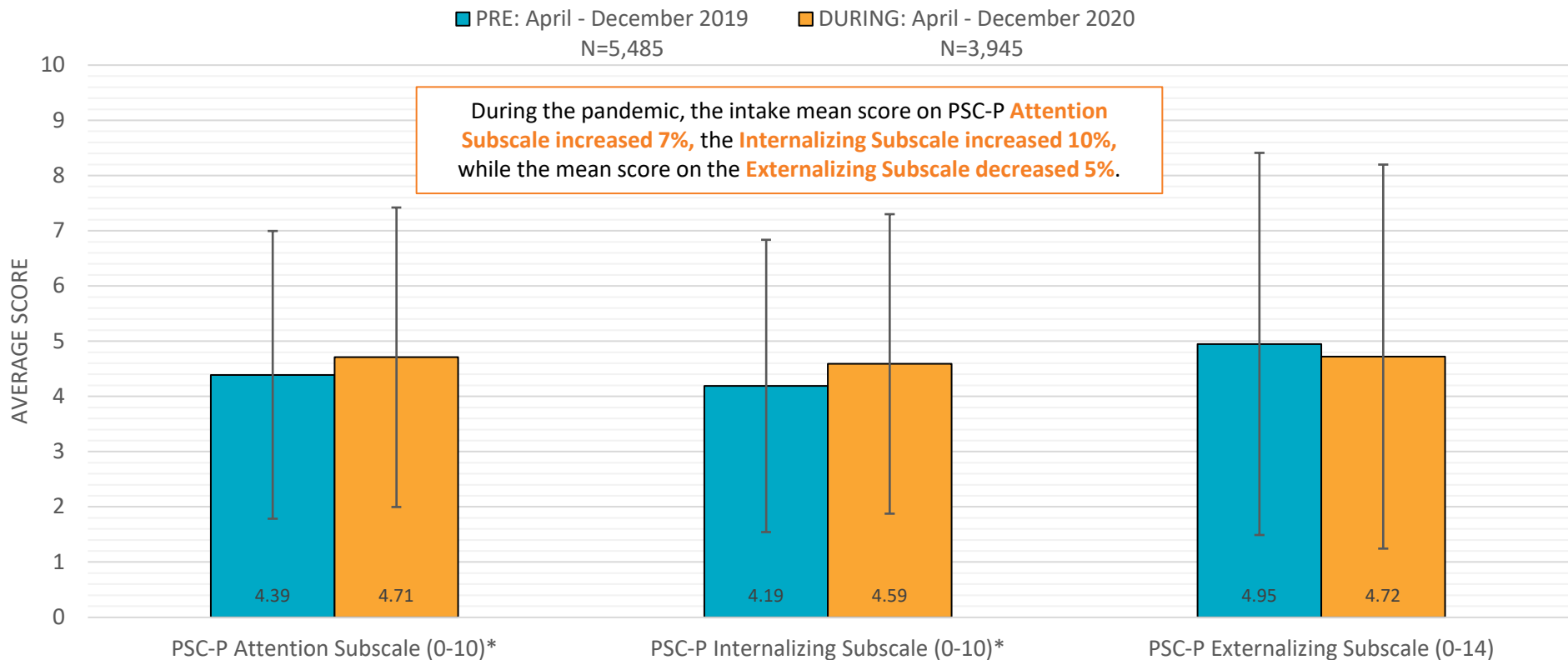|	PSC-Y Attention Subscale (0-10)*	PSC-Y Internalizing Subscale (0-10)*	PSC-Y Externalizing Subscale (0-14)
PRE	4.68	4.51	3.13
DURING	5.15	5.07	3.25

* During COVID, youth reported statistically significantly greater problems at intake.

PSC Parent Intake Subscale Averages

During the pandemic, **caregivers reported more attention and internalizing problems, but fewer externalizing issues**. During the pandemic, caregiver PSC **trends remained approximately the same across the largest racial/ethnic groups**: Hispanic, White, Black/African American, and Asian/Pacific Islander.

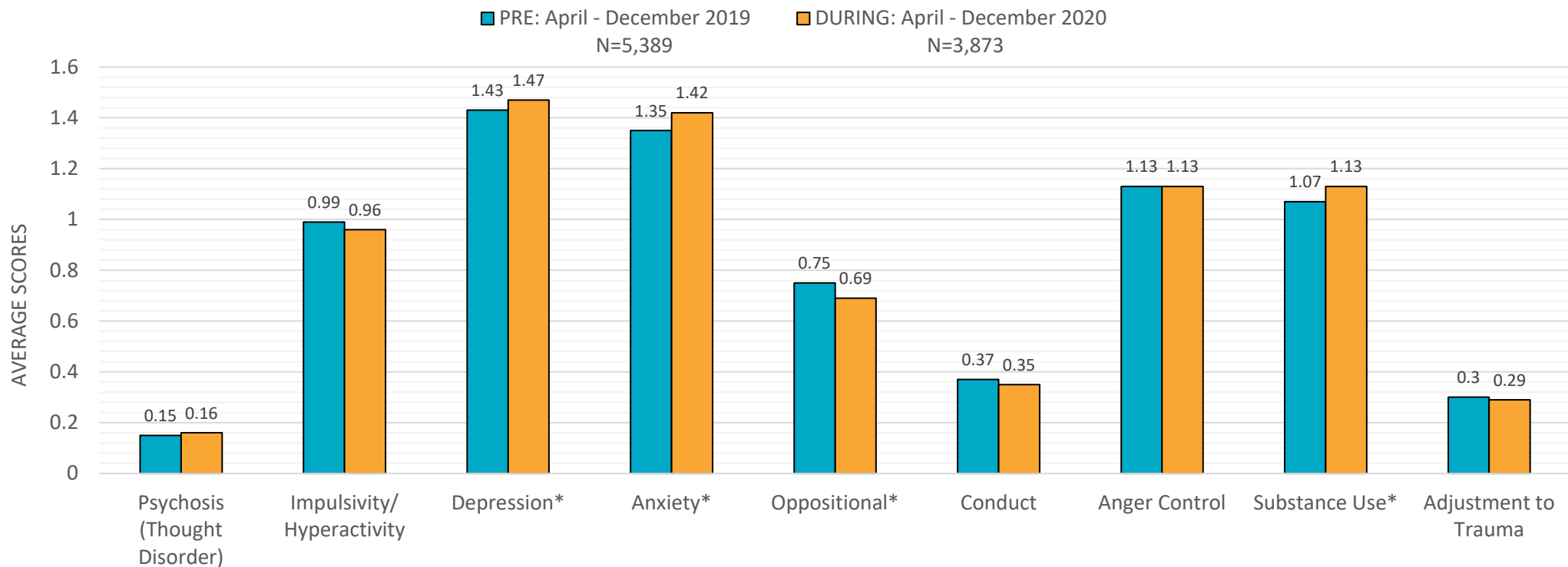## Intake: Parent PSC Before and During Pandemic

During the pandemic, the intake mean score on PSC-P **Attention Subscale increased 7%,** the **Internalizing Subscale increased 10%,** while the mean score on the **Externalizing Subscale decreased 5%**.

Legend:
- PRE: April - December 2019 N=5,485
- DURING: April - December 2020 N=3,945

Subscale	PRE	DURING
PSC-P Attention Subscale (0-10)*	4.39	4.71
PSC-P Internalizing Subscale (0-10)*	4.19	4.59
PSC-P Externalizing Subscale (0-14)	4.95	4.72

AVERAGE SCORE

* During COVID, parents reported statistically significantly more problems at intake.

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CANS Intake: Behavioral/Emotional Domain

During the pandemic, clinicians reported that youth entered services with **significantly greater depression, anxiety, and substance use, but less oppositional behavior**, which is consistent with caregiver report from the PSC. A large study of general population youth reported fewer symptoms of depression during the pandemic than in 2018 (Twenge & Joiner, 2020). However, this study may not generalize to the high-risk clients in San Diego County BHS.

Intake CANS Before and During Pandemic: **Behavioral/Emotional Domain**

Legend:
- PRE: April – December 2019 — N=5,389
- DURING: April – December 2020 — N=3,873

Bar chart values (PRE, DURING):
- Psychosis (Thought Disorder): 0.15, 0.16
- Impulsivity/Hyperactivity: 0.99, 0.96
- Depression*: 1.43, 1.47
- Anxiety*: 1.35, 1.42
- Oppositional*: 0.75, 0.69
- Conduct: 0.37, 0.35
- Anger Control: 1.13, 1.13
- Substance Use*: 1.07, 1.13
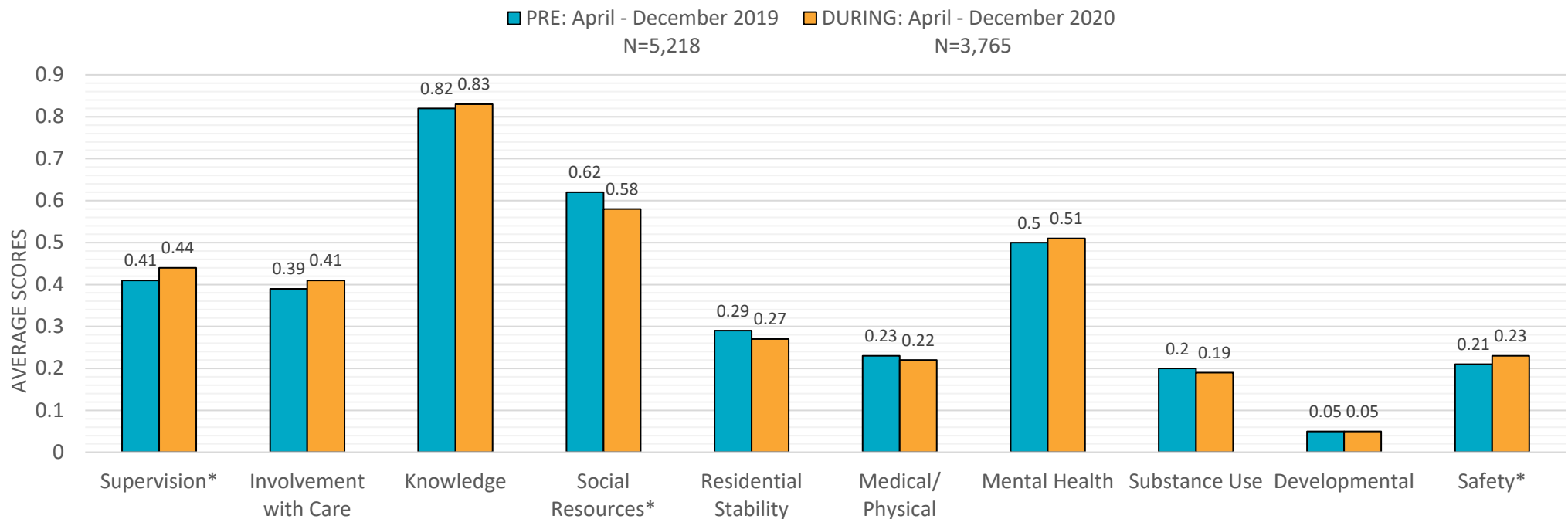- Adjustment to Trauma: 0.3, 0.29

Y-axis: AVERAGE SCORES

*At intake, there were statistically significant differences.

CANS Intake: Caregiver Resources and Needs

During the pandemic, clinicians reported caregivers had **significantly greater issues with supervision,** likely due to school closures, **and safety**, which is consistent with increases in domestic violence during the pandemic reported by a meta-analytic summary of 18 studies (Piquero et al., 2021). Clinicians surprisingly noted **fewer issues with social resources,** meaning that they thought caregivers had greater social/family networks to help with caregiving during the pandemic.

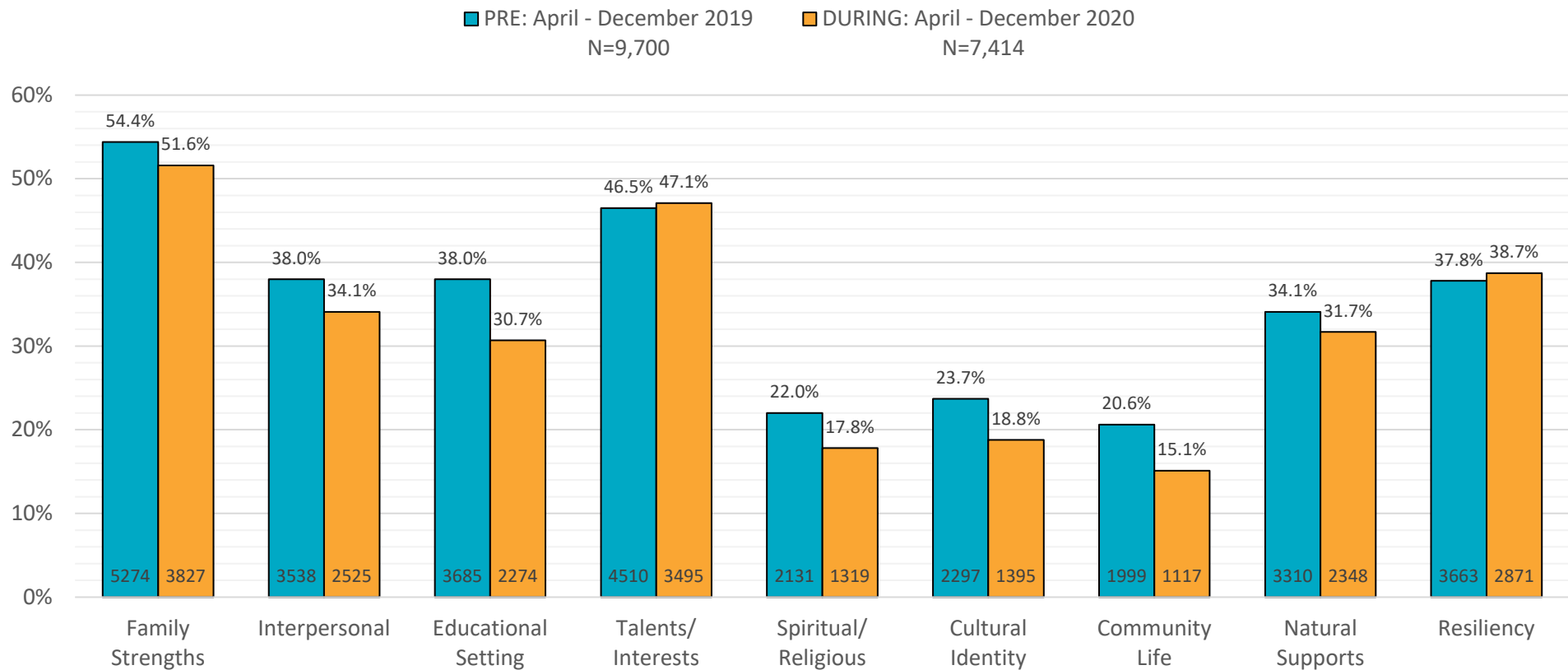## Intake CANS Before and During Pandemic: Caregiver Resources and Needs

■ PRE: April - December 2019
N=5,218

■ DURING: April - December 2020
N=3,765

Category	PRE	DURING
Supervision*	0.41	0.44
Involvement with Care	0.39	0.41
Knowledge	0.82	0.83
Social Resources*	0.62	0.58
Residential Stability	0.29	0.27
Medical/ Physical	0.23	0.22
Mental Health	0.5	0.51
Substance Use	0.2	0.19
Developmental	0.05	0.05
Safety*	0.21	0.23

AVERAGE SCORES

*At intake, there were statistically significant differences.

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CANS Intake: Strengths

Compared to before the pandemic, clinicians reported that **clients entered services with fewer strengths** during the pandemic, perhaps due to the lack of opportunity to see friends / family or engage in recreational activities, such as sports or church activities.

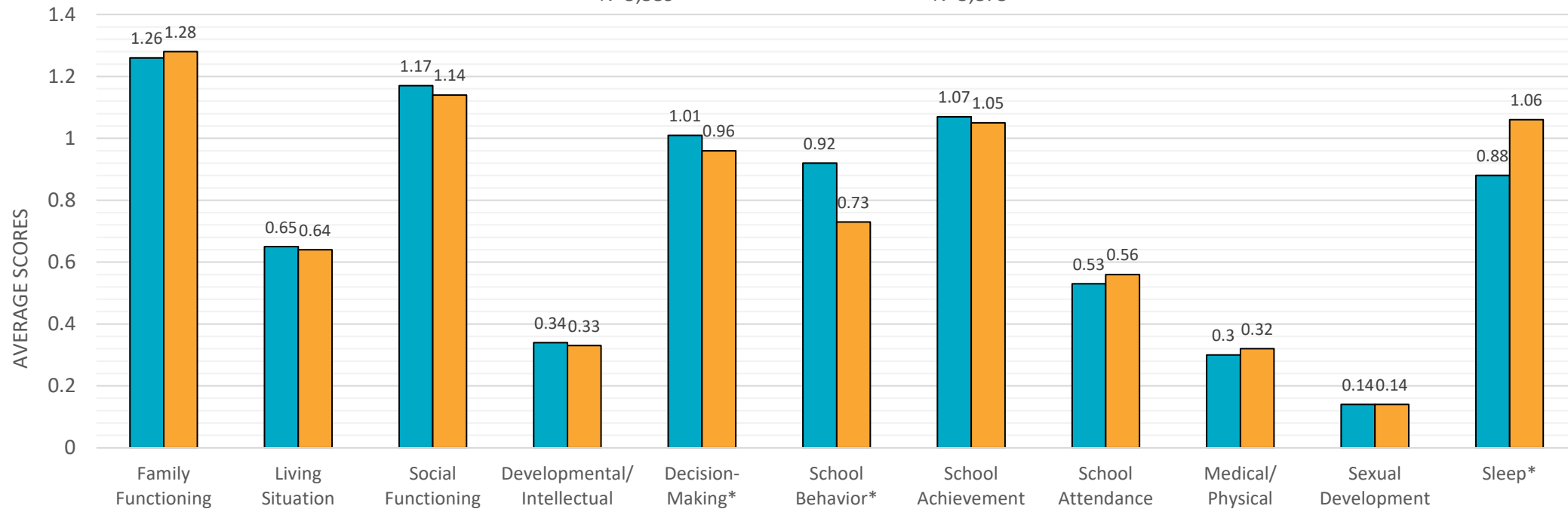## Intake CANS Before and During the Pandemic: **Strengths**

■ PRE: April - December 2019
N=9,700

■ DURING: April - December 2020
N=7,414

	Family Strengths	Interpersonal	Educational Setting	Talents/ Interests	Spiritual/ Religious	Cultural Identity	Community Life	Natural Supports	Resiliency
PRE	54.4%	38.0%	38.0%	46.5%	22.0%	23.7%	20.6%	34.1%	37.8%
DURING	51.6%	34.1%	30.7%	47.1%	17.8%	18.8%	15.1%	31.7%	38.7%
PRE n	5274	3538	3685	4510	2131	2297	1999	3310	3663
DURING n	3827	2525	2274	3495	1319	1395	1117	2348	2871

Data Source: CYF mHOMS

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CANS Intake: Functioning

During the pandemic, **clinicians rated youth as having significantly greater problems with sleep.** In the general population, children are sleeping more during the pandemic, likely due to online school eliminating the need for a commute (Twenge et al., 2020). This is not the case in San Diego's public system of care. **Clinicians reported that youth have had fewer problems with decision-making and school behavior**, which is logical as they have been at home.

Intake CANS Before and During Pandemic: Functioning Domain

■ PRE: April - December 2019   ■ DURING: April - December 2020
N=5,389   N=3,873

Domain	PRE	DURING
Family Functioning	1.26	1.28
Living Situation	0.65	0.64
Social Functioning	1.17	1.14
Developmental/Intellectual	0.34	0.33
Decision-Making*	1.01	0.96
School Behavior*	0.92	0.73
School Achievement	1.07	1.05
School Attendance	0.53	0.56
Medical/Physical	0.3	0.32
Sexual Development	0.14	0.14
Sleep*	0.88	1.06

AVERAGE SCORES

*At intake, there were statistically significant differences.

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CANS Intake: Cultural Factors

Clinicians reported youth had **significantly greater cultural stress** (e.g., youths' cultural identity was met with more hostility) **and difficulty accessing cultural traditions, rituals, and practices** (e.g., youth or family had more trouble practicing their chosen traditions) during the pandemic. This may be due to broader societal stress surrounding racial justice issues in 2020.
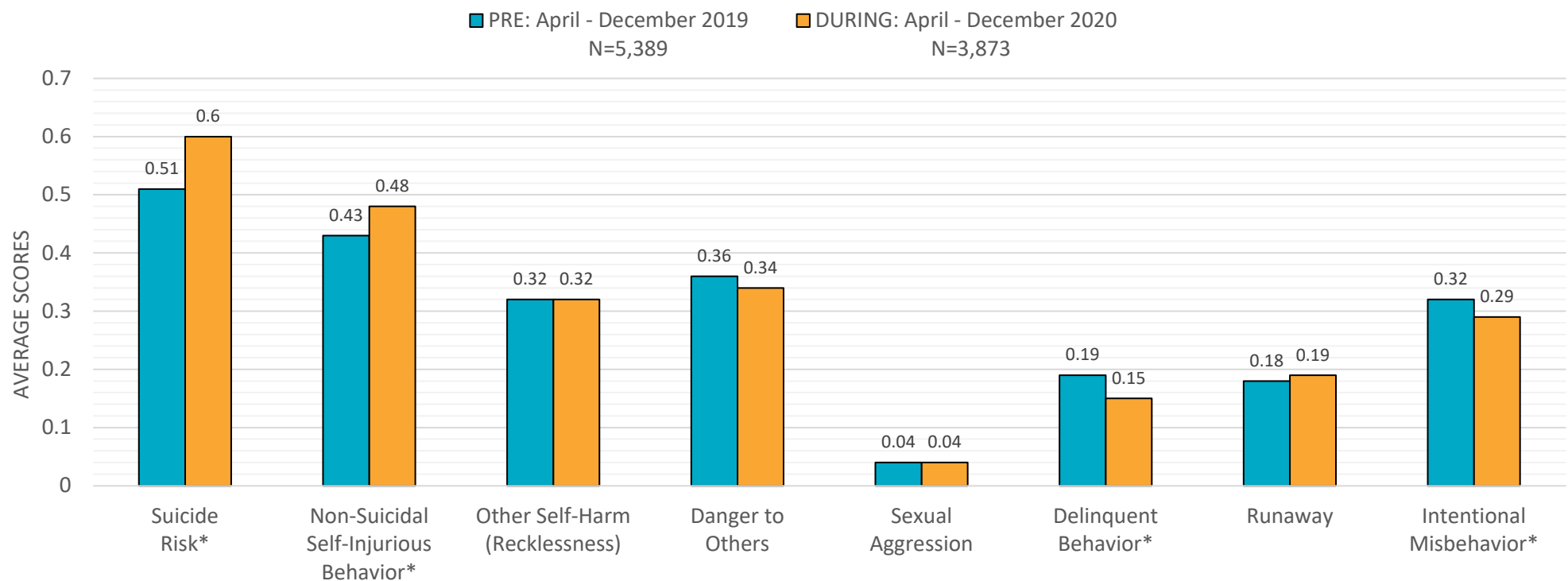
Intake CANS Before and During Pandemic: Cultural Factors

■ PRE: April - December 2019
N=5,389

■ DURING: April - December 2020
N=3,873

	Language	Traditions and Rituals*	Cultural Stress*
PRE	0.17	0.1	0.31
DURING	0.18	0.13	0.34

AVERAGE SCORES

*At intake, there were statistically significant differences.
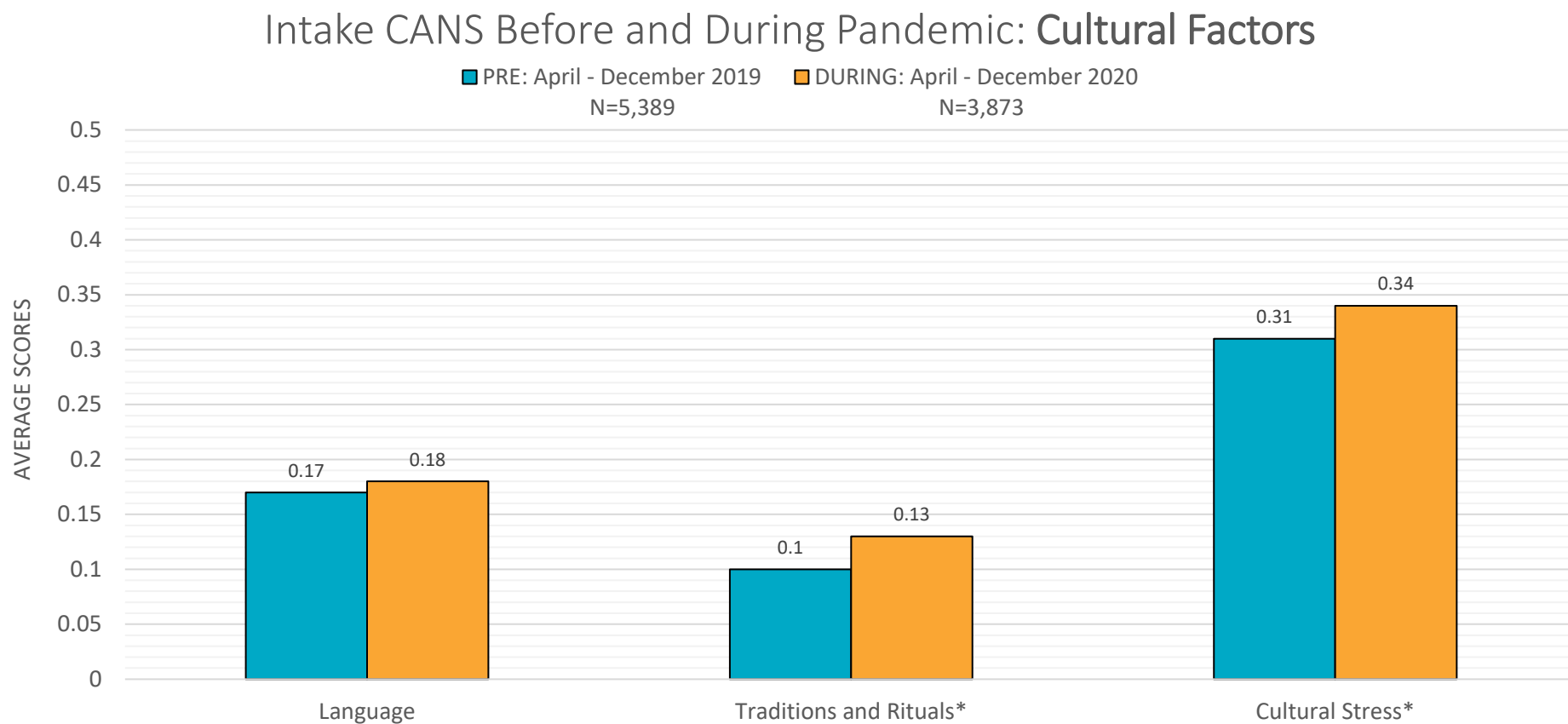
Data Source: CYF mHOMS

CANS Intake: Risk Behaviors

During the pandemic, clinicians reported youth had **significantly greater suicide risk and non-suicidal self-injurious behavior, but less delinquent behavior and intentional misbehavior**. This is in line with caregivers' report of more internalizing and less externalizing problems on the PSC during the pandemic. Further, a large meta-analysis of 54 studies suggests that suicidal ideation, suicide attempts, and self-harm have increased during the pandemic (Dube et al., 2021).

Intake CANS Before and During Pandemic: Risk Behaviors

PRE: April - December 2019 N=5,389   **DURING: April - December 2020** N=3,873

	PRE	DURING
Suicide Risk*	0.51	0.6
Non-Suicidal Self-Injurious Behavior*	0.43	0.48
Other Self-Harm (Recklessness)	0.32	0.32
Danger to Others	0.36	0.34
Sexual Aggression	0.04	0.04
Delinquent Behavior*	0.19	0.15
Runaway	0.18	0.19
Intentional Misbehavior*	0.32	0.29

*At intake, there were statistically significant differences.

Data Source: CYF mHOMS

CANS Intake: Sexual Exploitation

While clinicians reported that fewer children experienced sexual exploitation during the pandemic, those that did experienced **significantly more severe exploitation (e.g., more chronic exploitation)**.

Intake CANS Before and During Pandemic: Sexual Exploitation

Legend:
- PRE: April - December 2019 N=165
- DURING: April - December 2020 N=111

Sexual Exploitation*:
- PRE: 0.49
- DURING: 0.86

Y-axis: AVERAGE SCORES (0 to 1)
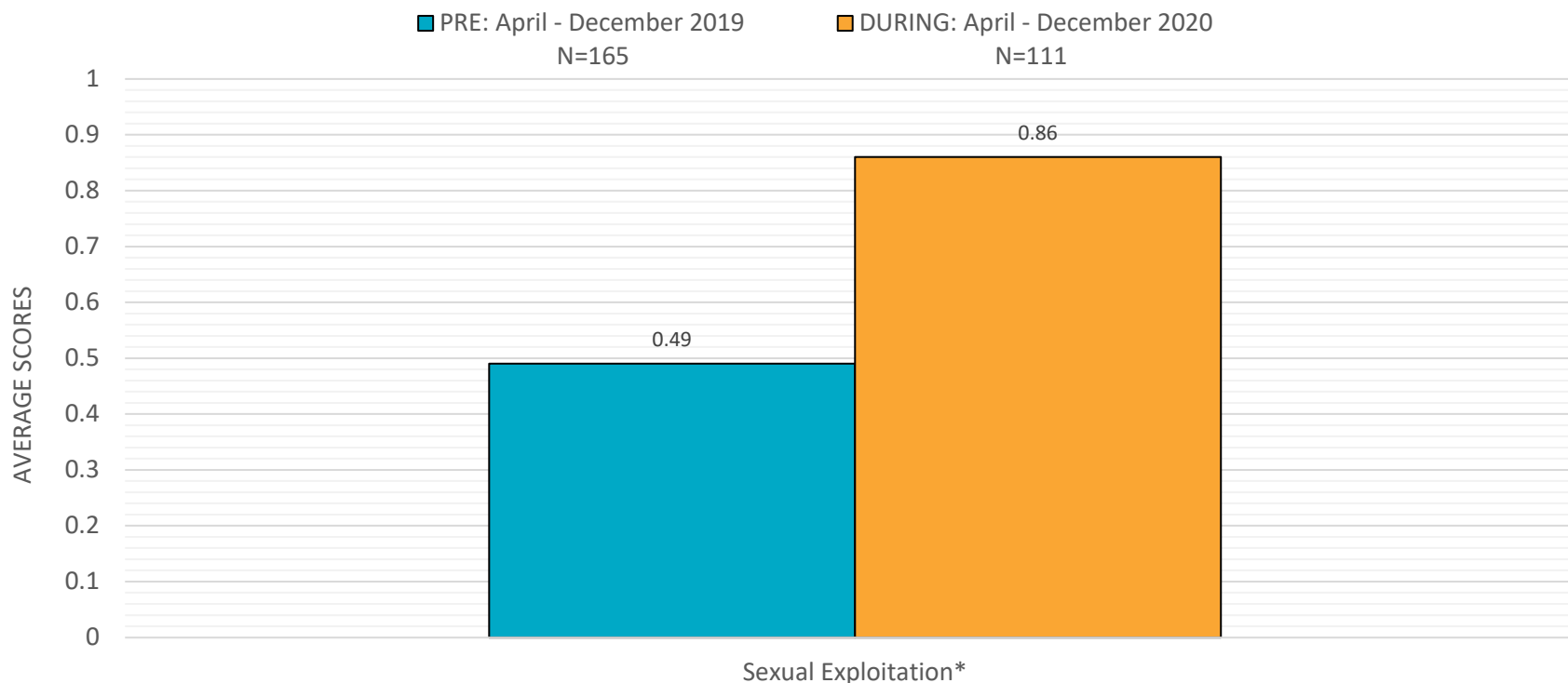
*In the intake CANS Sexuality Module, only the sexual exploitation item showed a statistically significant difference from pre- to during COVID.

Data Source: CYF mHOMS

Client Progress at Discharge

Discharge Outcomes: PSC/PSC-Y

Improvement is evaluated three ways:

1. Amount of Improvement: Cohen's d effect size
   - Increase in impairment: 1+ point increase
   - No improvement: 0-1 point reduction
   - Small improvement: 2-4 point reduction
   - Medium improvement: 5-8 point reduction
   - Large improvement: 9+ point reduction

2. Reliable Improvement: Defined by measures' developers
   - 6-point reduction on the total scale score
   - Statistically reliable

3. Clinically Significant Improvement: Defined by measures' developers
   - Started above the clinical cutoff on one scale at intake and was below the cutoff at discharge

   AND
   - 6-point reduction on the total scale score.

PSC-Youth: Progress at Discharge

Traditionally, the majority of youth experience improvement on the PSC at discharge. During the pandemic youth entered services with greater severity at intake, though **they reported similar or better progress at discharge**.

Discharge: Youth PSC* Before and During Pandemic

■ PRE: CCBH Discharge between July and December 2019
N=1,047†

■ DURING: CCBH Discharge between July and December 2020
N=974†

During the pandemic, **more discharged youth reported large improvement, reliable improvement, and clinically significant improvement at the end of treatment**.

	Increase in Impairment	No Improvement	Small Improvement	Medium Improvement	Large Improvement	Reliable Improvement	Clinically significant improvement‡
PRE	21%	9%	12%	17%	41%	53%	64%
DURING	21%	7%	9%	17%	46%	58%	66%
PRE (n)	218	99	122	174	434	558	403 / 633
DURING (n)	207	70	85	161	451	568	395 / 597

PERCENT OF CLIENTS

* Administered to youth ages 11 - 18 only
† Percent of clients and total N are based on clients who had both intake and discharge data available.
‡ This data is only calculated for clients who started above the clinical cutoff point at intake.
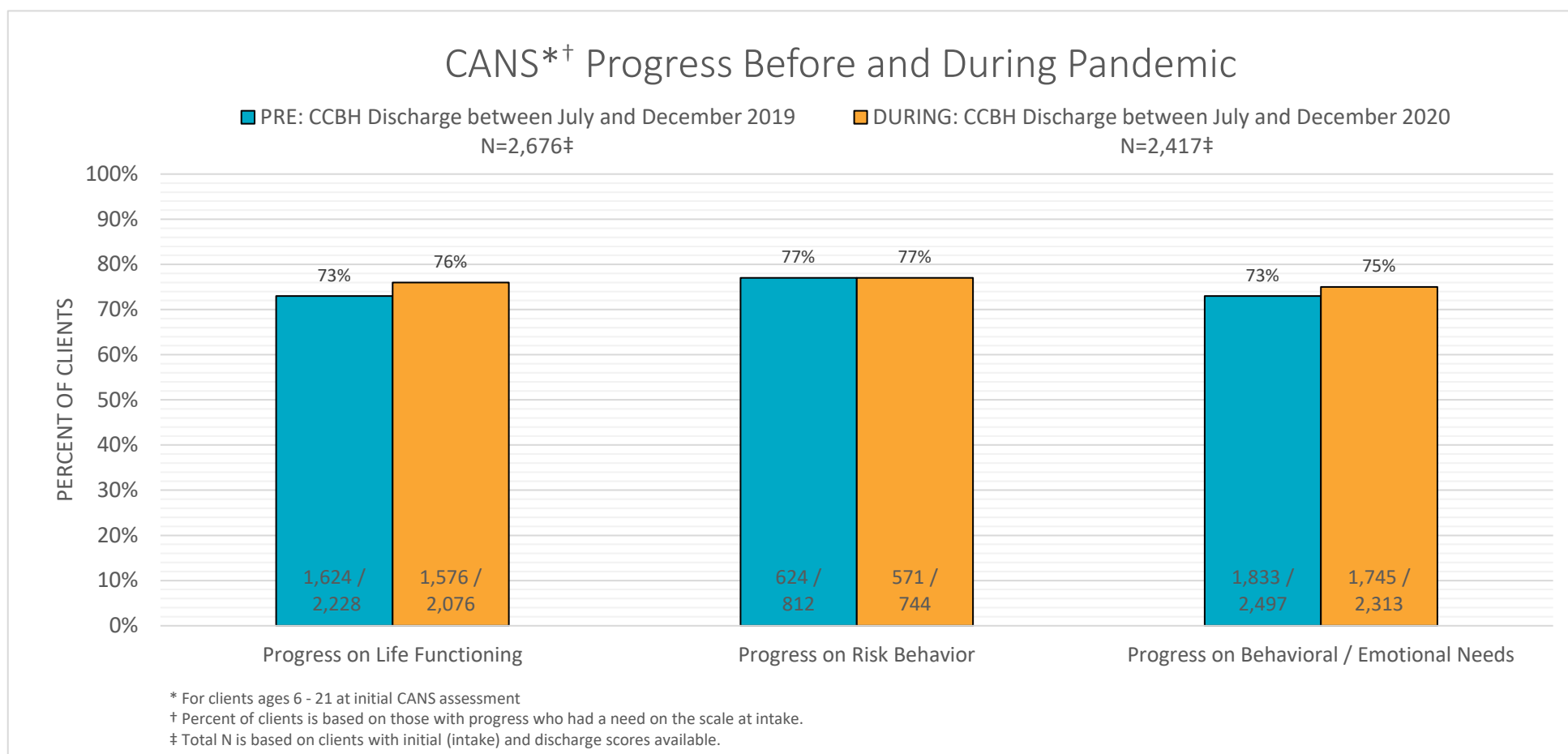
Data Source: CYF-mHOMS

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PSC Parent: Progress at Discharge

Again, the majority of caregivers report improvement in their children at discharge. During the pandemic, **caregivers reported similar improvement in mental health treatment outcomes** as they did before the pandemic.

Discharge: Parent PSC* Before and During Pandemic

■ PRE: CCBH Discharge between July and December 2019
N=1,767†

■ DURING: CCBH Discharge between July and December 2020
N=1,684†

> During the pandemic, caregivers reported **approximately the same amount of treatment improvement** as before the pandemic.

PERCENT OF CLIENTS

Category	PRE	DURING
Increase in Impairment	22% (394)	22% (375)
No Improvement	8% (136)	8% (141)
Small Improvement	12% (210)	11% (183)
Medium Improvement	16% (285)	15% (257)
Large Improvement	42% (742)	43% (728)
Reliable Improvement	54% (951)	55% (922)
Clinically significant improvement‡	58% (667 / 1,158)	62% (681 / 1,099)

* Administered to caregivers of youth ages 3 - 18 only
† Percent of clients and total N are based on clients who had both intake and discharge data available.
‡ This data is only calculated for clients who started above the clinical cutoff point at intake.

Data Source: CYF-mHOMS

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Discharge Outcomes: CANS

- Level of progress on the CANS between initial assessment and discharge was measured for discharged clients open for a minimum of 60 days.

- Progress is operationally defined as a reduction of at least one need from initial assessment to discharge on the CANS domains: Life Functioning, Risk Behaviors, and/or Child Behavioral and Emotional needs (i.e., moving from a '2' or '3' at initial assessment to a '0' or '1' on the same item at the discharge assessment).

CANS Progress at Discharge

Before the pandemic, youth traditionally experienced treatment progress on CANS outcomes at discharge. During the pandemic, clinicians reported that **the proportion of youth who experienced treatment progress on the Life Functioning, Risk Behaviors, and Behavioral/Emotional needs domains increased slightly or stayed about the same**.

CANS*† Progress Before and During Pandemic

■ PRE: CCBH Discharge between July and December 2019
N=2,676‡

■ DURING: CCBH Discharge between July and December 2020
N=2,417‡

	PRE	DURING
Progress on Life Functioning	73% (1,624 / 2,228)	76% (1,576 / 2,076)
Progress on Risk Behavior	77% (624 / 812)	77% (571 / 744)
Progress on Behavioral / Emotional Needs	73% (1,833 / 2,497)	75% (1,745 / 2,313)

PERCENT OF CLIENTS (y-axis: 0% – 100%)

* For clients ages 6 - 21 at initial CANS assessment
† Percent of clients is based on those with progress who had a need on the scale at intake.
‡ Total N is based on clients with initial (intake) and discharge scores available.

Data Source: CYF mHOMS.

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Crisis Services

Emergency Screening Unit (ESU)

The Emergency Screening Unit (ESU) provides emergency assessment services for Medi-Cal and unfunded youth experiencing a psychiatric crisis. ESU's multidisciplinary clinical team offers comprehensive screening services, crisis stabilization, and facilitates inpatient hospitalization when indicated. Crisis stabilization services are allowable for less than 24-hours at which point an individual should be stabilized and discharged home or transferred to an inpatient facility for additional service delivery to resolve the crisis.

Hospitalization via ESU occurs in two ways. First, following receipt of crisis stabilization services as outlined above. Second, via the direct admission process by which ESU reviews information received from the Emergency Departments throughout the county, and the ESU team will facilitate access to a county inpatient bed, as applicable, or recommend the youth is sent to ESU for stabilization services.

There are three (3) available inpatient hospitals for youth within San Diego County: (1) Rady Children's Hospital's Child and Adolescent Psychiatry Services (CAPS), which is the countywide Short-Doyle Medi-Cal psychiatric inpatient program for Medi-Cal and unfunded youth; (2) Aurora Behavioral Health Care and (3) Sharp Mesa Vista, which both provide Medi-Cal services.

Admissions to ESU

Before the pandemic stay-at-home order began, there were **1,773 total admissions to ESU (includes duplicated clients).** During the pandemic, there were **1,229 total admissions to ESU (includes duplicated clients).** This is a **decrease of 30.7%.**

ESU Screenings Receiving Crisis Stabilization Services*
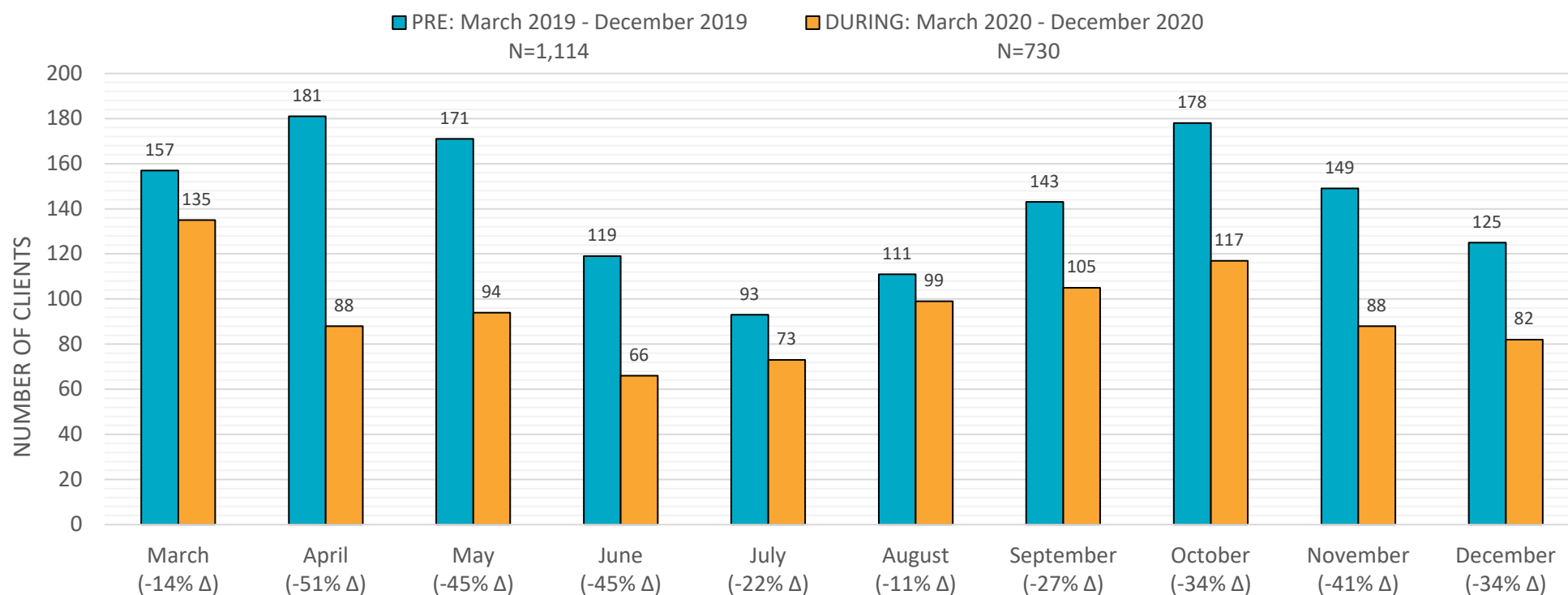Before and During Pandemic

Legend:
- PRE: March 2019 - December 2019 N=1,773 (659 duplicated)
- DURING: March 2020 - December 2020 N=1,229 (499 duplicated)

Month	PRE	DURING
March (-16% Δ)	192	162
April (-47% Δ)	217	115
May (-43% Δ)	209	124
June (-35% Δ)	145	94
July (-22% Δ)	129	101
August (-17% Δ)	150	124
September (-23% Δ)	184	142
October (-34% Δ)	215	142
November (-33% Δ)	180	120
December (-31% Δ)	152	105

Y-axis: NUMBER OF CLIENTS

*This applies to clients ages 0 - 18 years old.

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Data Source: Optum Assignments Table as of April 29, 2021 (Subunits 6301 & 6302).

Unique Clients Admitted to ESU

Before the pandemic stay-at-home order began, from March 2019 - December 2019, there were **1,114 total unique clients admitted to ESU**. During the pandemic, from March 2020 - December 2020, there were **730 total unique clients admitted to ESU**. This is a **decrease of 34.5%**. This may be due to fear of going to a medical setting during a pandemic as well as national stay home advisories.

ESU Unique Clients* Before and During Pandemic

■ PRE: March 2019 - December 2019
N=1,114
■ DURING: March 2020 - December 2020
N=730

Month	PRE	DURING
March (-14% Δ)	157	135
April (-51% Δ)	181	88
May (-45% Δ)	171	94
June (-45% Δ)	119	66
July (-22% Δ)	93	73
August (-11% Δ)	111	99
September (-27% Δ)	143	105
October (-34% Δ)	178	117
November (-41% Δ)	149	88
December (-34% Δ)	125	82

NUMBER OF CLIENTS

*This applies to clients ages 0 - 18 years old.

ESU: Unique Direct Admissions

Before the pandemic stay at home order began, from March 2019 - January 2020 **152 unique clients were authorized by ESU for direct hospital admission.** During the pandemic, from March 2020 - January 2021 there were **158 direct admissions**. This is an **increase of 3.9%.**

Total Direct Admissions to Inpatient via ESU* Before and During Pandemic

Legend:
- PRE: March 2019 - December 2019 (N=152)
- DURING: March 2020 - December 2020 (N=158)

Month (Δ)	PRE	DURING
March (-7% Δ)	14	13
April (38% Δ)	13	18
May (43% Δ)	14	20
June (43% Δ)	14	20
July (-8% Δ)	25	23
August (-33% Δ)	27	18
September (36% Δ)	14	19
October (-19% Δ)	16	13
November (29% Δ)	17	22
December (-45% Δ)	20	11

Y-axis: NUMBER OF CLIENTS (0 to 30)

*This applies to clients ages 0 - 18 years old.

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Data Source: Optum Assignments Table as of April 29, 2021 (Subunits 6302).

Inpatient Admissions: CAPS, Aurora, and Sharp

Before the pandemic, there were **782 total admissions (may include duplicated clients)**. During the pandemic, there were **695 total admissions**. This is a **decrease of 11.1%**.

	PRE: March 2019 - December 2019	DURING: March 2020 - December 2020	Percent Change
CAPS	501	481	-5.70%
Aurora	25	31	24.00%
Sharp	256	183	-28.50%

CAPS, Aurora, & Sharp Mesa Vista Admissions Before and During Pandemic*

PRE: March 2019 - December 2019
N=782 admissions (239 duplicated)

DURING: March 2020 - December 2020
N=695 admissions (209 duplicated)

NUMBER OF ADMISSIONS (CASES OPENED)

March (-8% Δ): 90, 83
April (1% Δ): 79, 80
May (-27% Δ): 78, 57
June (-21% Δ): 67, 53
July (4% Δ): 68, 71
August (-10% Δ): 82, 74
September (-16% Δ): 79, 66
October (-13% Δ): 92, 80
November (-19% Δ): 89, 72
December (2% Δ): 58, 59
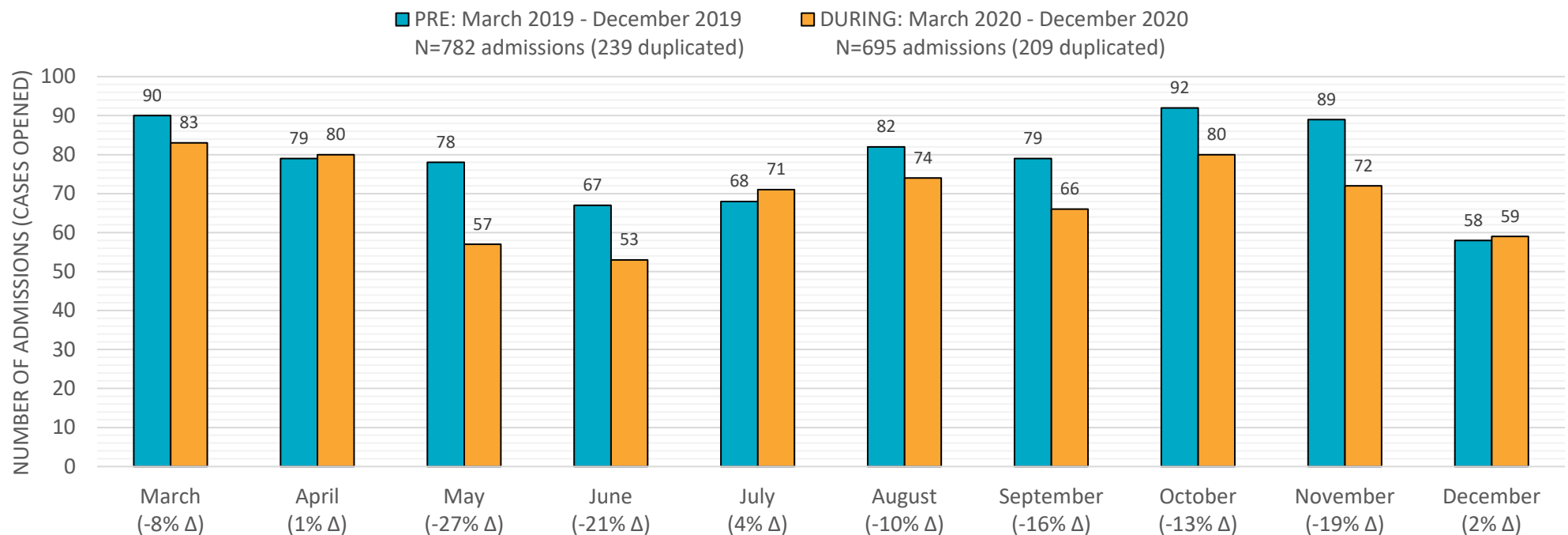
*Data presented is for clients up to age 18.

Unique Clients Served: CAPS, Aurora, and Sharp

Before the pandemic, there were **543 total unique clients who received services across all three inpatient hospitals serving kids**. During the pandemic, the hospitals served a total of **486 unique clients, which is a decrease of 10.5%**. See Slide 55 "Appendix: Unique Clients Served" for more detailed data on unique clients served per hospital.

	CAPS	Aurora	Sharp
PRE: March 2019 - December 2019	344	21	221
DURING: March 2020 - December 2020	326	28	161

CAPS, Aurora, & Sharp Mesa Vista Unique Clients Served Before and During Pandemic*

Legend:
- PRE: March 2019 - December 2019 (N=543)
- DURING: March 2020 - December 2020 (N=486)

NUMBER OF ADMISSIONS (CASES OPENED)

Month	PRE	DURING
March (-16% Δ)	87	73
April (-7% Δ)	76	71
May (-28% Δ)	74	53
June (-19% Δ)	59	48
July (16% Δ)	58	67
August (-3% Δ)	76	74
September (-14% Δ)	72	62
October (-12% Δ)	86	76
November (-16% Δ)	83	70
December (-4% Δ)	55	53

*Data presented is for clients up to age 18.

Data Source: Optum Assignments Table as of April 29, 2021.
Detailed data by Inpatient Hospital is located in the appendix.

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Inpatient Hospitalization: Length of Stay

Fewer clients received inpatient services, but **the amount of time they spent hospitalized increased**.

Inpatient Hospitalization Length of Stay
Before and During the Pandemic

Data Source: CYF Inpatient Hospital Data.
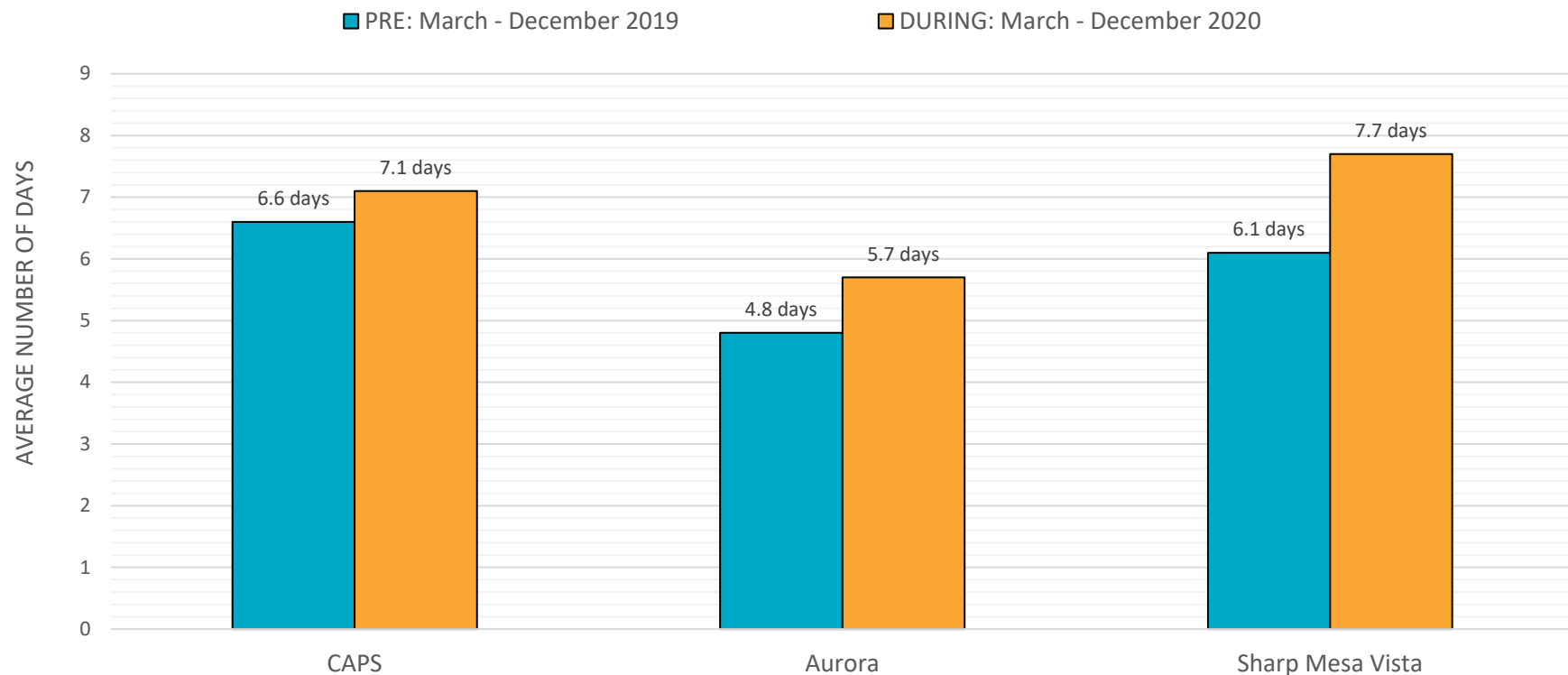
30-Day Inpatient Readmissions

The **percentage of discharged clients who were readmitted to inpatient services within 30 days of their discharge date did not change** during the pandemic. Inpatient readmissions (i.e., Rady's, Sharp Mesa Vista, and Aurora) stayed about the same.

	Rady's	Medi-Cal FFS	Total
PRE: March - December 2019	68 (14%)	25 (8%)	93 (12%)
DURING: March - December 2020	58 (13%)	15 (7%)	73 (11%)

30-Day Readmissions
Before and During Pandemic

- PRE: March - December 2019 (Discharge N=781)
- DURING: March - December 2020 (Discharge N=680)

PERCENT OF READMISSIONS

PRE: 12% (93)
DURING: 11% (73)

Data Source: Optum CO-4 B report (March 1, 2021)

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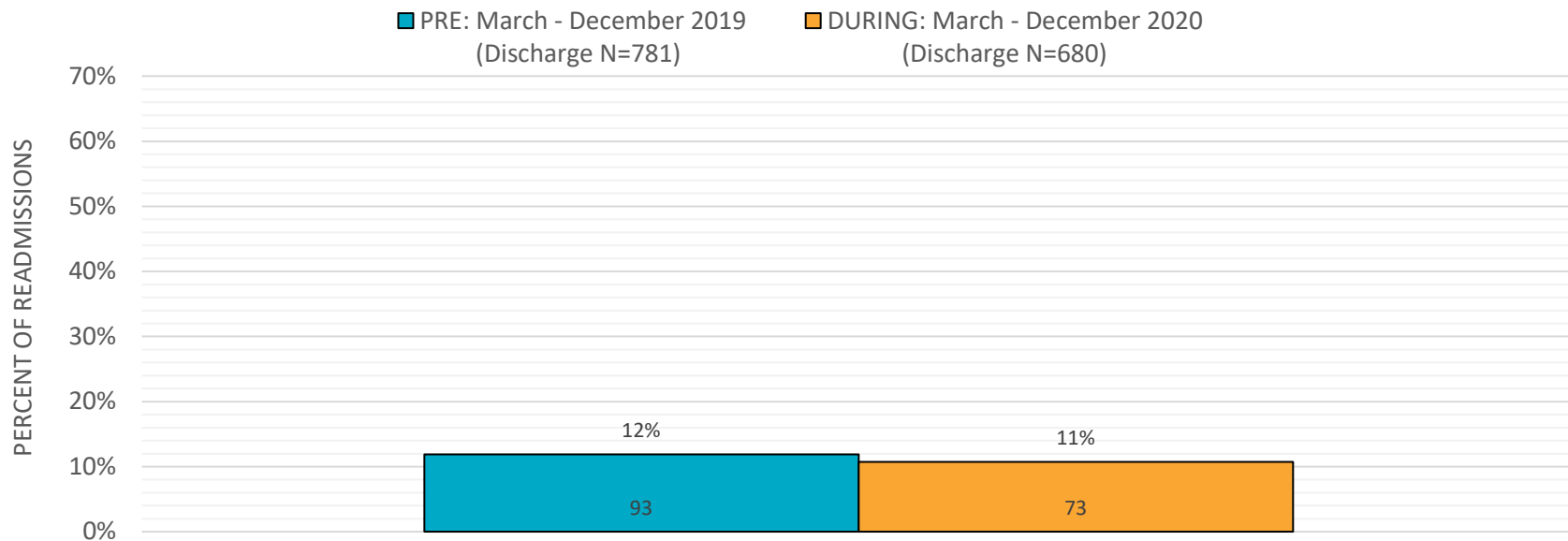
Additional Outcomes

Child Welfare Hotline Referrals

Before the pandemic, there were **22,021 hotline referrals** to Child Welfare. During the pandemic there were **17,757 hotline referrals**. This is a **decrease of 19%**, and is consistent with school closure during the pandemic, which is a large referral source to Child Welfare. A summary of 3 articles reported that child protection referrals fell 27-39% (Viner et al., 2021).

Hotline Referrals to Child Welfare: Before and During Pandemic

PRE: August 2019 - January 2020
N=22,021

DURING: August 2020 - January 2021
N=17,757

Month	PRE	DURING
August	3,399	2,855
September	3,789	3,259
October	4,248	3,401
November	3,679	2,756
December	3,556	2,755
January	3,350	2,731

TOTAL REFERRALS RECEIVED (y-axis: 0 to 5,000)

Data Source: Q1 CWS Dashboards 12/16/2019 and 10/14/2020

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Suicide Rates

In San Diego County, there were no differences in youth suicide rates during the pandemic. This is in line with a large universal study of 21 countries, which found no evidence of a significant increase in risk of suicide, across all age groups, during the first four months of the pandemic (Pirkis et al., 2021). It is unclear how the pandemic will impact suicide rates after the pandemic and during the transition back to in-person school.

Youth Suicides Before and During Pandemic*

Legend: ■ 2019 ■ 2020

Y-axis (NUMBER OF SUICIDES): 0, 2, 4, 6, 8, 10, 12, 14, 16, 18

- 2019: 15
- 2020: 13
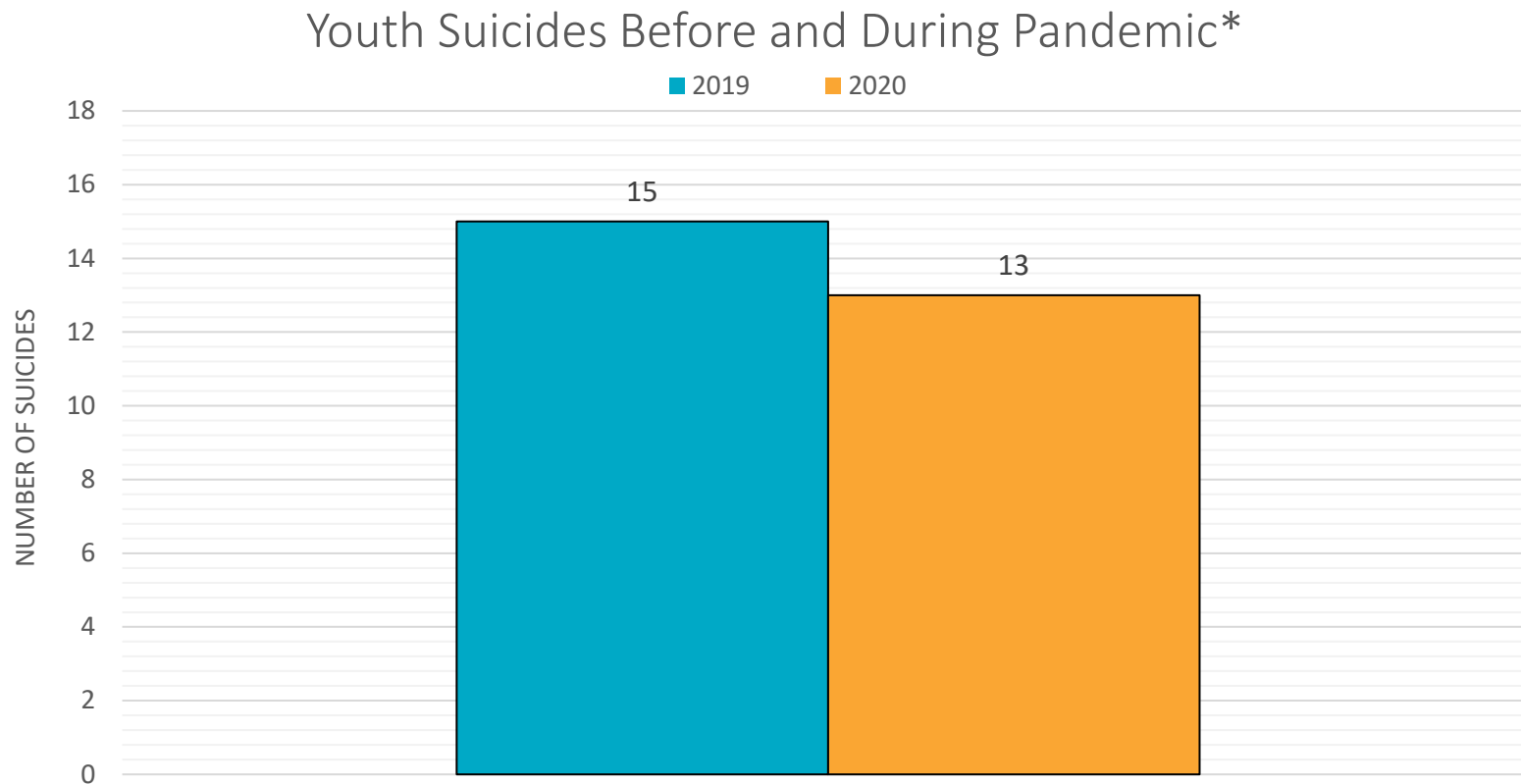
*Youth is defined as under age 18, where the cause of death from the medical examiner is listed as suicide.

Data Source: San Diego County Medical Examiner's website

Conclusions and Recommendations

Conclusions

- During the pandemic, services were primarily delivered through **teletherapy**.

- **20 percent fewer clients were served in CYFBHS during the pandemic**, but those who entered treatment **appeared to stay longer and receive more services.**

  - The largest decreases were noted in emergency/crisis services.

- Youth who entered services during the pandemic presented with **more severe depression & anxiety symptoms and fewer conduct issues.**

- Youth entered services with **fewer ODD and adjustment disorder diagnoses, and more stressor diagnoses.**

- **Treatment was equally, if not more effective** during the pandemic.

- While youth entered services with more severe symptoms at intake, they experienced similar, if not **better, progress at discharge**. This may provide support for similar levels of effectiveness between teletherapy and in-person services for youth.

- **Suicide rates didn't change during the pandemic**, though clinician reports of **suicidal ideation and self-harm increased.**

Recommendations Background

The stay-at-home orders and school closures during the pandemic led to the disruption in many areas of children's lives. After spending a year with reduced in-person interaction and primarily virtual services and school, the return to school and gradual openings across San Diego county once again means families will have to adjust to a new normal. As the pandemic continues and the state of the world continues to change, the following recommendations should be taken into consideration.

Recommendations from the Literature

What Has helped Children Adjust Positively During the Pandemic?

- **Exercise** – Participation in youth sports or engaging in daily exercise (Li, 2021).

- Screen time – Screen time was associated with more psychological distress, however, when **screen time** was **used to connect with friends/family**, youth reported less loneliness and improved wellbeing (Li, 2020).

- **Social Connection** – Youth who felt more socially connected reported less anxiety/depression and more life satisfaction than youth feeling socially disconnected (Magson, 2020).

- **In-person Education** – Parents of school aged students receiving virtual instruction reported that children experienced worsened mental health (24.9% vs 15.9%), compared to reports from parents of on-site students (Verlenden et al., 2021).

Recommendations

Therapists

School Recommendations:

- Regularly **ask about school reintegration** and factors that serve as supports or barriers.

- **Leverage SchooLink** to promote ongoing dialogue with schools.

- **Encourage caregivers to communicate regularly with teachers** about children's needs, and seek recommendations to improve children's school experience, including, but not limited to, performance and behavior.

- **Facilitate caregivers' interactions with teachers** and help develop questions for teachers

- Regularly inquire about and help families create structure for **school attendance.**

- **Discuss and help kids manage pandemic related anxiety**: returning to school, mask policies, the vaccine, virus fears.

- **Inquire about cyberbullying and other online activities** – as children return to school, in-person and cyberbullying may increase.

- **Ask about access to substances** since this may increase as children return to school campuses.

Recommendations (continued)

Therapists Pandemic Specific Recommendations Cont.

- Continue **providing teletherapy via videoconferencing,** when clinically appropriate.

- **Ask all families about the positive and negative ways the pandemic has impacted their families** (e.g., sleep patterns, electronic device use).

- **Provide caregivers with accurate information** about the effects of the pandemic on children's behavioral health.

- Discuss with families of youth with acute need, what prevents them from seeking crisis services, **strategize methods to increase access to services** and improve perceptions of safety.

Recommendations (continued)

CYFBHS

- **Continue providing education** around depression, anxiety, trauma, sleep, and suicidal thoughts **to remain prepared** for children's primary presenting problems.

- Contracting Officer Representatives (CORs) **check in with programs in neighborhoods where access to care was most impacted** to determine how to best support those programs.

- **Collaborate** with the Board of Supervisors **for opportunities to strengthen services** to children, youth, and families as well as recognize challenges around workforce shortages.

- **Enhance population health data** to inform system development.

- **Update the telehealth definition in the electronic health record** to delineate between video and telephone telehealth sessions, which will promote accurate reporting.

Questions

Appendix

Appendix: Notes

The data in this report was compiled in collaboration with multiple teams across HHSA and CASRC. The data sets used throughout this report were pulled from CYF mHOMS, CCBH, and the Optum Assignment Tables. Given that data utilized for this report came from multiple sources, there may be slight differences due to data extract dates.

Appendix: Unique Clients Served

The following data is the detailed data for unique clients served at each hospital presented on slide 41 entitled: **Unique Clients Served: CAPS, Aurora, and Sharp**. The data presented is for clients up to age 18.

	CAPS PRE: March 2019 - December 2019 N=501	CAPS DURING: March 2020 - December 2020 N=481	Aurora PRE: March 2019 - December 2019 N=21	Aurora DURING: March 2020 - December 2020 N=28	Sharp PRE: March 2019 - December 2019 N=221	Sharp DURING: March 2020 - December 2020 N=161
March	54	52	3	2	30	27
April	55	45	2	1	27	19
May	53	43	4	0	21	18
June	45	44	0	0	25	9
July	49	53	1	2	15	18
August	54	54	2	6	24	22
September	48	45	1	2	29	14
October	54	51	2	5	38	25
November	52	47	5	5	27	18
December	44	39	4	7	11	12

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