



THE EFFICACY OF EARLY INTERVENTION PROGRAMS FOR CHILDREN WITH AUTISM

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Gifted and Talented
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BACKGROUND

Autism spectrum disorder (ASD) continues to affect an estimated one in every 44 children in the United States according to the Centers for Disease Control (CDC)¹. Those on the autism spectrum face challenges that include but are not limited to struggles with social and emotional skills, speech and nonverbal communication and repetitive behaviors. Nonetheless, due to how highly variable this neurodevelopmental disorder is, and how its symptoms typically first appear during infancy or childhood; Fort Bend ISD has since then committed to serving their children with ASD and other through highly equipped and curated special education programs. The primary goal of the EIA is to assist young students with developmental disabilities through intensive behavioral intervention and therapies in a non-traditional school setting. The EIA Program utilizes a plentitude of educational and therapy services within the context of a developmentally appropriate early childhood curriculum to accomplish this goal. Furthermore, studies² show that children with Autism and developmental delays have improved outcomes when offered access to early childhood programs tailored with a structured curriculum that is comprehensive, and includes a skill-based approach as well as targeted behavioral interventions.

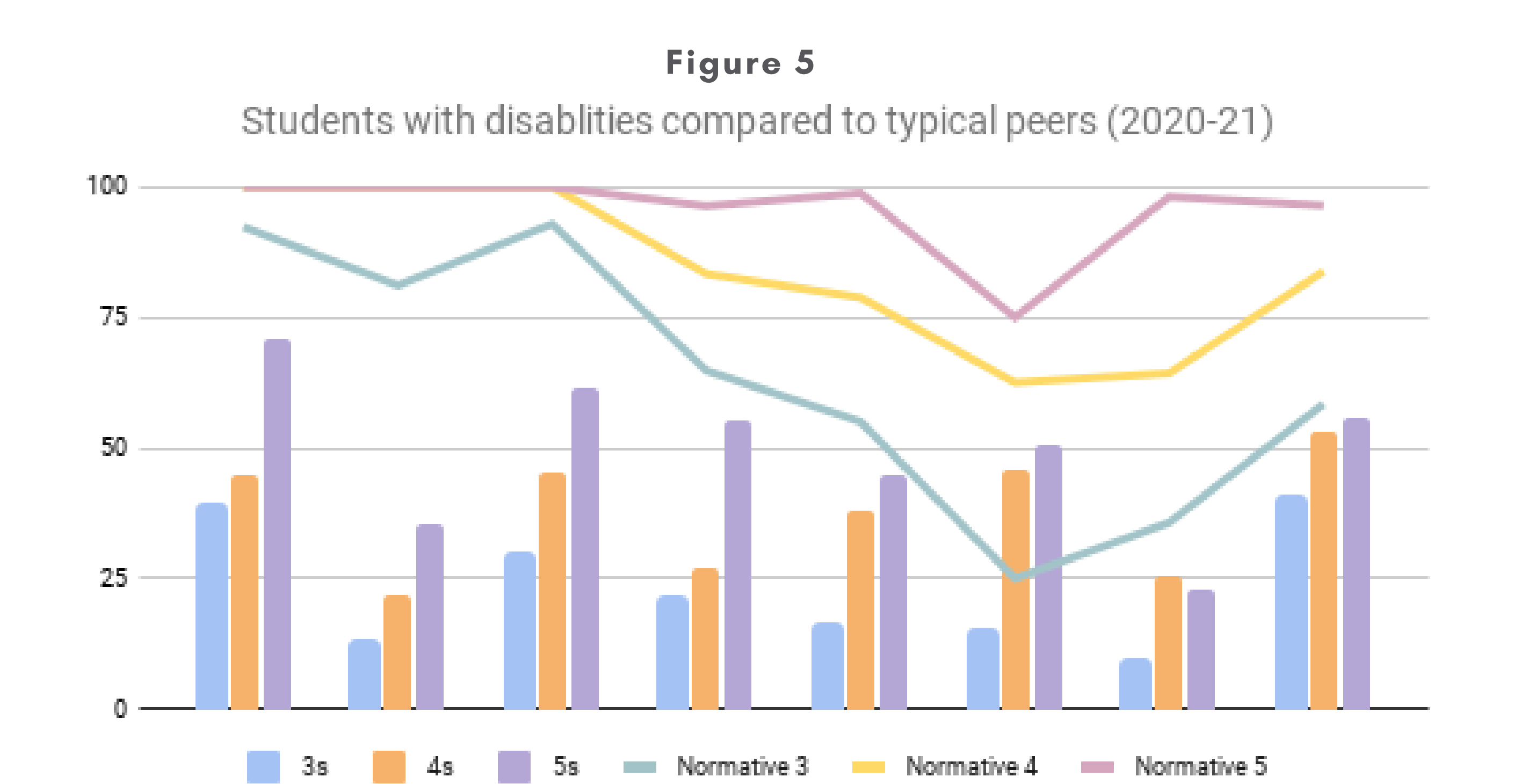
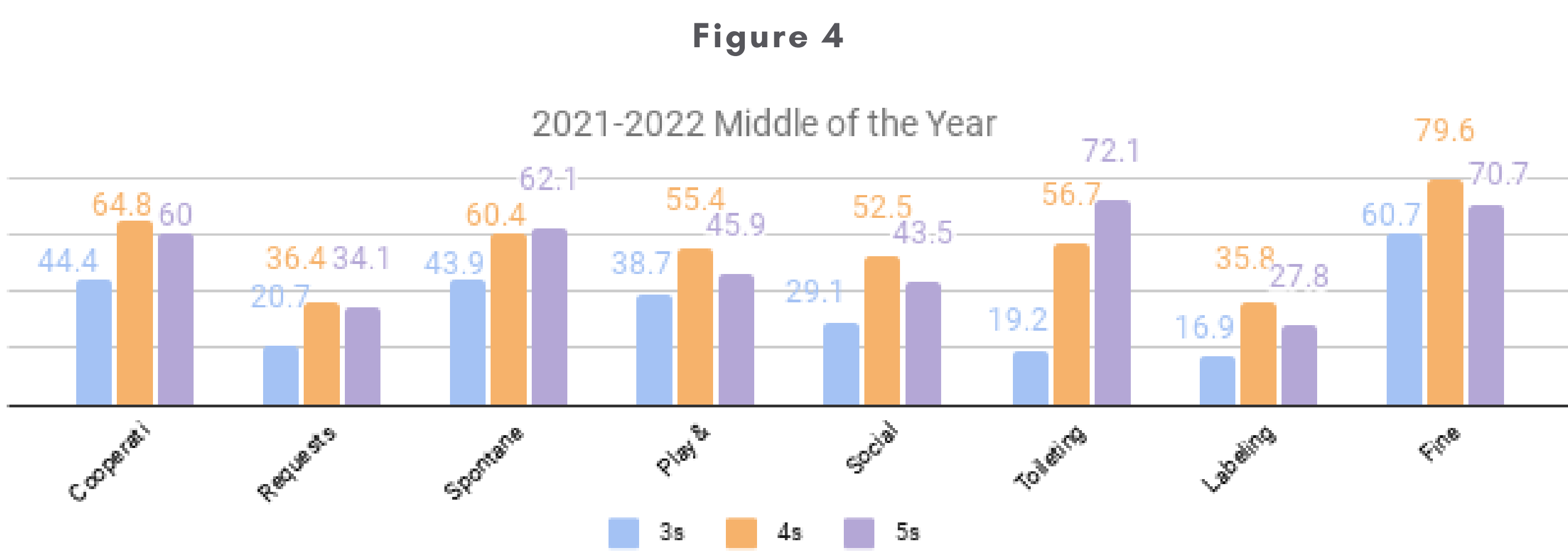
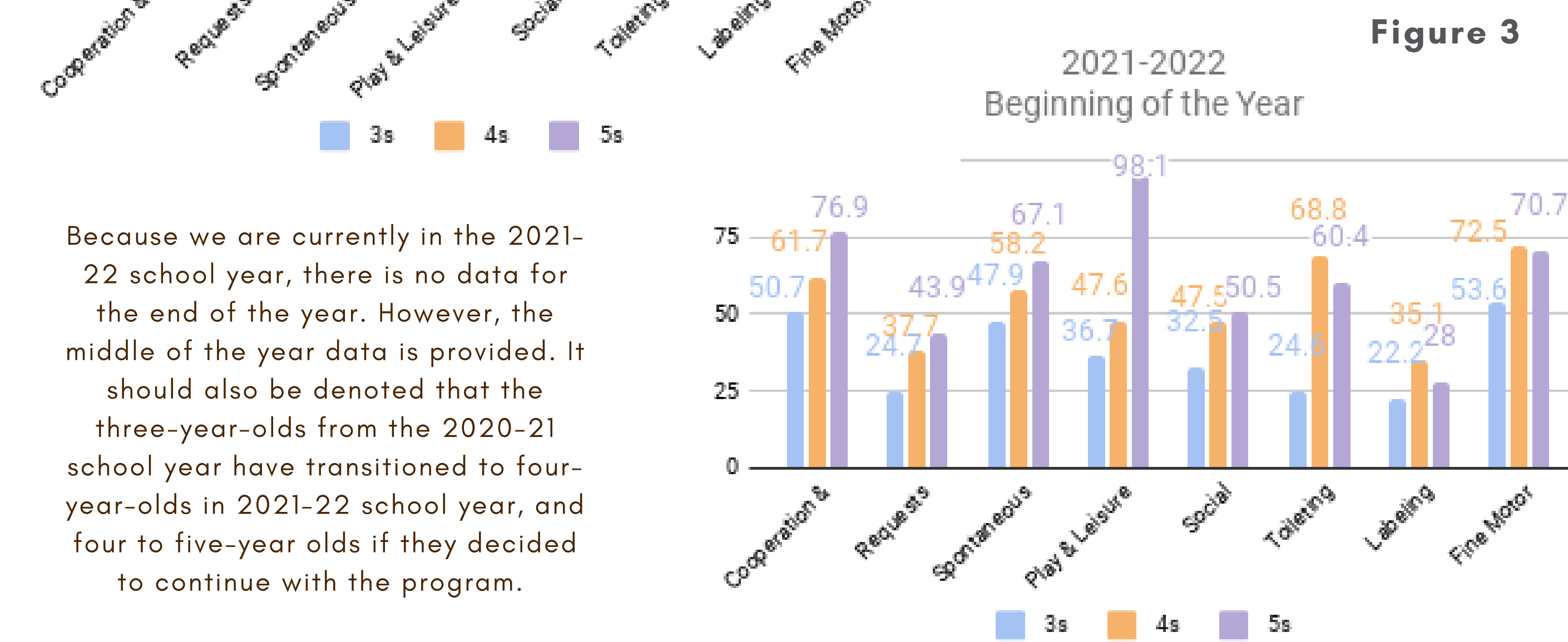
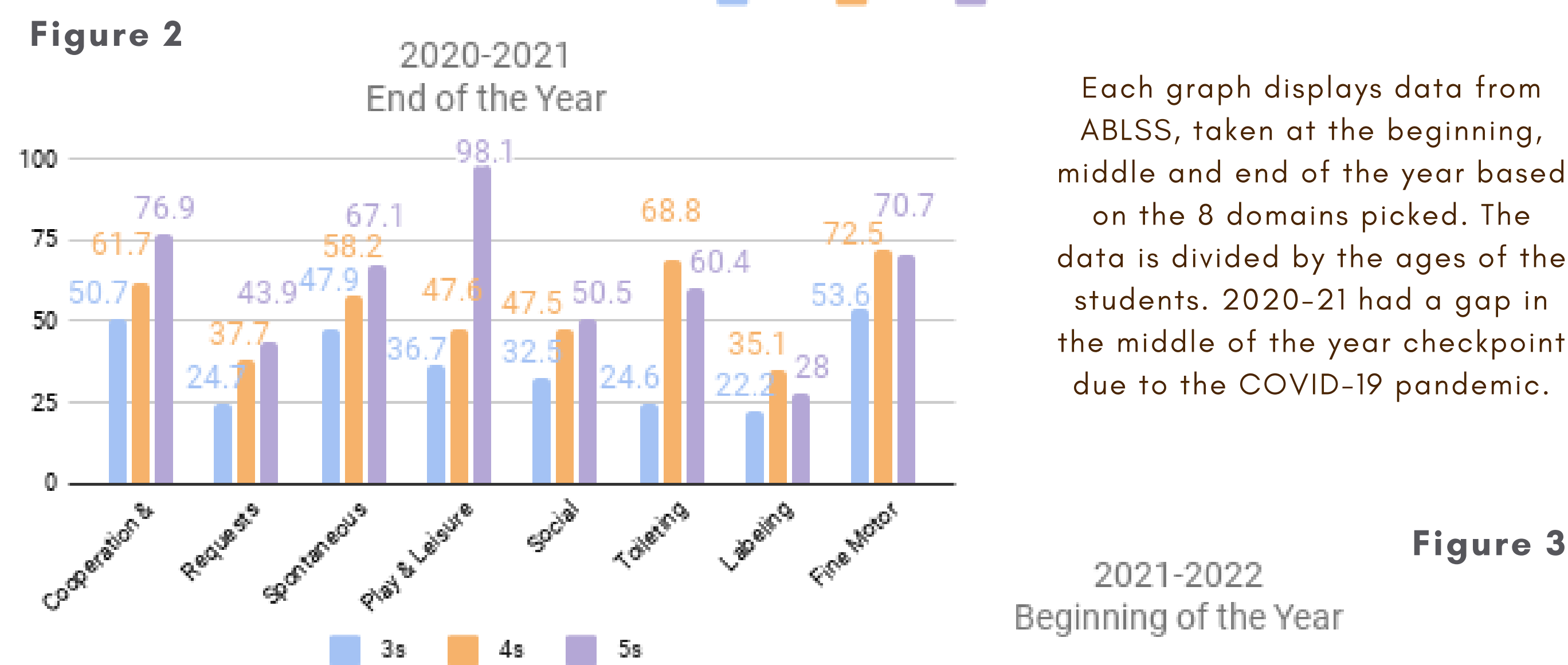
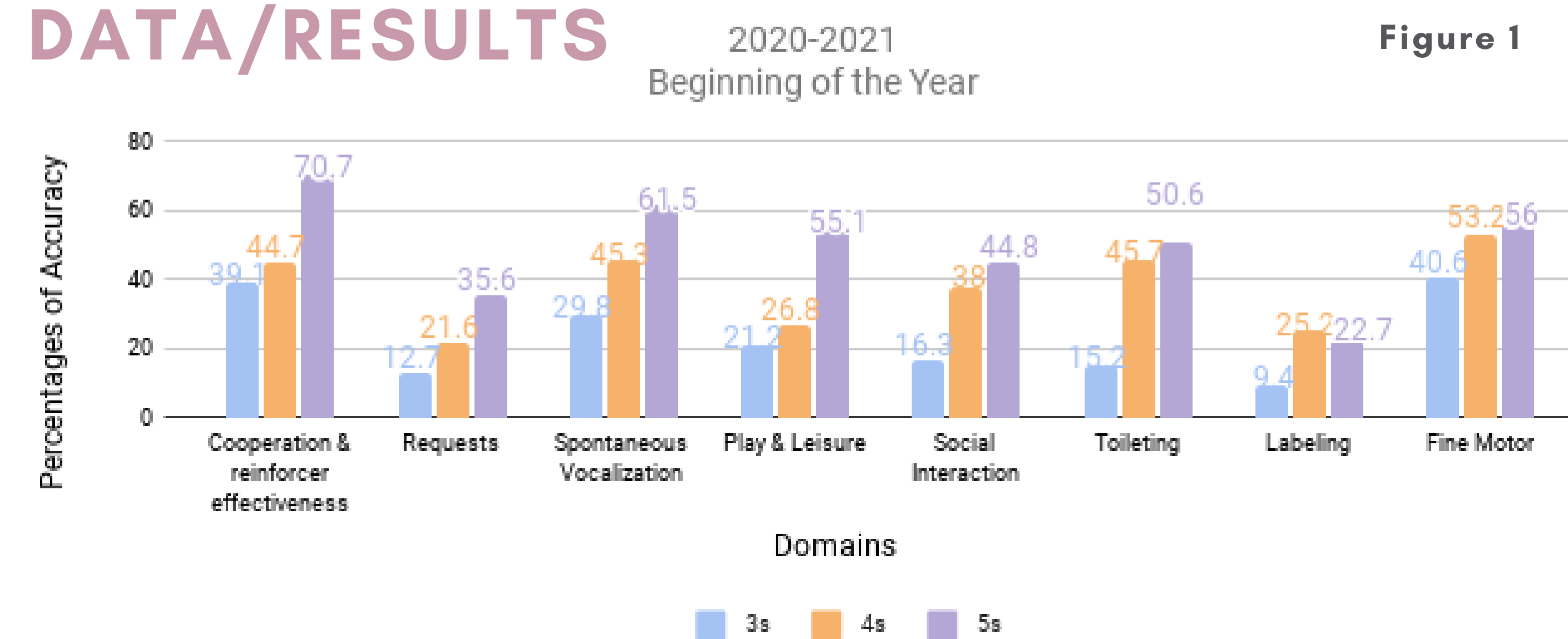
ABSTRACT

The purpose of this showcase project is to determine whether or not the learning model is truly beneficial for students' academic progress in comparison to their neurotypical counterparts based on a range of skills such as letter identification, sorting, social interaction, all of which are established by various progress assessments. By analyzing the data reports collected officially by the Early Intervention Academy, we can determine whether or not this program is instrumental in improving the academic and social performance of 3, 4 and 5-year-olds diagnosed with autism.

METHODOLOGY

The data is collected by the Early Intervention Academy, with the progress of students being assessed by the teachers and compiled by Ms. Kara Hallenberger, the program manager. Specifically, progress is monitored through the utilization of ABLLS (Assessment of Basic Language and Learning Skills) that is taken at checkpoints at the beginning of the year, middle of the year, and end of the year, following the school year calendar. This is coupled with data from the academic based progress reports completed at the end of the first through fourth grading periods to provide data reports of the progress of the EIA as a whole since its opening in 2018. As of the 2021-22 school year, there are eight total domains assessed according to ABLLS: Cooperation and Reinforcer Effectiveness, Requests, Spontaneous Vocalization, Play and Leisure, Social Interaction, Toileting, Labeling and Fine Motor. ABLLS assesses the deficiencies in language, academic, self-help and motor skills. The data is used to compare students with disabilities to students without disabilities. In the 2020-21 school year, EIA added two additional domains to the six domains assessed in the previous years, being Fine Motor and Labeling. Furthermore, the EIA uses the Early Childhood Outcomes and Prekindergarten Guidelines Alignment from Region 13 of the Texas Education Agency to compare how their students are doing in comparison to their normative counterparts. These skills include abilities to: identify alphabet letters, especially those in own name, counting objects, counting objects orally, recognition of numerals, sorting by shape, color and size, sorting objects into similar and different groups and describing them, as well as matching objects by some attributes.

DATA/RESULTS



FINDINGS

When looking at the *three-year-olds*, all the students have made growth as individuals in at least 80% of the skills measured on the academic progress report. The data in the chart shows some areas increasing, but others decreasing, along with fluctuations. This is primarily due to the steady increase in student enrollment throughout the school year, due to the COVID-19 pandemic's delaying the initial evaluation process for these students to qualify for entering the program. The data in the chart for *four- and five-year-olds* shows steady increase if not maintaining of majority of the skill areas. However, the relatively low percentage in the play & leisure domain can be likely attributed to students not being able to interact with their peers in a play environment with online instruction. The cooperation and reinforcer effectiveness domain was affected as well since students were not able to interact with the instruction like in a physical classroom with structure, routine and less distractions. Nine out of the 10 academic skills measured by TEA for pre-k, children with and without disabilities showed growth. In one skill (sort by size) students maintained their skill level. Overall, however, the data from both years shows that the students within the EIA were improving greatly if not steadily in their progress from the beginning to the end of the year and in comparison to their normative counterparts. Although they fall below the standard expects for neurotypical students, they were able to improve enough to reach around it.

DISCUSSION

Although there a quite a few limitations placed upon the students due to the persisting impacts of the COVID-19 pandemic, overall the Early Intervention Academy and its program have shown to be beneficial for the young children enrolled. There has been sufficient improvements in their skills and the goal of the program is to provide them with not only special education services and a blend of therapy services, but also to prepare them enough to be integrated into a general education setting. Within the EIA, there is a job tracking the progress of students who have successfully completed the program and moved back to their home campus in a gen-ed classroom, and see if they have maintained improvements in their progress there. This data shows that all students enrolled in the early intervention progress have made significant or gradual progress in the acquisition of academic, social-emotional, and overall life skills which can be attributed to quality classroom instruction, assistance of trained professionals, and the integration of multiple therapies such as music therapy, occupational therapy, and speech therapy Applied Behavior Analysis (ABA). With supervision of BCBA's and ABA therapy, students have increased appropriate pro-social behaviors, interactive play with peers, and requesting wants and needs. Based on this data, without a doubt, the accessibility of early intervention programs for young children with autism provides great advantage to helping these students on their journey, with a successful and fulfilling education. EIA should prove to be a model of success and exemplar for other school districts aiming to involve similar programs.

ACKNOWLEDGEMENTS

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