



Dolly Parton's Imagination Library Impact Report 2021

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Introduction

Improving Kindergarten Readiness has been the focus of many initiatives in the greater Cleveland area. Parents are a child's first teacher, and the positive impacts of reading to children for their early development and long-term academic success is irrefutable. **Recent local studies show that Dolly Parton's Imagination Library is associated with preparedness for kindergarten and family literacy habits, especially for children who live in high-poverty areas.**

About Dolly Parton's Imagination Library

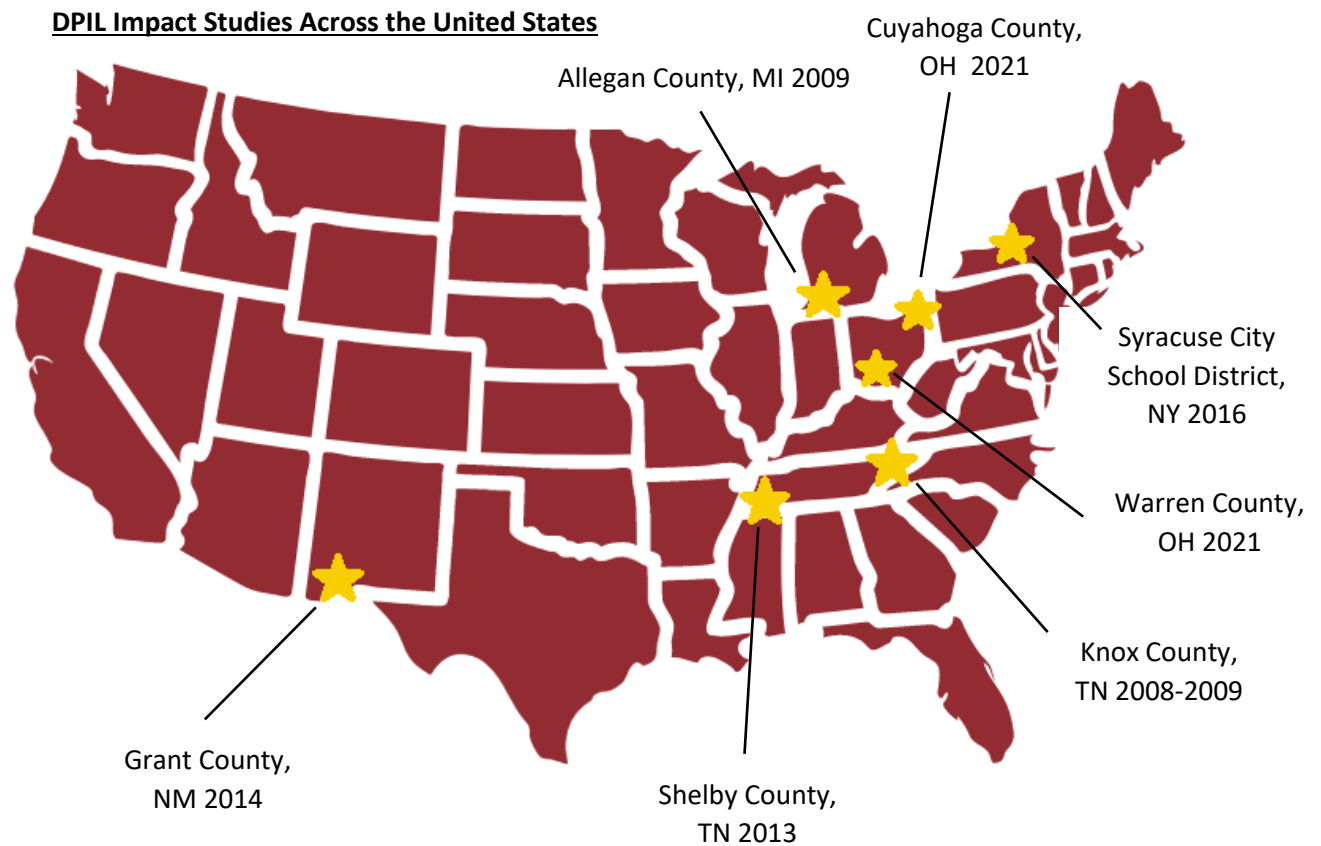
For more than 25 years, Dolly Parton's Imagination Library (DPIL) has been distributing free, high-quality books to children under the age of five. Children enrolled in the program receive one specially selected book in the mail once per month. In Ohio, Imagination Library is open to all children under age five, regardless of income. As of June 2021, **more than one-third of all children under age 5 in Cuyahoga County were enrolled in Imagination Library.** Since its inception in Cuyahoga County, 750,000 Imagination Library books have been mailed and 43,000 children have been served by the program. Currently, 30,000 children are enrolled. A child enrolled from birth through their fifth birthday will have a library of 60 books when they start kindergarten. The Literacy Cooperative of Greater Cleveland became the local affiliate of DPIL in 2017. As an affiliate, The Literacy Cooperative is responsible for managing enrollment, promoting the program, and securing the funding for the books and related expenses.

Local funds are required to cover the cost and shipping of books. Thanks to an allocation of state funds, the Ohio Governor's Imagination Library currently covers one half of the cost of Imagination Library for Ohio's children. Additional financial support for Imagination Library in Cuyahoga County comes from individual donors, foundations, and local organizations.

Forty-one independent studies have shown that Imagination Library has a positive and significant impact on family literacy habits, kindergarten readiness and supporting grade level reading by third grade. New data analyzed by The Center for Community Solutions and Case Western Reserve University also found positive trends associated with participation in Cuyahoga County's Imagination Library Program.

Research on DPIL Effectiveness

The positive impacts of DPIL have been studied across the country. While not an exhaustive list of the literature published on DPIL¹, the map below gives an idea of the breadth and timing of the research, with the newest from Ohio in 2021.



¹ A more complete list of research on DPIL from across the country can be found at <https://imaginationlibrary.com/news-resources/research/>

Syracuse City School District Study

A study conducted in 2013-2014 in the Syracuse City School District of New York explored connections between engagement in DPIL and kindergarten readiness. The researchers found that a significantly higher percentage of children who consistently participated in DPIL were considered to be ready for kindergarten instruction when compared to children who did not participate in DPIL.² The effect was only significant for children who had been enrolled in the program for at least three years, which evidences the importance of engaging with DPIL early in a child's development. This research was published in the peer reviewed Journal for Applied Social Science.

Tennessee Longitudinal Studies on DPIL Impact

Two studies in Shelby and Knox Counties in Tennessee showed positive impacts as a result of DPIL participation using a longitudinal research approach.

In Knox County, scores of a cohort of third grade DPIL alumni on the Tennessee Comprehensive Assessment Program (TCAP) exam were compared to their non-participant peers. The TCAP exam assesses whether a student is proficient in state standards at the current grade level.³ Research showed that third graders who had participated in DPIL received significantly higher scores on the exam.⁴ Indeed, among third graders who had engaged in DPIL, 55 percent scored a "Proficient" or "Advanced" on the TCAP exam, compared to 48 percent of third graders who didn't engage in DPIL. Only 8 percent of DPIL alumni scored "Below Basic" on the exam, compared to 12 percent of non-DPIL students.

In Shelby County, a study of five elementary schools in Memphis found that students who participated in DPIL scored an average of 9.64 points higher in language and 2.01 points higher in math on kindergarten readiness testing than children who were not in DPIL. These effects were still significant after controlling for demographics variables, socioeconomic variables, pre-kindergarten educational experience, and family reading habits.⁵ Comprehensive follow-up research with this cohort of students continued to find significantly better outcomes over the next three years, as measured by the Stanford Achievement Test 10 in second grade, the Istation reading assessment in the beginning of third grade, and the Tennessee Comprehensive Assessment Program (TCAP) at the end of third grade. As lead author Dr. Marie Snell put it, "the consistency in the findings is striking"⁶.

A Rural Comparison of DPIL

A random sampling of kindergartners in Grant County, New Mexico found that kindergartners enrolled in DPIL consistently scored significantly higher in the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment than kindergartners not enrolled in DPIL. This study is of note because it was conducted in a rural southwest location with a majority Hispanic/Latinx population⁷.

² Ridzi, F., Sylvia, M. Qiao, X., and Craig, J. (2016). The imagination library program and kindergarten readiness: Evaluating the impact of monthly book distribution. <https://doi.org/10.1177%2F1936724416678023>

³ Tennessee Department of Education. (2021). Overview of testing in Tennessee.

<https://www.tn.gov/education/assessment/testing-overview.html>

⁴ Beckett, J. (2012). TN-Knox county imagination library third grade follow up study: The imagination library program and the kindergarten cohort of 2008-2009. <https://imaginationlibrary.com/news-resources/research/>

⁵ DPIL SCBFB Final Paper. (2013). Evaluating the relationship between the Imagination Library early childhood literacy program and kindergarten readiness. <https://imaginationlibrary.com/news-resources/research/>

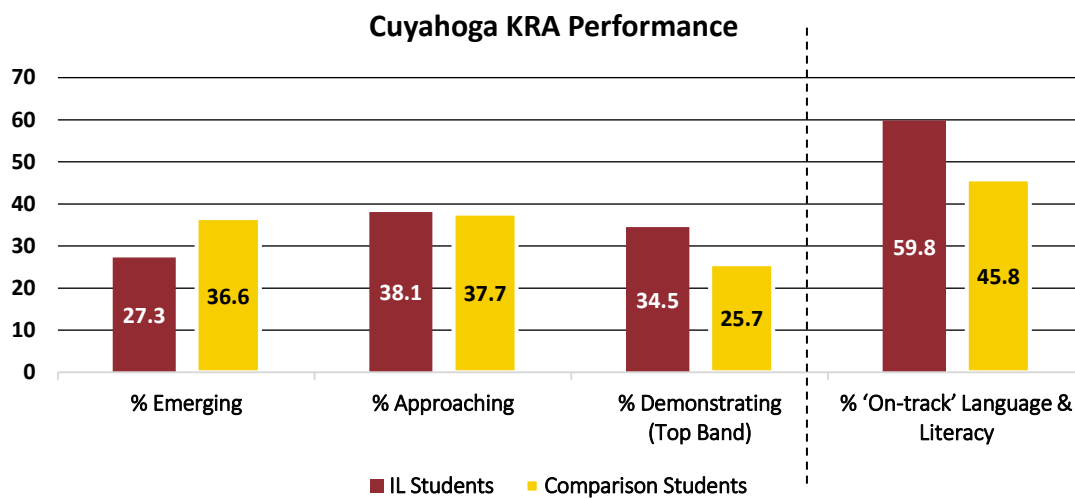
⁶ Snell, M.A., (2015) Comparisons of Academic Data for Imagination Library Participants Versus Non-Participants. <https://imaginationlibrary.com/news-resources/research/>

⁷ <https://imaginationlibrary.com/news-resources/research/>

Local Research; A Preliminary Analysis of DPIL in Cuyahoga County

The research conducted across the United States provides an indication of the possible impact of young children’s participation in DPIL, and a recent local study in Cuyahoga County indicates the positive trends related to DPIL and The Literacy Cooperative.

In Fall 2019, 472 children who participated in Imagination Library in Cuyahoga County had a valid Kindergarten Readiness Assessment (KRA) score that could be used for analysis. These students’ KRA scores were compared to KRA scores of 4,884 children in the same public school districts who did not participate in DPIL. As shown below, more children who participated in DPIL had “on track” KRA scores for language and literacy entering kindergarten than the rest of the cohort. “On-track” refers to a binary outcome of the KRA, which intends to predict a child’s likelihood of passing a reading diagnostic assessment requirement at third grade.



The Kindergarten Readiness Assessment (KRA) is used at the beginning of each school year as a way to measure each student’s skill level in being able to grasp instruction. It is based on Ohio’s Early Learning and Development Standards and focuses on four areas of development, one of which is Language and Literacy. Based on their scores, students are considered to be in one of three bands. Children in “Demonstrating Readiness” show the foundation skills and behaviors and are considered fully prepared for kindergarten. Those who are “Approaching Readiness” have some foundation skills and require little intervention to be considered fully ready to learn. Those who display “Emerging Readiness” usually lack one or more of the foundational skills and behaviors and require more assistance or intervention before they can take full advantage of kindergarten classroom instruction.

As shown above, just over a third (34.5 percent) of the 472 children who participated in DPIL had scores demonstrating readiness for kindergarten. This was a larger share than the roughly one-quarter (25.7 percent) of the 4,884 children who did not participate in DPIL who were assessed as demonstrating readiness for kindergarten.⁸ Similarly, only 27.3 percent of DPIL participants assessed displayed

⁸ Anthony, E., Sorenson, A. & Steh, S. (2021). Exploring the relationship between imagination library program participation and kindergarten readiness: Results from a preliminary analysis. Prepared for Bob Paponetti at The Literacy Cooperative by The Center on Urban Poverty & Community Development at CWRU.

emerging readiness for kindergarten, compared to 36.6 percent for the comparison students. In both of these categories there is an approximate nine percentage point difference in scores.

Language and Literacy scores as assessed by the KRA were also explored for differences. Findings indicate that nearly 60 percent of DPIL participants were 'On-track' for language and literacy, compared to 45.8 percent of those who had not participated⁹.

In general, DPIL participants who fell into the "emerging readiness" band had not participated in the program for as long, in most cases for less than one year. DPIL Participants who scored as demonstrating readiness for kindergarten, had been enrolled in DPIL on average nearly four months longer (15.4 months) than their peers who scored as emerging readiness (11.1 months). This pattern also applies to performance in the Language & Literacy development area. Research from Syracuse, NY had found improvement only after children participated in the program for at least three years. DPIL is relatively new to Ohio, which expanded to countywide eligibility in early 2020, and statewide eligibility in late 2020. Therefore, we expect to see a starker contrast between children who participate in DPIL and their peers in future classes of entering kindergarteners who will have had access to the program for longer.

These findings indicate a positive correlation between Imagination Library enrollment and KRA performance among Cuyahoga County students. They also demonstrate that the longer a student is enrolled in the program, the higher their KRA score. These findings have been identified elsewhere in the literature as well. However, the authors note that a true correlation cannot be determined with this analysis given the inability to control for other potential confounding variables, such as the education level of the children's parents¹⁰. Nonetheless, the initial findings are encouraging, but require greater statistical and methodological control to better understand.

The research literature that has been highlighted in this report, including new local analysis, has consistently found that participation in DPIL is associated with improved academic performance and increased kindergarten readiness. As previously mentioned, this summary is not meant to be an exhaustive review of the literature, but instead a brief overview of some of the promising impacts DPIL has had on families in in the United States, and Cuyahoga County specifically. While each of these studies had varying research questions and methods, evidence is mounting that DPIL is an effective tool to help children enter kindergarten prepared and ready to learn. Results of a recent survey of Cuyahoga County families participating in DPIL provides some insight into how the program improves early literacy, which is explored in greater detail below.

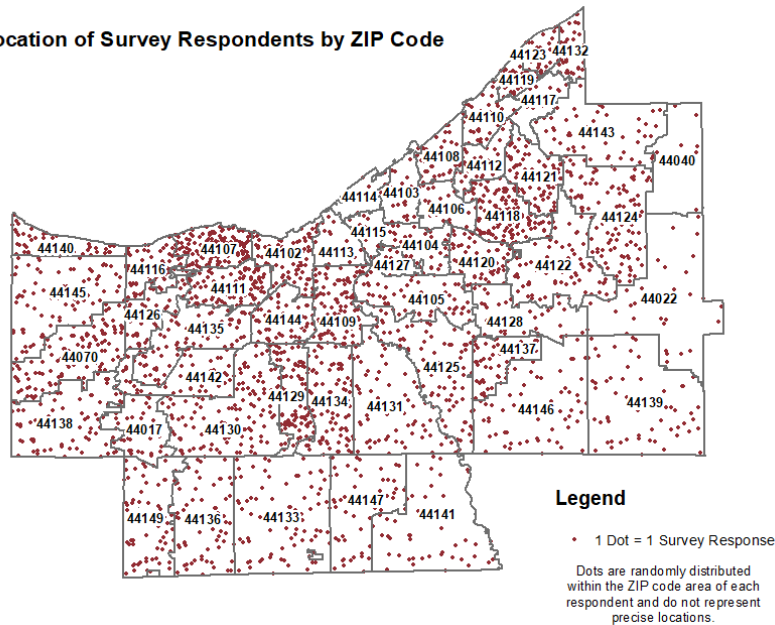
⁹ However, when the two groups were compared on other characteristics known to also effect Kindergarten readiness, notable differences were apparent. Some birth characteristics, specifically mother's age at birth and educational attainment, suggest that as a group, the Imagination Library children are at lower risk for experiencing a lack of school readiness as compared to the comparison population. Thus, a KRA comparison between these two groups carries inherent bias in that the two groups differ not only in their Imagination Library participation, but also in the ways shown above and likely other currently unknown reasons.

¹⁰ A plausible hypothesis is that maternal education level is correlated with length of time enrolled in Imagination Library such that mothers with higher levels of education enroll their children in the program earlier in development than mothers with lower levels of education. As a result, maternal education level, and not length of time enrolled in Imagination Library could be causing the positive association with kindergarten readiness.

The Literacy Cooperative 2021 Survey of Current Participants About the Survey

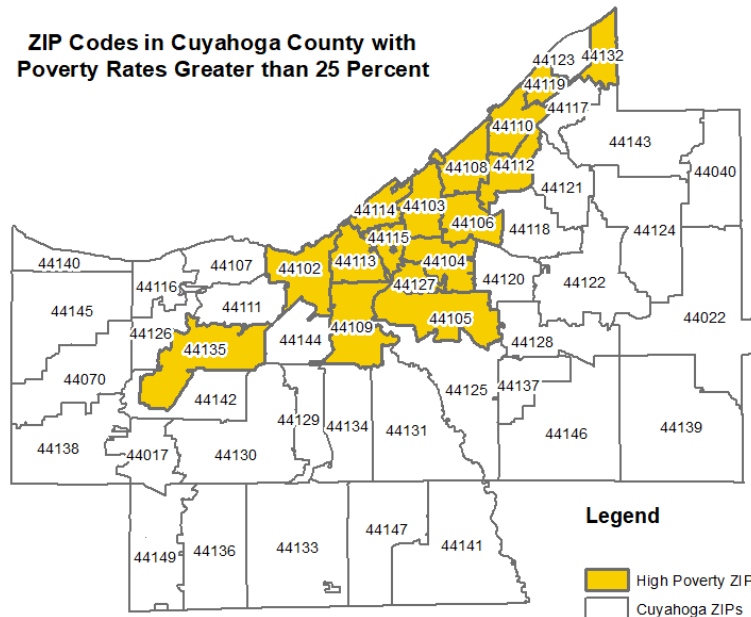
In the Summer of 2021, The Literacy Cooperative engaged The Center for Community Solutions to assist with the development and analysis of an online survey of all parents or guardians of children enrolled in Dolly Parton’s Imagination Library (DPIL) program. The survey was open for two weeks, and received 3,004 valid responses.

Location of Survey Respondents by ZIP Code



Of these responses, 623 or 20.9 percent came from 1 of 16 ZIP codes that were identified as “high poverty ZIP codes”, with poverty rates over 25 percent. Poverty rates are the percentage of households with annual income below the federal poverty line. These ZIP codes are 44102, 44103, 44104, 44105, 44106, 44108, 44109, 44110, 44112, 44113, 44114, 44115, 44119, 44127, 44132, and 44135.

ZIP Codes in Cuyahoga County with Poverty Rates Greater than 25 Percent

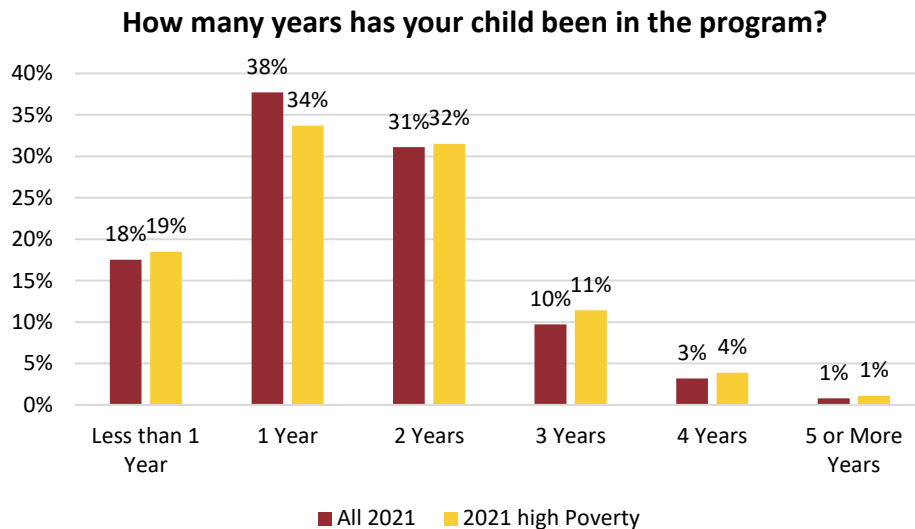


Summary

The results of the 2021 survey evidence a multitude of positive impacts for families in Cuyahoga County that participate in DPIL. Aside from the overwhelming majority of parents and children enjoying the books they receive, participants are reading more to their children, and children are more interested in reading. These positive impacts are even more pronounced in high poverty ZIP codes. Nearly all respondents believe that participation in DPIL is helping their child better prepare for kindergarten, and most people in high poverty ZIP codes often heard their children using words learned from DPIL books. These results are explained in more detail below, but broadly speaking are highly encouraging.

Time in the Program

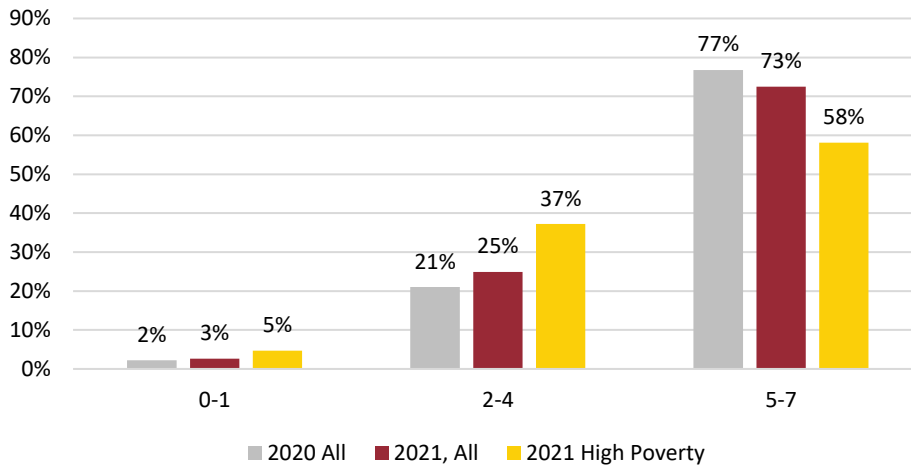
The majority (82.5 percent) of respondents had been in the program for at least one year, and there was very little difference between the total sample and the high poverty ZIP code participants in time spent in DPIL program.



Frequency of Reading

Respondents were asked how many times their child has been read to in the last seven days. The majority (73 percent) said they had read to their child between five and seven times in the last week. A quarter (24.9 percent) reported reading to their child between two and four times in the last week, and only 2.6 percent reported one or fewer times in the last week. This was a slight decrease from 2020, which saw 77 percent of respondents reading to their child nearly every day. Among higher poverty ZIP codes, respondents reported reading to their kids less frequently, with 58.1 percent reporting five to seven times a week, and 37.2 percent reporting two to four times a week.

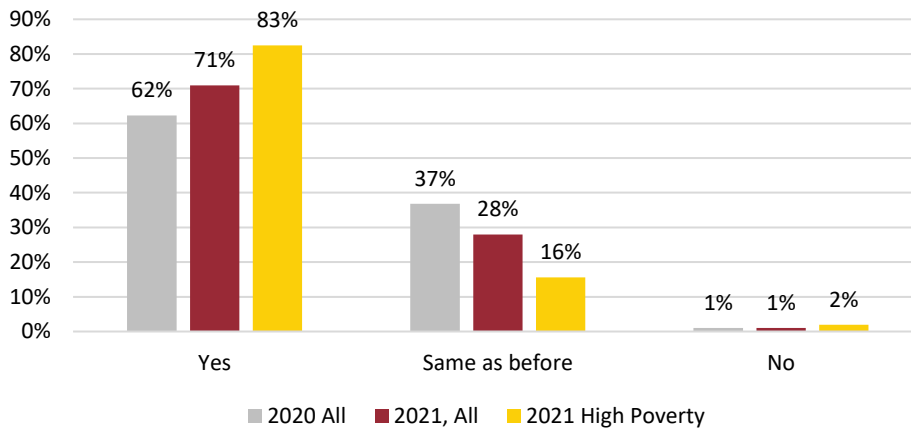
How many times have you or another adult read to your child/children in the last 7 days?



Impact of DPIL on Frequency of Reading

Well over two thirds (71 percent) of respondents stated that they read to their child more often since receiving DPIL books. This was an increase from 62 percent in the 2020 survey. About 28.0 percent of respondents replied that they didn't change their reading habits with their child. At 83 percent, even more respondents from high poverty ZIP codes reported reading more to their child after receiving DPIL books. This is a striking difference, and indicates a particularly positive impact among this sample.

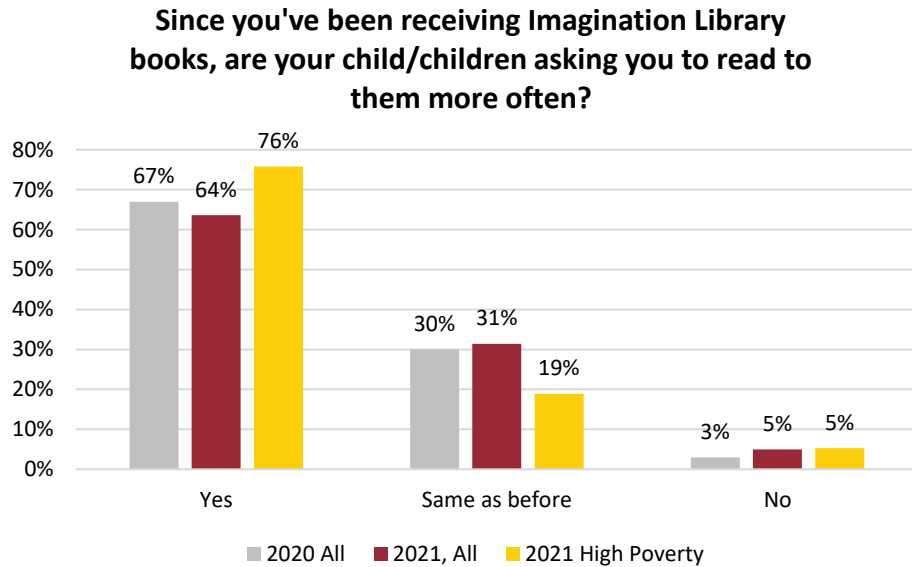
Do you, or other family members, read to your child/children more often since you began receiving Imagination Library books?



Impact of DPIL on Child asking to be read to

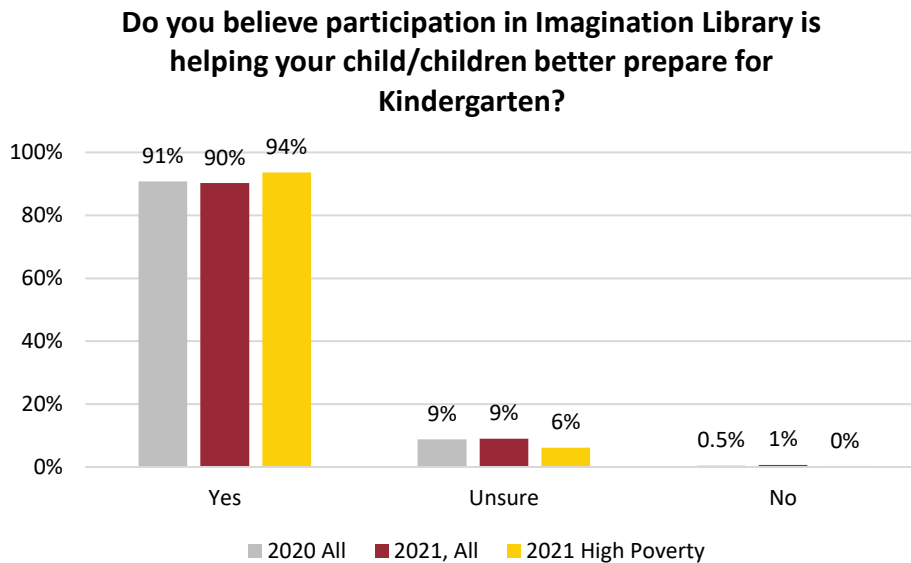
The majority (64 percent) of respondents replied that since receiving DPIL books, their child has been asking them to read to them more. About a third (31 percent) stated that there has been no change. Again, the positive change was more common in high poverty ZIP codes. Just over three quarters of the

respondents from high poverty ZIP codes (75.8 percent) explained that their child has been asking to be read to more since receiving DPIL books. This is another particularly positive impact in this high poverty ZIP code sample compared to the general respondent sample.



Impact of DPIL on Kindergarten Readiness

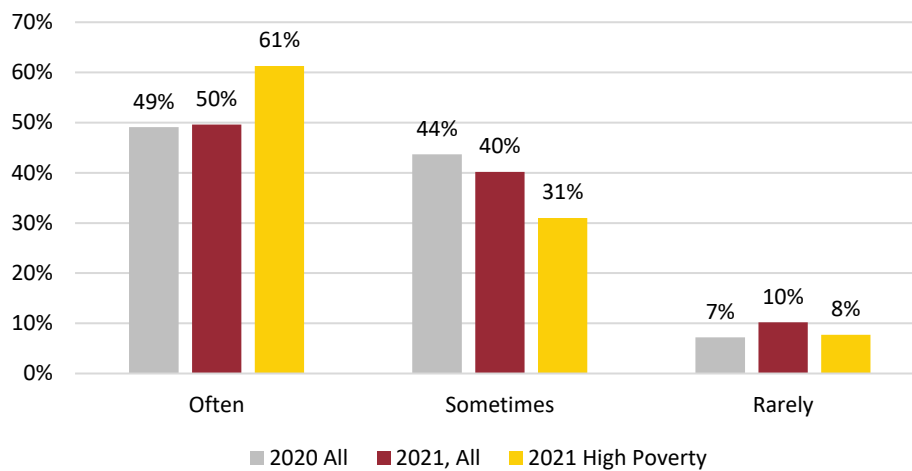
More than 90 percent of respondents felt that participation in DPIL was helping their child better prepare for kindergarten. This response rate mirrors the 2020 responses, as does the slightly higher percentage of high poverty ZIP code respondents (93.6 percent) who felt DPIL participation was better preparing their child for kindergarten. Approximately nine percent of the sample was unsure if DPIL was helping, and less than one percent felt DPIL was not helping their child prepare for kindergarten.



Impact of DPIL on Child Using New Words

In exploring the impact of DPIL and children learning new words, about half (49.6 percent) of the respondents indicated that *often* they found their children using new words they learned from the books they've read. Forty percent indicated that this happened sometimes, and about ten percent stated this rarely happened. These positive findings again mimic the findings from 2020. Of particular importance yet again, is the starkly greater percentage of respondents in high poverty ZIP codes (61.3 percent) who reported often observing their kids using words they'd learned from DPIL books. This is over a ten percent difference from the total population.

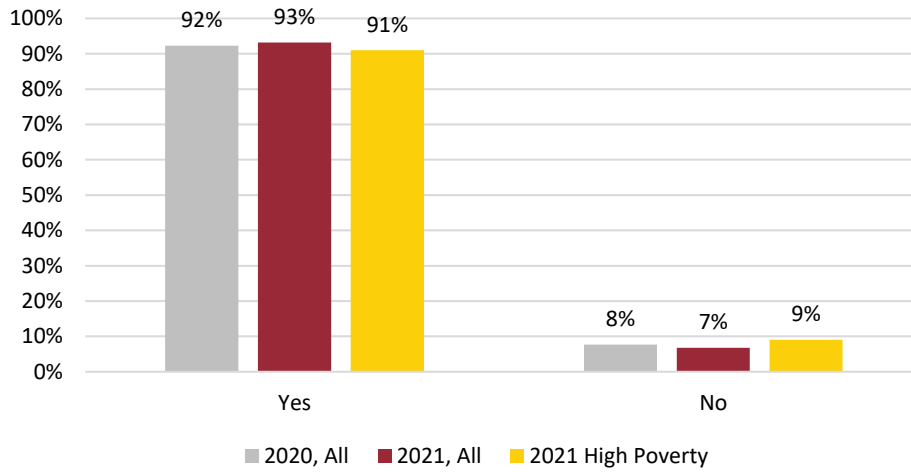
How often do you find your child/children using new words they have learned from books you have read?



Impact of DPIL on Other Older Children in the Household

When respondents were asked if the older non-enrolled siblings of children enrolled in DPIL also read and enjoyed DPIL books, over nine out of ten (93.2 percent) respondents indicated that they did. This was very similar to the responses from 2020.

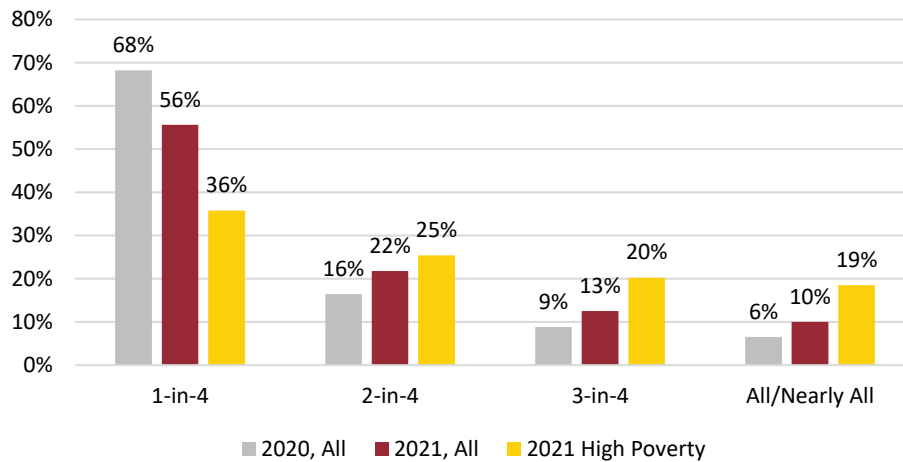
Do older non-enrolled brothers or sisters also read and enjoy the books?



DPIL Books and Home Libraries

Over half (55.6 percent) of the respondents indicated that a quarter of their home libraries were comprised of DPIL books, and 21.8 percent stated that DPIL books made up half of their home libraries. Respondents from higher poverty ZIP codes reported that DPIL books made up a larger percentage of their home libraries comparatively.

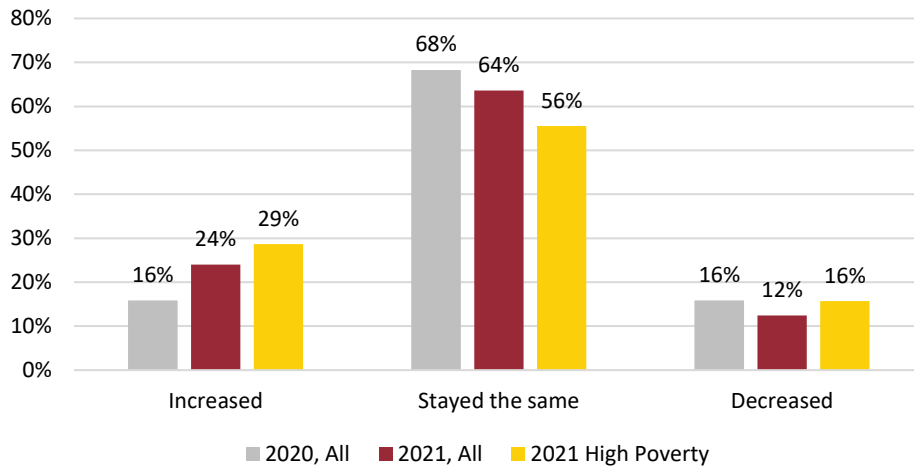
Imagination Library books make up what portion of your home library?



Public Library Use Among Enrolled Households

For the majority of participants (63.6 percent), enrolling in DPIL had no effect on their public library use. For nearly a quarter (24.0 percent) of respondents, public library use increased, and for 12.4 percent library use decreased. These results were similar for high poverty ZIP codes, with slightly more respondents indicating both increased *and* decreased use.

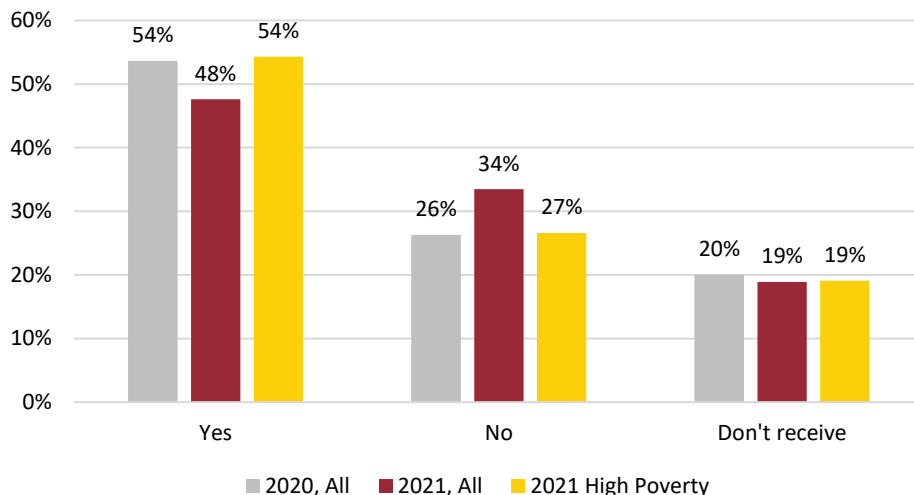
Since participating in Imagination Library, our public library use has



DPIL Newsletter Engagement

Respondents were asked about whether they regularly read The Literacy Cooperative’s Imagination Library Newsletter, and while close to half (47.6 percent) of respondents indicated they did, this response rate is unfortunately down from 54 percent of respondents in 2020. Even so, as DPIL eligibility and enrollment has expanded, so has the Imagination Library Newsletter subscription list. The very strong response rate to this online survey promoted almost exclusively via the Newsletter indicates healthy levels of engagement by participants. Similar to last year, about one in five participants said (18.9 percent) don’t receive the newsletter. The results for high poverty ZIP codes was a little more promising, with 54.3 percent of respondents indicating they regularly read the newsletter. Relatedly, respondents were asked if they have ever taken advantage of any of the information, offers, or events included in the Imagination Library Newsletter. About one in five (22.2 percent) of respondents indicated they had, and 28.3 percent of high poverty ZIP codes indicated they had.

Do you regularly read our Imagination Library e-newsletter?



Satisfaction with DPIL Books

New questions were added in 2021, which explore specific aspects of satisfaction with DPIL books. To start, respondents were asked if their child enjoys DPIL books, and the results were very positive. Seven in ten children (69.4 percent) always enjoy the books, and the remaining one-quarter (26.3 percent) usually enjoy the books. Less than half a percentage point of the respondents indicated rarely or never enjoying the books. The numbers are even more positive for high poverty ZIP codes, with eight in ten children (80.6 percent) always enjoying the books. This indicates that receiving DPIL books for children is an overwhelmingly positive experience.

Diversity, and specifically “regard for diversity of people, their roles, culture, and environment” is a stated fundamental theme of DPIL¹¹. Therefore, The Literacy Cooperative felt it was important to ask respondents whether they appreciated the uniqueness, variety and diversity of the characters in DPIL books. Nearly all respondents indicated they did, with 95.9 percent of the respondents strongly agreeing or agreeing that they appreciated the diversity in the books. This percentage in agreement was even slightly higher in the high poverty ZIP codes (97.8 percent).

Finally, respondents were asked if they found the reading tips included on the inside flaps of DPIL books to be useful; 78.3 percent of respondents strongly agreed or agreed that they were helpful, another 20.2 percent didn’t have an opinion on them. In high poverty ZIP codes, a greater percentage of respondents (87.4 percent) indicated that they thought the tips were helpful, and less than one percent of respondents disagreed.

¹¹ <https://imaginationlibrary.com/usa/themes-concepts/>

Satisfaction with DPIL Books

Seven in ten children **always** enjoyed DPIL Books



Nearly three in ten children **usually** enjoyed DPIL Books



19 in 20 respondents appreciated the **uniqueness, variety, and diversity** of the characters in DPIL books



Eight in ten respondents found the **reading tips** provided by DPIL books helpful

Where did you learn about DPIL?

According to the participants, the most common way they learned about DPIL was **from a friend** (38.4 percent), however learning about DPIL **through social media** was a close second (29.1 percent). Much less common was learning about DPIL through their school (3.1 percent), which is likely influenced by the fact that DPIL is targeted to children from birth to age five, often before they attend school. In high poverty ZIP codes these results were a little different, with the most endorsed source of information being **through social media** (30.0 percent). Learning about DPIL **from a friend** was still a commonly endorsed source of information (24.2 percent), however the biggest difference for high poverty ZIP codes was that over twice as many of these respondents learned about DPIL from a doctor's office (20.9 percent compared to 9.6 percent). Efforts to connect to parents via childhood well visits in certain parts of the community could explain this difference.

Conclusion

The meaningful and positive impacts of DPIL on children and their households are well evidenced. Research across the United States has shown that children participating in DPIL are significantly more likely to be assessed as ready for kindergarten. They are also significantly more likely to score higher on standardized tests of achievement beyond kindergarten, and the effect seems to hold at least through third grade, even after controlling for potential confounding variables. While not all research has produced similarly positive results, there is a strong and growing body of evidence that DPIL has a particularly positive effect on children's academic performance, and that effect is tied to early and consistent participation in DPIL.

Preliminary descriptive research in Cuyahoga County shows a promising trend with a greater percentage of children who participated in DPIL assessed as kindergarten-ready, or approaching readiness, compared to students who did not participate in DPIL. A greater percentage of local DPIL participants were also assessed as on track for language and literacy than their non-participating peers. However, until more rigorous statistical analysis is performed, these differences cannot be definitively attributed to DPIL.

Finally, the insight gained from the 2021 participant DPIL survey in Cuyahoga County illuminates many important findings. What is particularly clear from the survey results is that DPIL is having a positive impact on children and families in Cuyahoga County. For example, not only are the overwhelming majority of respondents reading to their children at least two to four times a week, most respondents indicated that the frequency with which they've been reading, and the frequency with which their child is asking to be read to, has increased since joining DPIL. Of particular note is that these findings indicated an even more positive impact amongst respondents from high poverty ZIP codes.

This increased engagement with reading is leading to perceived improvements as well. Nearly nine in ten respondents noticed their children using new words they learned while reading DPIL books, and the overwhelming majority felt that DPIL was helping to prepare their children for kindergarten. For some, DPIL engagement was also associated with an increase in public library usage.

What cannot be overstated however, is the immense satisfaction respondents experienced when interacting with DPIL books. Whether it was the child's enjoyment of the books, or the appreciation for the diversity and uniqueness of the books' characters, or the usefulness of the reading tips that come with DPIL books, the overwhelming majority of respondents founds these books to be worthwhile. For every one of these satisfaction measures, an even greater percentage of respondents in high poverty ZIP codes reported being satisfied. This indicates not only a strong benefit of these books for the sample as a whole, but that the program remains especially valuable for families in high poverty ZIP codes.