

#### RESEARCH REPORT

# How Do Two-Generation Approaches Affect Educational, Economic, and Social Outcomes for Whole Families?

# **Evidence from the Vimenti 2Gen Model in Puerto Rico**

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# **Executive Summary**

Addressing childhood poverty in the United States poses a significant and multifaceted challenge (Chetty and Hendren 2018a, 2018b; Ludwig et al. 2013; Hughes and Tucker 2018). This challenge is particularly pronounced in Puerto Rico, where high rates of poverty intertwine with systemic factors to contribute to elevated rates of food insecurity, underemployment, exposure to violence, and risk of asthma, obesity, heart disease, and diabetes (Enchautegui, Arroyo-Quijano, and Blakely-Vallecillo 2021). Two-generation (2Gen) approaches aim to address these complex challenges by recognizing the interconnectedness of family dynamics, neighborhood contexts, and child outcomes. By empowering families through comprehensive strategies, 2Gen initiatives aim to break the cycle of poverty and foster multidimensional well-being for both children and caregivers.

While 2Gen approaches are growing in popularity, few studies have rigorously assessed their effects on whole family outcomes. For this study, we seek to begin filling this gap by assessing the effectiveness of a 2Gen approach implemented at Vimenti in Puerto Rico. To do so, we ask the following research questions:

- 1. What effect does the Vimenti 2Gen model have on Vimenti's pillars of focus: the educational attainment of children and parents (education pillar), the economic outcomes of parents (economic pillar), and the mental, physical, and socioemotional health of the family as a whole (social pillar)?<sup>2</sup>
- 2. How closely does Vimenti adhere to the Aspen Institute 2Gen principles,<sup>3</sup> and to what extent might this explain differences in outcomes for Vimenti students and families?
- 3. How satisfied are families (at Vimenti and at comparison schools) with the education, services, and programs available to their families through their school and, in the case of comparison families, through other service providers?

# **Two-Generation Approaches**

Two-generation approaches are holistic interventions aimed at empowering families by simultaneously addressing the needs of children and caregivers and aligning services and supports with families'

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economic, social, and education goals. These approaches might include childcare assistance during adult education programs, or integrated workforce development and early childhood education services.

Two-generation approaches operate on the principle that family well-being is inseparable from the conditions of caregivers, children, and their communities.

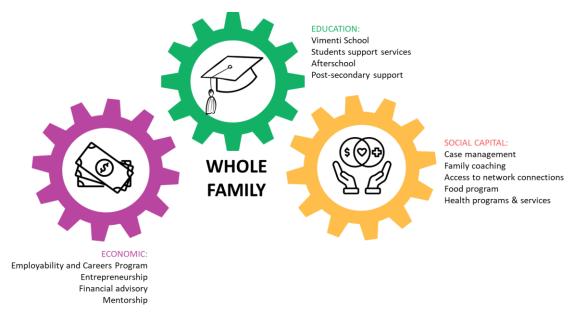
The roots of 2Gen approaches trace back to programs like Head Start, which integrated 2Gen principles in the 1960s, though the term itself emerged later. Today, over 500 organizations across the US and a few other countries implement 2Gen approaches, often driven by core principles such as equity, innovation, and systems alignment. These initiatives prioritize outcomes for both children and adults, engage families in decision-making processes, and aim to address systemic disparities while promoting comprehensive supports across domains including, but not limited to, education, health, and economic stability.

# Vimenti

Vimenti is an integrated service center for families in Puerto Rico that uses a 2Gen approach to provide a one-stop shop for a variety of services. It was started within the Boys & Girls Clubs of Puerto Rico in 2018 but is now independently managed. Vimenti combines a public charter school, or an *escuela pública alianza*, with a comprehensive service center dedicated to both parents and children. Vimenti operates in the Residencial Ernesto Ramos Antonini, a public housing project in the San Juan metropolitan area, where the poverty rate is 61 percent<sup>5</sup> and the community confronts significant economic challenges exacerbated by high crime rates. Vimenti employs a holistic family-centered approach to address the needs of children, parents, and families simultaneously, organized around three core pillars: education, economic, and social capital and health (figure 1).

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FIGURE 1
Vimenti Pillars
How Vimenti describes their model



Source: Image and text provided by Vimenti.

# Methods

To answer our research questions, we undertook a comparative analysis involving a subset of Vimenti families and a control group of families drawn from traditional public schools situated in similar neighborhoods that had family characteristics analogous to those of Vimenti. We employed a mixed-methods approach, incorporating surveys and focus groups with both sets of families and interviews with service providers from Vimenti and comparison schools. Our survey methodology involved two phases: we administered one survey at the onset of the 2022–23 academic year and another at its conclusion. This dual-stage approach allowed us to examine disparities in outcomes at the academic year's end via t-tests of statistical significance and disparities in outcome changes between Vimenti and the comparison families during the academic year via a two-way fixed effects difference-in-differences model.

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# Findings: The Effect of Vimenti's Approach across Its Education, Economic, and Social Pillars

Our first research question looked at the effect of the Vimenti 2Gen model on the educational attainment of children and parents, the economic outcomes of parents, and the mental, physical, and socioemotional health of the family as a whole. We find that in the 2022–23 school year, Vimenti families performed better than comparison families in a variety of measures and indices in each of Vimenti's three pillars (table 1).

# **Education Pillar**

- Vimenti students had higher kindergarten through first grade and kindergarten through fifth grade academic index scores than comparison students at the end of the school year.
- Vimenti students had lower chronic absenteeism than comparison students throughout the school year.
- Vimenti parents had higher levels of education at the end of the school year than comparison parents.
- Vimenti students showed a greater decrease in chronic absenteeism between the beginning and end of the school year than comparison students.

# **Economic Pillar**

- Vimenti parents were more likely to be employed at the end of the school year than comparison families.
- Vimenti parents were more likely to have a higher income at the end of the school year than comparison families.
- Vimenti parents were more likely to have gained new skills throughout the school year than comparison families.
- Vimenti parents were more likely to own a car at the end of the school year than comparison families.
- Vimenti parents did not experience any statistically significant changes in economic outcomes between the beginning of the school year and end of the school year compared with the comparison parents.

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# **Social Pillar**

- Vimenti families had greater access to quality health care at the end of the school year than comparison families.
- Vimenti families had greater improvements in access to quality health care between the beginning of the school year and the end of the school year than comparison families.

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TABLE 1
Vimenti Families Outperformed Comparison Families in 9 of 20 Education, Economic, and Social Outcomes

Outcomes from the 2022–23 school year

	T-tests at outcome	Difference-in-difference
<b>Education pillar</b> Kindergarten through first grade academic performance	+**	Effect not detected
Second through fifth grade academic performance	+*	Effect not detected
Child Motor skills and spatial reasoning	Effect not detected	Effect not detected
Child Chronic absenteeism	_*	_***
Parent education	+***	Effect not detected
Economic pillar Parent employment	+***	Effect not detected
Parent family income	+*	Effect not detected
Parent job quality	Effect not detected	Effect not detected
Parent job tenure	Effect not detected	Effect not detected
Parent entrepreneurship	Effect not detected	Effect not detected
Parent new skills	+**	Effect not detected
Parent financial health	Effect not detected	Effect not detected
Parent car ownership	+***	Effect not detected
Parent housing	Effect not detected	Effect not detected
Social pillar Child physical health	Effect not detected	Effect not detected
Parent mental and physical health	Effect not detected	Effect not detected
Child access to health screenings	Effect not detected	Effect not detected
Family access to quality health care	+**	+**
Child behavior and emotional intelligence	Effect not detected	Effect not detected
Positive parent behaviors	Effect not detected	Effect not detected

**Source:** Authors' analysis of survey data from a survey administered by the authors to parents at Vimenti and traditional public schools at the beginning and end of the 2022–23 school year.

**Notes:** For all measures except chronic absenteeism, a positive coefficient indicates that Vimenti families performed better than comparison families. For chronic absenteeism, a negative coefficient means that Vimenti families performed better than comparison families (i.e., had lower chronic absenteeism).

Qualitative findings, collected from focus groups with parents and interviews with school staff, suggest that Vimenti's approach to academic development is linked to students' higher academic performance than comparison schools, with many parents noting improvements in their children's

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<sup>\* =</sup> p < 0.10; \*\* = p < 0.05; \*\*\* = p < 0.01.

academic performance since enrollment. Within the economic pillar, qualitative findings suggest that Vimenti's strategies help support parents in improving their economic and financial outcomes, perhaps in part through Vimenti's provision of employment, finance, and entrepreneurship workshops. While the quantitative findings within the social pillar are infrequently statistically significant, qualitative findings indicate that Vimenti families were happy with and grateful for the support they received for their children's health. There was little consensus around the availability or quality of parent-focused social pillar activities provided by Vimenti, as almost none of the Vimenti parents in the focus groups explicitly mentioned being connected to a specialist for their medical needs or attending a parent-focused health workshop. This could reflect a need for additional offerings in this area, a lack of access to health care services, or parents' inability to attend workshops because of work or other economic responsibilities.

"[Los empleados de Vimenti] están ayudando [a los estudiantes] a desarrollar lo que son los valores. Siempre en casa, obviamente, le inculcamos los valores que tenga cada quién en su hogar. Pero aquí [en Vimenti], lo que es la empatía, compañerismo, el ayudar a otras personas, ellos están bien enfocados en eso."

-Una madre del grupo focal de Vimenti

Translation: "[Vimenti staff] are helping [the students] develop values. Obviously at home, we teach kids the values we have in the home. But here [at Vimenti], they are very focused on empathy, teamwork, and helping other people."

-Vimenti focus group parent

# Vimenti's Fidelity to 2Gen Principles

Our second research question looked at how closely Vimenti adheres to 2Gen principles and to what extent this fidelity could explain differences in outcomes for Vimenti students and families. Our fidelity study revealed the following key findings for each of the five Aspen Institute 2Gen principles. We use these principles because Ascend at the Aspen Institute is seen by interviewees as a leader in the field for the modern 2Gen approach.

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#### MEASURE AND ACCOUNT FOR OUTCOMES FOR BOTH CHILDREN AND THEIR PARENTS

The first principle of the 2Gen approach focuses on the needs of children and parents within families. Vimenti demonstrates a strong commitment to this principle through staff familiarity with the 2Gen model, comprehensive intake processes, and tailored approaches to education. By continuing to grow their robust data collection and evaluation efforts, Vimenti can ensure ongoing improvement in serving the holistic needs of families.

#### ENGAGE WITH AND LISTEN TO THE VOICES OF FAMILIES

The principle of engaging with families in 2Gen programs is evident in Vimenti's efforts to incorporate family perspectives at both individual and organizational levels. Survey data and qualitative findings highlight Vimenti's success in listening to parents' concerns and building trusting relationships. Vimenti has a parent council and a parent representative on its board of directors. However, focus group participants were not aware of these opportunities for parents. Increased communication about the council and board could help parents know they can reach out to these representatives as issues arise.

# **ENSURE EQUITY**

Vimenti's equity-driven approach acknowledges and prioritizes marginalized communities, particularly those in public housing projects like the Residencial Ernesto Ramos Antonini and children with special education needs. Challenges, such as navigating "poverty traps," as identified by Vimenti staff in qualitative interviews, and addressing systemic failures within Puerto Rico's education system persist, but Vimenti's holistic approach gives case managers the needed resources engage with parents and children in a frequent, intensive, and supportive way. Although Vimenti provides government-mandated services for special education students, gaps remain for students with severe disabilities, highlighting the need for continued advocacy and resource mobilization by traditional and charter public schools, including timely fund disbursement by the Puerto Rico Department of Education. Moving forward, Vimenti could expand its equity efforts by disaggregating data to better understand the experiences of various subgroups, fostering inclusivity, and proactively addressing systemic inequities within its community.

## FOSTER INNOVATION AND EVIDENCE TOGETHER

Vimenti leads in innovation by integrating emerging evidence and adapting the 2Gen model for Puerto Rico, notably in public housing communities. Through rigorous evaluation and research, Vimenti contributes significantly to the 2Gen field, informing the field's strategic roadmap and sharing insights with educational and governmental entities. Challenges persist in aligning poverty measures to the

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specific levels of poverty in Puerto Rico, but collaborations with other 2Gen organizations, such as the Colorado-based Family Resource Center Association, provide valuable insights. Vimenti recently acquired a \$10.5 million grant from the US Department of Education's Full-Service Community Schools program, which presents an opportunity to expand and scale its efforts and impact. And Vimenti's involvement in networks like the Ascend Network present opportunities for further knowledge exchange and collaboration.

#### ALIGN SERVICES AND FUNDINGS STREAMS FOR FAMILIES

The principle of aligning services and funding streams allows 2Gen programs to provide comprehensive support for both parents and children. Vimenti is evolving from being a part of the Boys & Girls Clubs of Puerto Rico to being an independent organization with access to various funding sources. Now operating as a public charter school, it advocates for broader adoption of the 2Gen model while prioritizing transparency in funding allocation. As a next step, Vimenti could document the overall share of expenditures for parents and children separately, including across public, private, and philanthropic funds, to identify where targeted fundraising could help accelerate outcome improvements. This could be a critical guidepost for other public and charter schools in Puerto Rico aiming to replicate 2Gen systems at their schools.

## IMPROVING VIMENTI'S LOGIC MODEL FOR BETTER OUTCOME MEASUREMENT

We also examined the extent to which Vimenti's logic model adheres to the five Aspen Institute 2Gen principles. Vimenti's model effectively illustrates its theory of change, yet we suggest improvements for clarity and alignment with 2Gen principles. Subheadings should align with Vimenti's three pillars or with the six components of 2Gen programs as outlined by the Aspen Institute<sup>9</sup> with clearer distinctions between child and parent outcomes. We also recommend incorporating measures for family goals, parent voice, and systems change. Ensuring measures reflect the five Aspen Institute 2Gen principles, <sup>10</sup> particularly the principle of engaging with and listening to the voices of families, is vital for robust evaluation and program development.

# **Program Satisfaction**

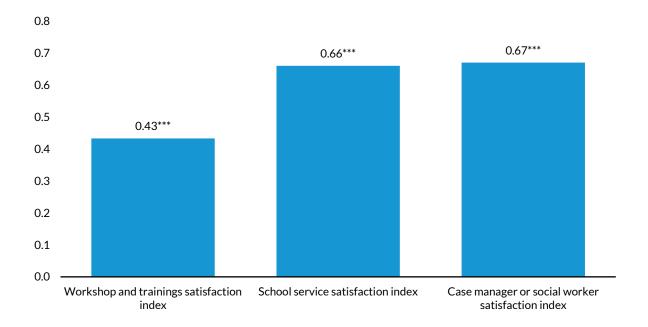
Our third research question looked at how satisfied families are with the education, services, and programs available through their school or elsewhere. Our assessment of program satisfaction showed that Vimenti families were more satisfied with their school and community supports across all three indices of satisfaction at the end of the school year than those in the comparison group (figure 2).

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FIGURE 2

Differences in Family Satisfaction at the End of the 2022–23 Academic Year

Satisfaction of Vimenti families compared with families at comparison schools across three indices



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**Source:** Authors' analysis of survey data from a survey administered by the authors to parents at Vimenti and traditional public schools at the end of the 2022–23 school year. Satisfaction indices were created by the authors from individual survey questions. **Notes:** \*\*\* = p < 0.01.

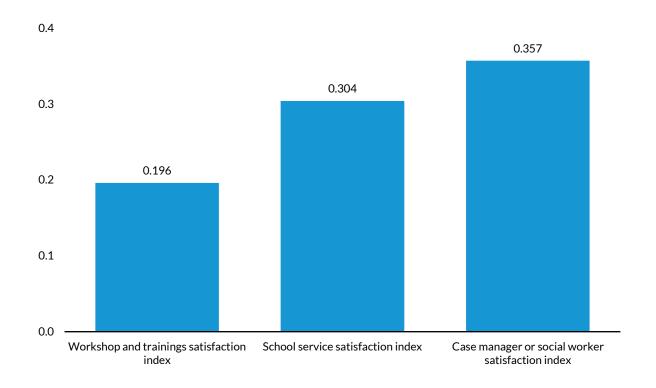
Specifically, Vimenti families reported being more satisfied than comparison school families at the 1 percent significance level with all of the following: workshops and trainings (including a social-emotional workshop and entrepreneurship programs); school services (including classes and extracurricular activities for students.); and case managers/social workers. While the difference in outcomes between the beginning of the year and the end of the year were not significant, they were all positive (figure 3).

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FIGURE 3

Difference-in-Differences in Family Satisfaction between the Beginning and End of the 2022–23

Academic Year across Three Indices



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**Source:** Authors' analysis of survey data from a survey administered by the authors to parents at Vimenti and traditional public schools at the beginning and end of the 2022–23 school year. Satisfaction indices were created by the authors from individual survey questions.

**Notes:** Results are based on a fixed effects model with both individual and time fixed effects included. We calculate heteroskedasticity-robust standard errors clustered at the individual level.

# Limitations

There are three key limitations to our analysis. First, we do not have a random sample, so some of the findings could reflect selection bias into the program rather than a truly causal effect of Vimenti on outcomes. Second, we compare families in a 2Gen charter school to families in traditional public schools so some of the differences observed could be caused by Vimenti's charter school status rather than its 2Gen model. And third, our sample size is not exceptionally large (177 total: 92 in the treatment group and 85 in the comparison group); a larger sample size could offer increased statistical power and greater generalizability.

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# Lessons Learned

Vimenti recently secured funding to expand the 2Gen model to other public charter schools and traditional schools throughout the island. Some lessons learned that might guide this effort include the following:

- Qualitative findings suggest that Vimenti's positive educational outcomes for children are due
  to Vimenti's unique approach to academic development. This includes the schools' attendance
  procedures, tiered learning model, integrated case management, and robust after-school
  services.
- Vimenti showed higher economic outcomes for parents than for comparison parents, which may be related in part to Vimenti's offering of employment, finance, and entrepreneurship workshops. One of the flagship economic workshops is a month-long training that includes soft skills development, interview practice, and job placement support.
- Vimenti families showed greater increases in access to quality health care throughout the school year than comparison families. This may be related to the quality of Vimenti's coordinated in-house team, including nurses, psychologists, and therapists, as well as the services Vimenti brings in, including health screenings and on-site pediatrician annual checkups.
- Data from our focus groups and interviews indicate that Vimenti excels at listening to parents. Both parents and staff emphasized that the Vimenti community values listening to and building trusting relationships with families. One best practice that other schools could adopt is increasing the frequency of communication and touch points with families, both individually and at school-wide events.
- The fidelity study noted that Vimenti supports families that have been stigmatized, criminalized, and overpoliced, and that Vimenti's understanding of entrenched structural poverty is a key difference in how Vimenti is implementing equity goals compared with comparison schools.
- Vimenti is attempting to better serve special education families by ensuring all of the government mandated services, including dedicated staff and therapists for students, are integrated into all Vimenti programming. Our qualitative findings suggest that Vimenti case managers in particular help families more efficiently navigate the bureaucratic process of getting their children certified as having special needs.

There are also ways in which Vimenti could continue to grow to further strengthen the 2Gen model:

Vimenti could continue to expand its economic pillar offerings, since finding within that pillar were less robust than in the education pillar. This may include providing new workshops, expanding the availability and frequency of trainings and workshops, and further advertising these offerings to parents.

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- Vimenti could continue to expand its offerings in the social pillar, since findings within this pillar were less robust than in the education pillar. This might include enhancing both child and parent health offerings, coordinating with the new health clinic in the neighborhood, and working with parents to increase positive behaviors such as reading to their children and reinforcing school subjects at home.
- Vimenti could further communicate opportunities for parent voice at the organizational level such as within governance or advisory bodies. Vimenti could also help parents to become community-based resident researchers to support their internal evaluation efforts.
- Vimenti could continue to advocate for resource mobilization for students with severe disabilities.

Moving forward, there is significant opportunity for Vimenti and other schools to continue scaling up combined education, employment, and social interventions in order to disrupt systemic poverty and help families most affected by structural poverty. By addressing challenges and building on successful strategies, approaches like the one Vimenti is taking can serve as exemplary models for comprehensive family support and empowerment for other 2Gen programs in Puerto Rico and beyond.

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# How Do Two-Generation Approaches Affect Educational, Economic, and Social Outcomes for Whole Families?

Childhood poverty is a significant problem in the United States, especially in communities affected by underinvestment and structural inequities. In 2022, 16 percent of all children age 17 and younger were in poverty, with 10 percent of white, non-Hispanic children in poverty compared with 30 percent of Black children and 22 percent of Hispanic children. This economic hardship has direct negative effects on the physical, emotional, and socioemotional health of children, which results in deficits in kindergarten readiness, reading and math ability, high school graduation, and job attainment. Poverty also disproportionately exposes children to adverse experiences (such as physical or emotional trauma) that have serious mental and physical consequences later in life (Hughes and Tucker 2018). And, living in impoverished neighborhoods has long-term effects on intergenerational mobility and children's outcomes, including their later earnings, their physical and mental health, their likelihood of attending college, and their likelihood of becoming a single parent (Chetty and Hendren 2018a, 2018b; Ludwig et al. 2013).

Due to a confluence of historical, economic, and political factors, childhood poverty rates are disproportionately high among Puerto Rican children, with 55 percent of children age 17 and younger living below the poverty line in 2021. In 2015, one-third of Puerto Ricans experienced food insecurity, and in 2020, 40 percent of Puerto Rican families experienced food insecurity due to COVID-19 (Santiago-Torres et al. 2019). Research has found that early life exposure to poor nutrition and infectious diseases in Puerto Rican sassociated with higher rates of heart disease and diabetes (McEniry et al. 2008). In addition, Puerto Rican children have some of the highest rates of asthma and obesity among all racial and ethnic groups in the US (Pérez-Perdomo et al. 2000; Ortega et al. 2003; Lara et al. 2006; Findley et al. 2003).

Policymakers and practitioners have attempted various interventions to break the cycles of childhood poverty, with two-generation (2Gen) approaches gaining increasing interest. 2Gen approaches are policies and programs based on the premise that childhood poverty cannot be separated from the conditions of the parents, families, and neighborhoods that children are connected

to, as those people and places directly affect children's outcomes. 2Gen program models emphasize holistic strategies for empowering families. <sup>17</sup> They attempt to build family well-being by intentionally and simultaneously working with both children and caregivers to meet their own individual and shared goals. <sup>18</sup>

The Vimenti school in Puerto Rico uses a 2Gen approach to help break persistent cycles of poverty among children and families. Originally created within Boys & Girls Clubs of Puerto Rico, the Vimenti organization includes a public charter school, or *escuela pública alianza*, and an integrated service center focused on parents and children that uses a whole family approach to work toward eradicating child poverty in Puerto Rico. <sup>19</sup> The 2Gen approach differs from most traditional schools or child-focused nonprofit programming in that it simultaneously addresses the needs of children, parents/caregivers, and families. To this end, Vimenti's services are organized around three pillars: education, economic development, and social development.

Vimenti serves families in the Ernesto Ramos Antonini public housing project in the San Juan metropolitan area and nearby communities. The neighborhood is characterized by profound economic hardship. The census tract in which Vimenti is located has a poverty rate of 61 percent, compared to 11.5 percent in the US as a whole.<sup>20</sup>

Vimenti gives enrollment preference to students who were enrolled in the school during the previous year (unless they have been expelled for justified reasons, excluding any academic reasons), siblings of students who are enrolled in the school, students who reside in the surrounding community, and students who reside within the boundaries of the school's region. Children who do not meet any of these enrollment priorities are given a lottery number and either placed into a classroom (if there are remaining spaces) or put on a waiting list.

During the 2022–2023 school year, 44.5 percent of Vimenti families lived in public housing, and an additional 12.3 percent lived in other federally subsidized housing. Only 22 percent of families owned a home.<sup>21</sup>

While 2Gen approaches are growing in popularity, few studies have rigorously assessed their effect on whole family outcomes. In this report, we seek to do so by answering three overarching research questions. First, what effect does the Vimenti 2Gen program have on the three pillars of focus: the educational attainment of children and parents; the economic outcomes of parents; and the mental, physical, and socioemotional health of the family as a whole? Second, how closely does Vimenti adhere to 2Gen principles, and to what extent might this explain differences in outcomes for Vimenti students and families? And third, how satisfied are families (Vimenti and comparison families) with the education,

services, and programs available to their families at their school and, in the case of comparison families, from other service providers?

To answer these questions, we compared a sample of Vimenti families to a sample of comparison families selected from traditional public schools located in similar types of neighborhoods as Vimenti and who have similar characteristics to Vimenti families. Specifically, we selected elementary schools that were traditional public schools (not Montessori), in neighborhoods similar to Vimenti's in terms of income, near public housing, near a Boys & Girls Club, and in the San Juan metropolitan region. We received permission from the Puerto Rico Department of Education's (PRDE's) Education Research and Innovation Center and from public school directors before finalizing our list of public schools. Families were eligible for the study if they had a household income of \$30,000 or less, lived within the San Juan metropolitan area, and had at least one child in kindergarten through grade five.

We conducted surveys, interviews, and focus groups with these families as well as with service providers at both Vimenti and comparison schools. We conducted one survey at the beginning of the school year and one at the end of the school year. This method allowed us to observe both differences in the two groups' outcomes at the end of the school year and changes in outcomes between the beginning and the end of the school year.

We used two main statistical methods to evaluate the survey data. First, we used *t*-tests to examine differences in outcomes between Vimenti and comparison group families at the end of the school year. This method is beneficial in that it accounts for the fact that most families were "treated" prior to the beginning-of-year survey, since the children attended Vimenti in previous years. It also accounts for the fact that some of the economic impacts take longer than just one year to emerge. However, a limitation is that differences may be due to selection bias rather than true treatment effects—that is, Vimenti families may appear to be doing better or worse on some measures because they were already likely to perform differently on those measures, rather than due to the Vimenti program itself. In Puerto Rico, families can register their children at any school of their choice. In this sense, there could also be self-selection bias in the choice of school in the comparison group.

To supplement this approach, we also estimated a difference-in-differences model, which allows us to compare changes in outcomes between the beginning-of-year and end-of-year surveys for Vimenti families compared to similar families with children in traditional public schools. This method helps to account for some of the unobserved differences between Vimenti families and comparison families (i.e., selection bias), but the result may be a lower-bound estimate since many families were already treated in prior years, meaning that their children had already attended Vimenti prior to the beginning-of-year

survey. It is important to note that selection bias still could affect these results if changes in outcomes are correlated with opting in to Vimenti (i.e., if families who are already improving on certain outcomes are more likely to apply to attend Vimenti).

The study findings show that Vimenti families performed better across the three Vimenti pillars on a variety of measures and indices, including the following:

- Education Pillar: Vimenti students had higher kindergarten through first grade and kindergarten through fifth grade academic index scores, and fewer school absences in a given month, and Vimenti parents had higher levels of education at the end of the year than their counterparts in comparison families. Vimenti students also showed a greater decrease in chronic absenteeism between the beginning and the end of the school year than children in comparison families (i.e., a greater improvement in attendance).
- Economic Pillar: Vimenti parents were more likely to be employed, have a higher income, have gained new skills in the past year, and own a car at the end of the school year than parents in comparison families.
- Social Pillar: Vimenti families had greater access to quality health care at the end of the year than comparison families. And over the course of the year, they saw a greater increase in access to quality health care than comparison families.

We did not find statistically significant differences in some key outcomes across pillars, including motor skills and spatial reasoning, job quality, job tenure, new business creation, financial health, type of housing, the likelihood of health screenings, child behavior and emotional intelligence, and positive parent behaviors. And we did not find as many significant effects in the difference-in-differences model as we did with the *t*-tests for the end-of-year survey, likely because many families were already treated in prior years. In the beginning-of-year survey, only 13 of the 92 treated families were in their first year at Vimenti, meaning that most of the families were likely treated by Vimenti prior to the beginning-of-year survey. This means that it is possible that the gains in outcomes occurred prior to the beginning of the study for the families who had already participated in Vimenti programs prior to the study start date.<sup>23</sup>

Qualitative findings support these quantitative findings. Many parents noted improvements in their children's academic performance since their enrollment at Vimenti, especially in comparison to siblings enrolled in other schools. They also shared that they had experienced some positive benefit from Vimenti's employment, finance, and entrepreneurship workshops, and they were highly satisfied with Vimenti's programs and case management.

The 2Gen fidelity study revealed that Vimenti demonstrates a strong commitment to a multifaceted approach that prioritizes the needs and outcomes of both children and parents within families through its comprehensive service offerings and data-informed decisionmaking processes. The five principles of the approach are accounting for the outcomes of both children and parents, engaging with and listening to the voices of families, ensuring equity in service provision, fostering innovation and evidence-based practices, and aligning and linking services and funding streams are central to Vimenti's operations. Efforts to incorporate family-centric goals and measures, enhance parent voice elements within program design, and align the logic model with 2Gen principles will further strengthen Vimenti's ability to effectively serve its community and drive meaningful change.

Finally, the assessment of program satisfaction showed that Vimenti families were more satisfied across the board with their school and community supports than those in the comparison group. Specifically, Vimenti families had higher levels of satisfaction with the workshops and trainings offered, with school services, and with their case managers and/or social workers at the end of the year than comparison families. None of these differences were statistically significant in the difference-in-differences model, but, again, that could be because many of the families were already treated at the beginning of the year and were comparing satisfaction with Vimenti in the prior year to satisfaction with Vimenti in the current year.

Overall, this analysis shows that approaches like Vimenti's 2Gen model hold promise for improving the educational, economic, and social well-being of whole families. Practitioners and policymakers should continue to explore new ways in which 2Gen principles can be applied to a variety of models. As we navigate the complex landscape of poverty alleviation, initiatives like Vimenti's serve as promising pathways toward a more equitable future for all children and families.

# The 2Gen Approach

2Gen strategies aim to break the intergenerational cycle of poverty by moving families toward economic security and stability through education, workforce training, and related support services (Blakely Vallecillo 2023). 2Gen approaches emphasize holistic strategies for empowering families.<sup>24</sup> They attempt to build family well-being by intentionally and simultaneously working with both children and caregivers to meet their own individual goals as well as shared family goals.<sup>25</sup> Some examples of 2Gen approaches include the following:

- a college or career training program that connects adult caregivers with child care programs so that a parent or caregiver can pursue higher education during hours when their child's development is also supported<sup>26</sup>
- a care center providing young children with early childhood education opportunities while also
  offering a workforce development program for parents and caregivers<sup>27</sup>
- a community center with an intake process that centers family goals and addresses the needs and goals of caregivers and children simultaneously<sup>28</sup>

Approaches that embrace 2Gen principles exist on a continuum from child-focused to parent-focused. What separates true 2Gen approaches is a focus on the whole family. There are many entities that employ 2Gen frameworks or methods to varying degrees. Some explicitly identify as 2Gen, while other use terms such as "whole family," "intergenerational," "Ohana Nui," "bigenerational," "integrated services," or "wraparound services." These terms all encompass the same core principles, focusing on building inclusive practices and policies for families of diverse structures.

# **History of 2Gen Approaches**

The concept behind the 2Gen approach has deep roots, with Indigenous communities around the world recognizing their importance. However, the term "2Gen" was officially coined by the Foundation for Child Development in the late 1980s.<sup>29</sup> Although the first federally funded 2Gen program, Head Start, began in the 1960s,<sup>30</sup> it was not until later that 2Gen principles were formally integrated into such initiatives. Head Start did this through strategies such as home visiting and ensuring that family members understood a child's readiness for school.<sup>31</sup>

Today, there are more than 500 organizations across the world implementing 2Gen approaches.<sup>32</sup> Organizations in all 50 states, Puerto Rico, and Guam are implementing or expressing strong interest in integrating 2Gen strategies into their policies.<sup>33</sup> Since 2012, more than 30 states and numerous community-based organizations have adopted some form of a 2Gen approach to enhance outcomes for families.

## **2Gen Best Practices**

2Gen approaches require a strong vision aimed at enhancing family well-being through the coordinated facilitation of fair access to essential economic and social systems and structures. Ascend at the Aspen Institute lists six key components of 2Gen approaches: early childhood education; K–12; postsecondary and employment pathways; social capital; health, including mental health; and economic assets.

In addition to these six components, Ascend highlights five core principles that should guide 2Gen approaches (Ascend 2019):

- 1. Measure and account for outcomes for both children and their parents.
- 2. Engage with and listen to the voices of families.
- 3. Ensure equity.
- 4. Foster innovation and evidence together.
- 5. Align and link systems and funding streams at the family level.

To be successful, 2Gen approaches must be focused on the whole family and incorporate the self-determined goals of the whole family. They must also maintain a rigorous data and performance measurement system that enables continuous feedback and improvement through frequent evaluation efforts (Bogle and Sims 2016). Together, these principles and components aim to address systemic challenges with approaches that are inclusive and innovative and that build thriving families.

# **Success of 2Gen Approaches**

2Gen approaches have been found to be an effective strategy for improving outcomes for whole families, in part because they include a variety of initiatives that measure and account for the financial, social, physical, and mental outcomes of both children and parents (Anderson et al. 2021).

For example, CareerAdvance, a career pathway training program for parents of children enrolled in Head Start, has been found to be associated with improved parent education, increased employment in the health care sector, and improvements to psychological well-being after one year, with no negative effects on parents' short-term levels of income or employment across all sectors (Chase-Lansdale et al. 2019). However, Sabol and colleagues (2019) did not find significant benefits for children of parents in CareerAdvance beyond the effects of Head Start, other than positive short-term effects for two groups of children: children whose parents were more college ready and children who were less school ready. Sommer and colleagues (2020) did find that children of caregivers in CareerAdvance had attendance rates that were 6.91 percent higher compared to a matched comparison group after one semester, as well as having lower rates of chronic absence.

Another 2Gen approach, called Opportunity NYC–Family Rewards, has also seen some positive outcomes for participating families. The program was an experimental, privately funded conditional cash transfer program with cash transfers conditioned on prespecified activities and outcomes in

children's education, families' preventive health care, and parents' employment. As a 2Gen intervention, the program is intended for parents and their school-age children. The program was found to reduce poverty and hardship, including hunger and some housing and health care hardships; increase savings and the likelihood that parents have bank accounts; and reduce the use of alternative banking institutions. It was also found to increase school attendance, course credits, grade advancement, and standardized test results among better-prepared high school students. It was found to somewhat increase families' continuous use of health insurance coverage, reduce their reliance on hospital emergency rooms for routine care, increase their receipt of medical care substantially, and increase their receipt of preventive dental care. In addition, it was found to increase employment in jobs that are not covered by the unemployment insurance system and reduce employment in unemployment insurance–covered jobs (Riccio et al. 2010).

Finally, a long-term evaluation of the Pascale Sykes Foundation's Whole Family Approach, a preventive family-led strategy that provided adults and children tools to set, plan for, and achieve goals together, which operated across 18 nonprofit collaboratives in southern New Jersey, found that families who were part of the initiative strengthened their relationships and reciprocity in responsibilities between caregivers, increased their social supports externally, and increased bonds and communication between caregivers and children (Whiting, Alger, and Villacis 2022). The researchers also found a reduction in financial challenges over time for enrolled families, improvements to child well-being, and significant improvements in children's math and language arts grades over time.

## 2Gen Schools

One form of 2Gen models is schools that provide both education and services for children and their parents/caregivers and the family as a whole, like Vimenti. Some other schools or programs that employ 2Gen approaches include the following:

• Full-Service Community Schools: In 2008, the US Department of Education launched its Full-Service Community Schools (FSCS) program. Since then, more than 120 schools have received FSCS grants, with 42 new schools receiving funding in 2022, including Vimenti.<sup>34</sup> According to the Department of Education, FSCS "provide comprehensive academic, social, and health services for students, students' family members, and community members that will result in improved educational outcomes for children." These services may take the form of early childhood education, extracurriculars, and other programs that promote family financial

- stability; mental health services; and adult education. An evaluation of FSCS led by Mathematica is under way, with findings expected in 2025.
- I Promise School: Launched in 2018 by LeBron James, the I Promise School in Akron, Ohio, is a public school that receives private supplemental funding and provides wraparound services to parents and children, including transportation supports, job supports, and child care supports. The school does not explicitly employ 2Gen language.<sup>36</sup>
- New York City Community Schools Initiative: Launched in 2014 by the New York State Department of Education, the New York City Community Schools Initiative uses a holistic strategy focused on addressing the social consequences of poverty as a means to improving student outcomes (Johnston et al. 2020). According to a RAND evaluation of the initiative, students in participating schools saw fewer absences, decreased disciplinary incidents, and improved academic outcomes.

While these schools vary in their target populations, resources, and approaches, they all provide whole families with resources as a way to address root causes of poverty and improve whole-family outcomes and families' ability to meet their goals.

Vimenti differs from other schools not only because of its 2Gen approach but also because it is a public charter school, or an *escuela pública alianza*. Charter schools differ from traditional public schools in other ways that may be independent of the 2Gen nature of the program. Charter schools can receive exemptions from a variety of rules and regulations that traditional public schools must follow, and they sometimes pursue alternative curricula and classroom strategies to serve their students (Green, Baker, and Oluwole 2013).

In the Puerto Rico context, as guided by the Educational Reform Act, or Ley 85-2018, charter schools are public nonprofit entities that must abide by the PRDE mandates and reporting requirements for all public schools.<sup>37</sup> Article 13.05 of the Educational Reform Act established that Puerto Rico charter schools have their own independent administrations as an *Entidad Educativa Certificada*, or a certified educational entity. As such, they may not receive the same funding allocation for classroom and administrative expenses that other traditional public schools receive (according to Article 7.01, charter schools' funding is split 70 percent for classroom and 30 percent for administration). Vimenti alleges that their allocated per pupil amount has consistently been below that of traditional public schools since 2018. Charter schools are able to receive and seek out grant funding and donations from private and philanthropic sources, as well as seek "third sector" partnerships and collaborations to provide services that go beyond just schooling. Interestingly, Ley 85-2018's provisions

allowing and encouraging schools to expand third-sector partnerships also apply to traditional public schools.

Because Vimenti is a public charter school, its method of enrollment may have selection bias implications for this evaluation. Families that have higher incomes or are more education-motivated may be more likely to apply to enroll their children at Vimenti; alternatively, the selection bias may flow the other way: because of its location, Vimenti may enroll a higher share of children from lower-income or less-education-motivated families.

The direction of selection bias could result in either more or less academically advanced students enrolling at Vimenti at the beginning of the school year. For example, a 2018 study found that nationwide, charter schools are less likely to respond to interested prospective families with a student with significant special needs, a history of poor behavior, or low achievement (Bergman and McFarlin 2018). While public charter schools are legally required to serve students with disabilities, challenges in the application process may limit families with children with special needs from successfully applying to and enrolling at charter schools (Bergman and McFarlin 2018); this would mean that the starting pool of students may be inflated toward higher performance. However, another study in Arizona found that students who transfer from district to charter schools have the lowest levels of prior academic achievement compared to students who made other types of school-choice decisions, suggesting that students are actually more likely to start out as lower performing at charter schools, so selection bias may run in the opposite direction (Garcia, McIlroy, and Barber 2008). These factors may mean that students in charter schools are fundamentally different from students in public schools, but the direction of the selection bias is ultimately unknown and thus could flow in either direction or both directions at the same time.

## Vimenti 2Gen Model

Vimenti is an integrated service center in Puerto Rico for whole families that uses a 2Gen approach. Their mission is to eradicate child poverty in Puerto Rico, which stood at 55 percent in 2021.<sup>38</sup>

Vimenti's services are organized around three pillars: education, social development, and economic development. Vimenti operates a school that opened in August 2018 with kindergarten and first grade classrooms and has added a new grade each year. At the time of the analysis for this study (the 2022–2023 academic year), Vimenti offered kindergarten through fifth-grade classes. It is currently phasing in to the junior high school level. The school is located in the Ernesto Ramos Antonini public housing complex and serves a neighborhood in extreme poverty.

Vimenti's logic model is shown in figure 4. The logic model outlines the inputs, or resources and data, that are used to achieve the goals of the organization; the activities, or the actions taken to implement the program; the outputs, or the evidence of program implementation, such as deliverables or numbers of activities; and the short-, medium-, and long-term outcomes, or the anticipated results of the program.

# FIGURE 4

# Vimenti's Logic Model

Goal: Use a whole family 2Gen model to eradicate child poverty through education, economic development, and social development programs

# Outcomes (Benefits, Impacts) for Vimenti Families

Inputs					
(resources and data to		Outputs			
achieve goals)	Activities	(products of activities)	Short-term	Medium-term	Long-term
Boys & Girls Clubs of Puerto Rico board Investors/stakeholders  Services Vimenti after-school programs School meals Equipment, materials, and facilities K-5 curricula Human resources Social and education directors School principal Vimenti teachers Vimenti psychologist Health coordinator Nurse Family case manager Enrollment coordinator Professional development plan  External Programs and Services External Alliances Data Intake family assessments Student report cards Student records School climate survey	School (K-5)  Daily class sessions Student tests and evaluations Parent-teacher meetings School meetings Student/parent school activities such as culture and recreational activities Summer school program Health Health screenings and assessments Healthy and Ready to Learn program Health fairs  After-School After-school tutoring and activities  Social Family assessment Family action plan Housing Economic (employment/finance) Health Transportation Education	School (K-5)  Number of children enrolled at Vimenti school Student attendance rate Test scores in English, reading, basic subjects Number of students participating in summer program Number of parent-teacher meetings Number of parents attending school meetings and activities Number of parents volunteering Health Number of students screened Number of student and parent workshops Number of services to reduce health barriers Number of health fairs Number of referrals After-School Number of Vimenti students participating in after-school program	School (K-5) Increased attendance rate Increased proficiency in core areas Increased literacy skills Increased grade passing rate  After-School Reduced academic achievement gap  Social Parents' increased knowledge and awareness of academic benefits and academic behavior of child Increased family stability (e.g., housing, transportation, child care) Increased number of	School (K-5) Increased proficiency on state achievement exams Increased number of students meeting developmental milestones  After-School Reduced academic achievement gap  Social Increased job/school and family stability Increased parenting skills  Education and Training (Adults) Increased number of parents with high school diploma or in postsecondary	<ul> <li>Increased student proficiency / academic achievement</li> <li>Reduced number of families living in poverty Increased family economic security</li> <li>Improved child and family well-being</li> </ul>

Inputs (resources and data to achieve goals)	Activities	Outputs (products of activities)	Short-term	Medium-term	Long-term
	Social (family relationship) Parents' sessions with family case managers (e.g., meetings, home visiting, others) Family retreat Referrals to Vimenti or external programs/services Workshops Education and Training (Adults) Referrals for high school completion or postsecondary education Employment training programs Economic Job placement and job search training/services Identification of job opportunities and employers	Social  Number of family assessments  Number of parents with a family action plan  Number of action plan goals completed  Number of parents' follow-up sessions with case managers  Number of referrals to services  Number of parents participating in Vimenti programs or external programs/services  Number of workshops  Education and Training (Adults)  Number of parents completing high school or postsecondary studies or employment training  Economic  Number of parents participating in employment training  Number of poreferrals  Number of job referrals  Number employed  Number of workshops	parents who meet their family action plan's goals  Education and Training (Adults)  Economic Increased number of parents engaged in job search, employment, or education	education/ training  Economic  Increased number of parents who enter and retain employment or get a better job Increased family income	

Source: Vimenti.

#### **EDUCATION PILLAR**

The education pillar is composed of three programs: (1) the school, (2) after-school academic support for children and youth, and (3) postsecondary support for local teens and their parents.

The school is the entryway to the full family 2Gen model. Children receive a high-quality academic program, and their parents receive intensive coaching. For the 2022–2023 school year, Vimenti had 195 students (34 per grade for kindergarten through fourth grade and 25 in fifth grade). School hours are from 8:00 a.m. to 3:00 p.m. All schoolchildren are required to participate in the after-school program from 3:30 to 5:30 p.m.

The education pillar also includes the after-school academic support program and the postsecondary support program. The academic support program serves all children in the school, along with preteen youth from the Ernesto Ramos Antonini housing project, the neighborhood in which it is located, and nearby communities. It provides tutoring and arts, cultural, and recreational activities. It also offers clubs organized around specific interests such as theater and recycling, among others. From 3:30 to 7:30 p.m., the program serves Vimenti schoolchildren and community children and youth.

The after-school academic support program in the 2022–2023 school year was staffed by the program coordinator, an arts teacher, and five tutors. The after-school program also draws resources from the social pillar for recreational activities and workshops, and from the economic pillar for entrepreneurship, career, technology, and English instruction.

The postsecondary program serves teens (from seventh grade on) from the Ernesto Ramos Antonini project and nearby communities, providing them with needed supports to help them pursue a postsecondary education, such as assistance filling out financial aid applications, orientations for parents, mentors, college visits and orientations, aptitude tests, and college entrance test practice. The program also provides support to students coming out of the Vimenti program and to those already attending college. The program is staffed by the coordinator. Similar to the after-school program, it draws resources from the social pillar for recreational and social activities and from the economic pillar for entrepreneurship and career programs.

## **ECONOMIC PILLAR**

This pillar addresses economic outcomes through employability and entrepreneurship programs and services. Its programs are divided into services to children, preteens, teens, and adults. The people served by these programs include the parents of students attending the school, the parents of children and youth participating in the after-school program, and other youth and adults from the community.

Examples of programs for youth within this pillar include the Project Makers entrepreneurships program for children and teens and the Job Ready tourism culture career program.

The career/employability program trains adult workers for jobs in the hospitality and tourism industry, with 125 contact hours using the Generation curriculum. For teens, the career curriculum is about job readiness, with the Job Ready program. Children ages 6 to 12 are trained through the Tourism Culture curriculum. The entrepreneurship program seeks to develop entrepreneurship competencies and is divided into three levels by age: preteen levels 1 and 2, and teen level 3. The curriculum starts at age 9. After-school youth program participants who complete level 3 and want to pursue creating their own business can enter into this program, as can other adults. Another component of the economic development pillar is the teaching of technology skills and English language to children and adults. During the 2022–2023 school year, the economic development pillar was staffed by the director, the coordinator, a mentor, the leader of entrepreneurship, a job mentor, a technology instructor, an English instructor, and a career instructor.

#### **SOCIAL PILLAR**

The social pillar addresses the social and health barriers faced by children and adults. This pillar (1) provides case management for the parents of children in the school, including a family assessment and appropriate levels of intervention, (2) helps families navigate the public benefits system, (3) performs health screenings for the schoolchildren, (4) provides referrals to job training and employment services, (5) takes a family health history of schoolchildren, (6) offers health and social workshops to after-school youth program participants and community members, (7) creates alliances with health providers to bring services to the school and community, and (8) provides sports and recreational services to children in the after-school program. The social pillar is staffed by the director, five case managers for the parents of schoolchildren, a health coordinator, a nurse, and four recreational leaders.

Case managers handle 25 to 35 cases each and continue with the families as their children move to higher grades in the school. After administering a family assessment questionnaire to the schoolchildren's parents at the beginning of each semester, the case managers classify the families as stable, moderate, or vulnerable. The classification is based on the information obtained from the assessment questionnaire in six areas: income, employment, housing, transportation, food security, and support networks.

Vulnerable families receive four interventions monthly, including one home visit. The interventions are one-on-one meetings with the case manager. Parents are also contacted by phone. Case managers assist parents with many of the day-to-day problems they confront; help parents navigate government

systems and advise them on their duties and rights; refer parents to needed services inside and outside Vimenti; advise parents about ways to complete high school or pursue postsecondary education and training opportunities; and provide help filling out forms for work, scholarships, and benefits.

# Research Methods

In our evaluation of the Vimenti 2Gen model, we used a mixed-methods approach to answer the research questions listed in table 2. We gathered data through a combination of interviews, focus groups, and surveys. We then analyzed these data using a combination of qualitative and quantitative methods, with a focus on understanding whether Vimenti's 2Gen model helped whole families to have better educational and economic outcomes and become healthier.

TABLE 2
Research Questions and Associated Data Collection Methods

	Data Collection Method			
Research questions	Survey	Focus groups	Key informant interviews	
What effect does the Vimenti 2Gen program have on the educational attainment of youth; the economic outcomes of parents; and the mental, physical, and socioemotional health of the family as a whole?	Х	Х		
How closely does Vimenti adhere to 2Gen principles, and to what extent might this model explain differences in Vimenti students' and families' outcomes compared to control group outcomes?		X	X	
How satisfied are families (Vimenti and comparison families) with the education, services, and programs available to their families at their school and, in the case of comparison families, from other service providers?	Х	Х	X	

Source: Urban Institute.

#### BOX 1

## **Local Engagement**

The research team received invaluable on-the-ground support from Sandra Espada-Santos, Inc. (SES), which played a crucial role in the successful completion of the study. SES, an organization specializing in consultative services in education, policy, and nonprofit organization, provided comprehensive assistance throughout the evaluation process, which included the following:

- obtaining authorization from the PRDE to conduct research activities for the study within selected public schools
- assisting with outreach and enrollment, including the selection of comparison schools
- collecting and submitting copies of paper or electronic consent forms
- engaging with potential comparison-group school directors to secure permission for survey recruitment
- organizing and scheduling in-person recruitment events at both treatment and comparison schools
- coordinating outreach efforts and logistics for surveys, interviews, and focus groups
- managing data collection through Qualtrics for all surveys conducted on paper
- facilitating the translation of materials into Spanish
- providing support and guidance to respondents regarding survey completion through various channels such as in-person assistance, WhatsApp, phone calls, and text messages
- distributing survey incentive gift cards to participants
- assisting in the coordination and execution of "data interactives" (interactive presentations where study findings were shared with participants)
- reviewing all protocols and products related to the study and contributing to the drafting of relevant sections

# **Study Enrollment and Recruitment Process**

This study was conducted during the 2022–2023 school year. The goal of the study enrollment and recruitment process was to generate a treatment group of Vimenti families with children in a range of grades and a comparison group that was as comparable as possible to the Vimenti families.

To do so, the research team first selected comparison schools that were located in the San Juan educational region and in neighborhoods similar to the neighborhood in which Vimenti is located. We then recruited families into the comparison group based on selection criteria that mirrored characteristics of Vimenti families, including that they had at least one child enrolled in kindergarten through fifth grade at a public elementary school in the San Juan metro area and that their household income was \$30,000 or less. We gave preference to families with younger children, as they would have reduced exposure to services prior to baseline, and we undertook an iterative enrollment process in

which characteristics such as grade and income were monitored on a weekly basis and outreach was amended to target families with characteristics that were less represented and/or to increase the likelihood that they would match the characteristics of the Vimenti families that were enrolling in the study (if, for instance, a third of the families that had enrolled from Vimenti had children in kindergarten, and enrollment in the comparison group was lower for kindergarten, the recruiters would prioritize outreach to families with kindergarteners). The research team excluded from our comparison group families with children who attended Montessori schools, as these schools may offer services that go beyond those of a traditional public school. We also gave preference to schools that were near or adjacent to a Boys & Girls Club, those that were of a similar size to Vimenti, and those with close proximity to a public housing project, to mirror the characteristics of Vimenti families.

The beginning-of-year survey was fielded at the same time that parents were enrolled in the study and consented to potential participation in the end-of-year survey and focus groups.

Because the enrollment for both Vimenti and comparison group families began in the summer of 2022, significant care was taken to put in place COVID-19 protocols that were approved by both our institutional review board and the PRDE. These COVID-19 protocols resulted in stricter regulations around how and when study enrollment could be conducted, especially on school property. Below, we detail the family and school characteristics we used to prioritize recruitment efforts, keeping the COVID-19 limitations in mind.

Because study enrollment and beginning-of-year survey consent were conducted simultaneously, we incorporated eligibility criteria as the first portion of the beginning-of-year survey. If potential participants did not meet the eligibility criteria, they were not asked to complete the survey. We established three primary criteria:

- whether someone was a parent or primary caretaker of a student in kindergarten through fifth grade
- whether someone had a yearly household income of \$30,000 or less
- whether someone lived in the San Juan metropolitan area

In enrolling students, Vimenti does not limit parent income. However, we chose to limit income in our study since most of the Vimenti families had incomes of \$30,000 or less. Vimenti also uses a lottery in enrolling students. In selecting comparison families to enroll in our study, we prioritized families who had not been selected to enroll their children at Vimenti but who had been added to Vimenti's waiting list. However, we were not able to recruit only families from the waiting list because that would have generated too small of a sample size.<sup>39</sup>

In the survey, we also asked parents and caretakers to respond to questions about outcomes for their youngest child who was in at least kindergarten. We asked parents to respond to questions about their youngest child to standardize the child parents spoke about when they had multiple children.

Additionally, we focused our enrollment on certain schools that were likely to serve families who were similar to the families Vimenti was serving. Schools were selected in collaboration with the PRDE's Education Research and Innovation Center and with public schools in the area. The school priority characteristics included public elementary schools in the San Juan educational region that

- were not designated as Montessori,
- were of comparable size to Vimenti (by grade), and
- were near or adjacent to a Boys & Girls Club or
- were located within or adjacent to a public housing project.

We selected public schools in the San Juan region that were not Montessori schools as comparison schools to ensure that comparison students were receiving the services offered in traditional public schools. Out of the list of non-Montessori public schools, and to abide by the PRDE COVID-19 protocols, we selected four priority schools for our local research team to visit and secured permission from school directors to set up in-person tables to recruit participants. Since Vimenti is based in the Ernesto Ramos Antonini public housing project, and the school has its origins as an after-school Boys & Girls Club, we prioritized public schools that were also likely to serve students who live in public housing projects and who were within the footprint of a nearby Boys & Girls Club. In addition to tabling at some local public schools, the local research team recruited study participants at the Boys & Girls Club location nearest to Vimenti.

Beginning-of-year survey recruitment took place both in person and virtually. In-person recruitment took place at school open houses in August and September 2022 to capture demographics and measures at the beginning of the school year, and on school premises at dates agreed to by comparison school directors. Virtual recruitment took place through QR codes or flyers that were posted at Vimenti and priority comparison schools. Parents who connected with the research team at tabling events but were not able to complete the survey immediately were given the opportunity to complete the survey virtually. All surveys were shared virtually through a Qualtrics link on WhatsApp. Some paper versions were also printed out and administered during in-person recruitment for the beginning-of-year survey.

The in-person and Spanish language focus groups were scheduled during March 2023. At the end of the beginning-of-year survey, respondents were asked if they would like to participate in focus groups. Those who selected "yes" were recruited via WhatsApp messaging, text messaging, and phone calls to participate in focus groups. Further details on the composition of the focus groups are included in the "Data" section below. Interviews of the participating schools' directors and staff were also scheduled concurrently with focus groups; these staff were recruited at the same time as permission was obtained to host in-person focus groups on school property.

End-of-year survey recruitment took place between April and June of 2023, to capture outcomes at the end of the school year. Because parents were already enrolled in the study, recruitment occurred primarily through WhatsApp messaging, text messaging, and phone calls.

All survey participants were provided a \$20 incentive for each study activity they participated in.

Further details about the recruited study population are included in the "Beginning-of-Year Equivalence and Outcome Response Rates" section.

#### Data

Our evaluation includes two primary sources of data: survey data (beginning-of-year and end-of-year surveys) and qualitative data (interviews and focus groups). Prior to our completing the analysis and drafting the report, the findings were shared and co-evaluated at two data interactives, one with Vimenti families and one with comparison group families.

### **SURVEYS**

We conducted both a beginning-of-year and end-of-year survey to evaluate how Vimenti and comparison schools affect the outcomes of parents and children in kindergarten through fifth grade along the education, social, and economic pillars. The beginning-of-year survey was conducted between August and October of 2022, and the end-of-year survey was conducted between April and June of 2023. The beginning-of-year and end-of-year surveys were available via Qualtrics (either in person on tablets or via a messaged link) or paper form. The surveys collected information on current housing and neighborhood, financial hardship, family relationships, health, student educational outcomes, and overall satisfaction with the child's school and its resources. The survey was drafted in English and then translated into Spanish. Surveys were completed either on paper, on the participant's cell phone, or on tablets. Following the survey, each participant was given a \$20 gift card as a thank-you. Ninety-two Vimenti families and 99 comparison families participated in the survey at the beginning of the school

year, and 85 Vimenti and 61 comparison families participated in the survey at the end of the school year, for a response rate of 92 percent and 61 percent, respectively. Additional details about the survey respondents are provided in the "Beginning-of-Year Equivalence and Outcome Response Rates" section.

# **INTERVIEWS AND FOCUS GROUPS**

To provide additional nuance about how effectively the 2Gen model is performing in comparison to other schools in the area, we conducted focus groups and interviews with parents of Vimenti students, parents of students in traditional public schools, school staff, and a 2Gen expert in Puerto Rico. These interviews and focus groups also provided insights into how services are provided.

The qualitative data collection, which took place in March 2023, included the fielding of the six proposed focus groups and the six proposed interviews.

SES led the recruitment for and coordination of the focus groups, staff interviews, and key informant interviews, which occurred via email, text, WhatsApp, and phone calls. To recruit parents, we used the contact information that we had already obtained from survey participants (they had consented to its use for future study involvement).

The parent focus groups (a total of six), and staff interviews (a total of four) were conducted by the Urban team during site visits and took place at a space associated with Vimenti (for the treatment group focus groups) and a local Boys & Girls Club (for the comparison group focus groups). The interviews with key subject matter experts, one with a national 2Gen expert and one with staff from the PRDE, were conducted virtually. All interviews, six in total, were no longer than one hour and took place individually.

The focus group participants were recruited from the list of 200 study participants. We conducted six focus groups, each composed of up to 10 parents, as listed in table 3.

TABLE 3
Focus Group Composition

		Approximate number of
Qualitative data collection	Description of qualitative collection	participants
K-1st grade parents focus	One Vimenti and one comparison family	Vimenti K-1st grade parents: 5
groups	focus group on the experiences of caretakers with children in K-1st grade	Comparison school 4 K-1st grade parents: 5
2nd-5th grade parents focus	One Vimenti and one comparison family	Vimenti 2nd–5th grade parents: 10
groups	focus group on the experiences of caretakers with children in 2nd-5th grade	Comparison school 2 parents: 7
Special education focus	One Vimenti and one comparison family	Vimenti special education parents:
groups	focus group on the experiences of	10
	caretakers with children in any grade	Comparison school 4 special
	but in special education programming	education parents: 5
Staff interviews	Interviews with staff at Vimenti and one	Vimenti staff: 4
	comparison school	Comparison school 2 staff: 3
Expert interviews	Interviews with Puerto Rico	2Gen expert: 1
	Department of Education and 2Gen	Puerto Rico Department of
	experts	Education staff: 2

Source: Framework developed by the authors.

#### **DATA INTERACTIVES**

We also conducted two data interactives (one with Vimenti families and one with comparison families) to present the findings to study participants and receive their feedback about the findings and whether we were interpreting them properly. A data interactive is a means of sharing data and research findings with stakeholders. The purposes of a data interactive are to share key data and findings with community residents and program participants, to ensure a more robust analysis and understanding of the data, to help inform better programming and policies to address both the strengths and the needs of a particular community or population, and to inspire individual and collective action among community agents.

We conducted the first data interactive, which included only comparison group families, virtually. This was because the comparison families were all in different locations and the team thought it would be easier for them to attend if it were available online rather than at a school that might be far from their location. During this data interactive, the researchers presented the findings and then asked participants to share their thoughts on the findings and ask questions on the topics at hand.

The second data interactive was conducted in a hybrid fashion (the participants attended in person and the research team was connected virtually) in February 2024. This data interactive was with Vimenti families and consisted of a virtual presentation of the findings and then an in-person "walk" around the room, where participants observed findings that were printed on posters and discussed those findings with data interactive facilitators.

Findings from the data interactives were incorporated into the final report to add nuance to our interpretations.

# **Empirical Methods**

We used two primary methods for estimating the relationship between the 2Gen model and outcomes of interest. The first is a fixed-effects, difference-in-differences model that estimates whether the characteristics of Vimenti families changed more than those of the comparison group families. The second is *t*-tests of differences in outcomes at the end of the school year. The difference-in-differences model allows us to remove any time-invariant unobserved heterogeneity (including time-invariant selection bias) that exists for each individual that may be related to their outcomes, but it may underestimate the effect of the Vimenti program since many families were treated before the beginning-of-year survey. The *t*-tests would show any effects that emerged prior to the beginning-of-year survey, but they may be biased by selection into the Vimenti program.

For the difference-in-differences model, we estimate the following two-way fixed-effects equation:

$$Y_{i,t} = \beta_A(T_i * Post_t) + \gamma_i + \lambda_t + \varepsilon_{i,t}$$

where  $Y_{i,t}$  is the outcome variable for participant i in year t;  $\beta_A$  is the treatment effect of participating in Vimenti;  $T_i$  is a dummy variable for treatment;  $Post_t$  (or Pre) is an indicator of whether the survey is the post or pre survey;  $\gamma_i$  and  $\lambda_i$  are individual and year fixed effects, respectively; and  $\mathcal{E}_{i,t}$  is the error term. We calculate standard errors clustered at the individual level that are robust to heteroskedasticity and arbitrary forms of error correlation.

The difference-in-differences regression model allows us to observe changes in outcomes from the beginning of the school year to the end of the school year. This statistical approach allows us to remove unobserved differences between Vimenti and traditional school families, such as motivation levels, that may influence their outcomes directly and may bias the results. It will not account for selection bias that may make Vimenti families more likely than non-Vimenti families to improve over the course of the school year, but it will help account for any time-invariant differences between the two groups. The approach is limited in that many of the Vimenti families in the study had already been treated prior to the beginning-of-year survey, since their children had already attended the Vimenti school in prior years (for example, some families had their youngest child in the third grade). This means that some of the effects may be attenuated (or closer to zero) than they are in reality. For this reason, we also undertake *t*-tests of measures from the end-of-year survey to observe how outcomes vary between Vimenti and non-Vimenti students at the end of the year.

To account for multiple outcomes and the probability of a type I error (a "false positive"), we combine individual measures into composite indices, as shown in the following section. This reduces concerns about false positives for individual variables, similar to the methods used by Kling, Liebman, and Katz (2007) and Karlan and Valdivia (2011).

#### **EDUCATION PILLAR OUTCOME MEASURES**

The primary composite measures that we examined for the education pillar include academic performance for kindergarten through first grade, academic performance for second through fifth grade, school absenteeism, motor skills and spatial reasoning, and parent education. Table 4 shows the measured educational outcomes and the survey questions used to build the composite outcome measures.

# TABLE 4 Measured Educational Outcomes

Survey measures used to assess effect of Vimenti's 2Gen model on educational outcomes

Primary outcomes	Questions
K-1st grade academic performance	<ul> <li>(K-1st grade) How well does your child do the following activity: Identify or name at least 10 letters in the alphabet?</li> <li>(K-1st grade) How well does your child do the following activity: Read at least four simple words?</li> <li>(K-1st grade) How well does your child do the following activity: Follow the text in the correct direction, left to right, and up to down, even if they can't read?</li> <li>(K-1st grade) How well does your child do the following activity: Write at least three letters of their name?</li> <li>(K-1st grade) How well does your child do the following activity: Write a simple word?</li> <li>(K-1st grade) How well does your child do the following activity: Know the names and symbols of numbers 1-10?</li> <li>(K-1st grade) How well does your child do the following activity: Know that a one-digit number is bigger than another one-digit number (for example, 4 is</li> </ul>
2nd-5th grade academic performance	<ul> <li>greater than 2)?</li> <li>(2nd-5th grade) How well does your child do the following activity: Understand the difference between a verb, noun, adjective?</li> <li>(2nd-5th grade) How well does your child do the following activity: Read a reading-level-appropriate book?</li> <li>(2nd-5th grade) How well does your child do the following activity: Write a story with a beginning, middle, and end?</li> <li>(2nd-5th grade) How well does your child do the following activity: Know the names and symbols for numbers 1-100?</li> <li>(2nd-5th grade) How well does your child do the following activity: Add and subtract simple numbers mentally?</li> <li>(2nd-5th grade) How well does your child do the following activity: Add or subtract numbers of four digits?</li> <li>(2nd-5th grade) How well does your child do the following activity: Round a number to the nearest 10 (for example, rounding 37 to 40)?</li> <li>(2nd-5th grade) How well does your child do the following activity: Recognize three-dimensional geometric shapes?</li> </ul>

Primary outcomes	Questions
Chronic absenteeism <sup>40</sup>	During the last 30 days, with what frequency has your child been absent from school?
Motor skills and spatial reasoning	<ul> <li>How well does your child do the following activity: Pick up an object with two fingers, like a pebble or stick, from the ground?</li> <li>How well does your child do the following activity: Know the difference between a tall and short animal, when shown an example (for example, a tiger is taller than a cat)?</li> <li>How well does your child do the following activity: Know the difference between yesterday, today, and tomorrow?</li> </ul>
Parent education	What is your highest level of schooling?

**Source:** Survey protocol constructed by authors. The academic and motor skills indices were drafted by drawing from the literature, including from Pushparatnam et al. 2021.

**Note:** The overall academic index was calculated as a weighted index of the combination of the responses for the academic index questions for K–1st graders and 2nd–5th graders.

Because many of the children in the survey were under the age of the PRDE's Puerto Rico-wide testing (third grade), we used survey measures to proxy for educational outcomes instead of using test score data. We drew our questions from a validated World Bank survey of early childhood academic performance and motor skills to assess literacy and numeracy (Pushparatnam et al. 2021). Given that most of the "least treated" children in the beginning-of-year survey were in kindergarten or first grade, and because educational attainment questions were selected from kindergarten through first-grade surveys and second- through fifth-grade surveys separately, we report academic differences for kindergarten through first-grade families and second- through fifth-grade families separately.

### ECONOMIC PILLAR OUTCOME MEASURES

For the economic pillar, we assessed the relationship between the Vimenti program and job quality, job tenure, entrepreneurship, the number of new trainings parents participate in, family income, financial health, housing, and transportation (table 5).

TABLE 5

Measured Income and Employment Outcomes

Survey measures used to assess effect of Vimenti's 2Gen model on income and employment outcomes

Primary outcomes	Questions		
Employed	How many hours do you work regularly in a week? (Zero or more than zero)		
Family income	What is your household's yearly income, before tax?		
Job quality	<ul> <li>Is your work a fixed schedule or does it vary from week to week?</li> <li>In the last year, have they increased or reduced your hours at work?</li> <li>In the last year, have you received a raise?</li> <li>In the last year, have you received a promotion at your job?</li> </ul>		
Job tenure	How long have you been at your current job?		
Entrepreneurship	In the last year, have you established your own business?		

<b>Primary outcomes</b>	Questions				
New skills	<ul> <li>In the last year, have you gained new skills to acquire a new job?</li> <li>Are you currently taking a course, workshop, or certification, or attending university?</li> </ul>				
Financial health	<ul> <li>How do you feel about your household's financial situation?</li> <li>Does your household have difficulty with the following: Utility payments?</li> <li>Does your household have difficulty with the following: Grocery bills?</li> <li>Does your household have difficulty with the following: Rent or mortgage payments?</li> <li>Does your household have difficulty with the following: Public or private transport?</li> <li>Does your household have difficulty with the following: Child care?</li> <li>How likely is it that you could find the money to cover a \$500 emergency?</li> </ul>				
Car ownership	What are your primary forms of transportation?				
Housing	<ul> <li>What type of housing do you have? Select from the following:</li> <li>Own paid home</li> <li>Own home with mortgage</li> <li>Rent without subsidy</li> <li>Rent with subsidy (Section 8)</li> <li>Public housing authority</li> <li>Living temporarily with a family member or friend</li> <li>Living in family or friends' home without rent</li> <li>Living in a shelter</li> </ul>				

**Source:** Survey protocol constructed by authors.

# SOCIAL PILLAR OUTCOME MEASURES

Vimenti's social pillar focuses on emotional intelligence and health and wellness; therefore, the indices we created to measure effects on this pillar focus on child physical health, parent mental and physical health, access to health screenings, access to quality health care, child behavior and emotional intelligence, and positive parent behaviors (table 6).

# TABLE 6 Measured Health, Social, and Well-Being Outcomes

Survey measures used to assess effect of Vimenti's 2Gen model on health, social, and well-being outcomes

Primary outcomes	Questions
Child physical health	<ul> <li>In general, how is the physical health of your child?</li> <li>In the last year, has your child been sick enough that they needed medical attention?</li> </ul>
Parent mental and physical health	<ul> <li>In general, how is your physical health?</li> <li>In the last year, have you been sick enough that you needed medical attention?</li> <li>In the last year, have you had difficulty doing your job or daily activities due to mental or emotional health issues, including feeling sad, anxious, nervous, euphoric, depressed, or other?</li> </ul>

Primary outcomes	Questions
Access to health screenings	<ul> <li>When was the last time you took your child for one of the following: Auditory screening?</li> <li>When was the last time you took your child for one of the following: Dental screening?</li> <li>When was the last time you took your child for one of the following: Vision screening?</li> <li>When was the last time you took your child for one of the following: Pediatric visit?</li> <li>When was the last time you took your child for one of the following: Psychological visit?</li> </ul>
Access to quality health care	<ul> <li>Does your family have medical insurance?</li> <li>If your child has been sick enough to need medical attention, what medical attention were you able to acquire?</li> <li>If you have been sick enough that you needed medical attention, what medical attention were you able to acquire?</li> <li>If you have had difficulty doing your job or daily activities due to a mental or emotional health issue, have you visited a mental health professional (like a therapist, psychologist, psychiatrist, therapist)?</li> </ul>
Child behavior and emotional intelligence	<ul> <li>During the last 30 days, have you received complaints from teachers about your child's behavior?</li> <li>How well does your child do the following activity: Adjust easily to transitions (for example, adjusting to a new teacher or new classroom)?</li> <li>How well does your child do the following activity: Accept responsibility for their actions?</li> <li>How well does your child do the following activity: Calm down after an exciting activity?</li> <li>How well does your child do the following activity: Get along easily with the kids who they play with?</li> <li>How well does your child do the following activity: Continue working until they finish a task?</li> <li>How well does your child do the following activity: Stop an activity when they are asked to?</li> <li>How well does your child do the following activity: Plan in advance?</li> <li>How well does your child do the following activity: Recall all of the instructions when asked to do various tasks?</li> <li>How well does your child do the following activity: Pay attention when they are doing an activity?</li> </ul>
Positive parent behaviors	<ul> <li>With what frequency do you do the following activity with your child: Read to the child?</li> <li>With what frequency do you do the following activity with your child: Reinforce school subjects at home?</li> <li>With what frequency do you do the following activity with your child: Participate in activities?</li> <li>With what frequency do you do the following activity with your child: Speak with teachers?</li> <li>With what frequency do you do the following activity with your child: Ensure that your child does not get in trouble?</li> <li>With what frequency do you do the following activity with your child: Ensure that your child attends school?</li> </ul>

 $\textbf{Source:} \ \mathsf{Survey} \ \mathsf{protocol} \ \mathsf{constructed} \ \mathsf{by} \ \mathsf{authors}.$ 

# Beginning-of-Year Equivalence and Outcome Response Rates

Maintaining demographic similarity between the Vimenti families and the comparison families in the beginning-of-year survey was crucial for ensuring the validity of any conclusions drawn from the study. If we have comparability, we can minimize the influence of selection bias, which occurs when certain characteristics of the participants influence the outcomes independently of the intervention being studied. If the demographics are similar at the outset, it is more likely that any observed differences in outcomes can be attributed to the intervention itself rather than preexisting differences between the groups.

Likewise, maintaining a high end-of-year survey response rate, especially across various subgroups, was critical to ensure the reliability and representativeness of the data collected. A high response rate reduces the risk of nonresponse bias, where the characteristics of those who choose not to respond differ systematically from those who do respond. A high response rate across different demographics can give us more confidence that any observed changes in outcomes are not due to certain groups dropping out of the study at greater rates, which could skew the results.

During the beginning-of-year survey, 92 surveys were completed by participants from the treatment group, and 99 surveys were completed by those in the comparison group, resulting in a total of 191 unique surveys. In the end-of-year survey, 85 surveys were completed by the treatment group and 61 by the comparison group, totaling 146 unique surveys. Table 7 provides a summary of responses for Vimenti and comparison group families, broken down by comparison school.

TABLE 7
Schools Represented in Beginning- and End-of-Year Surveys
Frequency of students in each of the participating schools in the beginning-of-year and end-of-year survey

School	Beginning-of-year frequency	End-of-year frequency
Treatment	,	
Vimenti	92	85
Comparison		
Comparison school 1	23	14
Comparison school 2	19	13
Comparison school 3	17	9
Comparison school 4	28	20
Other comparison schools	12	5
Total comparison	99	61

Source: Authors' analysis of beginning-of-year and end-of-year surveys.

**Note:** These frequencies were calculated before eliminating the survey responses of individuals who completed only one of the two surveys.

We conducted chi-square tests and *t*-tests of beginning-of-year equivalence to determine the extent to which the characteristics of families are independent from the type of school they attended (Vimenti or comparison) before the 2023 school year. In other words, these tests help us determine whether Vimenti and comparison group families were relatively similar before the school year began.

These tests show that some characteristics of Vimenti and comparison group families are independent from school type: grade, special education status (table 8), age, sex, and race (table 9). However, parents' highest level of education and employment level were not shown to be independent from school type in the beginning-of-year survey, suggesting that Vimenti parents were already more likely to be employed or to have attained a higher level of education at the start of the school year. It is important to note that this disparity may partially stem from the fact that a significant portion of Vimenti families had already undergone treatment in prior years. 41

TABLE 8

Beginning- and End-of-Year Survey Demographics of Respondents' Youngest K-5 Child

Frequency of students in grades K-5 and in special education

	Beginning-of-Year Survey Frequency of Demographics of Students		End-of-Year Survey Frequency of Demographics of Students		
	Vimenti families	Comparison families	Vimenti families	Comparison families	
Total students	92	99	85	61	
Grade					
Kindergarten	22	25	18	12	
First grade	13	18	11	10	
Second grade	18	13	19	9	
Third grade	11	18	11	12	
Fourth grade	15	12	14	9	
Fifth grade	13	13	12	9	
Special education					
Yes	41	38	47	30	
No	51	61	38	31	

Source: Authors' analysis of beginning-of-year and end-of-year surveys.

**Note:** Chi-square tests of independence show that both grade composition and distribution in special education are independent from treatment or comparison group status in the beginning-of-year and end-of-year surveys. These frequencies were calculated before eliminating the survey responses of individuals who completed only one of the two surveys.

TABLE 9
Beginning-of-Year Survey Demographics of Survey Respondents
Median age and share by sex, race/ethnicity, education, and employment status

Beginning-of-Year Survey Frequency of Demographics of Survey Respondents End-of-Year Survey Frequency of Demographics of Survey Respondents

	Treatment	Comparison	Treatment	Comparison
	group	group	group	group
Median age	38	36	39	40
Sex				
Female	78%	80%	67%	62%
Male	22%	20%	33%	36%
Race				
Afrodescendiente, Negra/o				
(Black)	36%	35%	37%	33%
Blanca/o (white)	33%	44%	31%	49%
Puertorriqueña/o, Boricua,				
Caribeña/o (Puerto Rican or				
Caribbean)	7%	2%	5%	2%
Latina/o, Hispano/a (Latinx				
or Hispanic)	14%	15%	19%	12%
Dos o más razas (including				
Morena/o, Trigueña/o) (two				
or more races)	4%	2%	6%	0%
Other or N/A	7%	1%	2%	5%
Highest level of education				
Less than high school	8%	28%***	4%	26%***
High school diploma	28%	31%***	26%	33%***
Associate's, technical				
degree, or some college	45%	31%***	48%	33%***
Bachelor's or higher	20%	9%***	22%	8%***
Employment				
Employed	66%	51%**	75%	66%***

Source: Authors' analysis of beginning-of-year and end-of-year surveys.

Note: Chi-square tests of independence show that sex and race/ethnicity are independent from treatment or comparison group status in the beginning-of-year survey but that neither level of education nor employment are independent from treatment or comparison group status. Race and ethnicity categories were created inductively from open-ended respondent self-identification. These frequencies were calculated before eliminating the survey responses of individuals who completed only one of the two surveys. \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01..

We found that the response rate dropped more for the comparison group than for Vimenti families (table 8). We observe an 8 percent decrease in participation by Vimenti families in the end-of-year survey, and a 38 percent decrease in participation by comparison families. The breadth of this gap was not observed until after the outcome data collection concluded because a subset of Vimenti families incorrectly identified themselves as comparison families; when asked if their children were either in Vimenti or in another school, they incorrectly selected "other," and then left the fill-in-the-blank line for their school blank. After confirming with Vimenti that these parents' children were enrolled the full year

in the Vimenti program, this issue was corrected, but it resulted in a discrepancy in response rates since we targeted outreach based upon frequent review of these response rates by study arm.

Although this is a significant gap in response rates (92 percent and 61 percent, respectively), we do not observe a change in the independence of student grade, parent age, parent sex, parent race/ethnicity, parent education, or parent employment between surveys. Thus, we do not suspect that certain subgroups were less likely to participate in the end-of-year survey than others and believe overall nonresponse bias is minimal.

We elected not to use the US Census Bureau's race and ethnicity modules, which ask about race in two closed-ended questions, one of which asks the respondent to identify their race and one of which asks if they are Hispanic or not. 42 Instead of the closed-ended census questions, we presented respondents with an open-ended question about their race, with some accompanying examples in the prompt, including "Negro o Afrodescendiente" (Black), "Blanco" (white), "Asiático" (Asian), "Indígena" (Indigenous), or "Dos o más razas" (two or more races). We did not ask about ethnicity, and we did not ask people to list all races that applied. The open-ended question gave us the flexibility to explore (1) whether individuals might identify more strongly with their nationality of "Puerto Rican" or "Boricua" (another term for Puerto Rican, based on the Taino word for the island of "Borikén") rather than the explicitly asked "race," and (2) how strongly racial self-identification may be superseded by ethnicity or nationality, including for Afro-Latinos or multiracial individuals, or otherwise superseded by "mestizaje," a cultural narrative of racial mixture. 43 Just as with qualitative data, we inductively coded and reported responses to race, or read through the categories people provided and grouped them by common themes. For example, respondents who listed their race as "Negro," "Negra," "Afro," or "Afrodescendiente" were counted under the category "Afrodescendiente, Negra/o (Black)." The majority of respondents wrote in either "white" or "Black," and despite not being directly mentioned, a few listed a Caribbean-specific mixed-race category (Morena or Trigueña). Showing the fluidity of racial, ethnic, and national identification, despite not being prompted, some listed their race as either Puerto Rican / Boricua or Hispanic/Latino. While these observations cannot be extrapolated to Puerto Rico as a whole, it does open up the possibility of interesting future potential research questions about race and ethnicity in Puerto Rico and the role they might play in differential access to economic opportunity.

All beginning-of-year statistics (including demographics and outcome measures) are reported in appendix A.

# Effect of the Vimenti Program on the Three Pillars

Our first research question explores the effect of the Vimenti program on outcomes within the three primary pillars of the program: education, economic development, and social development. For each of the three pillars, we include tests of differences at the end of the school year between Vimenti families and comparison families, difference-in-differences regression results that compare changes in outcomes for Vimenti families to those of comparison families between the beginning of the year and the end of the year, and qualitative focus group and interview findings.

# **Education Pillar Findings**

Results for the education pillar show that Vimenti families have statistically significantly higher academic performance for students in kindergarten through first grade and kindergarten through fifth grade compared to comparison group families in the end-of-year survey. They also show that students in kindergarten through fifth grade have lower chronic absenteeism and greater parental educational attainment (table 10). And the difference-in-differences results show that Vimenti families improved more on chronic absenteeism throughout the school year than comparison families did. Neither the difference-in-differences regressions nor the *t*-tests on the end-of-year survey show statistical significance for the motor skills and spatial reasoning index, even when only the subset of families with children in kindergarten through first grade is considered; however, the results show that Vimenti families outperform comparison families in both cases, even if these differences are not statistically significant (positive).

TABLE 10

Differences in Educational Outcomes

Survey measures used to assess effect of Vimenti's 2Gen model on educational outcomes

	K-1st academic index (standardized)	K-5th academic index (standardized)	K–5 motor skills and spatial reasoning index	K-5 chronic absenteeism	K–5 highest achieved parent education
End-of-year survey t-test (difference between Vimenti students and comparison students)	0.490**	0.261*	0.119	-0.155*	0.296***
End-of-year survey <i>p</i> value	(0.046)	(0.055)	(0.180)	(0.066)	(0.000)
N	51	146	146	146	146

	K-1st academic index (standardized)	K-5th academic index (standardized)	K-5 motor skills and spatial reasoning index	K-5 chronic absenteeism	K-5 highest achieved parent education
Difference-in- differences estimate	0.399	-0.072	0.117	-0.275***	0.072
Fixed effects <i>p</i> value	(0.162)	(0.625)	(0.492)	(800.0)	(0.133)
N	105	282	283	284	284
Adjusted R <sup>2</sup>	0.035	-0.001	0.003	0.084	0.01

Source: Urban Institute analysis of survey data.

**Note:** Difference-in-differences results are based upon a fixed effects model with both individual and time fixed effects included. We calculate standard errors using heteroskedastic robust standard errors clustered at the individual level, listed in parentheses. \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01.

For the academic performance quantitative findings, a closer look at the individual *t*-tests at the end of the year (appendix B) reveals that the following questions are driving the results:

- Q4: (K-1st grade) How well does your child do the following activity: Write at least three letters of their name?
- Q5: (K-1st grade) How well does your child do the following activity: Write a simple word?
- Q6: (K-1st grade): How well does your child do the following activity: Know the names and symbols of numbers 1-10?

And, while the difference-in-differences regressions for the kindergarten through first grade academic index are not statistically significant, the following individual variables within the index are:

- Q2: (K-1st grade): How well does your child do the following activity: Read at least four simple words?
- Q6: (K-1st grade): How well does your child do the following activity: Know the names and symbols of numbers 1-10?
- Q7: (K-1st grade): How well does your child do the following activity: Know that a one-digit number is bigger than another one-digit number (for example, 4 is greater than 2)?

Our qualitive research suggests that the approach to academic development at Vimenti is responsible for the students' higher academic performance. Many Vimenti families noted that they have seen significant improvements in their children's academic performance since enrolling at the school.

One Vimenti parent, who enrolled their child in a prekindergarten program, a public school for kindergarten, and then Vimenti for first grade, made the following observation:

"Sí, mi hija ... si la dejan, duerme en la escuela. Pero te estoy hablando literalmente. O sea, ella llora cuando yo la vengo a buscar por la tarde, si la busco temprano antes del after school .... Tiene buenas notas, le gusta mucho leer y a mí me gusta mucho que ellos tienen un programa de lectura como tal. Y ella para su edad o etapa de lectura, pues va bastante avanzada.

[Ella empezó en Vimenti] desde el primer grado, y tuvo kínder fuera. [La experiencia] antes de venir a Vimenti [fue un] poco vacía. Porque mi nena estuvo en [nombre de pre-Kinder] y ella ya escribía su nombre. Y cuando entró a kínder [en escuela pública], pues como que se quedó igual. Como que no hubo algún aprendizaje a lo que ya ella sabía. Realmente ella ha mejorado desde que entró a Vimenti ha mejorado mucho. Obviamente pues a cada grado es algo diferente. Pero en kínder esperaba como que si ya ella sabía escribir su nombre en [nombre de pre-Kinder], pues que saliera haciendo algo más."

Translation: "Yes, my daughter ... if you let her, would sleep at the school. But I'm talking literally. I mean, she cries if I pick her up early from the after-school program .... She has good grades, she likes reading a lot, and I like that they have a literacy program like that. And for her age or level of reading, she is very advanced.

[She started at Vimenti] in first grade and she had kindergarten outside. [The experience] before Vimenti [was a] little empty. Because my daughter was at [name of prekindergarten] and she was already writing her name. And when she entered kindergarten [in public school], well, she kind of stayed the same. Like, there was not any learning beyond what she already knew. Really, she has improved a lot since she came to Vimenti. Obviously, every grade is different. But in kindergarten, I expected that if she already could write her name at [name of prekindergarten], well, that she would get out doing something more."

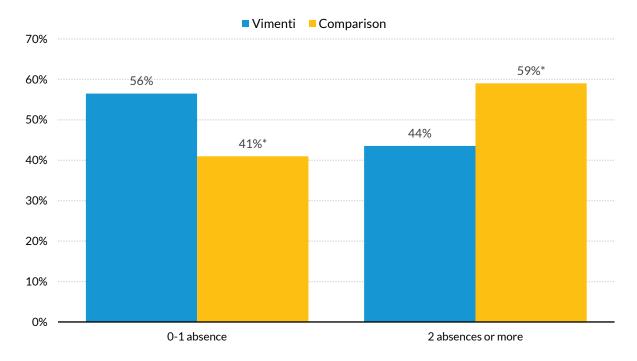
In contrast, parents of children in kindergarten through second grade at comparison schools shared frustration at their children's progress seeming to be at a standstill for months at a time, particularly when it came to reading.

For the chronic absenteeism measure, the difference-in-differences regression shows that children in Vimenti families were 27.55 percent less likely to have missed two or more days of school than children in comparison group families in a given month, which is statistically significant at the 5 percent level. For those students who were absent, there was a statistically significant difference at the 5 percent level in whether a school followed up with a caregiver after a student was absent; 9 out of the 9 families who did not receive follow-up from their child's school were in the comparison group (figure 5).

FIGURE 5

Chronic Absenteeism at Vimenti and Comparison Schools

Percentage of respondents who experienced 0-1 or 2 absences in a given month



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Source: Authors' analysis of end-of-year survey.

**Note:** The sample sizes in this figure include 85 treatment and 61 comparison respondents. The outcome t-test shows that there is a statistically significant difference between the treatment and comparison group at the 10% significance level (p = 0.066). \* p < 0.10.

The discrepancy in chronic absenteeism was also reflected in the qualitative findings. Staff interviewees at one comparison school shared the following:

"Aquí lo más que está acabando con la población escolar es el ausentismo. [E]l ausentismo [es una] conducta que, vuelvo y te digo, se acentúa cada día más." Translation: "Here, what is really negatively affecting the school population is absenteeism.
Absenteeism is a phenomenon that is increasing more every day."

Interviewed staff at this comparison school shared some of the other challenges they had been facing, including lack of power due to Hurricane Maria, infrastructure damaged by the 2020 earthquakes, pest infestations, an unsafe neighborhood, and a lack of funding to address these issues. It is notable that not a single parent in the Vimenti focus groups raised any of these issues, even neighborhood safety, despite the neighborhoods' high crime rates. All these issues were mentioned by

comparison group staff as potential factors contributing to students' and families' poorer motivation to maintain high attendance, in addition to other family issues.

Apart from some of the structural contributors, approaches to addressing chronic absenteeism also seemed to differ between Vimenti and the comparison schools. Comparison group parents were the only ones to mention that parent communication or follow-up after an absence was nonexistent or not helpful. For example, while Vimenti parents in the focus group for families with children in the second through fifth grade unanimously mentioned that case managers reach out to check in by 9 a.m. on the morning that a student is noticed as being absent, their counterparts in the comparison focus group said that they did not usually receive follow-up for absences; instead, they were typically called only when a teacher was having a trouble in the classroom with their child and needed a parent in the classroom to assist. Comparison focus group participants mentioned that calls from the school were instead sometimes even disruptive to their employment; at least two comparison group parents mentioned teachers or school staff calling them in on short notice, requiring the parent to come help with their child at school during class.

Low attendance during school hours also seemed to coincide with low attendance at after-school tutoring services. Interviewees noted that after-school tutoring is important for parents who work until 6 p.m. and need access to free quality child care, and for students who need extra academic support. However, there were marked differences in the satisfaction Vimenti and comparison group families voiced with these services, if they were offered to families in the comparison group at all. At Vimenti, parents almost unanimously said that their children received excellent support completing assignments and that the children frequently were so engaged by staff that most asked to stay later when picked up by their parents. In comparison school focus groups, parents said that after-school tutoring seemed to mostly consist of movie watching and playing games, so that school assignments were left unfinished, resulting in some parents not using the tutoring services other than as a last resort.

# **Economic Pillar Findings**

Within the economic pillar, Vimenti parents were more likely at the end of the year to be employed, have a higher income, have gained new skills in the past year, and own a car (table 11).

TABLE 11

Differences in Economic Outcomes

Difference-in-differences regression results for the selected income and employment outcome measures

	Employed	Family income	Job quality index	Job tenure	Entrepreneurship	New skills index	Financial health index	Car ownership	Housing
End-of-year survey <i>t</i> -test	0.261***	267.58*	0.185	-0.009	-0.005	0.273**	-0.132	0.304***	0.416
End-of-year survey <i>p</i> value	0.001	0.052	0.256	0.940	0.906	0.039	0.110	0.000	0.134
N	146	119	86	78	134	144	146	146	137
Difference-in- differences estimate	0.135	24.13	-0.119	-0.075	0.015	-0.161	-0.030	-0.055	-0.098
Fixed effects <i>p</i> value	(0.125)	(0.846)	(0.497)	(0.632)	(0.691)	(0.375)	(0.762)	(0.431)	(0.593)
N	284	240	162	148	261	282	283	284	268
Adjusted R <sup>2</sup>	0.019	0.007	0.011	0.065	-0.005	0.003	-0.006	0.000	0.013

**Source:** Urban Institute analysis of survey data.

**Note:** Difference-in-differences results are based upon a fixed effects model with both individual and time fixed effects included. We calculate standard errors using heteroskedastic robust standard errors clustered at the individual level, listed in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

No economic outcomes were statistically significant in the difference-in-differences regressions. This may be because many of the Vimenti families in our study had already been "treated" in prior years and may have seen those improvements then. Additionally, unlike the outcomes in the education pillar, changing economic and financial indicators such as employment, housing, and financial security may take more than one school year. And, we may not have the power to detect changes in these outcomes if they are smaller due to the short time period of analysis.

Digging a bit more into the employment outcome, the end-of-year survey tests show that employment is higher for Vimenti families than for comparison families (75 percent versus 49 percent, statistically significant at the 1 percent level), showing a much higher rate of employment among Vimenti families (appendix B). This could be due to selection bias (meaning that people who are employed are more likely to select into Vimenti), or it could be attributed to Vimenti's strategies to support parents to improve their economic and financial outcomes, including through employment, finance, and entrepreneurship workshops for parents of enrolled students (and on occasion for parents in the surrounding community). Vimenti staff indicated that these workshops could be one-off events or extend into six-month to yearlong courses.

One of the flagship economic initiatives, the employability program, which had been running for more than two semesters at the time of this analysis, includes soft skills development, interview practice, and job placement support. Workshops are offered at a variety of different times in order to accommodate as many schedules as possible; however, many parents said that even with this flexibility, there may still be parents who are interested in attending workshops who are unable to due to other commitments. Of those who attended, many worked in the hospitality or fast-food fields that they had trained in. Interestingly, staff at the comparison group schools mentioned offering some financial workshops for parents, although the economic offerings seemed to be sparser than Vimenti's, only offered on a one-off basis (instead of in a recurring or longer-term series of workshops), and limited mostly to the topics of family budgeting or child career development (career chats with police officers or firefighters, for example).

Despite not being statistically significant in the difference-in-differences regressions, the end-of-year survey tests show that monthly income, which includes all earnings and cash-based benefits, differed between the treatment and comparison group and was significant at the 10 percent level, showing a pattern of higher earnings for the treatment group. Nine percent of participants in the treatment group made more than \$2,500 per month in income, compared to 4 percent for the comparison group, and only 20 percent of the treatment group made between \$200 and \$499, compared to 36 percent of the comparison group. It is important to note that the monthly incomes of

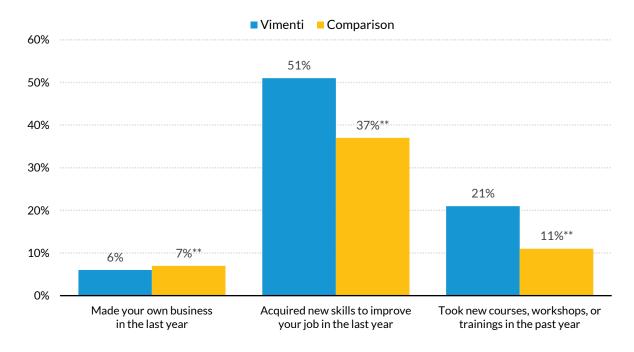
the two groups were already statistically different in the beginning-of-year survey (see appendix A), but this could, again, have been due to the Vimenti families' having been treated in earlier years, or to selection bias.

The job quality index includes measures on whether respondents have fixed or varied income, whether hours have recently been increased or decreased at work, whether respondents have received a raise, or whether they have received a promotion. A related stand-alone measure of job tenure—how long a respondent has been in their given job—was also recorded. Neither the job quality index nor the job tenure variable showed a statistically significant difference between groups in the difference-in-differences regressions. This may be because most of the questions ask about changes in the last year, which may not be a long enough time period to see effects on these outcomes (and/or these families may have experienced these improvements in prior years, which would not be picked up by this measure), or the Vimenti program may not be having a major effect on these outcomes.

Keeping in mind that the share of employed participants was much smaller in the comparison group at the end of the year (34 respondents in the comparison group versus 60 respondents in the treatment group), for those survey respondents who reported non-zero income, the quality of employment and opportunities to advance appear to be roughly similar between the treatment and comparison groups. Job tenure also did not show statistically significant differences in the end-of-year survey tests (appendix B).

The survey also asked respondents about their efforts to improve their employability, including whether they sought out entrepreneurship or looked for ways to build new skills. Neither the measure of whether respondents had created a new business in the past year nor the index capturing whether respondents had sought out new skills or certifications showed statistically significant differences between groups in the difference-in-differences regressions. However, outcome tests showed that participants differed to a statistically significant degree in their acquisition of new skills in the past year (figure 6). Participants in the treatment group were more likely to have acquired new skills (at the 5 percent significance level), with 51 percent reporting that they had acquired new skills to improve their job in the past year, compared to only 37 percent of participants in the comparison group.

FIGURE 6
Improvement of Primary Parent's Employability
Percentage of survey respondents who selected "yes" when asked if they had engaged in certain activities



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Source: Authors' analysis of end-of-year survey.

**Note:** The sample sizes for the three items illustrated in this figure were as follows, respectively: 77 treatment and 57 comparison families, 77 treatment and 51 comparison, and 80 treatment and 61 comparison. Outcome t-tests show that there is a statistically significant difference between the treatment and comparison groups at the 5% level for the index measure of these three components (p = 0.039). \*\* p < 0.05.

In terms of financial health, respondents were asked questions such as how they feel about their finances, the extent to which they feel they can cover financial responsibilities including utilities and groceries, and how likely they are to be able to cover a \$500 emergency. Neither this index nor any of its components revealed statistically significant differences between the treatment and control groups in the difference-in-differences regressions (appendix C). The components of the index also did not show any statistically significant difference on the end-of-year survey tests, with the exception of access to public or private transportation, where the Vimenti families demonstrate having less difficulty accessing these options than the comparison group (significant at the 1 percent level).

With regard to financial health, the most frequently cited financial challenges across all focus groups were affording basic needs, primarily electricity and groceries. One parent expressed the

concern that halfway through the month, they typically didn't have money left for groceries, a sentiment that was echoed in both the Vimenti and comparison groups.

Although the difference-in-differences regression did not detect a statistically significant difference in primary mode of transportation, the end-of-year *t*-test showed statistical significance at the 1 percent level for the difference between groups: 91 percent of the treatment group owned a car, but only 63 percent of the comparison group respondents did. However, the beginning-of-year *t*-test result was also statistically significant at the 1 percent level (see appendix A), so this may be more related to selection bias than to a treatment effect.

Across all parent focus groups, participants mentioned the challenge of getting their children to school, particularly when the school was not in their neighborhood or near their work. This challenge was somewhat alleviated when multiple children attended the same school, as is often the case with Vimenti families, since Vimenti gives preference to siblings of enrolled students. One Vimenti parent underscored this notion, explaining that they don't have to run between four schools like they did before.

The public transit system notably did not meet the needs of many parents, for a variety of potential reasons, including a lack of sufficiently frequent and fast buses and the accelerated closure of local schools, forcing parents to travel further to take their children to school. Multiple Vimenti and comparison group parents were forced to make tough choices to ensure that their kids made it to school:

Madre del grupo de comparación: "La transportación para mí cuando se me dañaba la guagua era malísimo, porque yo tenía que salir de mi casa a las 6 de la mañana para llegar [a la escuela]. Yo vivo por allá donde está el Residencial [redactado] e iba a pie con mis nenas en un andador bariátrico que me prestaban. Las montaba y fuá, para que no faltaran [a la escuela]. Eso es sacrificio."

Madre de Vimenti: "Yo vivía en la urbanización [redactada]. De allá yo tenía que coger dos guaguas. Yo dejaba al nene en [escuela pública]. Y de ahí, tenía que coger otra guagua para traer a las otras nenas. A veces, me llegaban cansadas y se dormían en el salón. Y era lógico. No tenemos vehículo, tengo que transportarme y madrugar."

Mother from the comparison group: "Transportation for me was terrible when my truck broke down, because I had to leave from my house at 6 a.m. to arrive [at school]. I live over there by that [redacted] public housing project, and I would go on foot with my girls on top of a medical walker that I borrowed. I would put them on the walker, and boom, so that they wouldn't miss [school]. That was a sacrifice."

Mother from Vimenti: "I lived in the [redacted name] neighborhood. From there, I would have to take two buses. I would leave my son at the [public school]. And from there, I would have to take another bus to take my other girls. Sometimes, they arrived tired and would fall asleep in the classroom. And that was logical. We didn't have a car; I had to transport myself and wake up early."

In terms of housing, the difference-in-differences regressions did not pick up a statistically significant difference in family housing situations between the treatment and comparison groups. However, the end-of-year survey tests did pick up a statistically significant (at the 5 percent level) difference, and this difference was not significant in the tests on the beginning-of-year survey. While most of the Vimenti families reported being renters (27 percent) or living with family (34 percent), almost half of comparison group respondents reported living with family (no rent). Because of the location of the Vimenti school within a long-established public housing project, it is not surprising that four times more respondents in the Vimenti program reported living in a public housing project.

No statistically significant difference was reported in how many times respondents had moved in the past year, with most respondents in both groups saying they had not moved at all during the year. While housing stability is important, a move might be beneficial for respondents who live in precarious situations (for instance, moving in order to purchase a home and become a homeowner is considered a positive outcome, while moving out of a rented apartment to couch surf might be considered a negative outcome). Of the few respondents who reported having moved within the school year, about half said their moves were voluntary and the other half said they were involuntary. The moves were broken down as follows: voluntary move to a Section 8 apartment (3 respondents in the treatment group and 4

in the comparison group), voluntary move to own a home (2 respondents in the treatment group and 0 respondents in the comparison group), involuntary move because of family problems (3 respondents in the treatment group and 0 in the comparison group), and involuntary move because of an increase in rent (3 in the treatment group and 1 in the comparison group).

# **Social Pillar Findings**

In this pillar, we explore social outcomes, including health and socioemotional outcomes. We find that being a Vimenti family is associated with greater access to quality health care in both the end-of-year *t*-tests and the difference-in-differences models, at the 5 percent significance level (table 12). Otherwise, we find no statistically significant differences between groups in terms of child or parent health, prevalence of health screenings, or child and parent behaviors.

TABLE 12

Differences in Social Outcomes

Difference-in-differences regression results for the selected health outcome measures

	Child health index	Parent health index	Health screenings index	Access to quality health care index	Child behavior and emotional intelligence	Positive parent behaviors index
End-of-year survey t-test	-0.018	-0.145	0.075	0.285**	-0.013	0.096
End-of-year survey p value	0.888	0.224	0.489	0.010	0.917	0.372
N	146	146	142	146	146	146
Difference-in-differences estimate	-0.231	-0.123	-0.074	0.248**	0.177	0.013
Fixed effects p value	(0.137)	(0.300)	(0.551)	(0.038)	(0.164)	(0.909)
N	284	284	276	284	284	284
Adjusted R <sup>2</sup>	0.009	0.002	-0.004	0.038	0.012	-0.005

**Source:** Urban Institute analysis of survey data.

**Note:** Difference-in-differences results are based upon a fixed effects model with both individual and time fixed effects included. We calculate standard errors using heteroskedastic robust standard errors clustered at the individual level, listed in parentheses. \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01...

The lack of statistically significant differences in child and parent health may be rooted in a few factors. First, the survey measures ask about how a parent felt about their own health (or their child's health) in the month of the survey. Natural fluctuations in sickness, such as getting sick with the flu or COVID-19, may affect the results. Another potential reason could be related to something heard in the focus groups: parents at both Vimenti and comparison schools noted challenges in seeking medical care, specifically wait times for appointments with specialists that often exceeded six months (for their children and for themselves).

If this is the case across both groups, lags in access to care may extend the time members of both Vimenti and non-Vimenti families are sick, and it may result in not observing a statistical difference between the two groups. For example, parents in both groups mentioned having difficulty accessing cardiologists, pneumologists, and neurologists, for either their kids or themselves. And almost none of the Vimenti parents in the focus groups explicitly mentioned being referred to a specialist for their own medical needs, receiving medical attention for their own needs at Vimenti, or attending a parent-focused health workshop. In interviews, staff mentioned only the Healthy and Ready to Learn workshop, which focuses on how to support child health. Expanding the offerings of workshops, trainings, and referrals to specialists for parents; increasing communication about existing workshops; or varying the scheduling of existing workshops could hold potential for improving parent-facing services. After the completion of data collection for this study, a clinic opened near Vimenti, which may help Vimenti families access the health care that they need and allow Vimenti's health-focused workshops to have a greater effect on families. Future studies should examine this effect.

While the quantitative findings on parent and child health may not be statistically significant, the qualitative findings indicate that Vimenti families were very happy with and grateful for the support they received for their children's health, something that was not consistently shared in the comparison school focus groups. In the comparison schools, parents were evenly split on their satisfaction with their school nurse and psychologist; some said that they were very responsive, while others mentioned that they were disorganized, not good at keeping track of their child's condition, and unable to maintain an open line of communication with parents. In the Vimenti focus groups, satisfaction with the school nurse and the school psychologist were very high. Two Vimenti parents shared the following:

Madre 1: "Excelente enfermera que tienen. Muy comunicativa, llama a cada rato. Tiene mucha comunicación con mi familia."

Madre 2: "Con mi nene también, [que tiene] asma, él tiene su copa [de asma] y la tiene que por obligación traerla [a la escuela]. Y él llega, la enfermera va donde él, ella busca el medicamento, y se queda con él." Translation: Mother 1: "They have an excellent nurse, very communicative. She calls frequently. She has a lot of communication with my family."

Mother 2: "With my son too, [who has] asthma, he has the [asthma] cup that he has to bring [to school]. He arrives and the nurse comes to him, and she finds the medication, and stays with him."

Similarly, a few parents mentioned finding the pediatrician that Vimenti brings to school premises to provide yearly checkups very helpful, including in comparison to the external pediatrician covered by their health insurance. Not all parents were aware of this resource, which means there could be an opportunity for Vimenti to expand its communication about existing child-facing health services. One Vimenti parent who had a positive experience with the Vimenti pediatrician shared the following:

"La pediatra [de aquí] ha sido mejor y más eficiente que el pediatra [de afuera] que me cubre el plan médico. En todo el sentido de la palabra, porque ella la revisó, pero mira, de verdad hace un 'checking' completo. A veces yo voy al pediatra [de afuera] y cuando voy al pediatra me dice, '¿Qué tiene?' ¡Pues eso quiero saber yo! Pero la pediatra [de aquí], no. Ella la chequeó completo, un chequeo completo físico. Te hace preguntas para saber si todo va bien, si tiene algunos hábitos o cosas que puedan [mejorar], como cosas a normales en su edad."

Translation: "The pediatrician [from here] has been better and more efficient than my [external] pediatrician that my health insurance covers. In every sense of the word, because she checked [my daughter], but really, she does a full 'check.' Sometimes I go to my [external] pediatrician, and he says, 'What does she have?' Well, that's what I want to know! But the pediatrician from here, no. She did a full check, a full physical. She asks you questions to know if everything is going alright, if they have some habits or things that could improve, like abnormal things at her age."

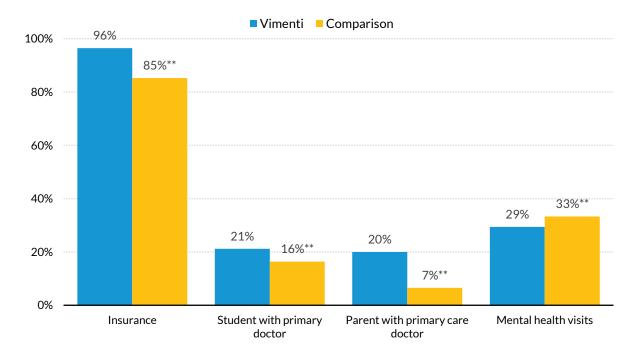
These qualitative findings align with the quantitative finding that access to quality care differed in a statistically significant and positive manner for both the end-of-year *t*-tests and the difference-in-differences regressions. This means that Vimenti parents were more likely to have access to a primary care doctor for themselves and their children (rather than going to the emergency room) than comparison parents, and more likely to have access to insurance (either private or public).

Figure 7 shows the components of the access to quality care index in the end-of-year survey. Vimenti families are observed to have medical insurance at a rate of 96 percent, with comparison families having insurance at a rate of 86 percent (significant at the 5 percent level). About 20 percent of Vimenti families shared that they had access to a primary care doctor when they got sick, compared to 7 percent of comparison families (significant at the 5 percent level). And 21 percent of Vimenti families whose kids got sick had access to a primary care doctor, compared to 16 percent in the comparison group. There is a risk that the government insurance component and parent health component are influenced by selection bias, since access to insurance and parent health were already statistically significant at baseline (appendix A). However, the results are still positive and statistically significant after excluding baseline differences (in the difference-in-differences regressions), which suggests a positive effect of the Vimenti program in supporting families in accessing quality care.

FIGURE 7

Quality of Care

Index measures for the quality of health care families had access to



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Source: Authors' analysis of end-of-year survey.

**Note:** The sample sizes for the four index measures illustrated in this figure were as follows, respectively: 85 treatment and 61 comparison families, 85 treatment and 61 comparison, 85 treatment and 61 comparison, and 17 treatment and 6 comparison. Outcome t-tests show that the difference between the treatment and comparison groups is statistically significant at the 5% level for the index measure of these four components (p = 0.010). \*\* p < 0.05.

In terms of child behavior, the lack of statistically significant differences in the child behavior and emotional intelligence index measures may be related to the relatively high reported share of students with special needs at Vimenti (and in Puerto Rico more broadly) who need additional support in socioemotional development. In the outcome survey, the share of students whose parents identified them as special education students was 55 percent at Vimenti, compared to 49 percent in the comparison group, figures that are both much higher than the 34 percent Puerto Rico average. Alternatively, it is possible that Vimenti's high share indicates that it is better at identifying and diagnosing students with special needs, rather than reflecting a truly higher rate of need at the school. As discussed further in the "Adherence to 2Gen Principles" section below, expanding the staff and funding allocated for disabled students at Vimenti could be a key strategy to produce a statistically significant effect on this index.

The qualitative findings showed that some Vimenti parents whose children did not have special needs did find value in how their kids were being taught how to behave and interact with others. One Vimenti parent shared that the approach that Vimenti teachers, the psychologist, and the after-school tutors use to engage with students does a good job of reinforcing positive behavior development:

"[L]os están ayudando a desarrollar lo que son los valores. Siempre en casa, obviamente, le inculcamos los valores que tenga cada quién en su hogar. Pero aquí [en Vimenti], lo que es la empatía, compañerismo, el ayudar a otras personas, ellos están bien enfocados en eso. Han tenido varias actividades, como lo que es la siembra [...] para subsistir. Todas esas cosas. Y a mí me parece que está súper chévere porque en lo que estamos viviendo hoy en día, lamentablemente, es super necesario."

Translation: "[T]hey are helping them develop values. Obviously at home, we teach kids the values we have in the home. But here [at Vimenti], they are very focused on empathy, teamwork, and helping other people. They have had multiple activities, including gardening for subsistence. All those things. And I think it's great because with how we are living nowadays, unfortunately, it's super necessary."

Finally, the lack of a statistically significant difference in either measure for the positive parent behavior index is surprising. Still, since the survey measures the frequency with which parents take certain actions (such as reading to their child), the lack of a statistically significant difference may be due to time poverty, or the inability of parents to choose to reallocate time to activities with their kids due to work or other economic responsibilities (Baldarsi and Wodon 2013). This hypothesis was validated by the fact that only a few parents in the Vimenti focus groups explicitly mentioned the child-rearing (*crianza*) workshops. For example, one Vimenti parent shared:

"Yo no he ido a tantos [talleres]. No, la realidad es que, por la falta de tiempo, no he ido a tantos. Pero sé que hay varios y que a las personas les interesan y les gustan." Translation: "I have not been to that many [workshops]. No, the reality is that, because of a lack of time, I have not been able to attend many. But I do know that there are various ones, and that people are interested in them and like them."

Still, the few parents who did have time to go mentioned finding it very helpful, especially in emotionally charged situations with their child that required patience and coaxing. One Vimenti parent shared:

"Hay talleres [...] para modificar su conducta, y para la crianza del niño. Esa serie de cosas que realmente ayudan a uno como papá que a veces está desesperado y no sabe qué hacer con el muchacho."

Translation: "There are workshops to modify their behavior, and for raising the child. A series of things that truly help a parent when sometimes you are desperate, and you don't know what to do with your child."

# **Data Interactives Feedback**

An important aspect of our research approach included the co-validation and interpretation of the study data alongside study participants from both the Vimenti and comparison schools. As individuals who live and breathe their day-to-day experience, study families were key experts for us to engage with prior to completing our research analysis, particularly our survey analysis (Harrison et al. 2021). In this study, we used the data interactive (formerly referred to as the "data walk") method to achieve a more robust analysis of our findings and to ensure that we shared data back with the participants who graciously agreed to share extensive details about their lives during data collection (Murray, Falkenburger, and Saxena 2015).

The first data interactive was held virtually with comparison group families, and the second was held in a hybrid format with Vimenti families. Both data interactives yielded valuable insights and added nuance to our findings, which are summarized below.

### COMPARISON GROUP DATA INTERACTIVE

Five people from two different comparison schools participated in the comparison group data interactive, which was more than expected given that the data interactive was virtual and there was no promised incentive. Of these five participants, all were women. One participant noted that her youngest

child joined the Vimenti Head Start program in the 2023-2024 school year, and she is currently trying to obtain a space at Vimenti for her sixth grader.

Participants heard a brief overview of the findings from the study and were then led in a discussion about these findings to solicit open-ended feedback. This feedback included the following:

- Proactive attendance management
  - » Vimenti's follow-up on student absences was highlighted, contrasting with other schools lacking such proactive measures.
- Empowering families: beyond academics
  - » A comparison parent, who after the study enrolled in the Vimenti family courses, highlighted the personal benefit she had, which facilitated employment opportunities.
- Adaptation amid challenges: special education needs
  - » Due to pandemic-related challenges, a parent had to change her child's school to ensure access to necessary special education services.
- Expansion of 2Gen approach
  - » A participant expressed a desire for the 2Gen approach implemented at Vimenti to be expanded to more schools, recognizing its potential effect on families and communities.

#### VIMENTI DATA INTERACTIVE

The treatment group data interactive for Vimenti families was held in person at Vimenti, and 13 Vimenti parents attended. Families heard a presentation of findings followed by a "walk" around the room to view posters highlighting findings from each pillar. Feedback from this exercise is below.

#### **EDUCATION PILLAR FEEDBACK**

Within the education pillar, parents attributed Vimenti's lower absenteeism rates to their children's heightened enthusiasm for attending school, which they ascribed to the school's practices. They also appreciated its approach to handling teacher absenteeism; unlike in traditional schools, where teacher absenteeism often leads to early dismissal, Vimenti's policy of retaining children within the school appeared to mitigate absenteeism rates.

Communication also emerged as a pivotal factor within the education domain, with parents commending Vimenti's case managers for their proactive engagement. Noteworthy examples included

the prompt outreach when a child failed to attend school or faced socioemotional challenges, which is indicative of Vimenti's commitment to maintaining a supportive ecosystem.

Parents also highlighted the role of Vimenti's end-of-day protocol in enhancing safety and security. They acknowledged the contrast with traditional public schools, where children roamed freely after school hours.

Additionally, parents underscored Vimenti's efficacy in addressing motor skill deficiencies through early intervention strategies. One parent noted a special education evaluation that pinpointed a child's condition, prompting effective interventions and yielding discernible progress, thus reinforcing the institution's dedication to inclusive educational practices.

#### ECONOMIC PILLAR FEEDBACK

Within the economic empowerment sphere, parents commended Vimenti's employability workshops and business supports. Parents were also surprised that there were not more positive findings across the board within this pillar.

Nonetheless, some Vimenti parents shared their desire for more sustained support from case managers, noting a decrease in follow-up after achieving family goals and highlighting the importance of ongoing connection with families. Another parent expressed a desire for more direct communication with case managers more broadly.

Another request from Vimenti parents was enhanced flexibility in program scheduling. And one participant requested increased promotion and visibility of available courses and programs. Finally, a request was made for literacy programs tailored to parents.

#### SOCIAL PILLAR FEEDBACK

Within the social pillar, Vimenti families shared positive feedback about Vimenti's provision of accessible and quality health services. The convenience of on-campus health facilities, coupled with consistent follow-up by nursing staff during student absences or illnesses, was lauded by parents, affirming the institution's holistic approach to student welfare.

Parental empowerment initiatives, such as workshops aimed at enhancing parenting skills, were also acknowledged for their positive influence on familial dynamics. However, calls for further integration and support in managing chronic diseases underscored an ongoing quest for comprehensive family assistance.

#### FINAL DISCUSSION FEEDBACK

The discussion culminated in reflections on the challenges inherent in replicating Vimenti's model within public school settings. Identified barriers included the need to overcome cultural resistance, educate families about the model's benefits, secure adequate funding, and address absenteeism, underscoring the multifaceted nature of institutional replication endeavors.

Overall, the data interactive underscored Vimenti's multifaceted approach to familial support and educational enhancement while shedding light on potential avenues for further refinement and for dissemination of its successful model within broader educational contexts. Additional findings from the data interactives regarding workshops and trainings are included in the "Program Satisfaction" section.

# Fidelity to the 2Gen Model

Our second research question for this study assessed the extent to which the delivery of the Vimenti model adheres to 2Gen principles, and to what extent this model might explain differences in outcomes for Vimenti students and families. To examine this, we explored adherence to 2Gen principles as established by Ascend at the Aspen Institute, a national roundtable for advancing and disseminating approaches that improve family well-being and economic mobility by addressing the needs of parents and their children together. 45

# Adherence to 2Gen Principles

2Gen approaches work in partnership with families to "build family well-being by intentionally and simultaneously working with children and the adults in their lives together." <sup>46</sup> 2Gen centers the whole family unit in pursuing policies and practices that build intergenerational educational success and economic prosperity and in developing "holistic, integrated, and equity-focused solutions."

To assess Vimenti's adherence to the 2Gen model, we used qualitative and quantitative data from our surveys, focus groups, and interviews (as well as our data interactives), and examined internal documents related to Vimenti's theory of change and evaluation efforts to evaluate how well the school and its staff follow the five 2Gen principles, as outlined by Ascend at the Aspen Institute:<sup>47</sup>

- 4. measure and account for outcomes for both children and their parents
- 5. engage with and listen to the voices of families
- 6. ensure equity

- 7. foster innovation and evidence together
- 8. align and link systems and funding streams at the family level

A description of these principles and an assessment of how well Vimenti adheres to each of them is detailed in the sections below. Additionally, we offer recommendations on how Vimenti could improve its adherence to 2Gen principles and best practices, including how Vimenti's logic model could be adapted to more easily facilitate successful 2Gen implementation and evaluation.

#### MEASURE AND ACCOUNT FOR OUTCOMES FOR BOTH CHILDREN AND THEIR PARENTS

This principle recognizes that dual outcomes are at the heart of true 2Gen programs. Therefore, programs and policies should measure how well they serve the whole family. Accordingly, our analysis focused on Vimenti's fidelity to serving parents and children from the same families.

2Gen programs are highly intentional about serving children and parents (and other caregivers) from the same family in mutually reinforcing ways. For example, parents who are employed on night shifts may receive childcare support that meets their scheduling needs. Surprisingly, organizations that serve children and families often do so without connecting the two populations—for example, the parents of children enrolled in a nonprofit's Head Start classrooms are not recruited into the same organization's separate employment and training offerings. 2Gen principles suggest that organizations that do not pursue 2Gen braiding, or connecting across child and parents, may miss the opportunity to improve the client experience and outcomes for families who often need to navigate different organizations and systems to obtain the services they need.

Vimenti staff and administrators exhibit high commitment to and awareness of serving children and parents in the same families in ways that reinforce outcomes for all family members. When asked about the 2Gen model, Vimenti staff with whom we spoke said they felt familiar with the goals, vision, and approach of the model. They felt like they understood that their roles dealt with meeting whole family goals, and they believed that families understood that as well. One Vimenti staff member explained the importance of the 2Gen model in their work:

"Vemos en la educación la herramienta más efectiva para que el niño pueda [...] exceder [expectativas] y pueda llegar a alcanzar y tener las oportunidades que de otra manera no las tendría. Sin embargo, la falta de acceso a oportunidades equitativas y justas para toda la población en Puerto Rico, dependiendo de su nivel social y económico, limitan también el desarrollo de esa familia y del niño por consecuencia. Así que esa es la razón por la cual nosotros nos movemos a trabajar también con las familias como un todo."

Translation: "We see education as the most powerful tool to enable a child to be able to [...] exceed [expectations], achieve goals, and have opportunities that they would not otherwise have access to. However, the lack of access to equitable and just opportunities for all of the Puerto Rico population, depending on their social and economic level, also limits the development of a given family and child, by consequence. So this is the reason why we work with families as a whole."

The measuring of and accounting for parent outcomes is a core aspect of Vimenti's 2Gen work. Typically, this process begins in the in-person intake interview, which uses a family assessment tool to determine which of three levels of vulnerability a family is facing. A few of the Vimenti case managers explained their approach to establishing goals with the family of a student and stated that the programming that they offer from year to year is also responsive to the needs, interest areas, and goals raised by parents.

The holistic and supportive approach also shows up in Vimenti's "tiered learning," 48 through which students are provided with a combination of one-on-one, small group, and general classroom education by at least two separate teachers per class, resulting in a much lower student-to-teacher ratio. The students rotate between the general, small group, or one-on-one instruction based on the subject at hand and how strongly they are performing in that subject. This attention to deep engagement with students often carries over to rapport with parents, as teachers are able to more clearly and consistently communicate the progress and needs of the student. Relatedly, Vimenti's case manager model includes an integrated parent and child-serving approach, which builds on the theory behind the tiered learning model, recognizing that each child and family may need individualized support. Unlike in the social worker model, case managers proactively and regularly meet with parents to discuss child and parent goals and outcomes.

Finally, evaluation and analysis are a crucial part of this adaptation to improve the effectiveness across parent and child services, and outcomes. Closely tied to the commitment to evaluation is the commitment to creating and maintaining an information system that can extract the unduplicated number of children and families who are receiving supportive services to produce integrated family

profiles. Often, dashboards are used to track families longitudinally over time, displaying key milestones such educational achievements from prekindergarten to college and career readiness and attainment milestones for both children and their parents.

In addition to conducting its own annual surveys to measure effectiveness and program satisfaction, Vimenti funded this evaluation, which focuses on the comparative effect of the Vimenti program on 2Gen outcomes, ensuring the inclusion of parent outcomes. From a data management perspective, Vimenti collects extensive case management data and tracks progress on all of the 14 indicators and outcomes in its logic model for both the students and the families (see figure 4 above). The commitment to utilizing data is evident in the way staff emphasize the significance of incorporating a data-informed approach into all aspects of their work, as noted in the following quote.

"[T]enemos un equipo de administración ejecutivo que el área de recursos humanos, [y en] el área de datos y de análisis de datos, [P]ara nosotros es importante la cultura de datos [porque] queremos ser un modelo basado en evidencia.

[...]. Donde se recojan los datos de manera responsable y transparente, [para que podamos rendirle cuentas, no solamente a los que nos dan el dinero, a las agencias, sino a los papás, a las comunidades."

Translation: "We have an executive administration team in human resources, [and in] data and data analysis. To us, the culture of data is important because we want to be a model based on evidence.

[...]. When we capture our data responsibly and transparently, we can answer not just to the people who donate to us, to the agencies who give us money, but also to the parents, and the communities."

Continuing to build the capacity to measure and evaluate how families are progressing in their pillar outcomes, including by disaggregating for parent and child outcomes, will help highlight where the greatest opportunities for improving services are.

#### ENGAGE WITH AND LISTEN TO THE VOICES OF FAMILIES

This principle recognizes that all 2Gen work must be grounded in the lived experiences and insights of families, ensuring that their perspectives and experiences inform program and policy design. Within 2Gen agencies, family voice should be found at two levels: (1) at the family level, as expressed through parent perceptions of how well line staff (e.g., teachers) and administrators listen to their individual concerns about program practice or policies, especially as it concerns their own children, and (2) at the organizational level, as expressed through opportunities for parent decision-making via advisory councils, the organization's board of directors, and parent councils, and as community-based researchers.

To gauge Vimenti's responsiveness to the voices of families, we included metrics assessing the degree to which families perceive their integration into decision-making about school and academic services. We also included two index measures to assess the level of support parents perceive in addressing both their child's needs and their own personal development. This approach aids in capturing parents' perceptions of the responsiveness of their community to the expressed needs. These measures are shown in table 13.

TABLE 13
Frequency of Community Support and Parent Voice
Survey measures used to assess 2Gen fidelity

Secondary outcomes	Questions
Community support for children	<ul> <li>In the last year, do you feel like your school community has: Supported your child with their positive development and learning?</li> <li>In the last year, do you feel like your school community has: Ensured that your child does not get into trouble at school?</li> <li>In the last year, do you feel like your school community has: Ensured that your child attends school regularly?</li> </ul>
Community support for parents	<ul> <li>In the last year, do you feel like your school community has supported you and the caretakers by: Helping you achieve your educational goals?</li> <li>In the last year, do you feel like your school community has supported you and the caretakers by: Helping you achieve your economic or employment goals?</li> </ul>
	In the last year, do you feel like your school community has supported you and the caretakers by: Helping you acquire access to nutritious food for your family?
	• In the last year, do you feel like your school community has supported you and the caretakers by: Helping you acquire access to medical services for your family?
	• In the last year, do you feel like your school community has supported you and the caretakers by: Helping you acquire access to mental health services for your family?
Parent voice	In the last year, how satisfied are you with the following services of your school: Family integration into school or academic services?

**Source:** Survey protocol constructed by authors.

Data from our survey indicate that, at the end of the year, the three measures—community support for children, community support for parents, and parent voice—are statistically significant at the 1 percent, 1 percent, and 10 percent level, respectively. Additionally, the difference-in-differences results show that during the 2022–2023 school year, parent voice improved more for Vimenti families than it did for comparison families. The survey results are shown in table 14.

TABLE 14

Differences in Community Support and Parent Voice

Difference-in-differences regression results for the selected fidelity measures

	Community support for children index (standardized)	Index of community support for parents (standardized)	Parent voice
Vimenti treatment	-0.131	0.175	0.902*
Fixed effects <i>p</i> value	(0.477)	(0.342)	(0.058)
N	270	270	152
Adjusted R <sup>2</sup>	0.006	0.002	0.087
End-of-year survey t-test	0.428***	0.727***	0.508*
End-of-year survey p value	(0.002)	(0.000)	(0.072)
N	140	137	64

Source: Urban Institute analysis of survey data.

**Note:** Difference-in-differences results are based upon a fixed effects model with both individual and time fixed effects included. We calculate standard errors using heteroskedastic robust standard errors clustered at the individual level, listed in parentheses. \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01.

Data from our focus groups and interviews match our quantitative findings and indicate that Vimenti excels at the first level of this principle, listening to parents. Both parents and staff underscored the emphasis the Vimenti community places on listening to and building trusting relationships with families.

Many parents from across all Vimenti focus groups shared that they feel that their communications with their case manager and their children's teachers are frequent, proactive, and detailed. One parent even mentioned that they had reached out to their case manager on a Sunday and received a prompt response. Many Vimenti parents contrasted this with the flow of information they used to receive in other public schools, where sometimes they would go the entire year without having the opportunity to meet their child's teacher. Some Vimenti parents also shared the positive experience they had in developing their family plan and goals with their case manager, and in feeling that their goals and struggles were validated, as well as gaining a sense of satisfaction and acknowledgment when a family goal is met.

The next level at which parent voice should be found in a 2Gen organization is in determining how decisions are made about program policy and operations. Overall, we found that Vimenti has excellent opportunities for parents to be represented in decision-making, but that improvement could be made in making all parents aware of these opportunities, including how to reach out to the parents who serve in leadership positions. As mandated by Article 6.04 of Ley 85-2018, 49 Vimenti has already established a parent council and placed a parent on the organization's governing board, or on the *Consejo Escolar*. The parent council, which is composed of 13 parents and meets monthly, is responsible for providing

recommendations on the implementation and budgeting of the annual Vimenti work plan, including by sharing parents' ideas for tackling community challenges. The existence of the parent council and the parent seat on the governing board provide a good foundation for moving from just listening to parents, to actually involving parents in improving 2Gen outcomes for all participating families and the surrounding neighborhoods.

To continue scaling up the intensity and frequency at which parent voice is incorporated into Vimenti's work, broader dissemination of the activities of the parent council to the rest of the family population should be considered. Although the members of the parent council are elected by all participating Vimenti families, and the council gives a yearly informal presentation to parents about its recommendations, the parent council was not mentioned once by either staff or parents in our qualitative data collection when we asked about opportunities to participate in decision-making. This disconnect between opportunities and awareness could be addressed by supporting parents on the parent council to build more visibility among other families not on the council—for example, by including more mentions of the parent council in email and text communications to families, more frequently encouraging parent council members to attend and present at regular family events, or even creating new parent council T-shirts that make the council members more easily identifiable to other families.<sup>50</sup>

#### **ENSURE EQUITY**

This principle recognizes that 2Gen efforts must evaluate and address structural problems that create disparities in service provision and assistance, including but not limited to disparities based on gender, race, ethnicity, income, and disability. Using an equity lens is crucial for understanding the experiences of different groups and communities and the ways in which policies or practices can benefit or harm certain groups more than others.

Supporting families who have been stigmatized, criminalized, and overpoliced, and doing so with an understanding of structural inequity and entrenched poverty, is a key aspect of equity work.

Comparison school staff shared their frustration with not having the resources or staff necessary to confront the magnitude of the problems their school populations face. Although the qualitative data collection is not representative, no Vimenti parents mentioned having experienced or witnessed a Child Protective Services or police intervention, which may be due partially to Vimenti's structural approach to disrupting poverty traps and its budgeting of funds to that end.

Another observed Puerto Rico-specific inequity that Vimenti hopes to address is the servicing of special education students and their families and fighting ableism in Puerto Rico. In 2021–2022, 34

percent of students in public schools in Puerto Rico received special education or related services, almost three times the national U.S. average. Despite this need, the PRDE has a long history of failing to meet its federal and local legal obligations to fairly serve students with disabilities and neurodiverse students. For example, the class action lawsuit led by Rosa Lydia Vélez, a mother of a child with cerebral palsy in the 1980s, claimed that the Department of Education did not provide the educational and related services that her daughter needed. Even decades after the beginning of the dispute, the government has continued to fail to meet its evaluation and service obligations, preferring to pay daily noncompliance fines and appeal decisions that reduce the government's responsibilities to families with special education children. The condition of special education service provision has worsened significantly since Hurricane Maria, the 2020 earthquakes, and Hurricane Irma, with school closures, budget cuts, and special education staff shortages leading to a worsening of the quality and quantity of in-classroom assistance or therapies offered.

Vimenti is attempting to better serve families of children with special education needs by ensuring that all the mandated services, including dedicated staff and therapists, are integrated into all Vimenti programming. As of March 2023, Vimenti had 80 students with some form of special education needs, and three specialized education staff. The school also provides six primary services for students with special education needs: screening, therapies, specialized and trained staff, assistive technology, extended school year, and reasonable accommodations. Additionally, case managers are trained to assist parents with the Department of Education disability enrollment process. This support in enrolling in special education was cited by parents as being very helpful, as the process can be very arduous and bureaucratic; multiple parents told stories about going the department in person multiple times but being turned away due to long and inefficient lines. As a Vimenti executive staff member noted, the school also provides in-house services, such as speech, physical, occupational, and psychological therapy, to ensure that the full needs of the child can be met in-house:

"[Servicios de educación especial] incluye también las terapias. Y en este caso particular, nosotros hemos querido como organización traer las empresas que ofrecen el servicio a través del departamento de educación. Les ofrecemos un espacio aquí para evitar sacar a los niños del salón de clases. Porque si no, los papás tendrían que hacer el esfuerzo de llevar al niño a la terapia. Y eso incluye el hecho de que el nene, y me lo sacaste del salón, y no vino a clase ese día. Y mientras el niño no está, yo no puedo hacer nada. Pero si está, yo puedo hacer el trabajo completo para el niño. Así que aquí le ofrecemos también las terapias."

Translation: "[Special education services] also include therapies/treatments. In our particular case, we have wanted as an organization to bring in the service providers through the Department of Education. We offer them a space here to avoid having the kids pulled out of the classroom. Otherwise, the parents would have to make the extra effort to take their child to their therapies/treatments. And that includes pulling the child out of the classroom, the child not going to school that day. And while the child is not here, I cannot do anything. But while they are here, I can do my full job with the child. So we offer therapy/treatments here."

Still, because of the structural and historical dysfunction within the special education system in Puerto Rico, there is more work to be done to improve these services, even at Vimenti. At comparison schools, staff mentioned a lack of resources and staff to support special education, resulting in an unsustainable ratio of specialized staff to students in need. Comparison school parents mentioned a particular difficulty with navigating the screening and special education designation process, as well as the challenge of knowing that their child needed additional support but was either not receiving the needed services at all or receiving support that the parents considered deficient. Although comparison school staff mentioned that they had some PRDE-provided "T1s" (essentially, an assigned special education teacher mandated as a right for all special education students in Puerto Rico), they did not mention having any specialized special education staff. At Vimenti, many parents with children receiving special education shared satisfaction with how their children are being served; because of their case managers, none mentioned difficulties navigating the special education process, and most mentioned satisfaction with how teachers and therapists support their students with various developmental needs. However, in the Vimenti special education focus group, a few parents of students recently diagnosed with a severe disability, such as severe autism, voiced frustration with Vimenti's not having the needed resources to serve their children in the 2022-2023 school year, requiring them to reenroll in a different, better-equipped school.

One parent with a child who required specialized supports for severe autism explained how Vimenti's limited resources for severe disabilities was affecting their child:

"[Mi niño] está en kínder, este es su primer añito en Vimenti. Experiencias [en Vimenti], he tenido buenas y malas. Muy buenas porque las maestras son estupendas, mantienen una comunicación conmigo constante .... Él padece de autismo y entonces también es una parte clave para él, tener una maestra de educación especial con él .... Lo único que a mí me incomoda de Vimenti es que él necesita una asistente, una T1. Y eso ha sido una lucha desde el día 1 con el Departamento de Educación y con Vimenti. Él tiene la T1 aprobada por el departamento. Y tuve que ir hasta al tribunal a forzar al departamento a que nos dieran esa T1. Al fin y al cabo, después de que el juez fue a favor mío, le colocaron la T1. Hace como un mes, y llevaba un mes sin T1. Vimenti se comprometió en conseguirme esa T1 y todavía es la hora que [mi niño] está sin esa asistente. O sea que tengo sentimientos mixtos con Vimenti y con el departamento [....].

El único 'foul' de Vimenti es la educación especial, porque ellos no están capacitados para tener niños de educación especial de ningún aspecto. Pero como una escuela 'regular' es súper buena, ahí no hay quejas [...].

Pero deberían de, si pensaron en una escuela, deberían de haber pensado primero en educación especial, porque es lo que la mayoría de los nenes que están creciendo ahora. Y con los niños 'pandémicos' [...], pues es algo que es más importante que una escuela regular."

Translation: "[My child] is in kindergarten, in his first year at Vimenti. I have had good and bad experiences at Vimenti. Very good ones because the teachers are fantastic, and they maintain constant communication with me. He has autism, and so that is also a key piece for him, having a special education teacher with him .... The only thing that brings me discomfort about Vimenti is that he needs a special education aide, a T1. And that has been a battle since day 1 with the Department of Education and with Vimenti. He has a T1 approved by the department. And I had to go to the courthouse to force the department to give him that T1 aide. Finally, after the judge ruled in my favor, they gave him the T1. It has been a month, and he has been without a T1 for a month. Vimenti committed to finding him a T1 and still today [my son] is without an aide. So, I have mixed feelings about Vimenti and about the department [...].

Vimenti's only 'foul' has been special education, because they are not trained to have special education kids of any type. But for a 'regular' school, it's very good—no complaints there [...].

But yes, if they thought about a school, they should have first thought about special education, because it is the majority of the kids that are growing up now. And with the 'pandemic' kids [...], well it's something that is more important than a regular school."

As explained by Vimenti staff, delays in receiving PRDE government funding have resulted in this inability to fully scale specialized services for severe disabilities in the same way that has already been

done for more common special education needs. At Vimenti, as in traditional public schools, children with severe disabilities whose needs cannot be met at a given school are supposed to be referred to schools that are equipped by the Department of Education to serve those students.

Ultimately, Vimenti has made significant strides to embed equity into its systems, particularly in its service to stigmatized families. Vimenti's leaders are also beginning to develop their strategy to address the significant Puerto Rico-wide failure to equitably serve children with special education needs. However, more can be done in this area by expanding the staff so that more children with particular conditions can be served at the school and, in the meantime, providing families with more communication and advance notice if a child's needs truly cannot be met at Vimenti. Admittedly, staff shared that a key factor in this service limitation has been lagged or delayed special education funding owed to Vimenti by the Department of Education (Lake and Vargas Díaz 2021). As discussed below in the section on the final 2Gen principle of aligning funding streams, finding alternative sources of funding through private or federal dollars, or resolving the delay in receipt of public dollars, is a core equity priority.

Data collection that documents the prevalence of various disabilities is a potential step forward to evaluate progress in providing equitable services to children with special education needs. Collecting data about children's disabilities, including but not limited to functional, neurological, intellectual and developmental, mental health, and chronic illness disabilities, would improve Vimenti's ability to appropriately staff and invest in expanded supports. Disaggregating program and service satisfaction evaluations by whether or not a family's child has a disability might also be a good way to observe whether parents are perceiving inequitable service provision.

Future data collection could also consider the following subgroups to evaluate for equity:

- race, especially given the sufficient size of the Black and white racial groups in this evaluation
- single parenthood, especially single mothers, given their apparent overrepresentation in the population during the qualitative data collection
- past involvement in the criminal legal system or with the Department of the Family
- housing within (not just near) a public housing project

#### FOSTER INNOVATION AND EVIDENCE TOGETHER

This principle acknowledges that 2Gen organizations should encourage the integration of innovation and emerging evidence into their work. Vimenti, being the first 2Gen program of its kind implemented

in Puerto Rico, is leading 2Gen innovation in Puerto Rico. Additionally, because of its interest in building a strong data and evaluation infrastructure, Vimenti is contributing to the 2Gen field through this evaluation, by sharing a blueprint for comparative evaluation of other 2Gen models in the US. Part of this innovation leadership has included adapting the existing 2Gen literature and contextualizing it to the Puerto Rico setting.

With the exception of a few robust evaluations of 2Gen models, including the Walter Rand Institute evaluation of 2Gen models in New Jersey<sup>56</sup> and the Housing Opportunities and Services Together Initiative in Action,<sup>57</sup> rigorous evaluation and research on 2Gen models is extremely limited, and Vimenti is leading the way in the documentation of evidence and the evaluation of its programs and strategies. Since the first year of its operation, in the 2019–2020 school year, Vimenti has been conducting and publishing evaluations of its three 2Gen pillars, including internal evaluations and a non-publicly available evaluation conducted in 2019 by the Instituto de la Juventud (Lake and Vargas Díaz 2021). A Vimenti staff member describes a portion of Vimenti's self-evaluation process, specifically the institutional evaluation process, as follows:

"El proceso de la evaluación [institucional] que hacemos dos veces al año, donde hay un sinnúmero de indicadores que están atados a la salud administrativa y a la gobernanza de la organización, desde seguridad hasta procesos críticos que pudieran estar atados a la apertura o cierre de una organización. Y nosotros vamos evaluando cómo vamos, qué necesitamos, qué tenemos y qué nos falta. Y eso nos ayuda mucho a establecer como un roadmap de lo que queremos hacer y qué nos falta .... Y eso nos ayuda muchísimo porque nos enfoca. Nos enfoca en la dirección correcta, en la estructura correcta y nos enfoca con los objetivos específicos por las diferentes áreas. Y nos permite también ver el effecto de las diferentes áreas entre sí."

Translation: "The process for the institutional evaluation that we conduct every two years has many indicators that are tied to the administrative health and governance of the organization, including security and critical processes that could influence the opening or the closing of the organization. And we continue evaluating how we are doing, what we have, and what we are missing. And that helps us establish a road map of what we want to do and what remains to be done .... And that gives us a lot of focus. It focuses us in the right direction, and it focuses us on the objectives in our different areas. And it allows us to also see the effect that the different areas have on each other."

Most recently, the first symposium on bigenerational models in Puerto Rico, hosted by the Instituto de la Juventud de Puerto Rico and attended by Vimenti, was organized to begin promoting peer learning on the unique application of the model in Puerto Rico.<sup>58</sup>

Because of its recent FSCS grant,<sup>59</sup> which will help expand the 2Gen model to five schools throughout the island, Vimenti has a monumental opportunity to lead the field in demonstrating how evaluation of services can support continuous learning and improvement by fostering innovation. In partnership with the five additional public and charter schools that will be receiving grant money to implement new 2Gen programs, it would be very strategic to consider expanding the scope of this evaluation in the following ways:

- selecting public schools as the treatment group, to maximize comparability between all participating families
- selecting only first-year families as the treatment group families, and excluding families with any children at Vimenti
- sourcing the comparison group families primarily from school lottery waiting lists
- selecting as comparison group families those who currently live in a public housing project in the same educational area as the treatment group at the same ratio as is found at Vimenti
- extending the length of the evaluation to cover at least a three-year period, to facilitate longitudinal comparison
- linking administrative data, including case management data, absence data, workshop and training attendance, and potentially test score data, with survey data

Finally, in addition to cohosting peer-learning opportunities locally in Puerto Rico, Vimenti could consider increasing its participation in the following 2Gen networks to facilitate learning across the 2Gen field:

- The Ascend Network: A network of organizations that use 2Gen approaches in policy and practice to create a society in which every family can reach their full potential
- Ascend Fellows: Leaders who are well connected, well prepared, and powerfully positioned to build political will, change systems, and drive a 2Gen policy agenda
- Family Prosperity Partners: A collaborative community focused on innovating to strengthen parents' and families' access to employment opportunities, economic security, and health and well-being

 Postsecondary Success for Parents: Raises awareness of and shares recommendations to better support the one in five students enrolled in postsecondary pathways who are parents

#### ALIGN AND LINK SYSTEMS AND FUNDING STREAMS AT THE FAMILY LEVEL

This final principle acknowledges that programs seeking to advance 2Gen policies and approaches must intentionally align and link publicly funded systems at the family level for both parents and children. Rarely will single funding streams fully address all the needs of children, parents, and families. To account for this, effective 2Gen programs blend and coordinate funds to deliver two-generation services. In effect, the program acts as a portal for families by providing service navigation that links them to all the public benefits and private programs that can help them make the journey from poverty to economic security. Service navigation should also include attention to the "cliff effect" for families, and assistance with smoothing out families' experiences with seeing their benefits decline as their incomes rise on account of successful outcomes. To this end, 2Gen programs often demonstrate keen awareness of 2Gen service integration mechanisms at the state level, such as common applications, cliff effect work groups, transitional benefits, and streamlined programs, such as combined plans for Temporary Assistance for Needy Families and the programs of the Workforce Innovation and Opportunity Act.

Because of Vimenti's origin as a Boys & Girls Club after-school tutoring program, the first few years of aligning services and streams of funding required the creation of Vimenti as an independent initiative. This launched a yearslong process to establish and fund Vimenti as a separate entity from the Boys & Girls Club. Because Vimenti incorporated as a public charter school, its funding as a charter school, or an escuela pública alianza, can come from the Puerto Rico Department of Education or from private or philanthropic sources. As a charter school that has organized a concerted effort to raise private and philanthropic funds, Vimenti is in a position to subsidize its limited and unreliable public funding allocation. For context, Puerto Rico public schools were the least well-funded per pupil among all US states and territories, with an average of \$8,129 per pupil in the 2020–2021 school year. 60 This low per-pupil amount leaves schools with a limited set of resources to tackle challenging student and family economic, social, and health challenges. Unfortunately, Vimenti has also had to navigate a slow and unreliable disbursement of public PRDE funds. For example, Vimenti received only half of its expected public PRDE funds in the 2020–2021 school year (Lake and Vargas Díaz 2021), a budget shortfall that, in the absence of successful private and philanthropic fundraising, could have significantly disrupted school and family programming. $^{61}$  Vimenti should continue to clearly document its public, private, and philanthropic children-related funding sources, as this level of transparency will be

imperative in advocating for an expansion of the 2Gen model in both public and charter schools, and for an overall increase in per-pupil funds available to every school in Puerto Rico.

Given its 2Gen model, Vimenti should also transparently disclose the funds it is earmarking for parent, family, and adult services, separately from its funding for children's services. For example, Vimenti could, at its discretion, transparently share with its parent council, parents, and community members the percentage of each pillar—education, social development, and economic development—that is being spent on parents and children; in the economic pillar, for instance, this could include how much of the pillar expenses is going to employment trainings for parents and how much is being used for student career development. Currently, Vimenti reports expenses pillar by pillar, but it is unclear how much of each pillar's expenses goes to each generation. Figures for integrated services that support both parents and children (for example, case management expenses) could also be reported.

Transparently including per-parent or per-family expenditures could be useful for two main reasons: (1) in areas where the evaluation above did not show statistically significant impact, the share of budget expenditure could show areas where more funding and scale is needed to see changes and (2) sharing these numbers could help support more targeted fundraising or partnership building.

A review of the share of funds allocated specifically for parent and family programming suggests that one potential future area of expansion of the economic pillar and education pillar would be to serve parents at the Ernesto Ramos Antonini housing project—that is, not just for parents of Vimenti students but for adults in the public housing project where the school is located. As noted above in the economic pillar findings, Vimenti families voiced an interest in expanded workforce development and adult postsecondary education programs. If Vimenti is currently spending a greater share of its funds on children, staff could seek to target future fundraising efforts to additional public, private, or philanthropic funding with more of an adult focus, including with the Puerto Rico Departments of Health or Employment, or other topically interested philanthropic funders.

Across the five Ascend 2Gen principles, Vimenti is performing best in the three principles of listening to parent voices, ensuring equity, and fostering innovation. The greatest improvement to increase fidelity and adherence to the five 2Gen principles could be obtained from

- increasing parent leadership and participation in governance and research design;
- increasing resources and research on the analysis of disaggregated subgroups, especially for children with special education needs; and
- increasing reporting on the share of funds earmarked exclusively for parent servicing and programming (and showing parity with investments made in children's services).

#### ALIGNMENT OF THE LOGIC MODEL WITH 2GEN PRINCIPLES

Because designing and implementing 2Gen programs requires significant systems change and innovation across established systems, having a clear and consistent logic model that explicitly reflects 2Gen principles is critical in ensuring adherence to those principles. Also, a robust logic model is useful for internal evaluation of 2Gen initiatives, as it supports the clarity with which the stated inputs, services, outputs, and outcomes can be measured. Below, we offer recommendations on how to improve the Vimenti logic model to facilitate more consistent implementation and evaluation of the organization's 2Gen approach.

Vimenti's current logic model (figure 2) excels in several ways. First, it effectively indicates the progression between inputs, activities, outputs, and outcomes. This clearly demonstrates Vimenti's theory of change via disrupting child and adult poverty and supporting economic mobility for whole families. Second, clearly labeled and detailed descriptions of activities and measures for each output and outcome transparently show the range of initiatives Vimenti is pursuing under its three pillars. Finally, the delineation of short-, medium-, and long-term outcomes is extremely useful and provides a helpful means to measure progress within a one-year, three-year, and five-year context.

However, there are some improvements that could be made to the logic model, which would be very helpful in improving Vimenti's already good adherence to 2Gen principles, as well as in supporting more rigorous internal evaluation in the future.

First, the current model's subheadings should be adjusted to better reflect the three pillars. Currently, the Vimenti model includes six subheadings under inputs, activities, outputs, and outcomes, three of which are related to education; the logic model headings currently comprise (1) school (K–5), (2) health, (3) after-school, (4) social, (5) education and training (adults), and (6) economic. This is confusing, since Vimenti has three core pillars in which it wants to track progress. We suggest reorganizing the subheadings to list only the three pillars (education, economic, and social). For example, this would require the health subheading to be reorganized under the social pillar; relatedly, this change should include making a clearer connection between health outcomes and socioemotional outcomes. Alternatively, these subheadings could be reorganized to fit the six Aspen components of well-being: (1) early childhood education; (2) K–12; (3) postsecondary and employment pathways; (4) social capital; (5) health, including mental health; and (6) economic assets.<sup>62</sup>

Second, the logic model should label child and parent outcomes separately. 2Gen models distinguish child-focused work from adult-focused work for the sake of clarity when it comes to identifying which activities and outcomes are mutually reinforcing or for the whole family (see next

paragraph). In particular, the social and economic pillars do not have clear child-versus-parent labels. Distinct and clear labeling will help highlight, for example, that the social pillar does not include short, medium-, or long-term outcomes for children, only for parents. The missing measures become a problem when conducting internal or comparative evaluations, as measures included in a survey protocol may not map one-to-one with the logic model. The measures developed in this evaluation can serve as a starting point to fill in some of the missing measures in the economic and social pillars.

Third, the Vimenti logic model should display family (distinct from parent) outcomes more clearly, as well as flag any adult or child activities and outcomes that are mutually reinforcing or generating a "multiplier" effect. For example, a family section of the model could display goals, activities, inputs, outputs, and outcomes for improved housing conditions, whole family civic engagement or outings, and shared family meals where healthy cooking and eating is practiced together. Adult goals, activities, and outcomes to flag as mutually reinforcing might include, for example—if needed or requested by parents—more alignment between shift work and options for quality child care during odd hours.

Fourth, the logic model should reflect more parent voice elements, especially the inclusion of a column displaying adult, child, and family goals and needs. In keeping with the parent voice principle for 2Gen approaches, the entire logic model should be assessed to include inputs, outputs, and outcomes of parent voice being heard and incorporated into Vimenti planning. This could include tracking inclusion and awareness of parents on advisory boards and the Vimenti board itself, as well as tracking parent satisfaction with Vimenti policies and operations. Examples of measures Vimenti leaders might consider including are the number of seats parents have on the board or on the parent council, parent attendance at school policy and planning meetings, and the number of community-based researchers Vimenti hires from among participating families for its evaluation purposes.

Finally, the logic model should include an additional section to reflect Vimenti goals for systems change. Which cliff effects and poverty traps are most damaging to family prospects? What activities (e.g., bridge funds) might address these issues? This section could also highlight the need for more explicit attention to parent voice at the level of power and authority by including goals for advocacy aligned with activities and measures such as parent testimony before the Legislative Assembly of Puerto Rico.

## **Program Satisfaction**

For our third and final research question, we examined how satisfied Vimenti and comparison families are with the education, services, and programs available to their families at their school. This included satisfaction with workshops and trainings offered, satisfaction with school services, and satisfaction with case managers (or social workers, in the context of the comparison schools).

Table 15 lists the satisfaction questions that were combined to create satisfaction indices for the analysis under three main groupings: program, service, and case manager / social worker satisfaction. Although these measures were generated with the intention of representing all of Vimenti's programming, we kept the survey questions broad enough that comparison school families could share their satisfaction with the listed service within their "school community," whether they receive the service at their school proper or from a community nonprofit, such as a nearby Boys & Girls Club. This assumption that comparison families have some level of access to many of the services included in our workshop and training satisfaction measurements was confirmed during the qualitative data collection, as parents and staff at the two participating comparison schools confirmed that both schools and local nonprofits made efforts to provide health, employment, and self-esteem workshops, among others. The survey measures also included an option for all respondents to indicate that a given service was not offered. Those who selected that option were considered "missing" and not included in the satisfaction results below.

#### TABLE 15

#### Satisfaction

Survey measures used to assess satisfaction with programs, services, and staff from Vimenti

Secondary outcomes	Questions
Workshop and training satisfaction	<ul> <li>In the last year, how satisfied are you with the following program: Social emotional workshops?</li> <li>In the last year, how satisfied are you with the following program: Health workshops or fairs?</li> <li>In the last year, how satisfied are you with the following program: Entrepreneurship programs?</li> <li>In the last year, how satisfied are you with the following program: Employment programs?</li> <li>In the last year, how satisfied are you with the following program: Help identifying jobs, interviewing, and relocation to new jobs?</li> <li>In the last year, how satisfied are you with the following program: Help completing postsecondary courses?</li> <li>In the last year, how satisfied are you with the following program: Technology workshops?</li> <li>In the last year, how satisfied are you with the following program: English workshops?</li> <li>In the last year, how satisfied are you with the following program: Finance workshops?</li> <li>In the last year, how satisfied are you with the following program: Finance workshops?</li> <li>In the last year, how satisfied are you with the following program: Workshops for child development or raising?</li> </ul>
School service satisfaction	<ul> <li>In the last year, how satisfied are you with the following services of your school: School in general?</li> <li>In the last year, how satisfied are you with the following services of your school: Safety of the school?</li> <li>In the last year, how satisfied are you with the following services of your school: Classes?</li> <li>In the last year, how satisfied are you with the following services of your school: Tutoring?</li> <li>In the last year, how satisfied are you with the following services of your school: School facilities?</li> <li>In the last year, how satisfied are you with the following services of your school: Virtual school during the pandemic?</li> <li>In the last year, how satisfied are you with the following services of your school: Family integration into school or academic services?</li> <li>In the last year, how satisfied are you with the following services of your school: Communication of the school and teachers with you?</li> <li>In the last year, how satisfied are you with the following services of your school: Emotional support for students?</li> <li>In the last year, how satisfied are you with the following services of your school: Extracurricular activities for students?</li> <li>In the last year, how satisfied are you with the following services of your school: Resources in disciplining the student?</li> <li>In the last year, how satisfied are you with the following services of your school: Resources in disciplining the student?</li> <li>In the last year, how satisfied are you with the following services of your school: Nursing or health services at school?</li> </ul>

Secondary outcomes	Questions
Case manager or social worker satisfaction	<ul> <li>How satisfied are you with the following: The communication with your case manager or social worker?</li> <li>How satisfied are you with the following: The support provided by your case manager or social worker?</li> </ul>
	How satisfied are you with the following: The ability of your case manager or social worker to connect you to services?

**Source:** Survey protocol constructed by authors.

#### **Satisfaction Findings**

We find that, across the board, participants in the treatment group reported greater satisfaction with their school and community supports than those in the comparison group, all with statistically significant differences (table 16).

Specifically, Vimenti families reported being more satisfied than comparison school families (significant at the 1 percent level) with all of the following:

- workshops and trainings offered (such as social emotional workshops and entrepreneurship programs)
- school services provided (including classes, extracurricular activities for students, etc.)
- case managers or social workers

None of these differences were statistically significant in the difference-in-differences analysis. However, this could be due to families being treated in prior years, meaning that they were already happy with these services at the time of the beginning-of-year survey because they had already experienced them previously. And, while none of the differences were statistically significant, they were all in the intended direction.

TABLE 16

Differences in Program Satisfaction

Difference-in-differences regression results for the selected satisfaction measures

	Workshops and trainings satisfaction index (standardized)	School service satisfaction index (standardized)	Case manager or social worker satisfaction index (standardized)
Difference-in-differences estimate	0.196	0.304	0.357
Fixed effects p value	(0.276)	(0.152)	(0.121)
N	280	246	274
Adjusted R <sup>2</sup>	0.019	0.029	0.015
End-of-year survey t-test	0.433***	0.660***	0.670***
End-of-year survey p value	(0.002)	(0.001)	(0.000)
N	145	125	138

Source: Urban Institute analysis of survey data.

**Note:** Difference-in-differences results are based upon a fixed effects model with both individual and time fixed effects included. We calculate standard errors using heteroskedastic robust standard errors clustered at the individual level, listed in parentheses. \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01..

Since we did not include in table 16 the individuals who said that a given service was not available (as their responses did not fit within the Likert ranking), we also compared the availability of workshops and trainings, and whether that appeared to differ between Vimenti and comparison schools (table 17).

TABLE 17
Reported Lack of Access to Supports

Frequency of parents who reported not having access to the following services

End-of-Year Survey Frequency of Reported Lack of Access to Workshops and Trainings

	Treatment group	Comparison group
Social emotional workshops	1	7
Health workshops	0	12
Entrepreneurship programs	0	13
Employment programs	1	14
Help identifying new jobs	1	18
Help completing postsecondary courses	1	18
Technology trainings	4	15
English workshops	5	16
Finance workshops	3	19
Parenting or child development workshops	0	12

Source: Authors' analysis of end-of-year survey.

Vimenti parents in the focus groups also noted satisfaction with some of the workshops and trainings offered for parents. The training and workshops that parents mentioned attending included a finance workshop, a child-rearing class, and a monthlong employment workshop. Those who mentioned attending—typically about a third of the total number of participants in the three Vimenti focus

groups—said that they really enjoyed the workshops and found them useful. Those who attended did note that they had observed attendance at parent workshops being lower than expected. When those who did not attend were asked about the most common barriers, most mentioned that the courses were offered during the day and conflicted with their work schedules. This finding was reiterated by at least one parent in the Vimenti data interactive, who said that they wished the employability and careers trainings were offered with more frequent and flexible schedules, while another data interactive participant mentioned wishing that these particular courses were advertised more.

The Vimenti data interactive participants shared many new ideas about the types of workshops, trainings, or services Vimenti could consider expanding for parents. These cut across all three pillars and included the following:

- Education pillar: Adding a program to support parents in completing their high school equivalency credential and adding a program to support parents in improving their reading and writing (literacy workshops), so that they can better support their kids
- Economic pillar: Adding more workshop times and offerings related to obtaining new employment
- Social pillar: Adding more workshops about health, including around topics of chronic conditions; increasing access to blood tests as part of the screening offerings; and expanding services and programs for parents

Regarding satisfaction with school services, parents noted that the onset of the pandemic and virtual learning presented challenges, but that Vimenti, through its active parent engagement approach, was better able to adjust to those changes. For example, parents with kids in comparison schools mentioned the lack of structure in lessons and their children's difficulty focusing during virtual learning. For parents who had children in both Vimenti and in a traditional public school, the difference in this dynamic between the two schools was particularly marked during the pandemic. For example, one parent with a child who started at Vimenti in kindergarten and an older child who completed kindergarten and first grade at a nearby public school described the differences in academic supports:

"La pandemia llega el segundo semestre de ese periodo escolar. Y realmente fue un desastre. La diferencia [entre escuelas] ha sido del cielo a la tierra. O sea, la diferencia en cuestión de la planificación educativas. Es sumamente diferente a lo que es una escuela pública. La grande me cursó primero virtual y la chiquita me cursó kínder virtual. Aprendieron mucho más de lo que están aprendiendo [allá]. Y el ejemplo que te doy es que, por lo menos la grande, continuó allá en lo que entraba acá. Y yo veía la diferencia tan grande entre la dinámica de los maestros. La preparación de los maestros incluso aunque era kínder, no importa que fuera kínder, se veía entenderse vaya la maestra más capacitada que los maestros de la escuela pública. La planificación virtual. La rutina diaria. Era bien diferente.

Mi nena más grande llegaba al punto que ella se frustraba .... Ella podía estar una hora cogiendo inglés. Y era desesperante para ella porque la maestra [...] no le daba una manera de que los niños pudieran entender. Y entonces para cada período de clase era demasiado extenso. No estaba bien planificado. Entonces para las tareas también era bien complejo.

Y acá era bien sencillo .... Y las tareas te las ponían bien específicas y todo. Y del otro lado todo el tiempo tenía dudas. 'Mamá no sé hacer esto, mamá no sé hacer.' Y no porque sea mi nena. Pero mi nena es brillante [....]. Yo veía la frustración constante de ella. [Cuando la mayor] entra acá [...], ella empieza a ver todo acá, yo vi el cambio total."

Translation: "The pandemic arrived the second semester of that school year. And it was truly a disaster. The difference [between schools] has been night and day. The difference has been in terms of educational curriculum. It is extremely different from a public school. The eldest did first grade virtually and the youngest did kindergarten virtually. They are learning a lot more here than what they are learning there. And the example I have is that, at least the oldest, continued [in public school] until she was able to enroll here. And I saw a huge difference in the dynamic of the teachers. The preparation of the teachers was obvious-even if it was just kindergarten, you could tell that the teachers are more capable than those in the public school. The virtual planning. The daily routine. It was very different.

My eldest reached the point of being frustrated .... She could be taking English for an hour. And it was exasperating for her because the teacher could not explain it in a way the kids understood. Every class period was extensive. It was not well planned. And so for the homework, it was very complex.

Here, it was simple .... And the homework assignments were specific and well planned. And from the other side, I had questions all the time. 'Mom, I don't know how to do this. Mom, I don't know how to do it.' And it wasn't because of my daughter. Because she is brilliant. [....]. I saw her constant frustration. [When the eldest] enrolled here, [...], I saw a complete change.

Finally, as mentioned in the "Adherence to 2Gen Principles" section, Vimenti parents have significantly more positive and inclusive interactions with their case managers than comparison parents do with their school-based social workers. In large part, the qualitative data collection seems to suggest that the reframing of poverty as a structural rather than individual fault, and the purpose of the case managing (supporting family goals versus reporting requirements to the government), drove some of this difference between Vimenti and the comparison group.

One note that was shared by at least two Vimenti data interactive participants was that case manager follow-up appears to decrease once a family has met most of or all their goals. They said that they did not appreciate experiencing that drop-off and would prefer to continue to receive follow-up and communication from their case manager. It might be useful for Vimenti to evaluate whether this drop-off is really happening, which would make sense with a model that prioritizes families in economic crisis. Given the nature of "poverty traps," however, a family's achievement of a more economically stable position may not translate to durable economic stability.

### Limitations

There are three key limitations to our analysis. First, we compare families in a 2Gen charter school to families in traditional public schools, so some of the differences observed could be due to Vimenti being a charter school rather than to its use of a 2Gen model. However, the direction of this bias is unclear. Research on charter schools shows that they do not always outperform public schools (Betts and Tang 2011). For instance, Angrist, Pathak, and Walters (2013) find that Massachusetts' urban charter schools boost students' achievement well beyond that of traditional urban public-school students, while nonurban charters reduce achievement from a higher baseline. And in our interviews and focus groups with families, participants often referred to the interactions with staff that are key in 2Gen models, suggesting that we are capturing the effect of the 2Gen intervention above and beyond the charter school effect.

A second key limitation is that we do not have a random sample, so some of the findings could reflect selection bias (due to the characteristics of those opting in to the program) or other endogeneity rather than a truly causal effect of the Vimenti program on outcomes. Even the difference-in-differences model, which removes any selection bias that is time invariant, does not remove selection bias related to changes over time. In other words, if people who self-selected into Vimenti were already improving or worsening on outcomes prior to joining the program, the results will partially reflect those preexisting trends. But the direction of this effect is unclear. While a 2018 study found that charters are

less likely to respond to prospective families with a child with significant special needs, a history of poor behavior, or low achievement (Bergman and McFarlin 2018), other research has found that students who transfer from district to charter schools actually have the lowest levels of prior academic achievement compared to students who made other types of school choices (Garcia, McIlroy, and Barber 2008). Because Vimenti serves one of the poorest neighborhoods in San Juan, as mentioned earlier, our estimates may actually underestimate the true effect of the Vimenti program, as comparison families may live in safer neighborhoods with lower poverty rates. However, Vimenti does give preference to children who have completed voluntary preschool programs, for example, which may skew its student population toward higher levels of academic achievement. We use two different econometric models to attempt to better understand this challenge and estimate bounds on the effects of the program.

Third, although our sample size is neither exceptionally large nor extremely small, it is important to recognize that the size does represent a limitation on our analysis. While the data provide valuable insights, larger sample sizes could offer increased statistical power and greater generalizability. Despite this limitation, we have taken steps to ensure robustness in our findings and have employed appropriate methodologies to mitigate potential biases.

## **Conclusion and Next Steps**

This study contributes insights into the efficacy of 2Gen models through the evaluation of the Vimenti 2Gen model in Puerto Rico. The mixed-methods findings indicate that Vimenti families outperformed comparison families across various metrics, underscoring the potential of 2Gen approaches to positively affect educational, economic, and social outcomes for both children and their families. Vimenti families also exhibited higher levels of satisfaction with the school and the day-to-day case management provided than did comparison families.

Vimenti's fostering of innovation and gathering of evidence in the education and antipoverty field comes at a critical time in Puerto Rico, where the compounding crises of Hurricane Maria, the 2020 earthquakes, the COVID-19 pandemic, economic recession, and austerity policy have led to a protracted battle over public school funding. With Vimenti's recent securing of an FSCS grant, <sup>63</sup> which will help expand versions of the 2Gen model to both public charter and traditional schools throughout the island, Vimenti has a monumental opportunity to lead the field in a few ways:

- continue building the evidence around the successes and challenges of a 2Gen model,
   particularly the expansion of focus into parent outcomes and supports, and the mutually
   reinforcing benefit of focusing on both children and parent outcomes
- provide a blueprint for traditional and public charter schools in Puerto Rico to pursue new frameworks, collaborations, services, and programming
- document the educational, economic, and social effects and return on investment of increasing expenditure per family and child in Puerto Rico
- demonstrate the unique adaptations of the 2Gen model to the Puerto Rican context
- foster innovation in the rigorous and comparative evaluation of 2Gen models

Some lessons learned from this evaluation that might be useful to expand into these new schools include the following:

- Qualitative data suggest that Vimenti's positive educational outcomes for children are due to the schools' unique approach to academic development. This includes the schools' attendance procedures (such as following up with families about absences), tiered learning model, integrated case management, and robust after-school services. Indirectly, support for parents, including through programming and monetary assistance when parents are in significant financial need, may increase the quality of parents' support for their children and, in turn, contribute to student academic performance.
- Vimenti parents showed higher economic outcomes than comparison parents, which may in part be related to Vimenti's offering of employment, finance, and entrepreneurship workshops. One of the flagship economic workshops, the employability program, is a monthlong training that includes soft skills development, interview practice, and job placement support. Although comparison staff mentioned offering a few one-off workshops on budgeting, they did not compare to Vimenti's programs in topic breadth or depth.
- Vimenti families showed greater increases in access to quality health care throughout the school year than comparison families. Some of this may be due to the quality of Vimenti's coordinated in-house team, including its nurses, psychologists, and therapists, as well as the services it brings in, such as health screenings and pediatricians. While the rest of the quantitative findings within the social pillar for parent and child health revealed no statistically significant differences between the treatment and control groups, qualitative findings indicated that Vimenti families were very happy with and grateful for the support they received to

- promote their children's health, and that receiving this support helped children be healthier and perform better in school.
- Data from the focus groups and interviews indicate that Vimenti excels at listening to parents. Both parents and staff underscored the emphasis the Vimenti community places on listening to and building trusting relationships with families. The practice of increasing the frequency of communication and touch points with families, both individually and at schoolwide events, would seem to be a key best practice for other schools to adopt.
- The 2Gen fidelity study also noted that Vimenti supports families who have been stigmatized, criminalized, and overpoliced, and that Vimenti's structural understanding of entrenched poverty is a key difference in how the organization is implementing its equity goals.
- Vimenti is attempting to better serve families of children with special education needs by ensuring that all the mandated services, including dedicated staff and therapists, are integrated into all Vimenti programming. From the qualitative findings, this effort appears to be helping families to more efficiently (and with less frustration) navigate the bureaucratic process of getting their children certified as having special needs.

There are also ways in which Vimenti could continue to grow to further strengthen the 2Gen model:

- Vimenti could continue to expand its economic pillar offerings, since these results were less robust than those of the education pillar. Such an expansion could include providing new workshops, expanding the availability and frequency of existing trainings and workshops, and advertising Vimenti's existing offerings more extensively. With regard to financial health, financial coaching has been proven to be a successful way to help families improve their financial security, so it may be one model to explore (Theodos, Stacy, and Daniels 2018). Cash transfers can also help increase families' financial health (Londoño-Vélez and Querubín 2020), so Vimenti could attempt to raise funds for a conditional or unconditional cash transfer for its students' families (receiving exemptions from benefits calculations or otherwise tracking benefits cliffs for families, with an eye to not worsening these cliffs).
- Vimenti could continue to expand its offerings in the social pillar as well, since these results were also less robust than those seen in the education pillar. With regard to parent physical health, no parents mentioned receiving services for their own medical or mental health needs, so that could be a potential idea to explore for expanded programming. With regard to child and parent socioemotional health, it could be interesting to consider longer-term trainings or

- certifications that parents can participate in, so that they have a longer time frame during which to learn and apply new skills.
- Vimenti could further communicate opportunities for parent voice at the organizational level, such as within governance or advisory bodies and by helping parents to become communitybased resident researchers to support Vimenti's internal evaluation efforts.
- Vimenti could continue to advocate for resource mobilization for students with severe disabilities, including for timely fund disbursement by the PRDE. Vimenti parents did not note deficiencies in the capacity of therapists on site or the support provided by case managers to successfully register for "T1." Rather, parents noted that Vimenti's weakness was its current inability to fully support children with very acute special needs.

There are also structural challenges that leaders within Puerto Rico should work to address to increase the well-being of all families. Both Vimenti and comparison school parents highlighted issues with the transportation infrastructure, which often forced parents to make difficult choices between their own work and their children's school attendance. Similarly, concerns regarding the special education process were voiced by parents in both groups, signaling the need for systemic improvements in diagnosis, enrollment, and ongoing support mechanisms. Parents also noted challenges with the benefits cliff, meaning that as they gained employment or increased income, they often lost their eligibility for other benefits.

Moving forward, it is imperative that local policymakers and educational authorities address these challenges. Investments in transportation infrastructure and streamlining special education services, as well as finding ways to help families avoid the benefits cliff, are essential steps toward ensuring equitable access to education and support for all children and families.

Additionally, future 2Gen research should continue to evaluate the effects of such approaches on whole family outcomes and should track longer-term outcomes for participants of these programs. It should also dig deeper into which types of workshops and programs work best to improve whole family outcomes, and how and why parents prioritize one type over another. While a plethora of guidance and case study work on 2Gen models exists, there are few empirical studies that examine outcomes for participants of such initiatives and/or evaluate which methods are most effective within 2Gen models. Researchers should expand this scholarship to help the field continue to learn and innovate. For Vimenti in particular, future research should follow Vimenti students over time to assess how the approach affects the students' long-term academic, economic, and social outcomes.

This study underscores the importance of continued research into 2Gen models to refine their implementation and maximize their potential for holistic family improvement. By addressing existing challenges and building upon successful aspects, 2Gen programs like Vimenti can serve as models for comprehensive family support and empowerment.

# Appendix A. Beginning-of-Year Survey *t*-Tests

TABLE A1
Education Pillar Beginning-of-Year t-Tests

Variable name	Obs.	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	p Value
Identify Letters	33	41	3.606	3.073	0.533*	0.063
Read Four Words	30	34	2.500	2.618	-0.118	0.736
Follow Text	31	39	3.161	2.769	0.392	0.269
Write 3 Letters of Name	34	42	4.265	3.452	0.812***	0.005
Write Simple Word	32	39	3.406	3.051	0.355	0.250
Know 1-10	35	42	3.771	3.881	-0.110	0.692
Know Greater Than	31	37	2.935	2.892	0.044	0.900
K-1st Academic Performance Index (Standardized)	35	43	0.092	-0.086	0.178	0.319
Pick Up Object	92	94	4.315	4.053	0.262*	0.060
Know Tall vs. Short	92	97	4.315	4.206	0.109	0.443
Recognize Passage of Time	92	94	3.848	3.681	0.167	0.334
Motor Skills and Spatial Reasoning (Standardized)	92	97	0.089	-0.106	0.196	0.106
Chronic Absenteeism	92	99	0.424	0.374	0.050	0.482
Parent Education	92	99	0.641	0.404	0.237***	0.001

**Source:** Authors' calculations using data from a survey conducted by the authors.

**Notes:** \* *p* < 0.10,. \*\* *p* < 0.05, \*\*\* *p* < 0.01..

TABLE A2
Economic Pillar Beginning-of-Year t-Tests

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	p Value
Family Income (not normalized)	83	85	1,060.24	755.29	304.95***	0.005
Employment	92	99	0.663	0.505	0.158**	0.027
Job Tenure	54	40	0.815	0.700	0.115	0.198
Fixed Schedule	55	44	0.600	0.568	0.032	0.752
Increased Hours	47	34	0.766	0.765	0.001	0.990
Raise	52	40	0.288	0.325	-0.037	0.709
Promotion	50	43	0.040	0.070	-0.030	0.531
Job Quality Index (Standardized)	56	46	-0.038	-0.031	-0.006	0.964
Entrepreneurship	83	88	0.036	0.068	-0.032	0.351
Acquired New Skill	84	75	0.512	0.440	0.072	0.368
Taking Course	91	98	0.220	0.051	0.169***	0.001
New Skills Index (Standardized)	91	98	0.194	-0.179	0.373***	0.002
Financial Stability	82	79	2.500	2.418	0.082	0.519
Difficulty Paying Utilities	89	89	2.596	2.854	-0.258	0.172
Difficulty Paying for Groceries	87	85	1.609	1.788	-0.179	0.289
Difficulty Paying Rent or Mortgage	87	85	1.690	1.965	-0.275	0.129
Difficulty Paying for Transport	87	85	1.805	2.000	-0.195	0.312
Difficulty Paying for Child Care	86	87	2.291	2.023	0.268	0.184
Could Cover \$500 Emergency	70	71	2.429	2.366	0.062	0.722
Financial Health Index (Standardized)	91	95	-0.031	0.018	-0.049	0.525
Car Ownership	92	99	0.891	0.586	0.305***	0.000
Housing	87	89	3.632	3.213	0.419*	0.090

 $\textbf{Source:} \ \textbf{Authors'} \ \textbf{calculations} \ \textbf{using data} \ \textbf{from a survey} \ \textbf{conducted by the authors}.$ 

**Notes:** \* *p* < 0.10,. \*\* *p* < 0.05, \*\*\* *p* < 0.01..

TABLE A3
Social Pillar Beginning-of-Year t-Tests

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	p Value
Parent Health	90	93	3.778	4.065	-0.287**	0.017
Parent Sick in Last Year	89	87	0.337	0.356	-0.019	0.790
Parent Mental Health	84	84	0.119	0.214	-0.095*	0.099
Parent Mental and Physical Health Index (Standardized)	92	99	0.023	-0.046	0.070	0.488
Child Health	91	95	4.396	4.084	0.311***	0.003
Child Sick in Last Year	90	94	0.422	0.340	0.082	0.256
Child Physical Health Index (Standardized)	92	99	0.071	-0.086	0.126	0.125
Medical Insurance	92	99	0.967	0.838	0.129***	0.003
Child Access to Medical Care	92	99	0.185	0.172	0.013	0.815
Parent Access to Medical Care	92	99	0.163	0.121	0.042	0.410
Parent Access to Mental Health Care	8	18	0.250	0.222	0.028	0.883
Access to Quality Care Index (Standardized)	92	99	0.093	-0.095	0.188**	0.047
Auditory Screening	87	82	3.552	3.232	0.320	0.109
Dental Screening	89	90	1.888	1.867	0.021	0.900
Vision Screening	89	83	3.056	2.988	0.068	0.767
Pediatric Screening	89	89	1.854	1.607	0.247	0.130
Psychological Screening	86	78	3.547	2.833	0.713***	0.008
Access to Health Screenings Index (Standardized)	90	93	0.083	-0.111	0.194**	0.046
Behavioral Complaint	89	92	0.090	0.098	-0.008	0.856
Adjust to Transitions	92	95	3.522	3.558	-0.036	0.822
Accept Responsibility	91	95	3.549	3.705	-0.156	0.326
Calm Down	91	97	3.538	3.711	-0.173	0.309
Get Along with Others	91	96	4.330	4.260	0.069	0.608
Finish a Task	90	96	3.567	3.635	-0.069	0.677
Stop When Asked	92	93	3.543	3.677	-0.134	0.404
Plan in Advance	90	92	3.400	3.620	-0.220	0.199
Recall Instructions	91	94	3.088	3.457	-0.370**	0.026

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	p Value
Pay Attention	91	96	3.473	3.594	-0.121	0.490
Child Behavior and Emotional Intelligence Index (Standardized)	92	99	-0.056	0.014	-0.070	0.520
Read to Child	92	98	3.533	3.602	-0.069	0.630
Reinforce Schoolwork	91	98	4.077	4.327	-0.250**	0.037
Participate in Activities	91	93	4.297	4.312	-0.015	0.906
Speak with Teachers	90	95	4.478	4.316	0.162	0.195
Ensure Child Does Not Get into Trouble	89	96	4.461	3.979	0.482**	0.013
Ensure Child Attends School	91	96	4.934	4.750	0.184***	0.005
Positive Parent Behaviors Index (Standardized)	92	99	0.039	-0.035	0.074	0.417

 $\textbf{Source:} \ \textbf{Authors'} \ \textbf{calculations} \ \textbf{using data} \ \textbf{from a survey} \ \textbf{conducted by the authors}.$ 

**Notes:** \* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01.

# Appendix B. End-of-Year Survey *t*-Tests

TABLE B1
Education Pillar End-of-Year Survey t-Tests

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	p Value
Identify Letters	29	22	4.276	3.773	0.503	0.125
Read Four Words	27	22	3.963	3.500	0.463	0.201
Follow Text	28	22	3.893	3.455	0.438	0.189
Write 3 Letters of Name	29	22	4.793	4.045	0.748***	0.005
Write Simple Word	28	22	4.321	3.682	0.640**	0.048
Know 1-10	29	22	4.552	4.000	0.552**	0.038
Know Greater Than	27	22	4.037	3.591	0.446	0.184
K-1st Academic Performance Index (Standardized)	29	22	0.199	-0.291	0.490**	0.046
Pick Up Object	84	61	4.298	4.148	0.150	0.346
Know Tall vs. Short	85	61	4.494	4.197	0.297**	0.043
Recognize Passage of Time	84	61	4.000	3.918	0.082	0.638
Motor Skills and Spatial Reasoning (Standardized)	85	61	0.072	-0.127	0.199	0.180
Chronic Absenteeism	85	61	0.435	0.590	-0.155*	0.066
Parent Education	85	61	0.706	0.410	0.296***	0.000

**Source:** Authors' calculations using data from a survey conducted by the authors.

**Notes:** \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

TABLE B2
Economic Pillar End-of-Year Survey t-Tests

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	р Value
Family Income (not normalized)	72	47	1,106.94	839.36	267.58*	0.052
Employment	85	61	0.753	0.492	0.261*	0.001
Job Tenure	58	20	0.741	0.750	-0.009	0.940
Fixed Schedule	60	21	0.600	0.524	0.076	0.548
Increased Hours	54	18	0.778	0.889	-0.111	0.309
Raise	54	23	0.315	0.174	0.141	0.209
Promotion	48	24	0.125	0.083	0.042	0.602
Job Quality Index (Standardized)	60	26	0.037	-0.148	0.185	0.256
Entrepreneurship	77	57	0.065	0.070	-0.005	0.906
Acquired New Skill	77	51	0.506	0.373	0.134	0.138
Taking Course	80	61	0.213	0.115	0.098	0.128
New Skills Index (Standardized)	83	61	0.095	-0.178	0.273**	0.039
Financial Stability	79	51	2.620	2.608	0.012	0.931
Difficulty Paying Utilities	82	58	2.573	2.621	-0.048	0.818
Difficulty Paying for Groceries	81	55	1.901	1.945	-0.044	0.834
Difficulty Paying Rent or Mortgage	84	56	1.857	2.196	-0.339	0.116
Difficulty Paying for Transport	85	56	1.776	2.196	-0.420*	0.053
Difficulty Paying for Child Care	84	55	2.202	2.364	-0.161	0.511
Could Cover \$500 Emergency	64	41	2.578	2.463	0.115	0.549
Financial Health Index (Standardized)	85	61	-0.044	0.088	-0.132	0.110
Car Ownership	85	61	0.894	0.590	0.304***	0.000
Housing	81	56	3.827	3.411	0.416	0.134

 $\textbf{Source:} \ \textbf{Authors'} \ \textbf{calculations} \ \textbf{using data} \ \textbf{from a survey} \ \textbf{conducted by the authors}.$ 

**Notes:** \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

TABLE B3
Social Pillar End-of-Year Survey *t*-Tests

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	р Value
Parent Health	85	61	3.929	4.016	-0.087	0.528
Parent Sick in Last Year	83	58	0.434	0.310	0.123	0.140
Parent Mental Health	79	53	0.228	0.113	0.115*	0.096
Parent Mental and Physical Health Index (Standardized)	85	61	-0.061	0.084	-0.145	0.224
Child Health	85	61	4.294	4.197	0.097	0.430
Child Sick in Last Year	84	55	0.488	0.345	0.143*	0.098
Child Physical Health Index (Standardized)	85	61	-0.007	-0.010	-0.012	0.888
Medical Insurance	85	61	0.965	0.852	0.112**	0.015
Child Access to Medical Care	85	61	0.212	0.164	0.048	0.473
Parent Access to Medical Care	85	61	0.200	0.066	0.134**	0.022
Parent Access to Mental Health Care	17	6	0.294	0.333	-0.039	0.865
Access to Quality Care Index (Standardized)	85	61	0.112	-0.173	0.285**	0.010
Auditory Screening	82	58	3.500	3.172	0.328	0.162
Dental Screening	84	58	1.881	1.810	0.071	0.714
Vision Screening	83	58	2.940	2.828	0.112	0.655
Pediatric Screening	84	58	1.512	1.741	-0.229	0.202
Psychological Screening	80	55	2.963	2.673	0.290	0.358
Access to Health Screenings Index (Standardized)	84	58	0.035	-0.040	0.075	0.489
Behavioral Complaint	82	59	0.220	0.169	0.050	0.466
Adjust to Transitions	84	60	3.548	3.633	-0.086	0.616
Accept Responsibility	85	59	3.624	3.458	0.166	0.376

Variable Name	Obs. (treatment)	Obs. (comparison)	Mean (treatment)	Mean (comparison)	Mean (difference)	<i>p</i> Value
Calm Down	85	60	3.541	3.483	0.058	0.758
Get Along with Others	85	61	4.376	4.049	0.327**	0.031
Finish a Task	83	61	3.434	3.557	-0.124	0.531
Stop When Asked	85	60	3.565	3.517	0.048	0.780
Plan in Advance	84	60	3.429	3.600	-0.171	0.342
Recall Instructions	85	61	3.129	3.475	-0.346*	0.069
Pay Attention	85	61	3.412	3.607	-0.195	0.302
Child Behavior and Emotional Intelligence Index (Standardized)	85	61	-0.006	0.007	-0.013	0.917
Read to Child	85	61	3.518	3.721	-0.204	0.209
Reinforce Schoolwork	84	60	4.179	4.350	-0.171	0.184
Participate in Activities	84	61	4.310	4.213	0.096	0.495
Speak with Teachers	85	61	4.529	4.262	0.267*	0.052
Ensure Child Does Not Get into Trouble	84	60	4.607	4.233	0.374**	0.031
Ensure Child Attends School	85	59	4.871	4.780	0.091	0.243
Positive Parent Behaviors Index (Standardized)	85	61	0.051	-0.045	0.096	0.372

Source: Author's calculations using data from a survey conducted by the authors.

**Notes:** \* p < 0.10,. \*\* p < 0.05, \*\*\* p < 0.01..

# Appendix C. Difference-in-Differences Results

TABLE C1
Academic Pillar Difference-in-Differences (DID) Results

Variable name	DID coefficient	p Value	N	Adj. R <sup>2</sup>
Identify Letters	-0.137	0.725	103	0.201
Read Four Words	0.815*	0.069	93	0.538
Follow Text	0.014	0.979	100	0.167
Write 3 Letters of Name	0.347	0.486	104	0.109
Write Simple Word	0.471	0.323	99	0.247
Know 1-10	0.967**	0.017	104	0.205
Know Greater Than	1.125**	0.039	97	0.275
K-1st Academic Performance Index (Standardized)	0.399	0.162	105	0.035
Pick Up Object	-0.003	0.989	280	-0.006
Know Tall vs. Short	0.354*	0.075	282	0.017
Recognize Passage of Time	0.031	0.884	281	0.006
Motor Skills and Spatial Reasoning (Standardized)	0.117	0.492	283	0.003
Chronic Absenteeism	-0.275***	0.008	284	0.084
Parent Education	0.072	0.133	284	0.010

**Source:** Authors' calculations using data from a survey conducted by the authors.

**Notes:** \* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01.

TABLE C2
Economic Pillar Difference-in-Differences (DID) Results

Variable name	DID coefficient	p Value	N	Adj. R <sup>2</sup>
Family Income (not normalized)	24.130	0.846	240	0.007
Employment	0.135	0.125	284	0.019
Job Tenure	-0.075	0.632	148	0.065
Fixed Schedule	-0.086	0.465	154	0.017
Increased Hours	-0.154	0.291	134	0.021
Raise	0.063	0.686	146	-0.008
Promotion	-0.068	0.505	142	0.047
Job Quality Index (Standardized)	-0.119	0.497	162	0.011
Entrepreneurship	0.015	0.691	261	-0.005
Acquired New Skill	0.015	0.903	250	-0.008
Taking Course	-0.104	0.173	279	0.006
New Skills Index (Standardized)	-0.161	0.375	282	0.003
Financial Stability	-0.137	0.357	251	0.015
Difficulty Paying Utilities	0.321	0.136	272	0.022
Difficulty Paying for Groceries	0.269	0.171	263	0.048
Difficulty Paying Rent or Mortgage	0.247	0.375	270	0.010
Difficulty Paying for Transport	0.106	0.702	270	-0.006
Difficulty Paying for Child Care	-0.425	0.149	270	0.009
Could Cover \$500 Emergency	0.125	0.619	212	-0.005
Financial Health Index (Standardized)	-0.030	0.762	283	-0.006
Car Ownership	-0.055	0.431	284	0.000
Housing	-0.098	0.593	268	0.013

**Source:** Authors' calculations using data from a survey conducted by the authors.

**Notes:** \* p < 0.10,. \*\* p < 0.05, \*\*\* p < 0.01..

TABLE C3
Social Pillar Difference-in-Differences (DID) Results

Variable name	DID coefficient	p Value	N	Adj. R <sup>2</sup>
Parent Health	0.233	0.158	281	0.008
Parent Sick in Last Year	0.252**	0.016	275	0.042
Parent Mental Health	0.115	0.150	260	0.014
Parent Mental and Physical Health Index (Standardized)	-0.123	0.300	284	0.002
Child Health	-0.176	0.273	282	0.002
Child Sick in Last Year	0.149	0.159	273	0.010
Child Physical Health Index (Standardized)	-0.231	0.137	284	0.009
Medical Insurance	0.038	0.444	284	0.010
Child Access to Medical Care	0.072	0.366	284	-0.001
Parent Access to Medical Care	0.140*	0.067	284	0.020
Parent Access to Mental Health Care	-0.583	0.116	43	0.256
Access to Quality Care Index (Standardized)	0.248**	0.038	284	0.038
Auditory Screening	-0.226	0.467	265	-0.003
Dental Screening	0.119	0.613	274	-0.003
Vision Screening	0.133	0.676	270	0.004
Pediatric Screening	-0.373*	0.093	275	0.044
Psychological Screening	-0.158	0.635	259	0.028
Access to Health Screenings Index (Standardized)	-0.074	0.559	276	-0.004
Behavioral Complaint	0.103	0.219	274	0.082
Adjust to Transitions	0.037	0.869	281	-0.004
Accept Responsibility	0.401**	0.500	280	0.037
Calm Down	0.422**	0.034	282	0.034
Get Along with Others	0.413**	0.400	282	0.038
Finish a Task	0.052	0.809	279	0.007
Stop When Asked	0.287	0.206	280	0.009
Plan in Advance	0.162	0.459	279	-0.002
Recall Instructions	0.228	0.303	282	0.008
Pay Attention	-0.025	0.906	282	-0.004
Child Behavior and Emotional Intelligence Index (Standardized)	0.177	0.164	283	0.012
Read to Child	-0.132	0.529	283	-0.004
Reinforce Schoolwork	0.121	0.479	280	0.000
Participate in Activities	0.207	0.180	280	0.026

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Variable name	DID coefficient	p Value	N	Adj. R <sup>2</sup>
Speak with Teachers	0.022	0.889	281	-0.006
Ensure Child Does Not Get into Trouble	-0.250	0.345	279	0.007
Ensure Child Attends School	-0.070	0.515	279	-0.001
Positive Parent Behaviors Index (Standardized)	0.013	0.909	284	-0.005

**Source:** Authors' calculations using data from a survey conducted by the authors.

**Notes:** \* *p* < 0.10,. \*\* *p* < 0.05, \*\*\* *p* < 0.01..

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## **Notes**

- <sup>1</sup> David Murphey and Zakia Redd, "5 Ways Poverty Harms Children," Child Trends, January 8, 2014, https://www.childtrends.org/publications/5-ways-poverty-harms-children.
- <sup>2</sup> For brevity, we use the term "parent" throughout to refer to parents or the primary caregivers of a child. We acknowledge the complexity of various family structures, and that some of the households in our study have a grandparent or other figure serving as primary caregiver. Additionally, we note that the Spanish translation of "parent" is not gender neutral, and requires specifying gender with "madre" or "padre."
- <sup>3</sup> Author's calculations from US Census Bureau 2018–22 five-year American Community Survey data.
- <sup>4</sup> Author's calculations from US Census Bureau 2018–22 five-year American Community Survey data.
- <sup>5</sup> Author's calculations from US Census Bureau 2018–22 five-year American Community Survey data.
- <sup>6</sup> Ascend at the Aspen Institute, "The 2Gen Approach," accessed May 2, 2024, https://ascend.aspeninstitute.org/2gen-approach/
- <sup>7</sup> Family Resource Center Association, "Creating Strong and Thriving Families," accessed May 2, 2024, https://www.cofamilycenters.org/
- 8 Philanthropy News Digest, "Vimenti by Boys & Girls Clubs of Puerto Rico Gets \$10.5M Grant," accessed May 2, 2024, https://philanthropynewsdigest.org/news/other-sources/article/?id=12197240&title=Vimenti-by-Boys-&-Girls-Clubs-of-Puerto-Rico-gets-\$10.5M-grant
- 9 Ascend at the Aspen Institute, "The 2Gen Approach."
- <sup>10</sup> Ascend at the Aspen Institute, "The 2Gen Approach."
- <sup>11</sup> In this evaluation, we treated case managers at Vimenti and social workers at comparison schools as comparable, due to the similarity in their roles, primarily in managing supports and direct engagement with families.
- <sup>12</sup> Philanthropy News Digest, "Vimenti by Boys & Girls Clubs of Puerto Rico Gets \$10.5M Grant."
- 13 "America's Children: Key National Indicators of Well-Being, 2023," Federal Interagency Forum on Child and Family Statistics, accessed May 2, 2024, https://www.childstats.gov/americaschildren/eco1.asp#:~:text=SOURCE%3A%20U.S.%20Census%20Bureau%2C%20Current,White%2C%20non%2DHispanic%20children.
- <sup>14</sup> David Murphey and Zakia Redd, "5 Ways Poverty Harms Children," Child Trends, January 8, 2014, https://www.childtrends.org/publications/5-ways-poverty-harms-children.
- <sup>15</sup> "2023 Kids Count Data Book Interactive," Annie E. Casey Foundation, accessed May 2, 2024, https://www.aecf.org/interactive/databook.
- 16 "Survey Finds 40 Percent of Puerto Rican Families Reporting Food Insecurity Due to COVID-19," news release, George Washington University Milken Institute School of Public Health, September 22, 2020, https://publichealth.gwu.edu/survey-finds-40-percent-puerto-rican-families-reporting-food-insecurity-due-covid-19.
- "What Is 2Gen?" Cornell University College of Human Ecology, accessed May 2, 2024, http://2gen.bctr.cornell.edu/what-is-2gen#:~:text=Two%2Dgeneration%20approaches%20exist%20on,can%20enhance%20family%20well%2Dbeing.
- <sup>18</sup> "The 2Gen Approach," Ascend at the Aspen Institute.

- <sup>19</sup> The Vimenti school began with kindergarten and first grade in 2018 and has added two kindergarten classrooms each year since then. At the time of the analysis for this report, Vimenti provided schooling to students in kindergarten through fifth grade.
- <sup>20</sup> Emily A. Shrider and John Creamer, "Poverty in the United States: 2022," United States Census Bureau, September 12, 2023, https://www.census.gov/library/publications/2023/demo/p60-280.html.
- <sup>21</sup> Calculation sourced from Vimenti administrative data.
- <sup>22</sup> We explored the possibility of using Vimenti wait-listed families as our control group, but the sample was not large enough.
- <sup>23</sup> We also ran a robustness check for families with children in just kindergarten and first grade to reduce the pretreatment bias, and we found the results to be similar, with the exception of child health, which showed a negative correlation, significant at the 5 percent level. However, the sample size for this analysis was small, suggesting that these findings could be spurious.
- <sup>24</sup> "What Is 2Gen?" Cornell University College of Human Ecology.
- <sup>25</sup> "The 2Gen Approach," Ascend at the Aspen Institute.
- <sup>26</sup> "The 2Gen Approach," Ascend at the Aspen Institute.
- <sup>27</sup> "The 2Gen Approach," Ascend at the Aspen Institute.
- <sup>28</sup> "About Us," Garrett County Community Action, accessed May 2, 2024, https://garrettcac.org/about/.
- <sup>29</sup> "The 2Gen Approach," Ascend at the Aspen Institute.
- 30 "What Is 2Gen?" Cornell University College of Human Ecology.
- <sup>31</sup> "School Readiness," US Department of Health & Human Services, accessed May 2, 2024, https://eclkc.ohs.acf.hhs.gov/school-readiness/article/head-start-approach-school-readiness-fags.
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