Impact of Family Development on Family Health and Well-Being

Findings from a three-year study of Colorado's Family Pathways Framework

OMNI

Family Resource Center Association

Impact of Family Development on Family Health and Well-Being Executive Summary

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Key Takeaways

1. **Families' economic security, resiliency, and health improved** while they participated with Family Resource Centers that offer family-centered, strengths-based supports.
2. Family Resource Centers were **responsive to families during the COVID-19 pandemic**.
3. **Additional research is needed** to understand how these improvements compare to families not connected to a Family Resource Center.

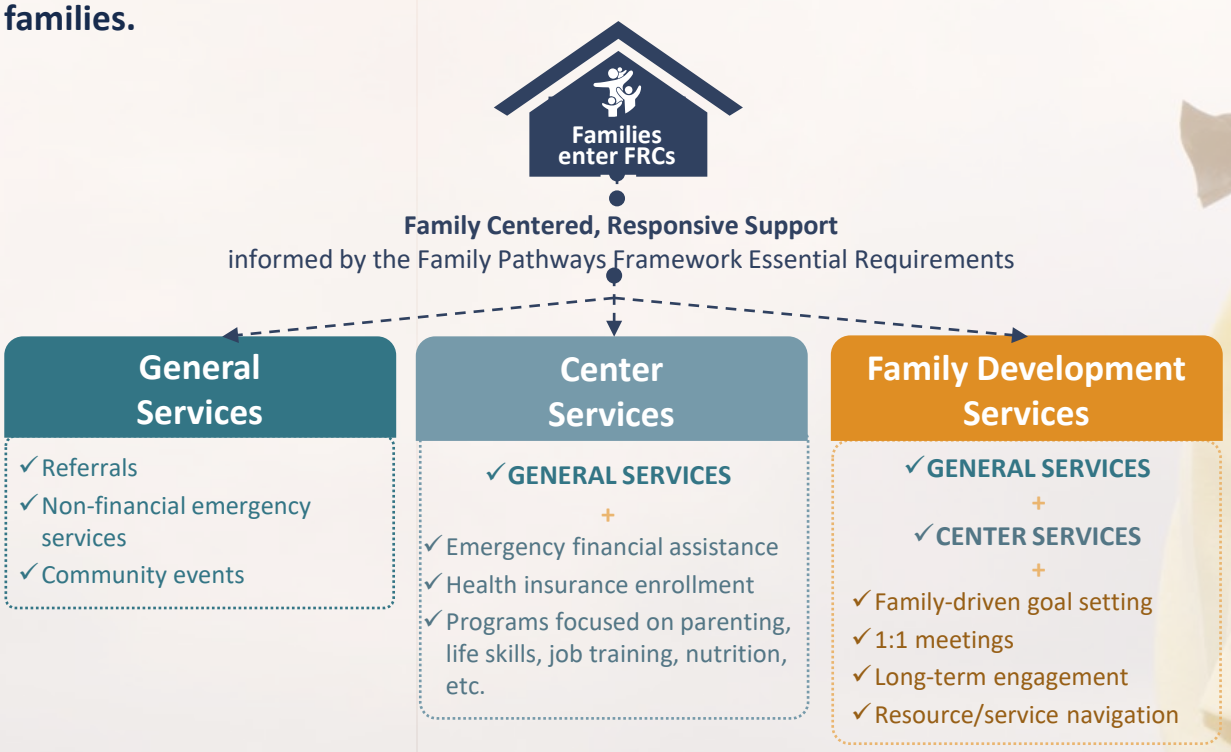
Background

When children grow up in safe, stable, and nurturing environments, they are more likely to thrive and experience better health and well-being throughout their lives. To enhance the social and economic conditions that foster the health and wellbeing of families, effective, scalable, and culturally sensitive models are needed.

Family Resource Centers are community-based hubs that share the philosophy that strengthening families through a strengths-based, culturally relevant, family-centered approach is a key mechanism to foster healthy communities.

In Colorado, the Family Resource Center Association (FRCA) serves as the statewide intermediary for 30+ Family Resource Centers (FRCs) operating in 58 counties. FRCA developed the Family Pathways Framework to support consistency across FRCs in providing responsive services that are tailored to meet family and community needs.

In Colorado, Family Resource Centers use three pathways of service to support families.



General Services consist of brief, non-financial assistance designed to meet immediate needs. Center Services include formal programs such as emergency financial assistance and parenting/early childhood education. Because each center is community-based and responsive to local needs, the exact programs that are available vary from one FRC to another. Family Development Services, however, are core services provided at all FRCs. These services include coordinated case management that is characterized by client-choice and personal goal-setting; ongoing, motivational meetings with program staff; and services and referrals. Families create and set goals that lead to the identification of referral or direct service delivery opportunities that are designed to support families in meeting their unique and often complex needs.

Family Development Workers (FRC staff trained in Family Development Services) use motivational interviewing to initiate strength-based relationships that facilitate trust and elicit readiness to set goals that address family-identified priorities. All families can participate in General and Center Services, but only families in the Family Development Services path receive coordinated case management and goal-setting services.

In this study, we sought to examine whether families with unmet needs[1] benefited from Family Development Services above and beyond access to General Services and Center Services, and to understand how COVID-19 impacted those experiences.

This report addresses the following research questions:

1. **Did families improve their economic security, resiliency, and health while participating in services and supports from FRCs?**
2. **Were there differences in family outcomes for families who were assigned to receive General and Center Services and families who were assigned to receive Family Development Services?**
3. **To what degree, and in what ways, did COVID-19 affect service delivery and family outcomes?**

Methods

250 families at three Family Resource Centers were randomly assigned to participate in *General and Center Services* or *Family Development Services*.

The study was designed so that all participating families could access General and Center Services. Half of families (126) were randomly assigned to participate in Family Development Services during the study, and half (124) were randomly assigned to participate only in General and Center Services (with the option to participate in Family Development Services once their study participation ended).

1 - FRCs administer a standardized common screening tool to assess unmet needs in eight areas: employment, housing, transportation, food security, adult education, health insurance, quality child care, and children's education.

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Families participated in the study for nine months. The study began before the onset of COVID-19 and continued through the pandemic.

The study started in May 2019 and ended in September 2021, and families enrolled on an ongoing basis. Before participating in services, and again six and nine months later, parents[2] completed assessments of economic security, resiliency, and health for themselves, their families, and one of their children. In Spring 2021, we also conducted focus groups with 18 FDS families so that they could share personal perspectives about their experiences.

Families assigned to General and Center Services are referred to as *G/CS families.*

Families assigned to Family Development Services are referred to as *FDS families.*

Participants

One parent per family enrolled in the study and completed assessments for the study visits. Descriptive characteristics of the 250 parents and their families are presented below.

74% of families lived in rural counties in Colorado

26% of families lived in urban counties in Colorado

88% of parents identified as female

The median annual income was **$24,000** with a range in annual income from $0 to $114,000

The median age of parents was **36.5** with a range from ages 18 to 76

12% of parents identified as **American Indian or Alaska Native**

16% of parents identified as **Hispanic or Latinx**

20% of parents identified as **more than one race or ethnicity**

50% of parents identified as **White**

2% of parents identified with race/ethnicity categories not depicted above, including Asian, Black or African American, or Native Hawaiian or Other Pacific Islander. Parents who identified as more than one race/ethnicity are combined here, as further information on these parents was not available.

2 - Throughout this report, we use the term *parent* to refer to heads of households who were at least 18 years of age at the time of study enrollment and enrolled in the study on behalf of their family (including, but not limited to, parents, guardians, and caregivers).

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Results

G/CS and FDS families participated in Center Services to support basic needs and parenting practices, and almost all FDS families participated in goal-setting.

Most families participated in Center Services that were categorized as Basic Needs (82%), and approximately one-third participated in Parenting services (36%). There were no significant differences between G/CS families and FDS families in the average number or the type of Center Services they participated in.

As part of FDS, families engage in goal-setting and ongoing, motivational meetings with Family Development Workers. Almost all FDS families (98%) completed initial goal-setting, and 58% completed the recommended 90-day follow-up. Through focus groups, FDS families reported that they found the goal-setting process to be easy, and their interactions with staff were supportive, hands-on, and trust-building.

COVID-19 impacted how FRC staff supported G/CS and FDS families.

FRCs reported that it was particularly challenging for FDS families to focus on long-term goals. In response to the health crisis, Family Development Workers were often supporting families in revising goals to meet more immediate, short-term needs, or families were so overwhelmed that they were not working towards goals. When reflecting on their goal-setting progress in the focus groups, FDS families noted that they were able to meet some goals but not others, and surfaced challenges related to meeting financial/economic goals with the reality of managing everyday life; coping with mental health challenges; and the overall impact of COVID-19.

Furthermore, study visits with all families started by checking in on their well-being and assessing immediate needs. For G/CS families, the study visits were an opportunity to connect with the family, assess current needs, and offer access to referrals and services. FRCs reported that staff may have engaged G/CS families in informal goal setting during these conversations. Additionally, a few G/CS families (2%) engaged in formal goal-setting.

While participating in FRC services, families demonstrated improvements in economic security, resiliency, and health.

Economic security. Economic self-sufficiency, access to resources to cover basic needs, and availability of monetary resources increased for G/CS and FDS families.

Resiliency. For parents in G/CS and FDS families, four factors that have been shown to protect against child abuse and neglect improved, including family functioning, social support, concrete support, and nurturing and attachment. Parents in G/CS and FDS families also had more time for themselves and more time for their family.

Health. For parents in G/CS and FDS families, health (including a self-rating of mental and physical health) improved; the number of unhealthy days and the number of days that health negatively impacted their lives in the past month decreased; and stress decreased. There were not significant changes in parents' global assessments of their own health nor their ratings of a child's overall health.

To help better understand these significant changes over time, we calculated effect sizes to quantify how big the changes were. Relative to where families started, improvements to economic security, resiliency, and health ranged from small to large (effect sizes ranging from .16 to .48). Small and medium effects are common in studies like this one.

Improvements did not differ between G/CS and FDS families.

There were not significant differences in changes over time between G/CS families and FDS families. These results suggest that families participating in FRC services improved regardless of their assignment for this study.

Families with FRC support improved even during the COVID-19 pandemic.

We examined if the changes over time in economic security, resiliency, and health differed depending on whether assessments occurred before or during COVID-19. Results suggested that the benefits of FRC services did not differ before and during COVID-19. Parents also provided direct input on how COVID-19 was impacting them and their families. The most frequently mentioned concerns were in the areas of employment and finances (40%), mental health (30%), and isolation (20%).

A Piece of the Bigger Picture: Federal Economic Stimulus Efforts

Beginning in April 2020, the federal government began distributing Economic Impact Payments (also known as stimulus payments) to help offset the financial losses that many individuals were experiencing due to lockdowns and other impacts of COVID-19. Eligibility for these payments was based primarily on adjusted gross income; using annual incomes provided by families and self-report from parents, we estimate that most parents qualified for $3,200 in stimulus payments that largely co-occurred with their participation in the study. When reflecting on the impact of that stimulus check, parents noted that they used the money to pay for bills, pay off debt, or help meet basic needs.

Although these stimulus benefits were not enough to keep federal and state poverty levels from increasing, the effect of that additional money may have been captured in the observed improvements in economic security, resiliency, and health for families in this study. However, it may also be that the combination of additional money and FRC support helped families improve during such a challenging time.

Conclusions

When families are connected to an FRC that follows the Family Pathways Framework, economic security, resiliency, and health improve, even during a pandemic.

FRCs are places that families can turn to when they need support. Results from this study show that over the course of nine months of being connected to an FRC that follows the FRCA Family Pathways Framework, families' economic security, resiliency, and health improved relative to where they started. What's more, these improvements did not vary based on COVID-19, despite the direct challenges to economic security and health that the pandemic created.

Considering national and state trends demonstrating the negative impact of the pandemic on health and well-being, there is good reason to expect that families' economic security, resiliency, and health would have decreased during the study; the fact that they made significant and relatively sizeable gains suggests that FRCs are meaningful community resources to help families weather challenging times.

> We all may be in the same boat…, but the truth is there are those of us out there that don't have that life jacket and [the Family Resource Center] provides that for us and for this community.
>
> - FDS Parent, Spring '21 Focus Group

We hypothesized that FDS families would demonstrate greater gains compared to G/CS families. However, results indicated that there were no differences in growth between G/CS and FDS families. Given how profoundly the COVID-19 pandemic affected families and FRCs, there are several potential explanations for these unexpectedly parallel patterns of growth. In using a study design that allowed all families to participate in FRC services (and thus not deny any family access to services to support basic and other needs), the ability to identify differences between service models relied heavily on fidelity, which COVID-19 may have compromised. Ultimately, it is impossible to know whether, without COVID-19, we would have seen the expected differences between G/CS and FDS families.

When communities face challenges, FRCs are well-positioned to react to those challenges through family-centered support.

Though COVID-19 is an unprecedented pandemic, community challenges (whether global, national, or local) are not unprecedented. Results from this study in which families were able to make progress amid such challenges suggests that when communities face public health crises, natural disasters, economic downturns, and other challenges, FRCs can serve as vital resources for families.

Though challenging to implement, rigorous research is critical for advancing our understanding of effective, culturally responsive, and scalable service models designed to strengthen families and communities.

Implementing rigorous efficacy studies is challenging, even without the occurrence of a global pandemic. Limitations to this study that may have resulted in a lack of observed differences between G/CS and FDS families include COVID-19 related disruptions; study visits serving as an opportunity to connect with and support G/CS and FDS families during the crisis; and, given ethical guidelines, the inability to include families who were actively seeking FDS in the study (families who were directly seeking these services were enrolled in FDS and therefore ineligible for the study). On this latter point, families who receive FDS are often distinctly motivated to set and work towards goals to make changes in their lives, but the current study design did not allow for us to examine the role of motivation in seeking services. Additional limitations include a lack of comparison to families who did not receive any services from an FRC, and reliance on interview and self-report measures (objective measures, such as income or employment verification, were not available).

Nevertheless, this study provides new insights into the ways that families experience health and well-being benefits when connected to an FRC, and a timely understanding of how FRCs support families during times of individual challenges and community-wide crises. To build upon these findings, future research should consider alternative approaches (such as emerging experimental designs like preference trials; quasi-experimental designs that draw on administrative or secondary data; and smaller, in-depth studies that focus on mechanisms of change) to building the evidence base for family-centered, community-based models of family support.

Contributors

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Learn More

For more information about this study, contact OMNI at projects@omni.org. For more information about Colorado's Family Resource Centers or the Family Pathways Framework, contact Family Resource Center Association at info@cofamilycenters.org.

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Background

Economic stability, family resiliency, social support and community connectedness are critical components that underlie a culture of health. When children grow up in safe, stable, and nurturing environments, they are more likely to thrive and experience better health and wellbeing throughout their lives.[1] To enhance the social and economic conditions that foster the health and wellbeing of families, effective, scalable, and culturally sensitive models are needed. This report presents findings from a randomized controlled trial of families engaging with three Family Resource Centers (FRCs) in Colorado, with the initial goal of rigorously testing whether a model of family supportive services can enhance families' health and well-being. With the outbreak of COVID-19, the study also sought to understand the ways in which the pandemic affected families while they were participating in FRC services, as well as how FRCs support families during times of crisis.

Family Resource Centers

FRCs are community-based hubs that share the philosophy that strengthening families through a strengths-based, culturally relevant, family-centered approach is a key mechanism to foster healthy communities. FRCs offer family-centered services that are coordinated to meet families' unique needs and focused on prevention and long-term growth. They serve diverse populations; are family-friendly and inclusive; develop strong collaborative relationships between families and staff; and involve peers, neighbors and community members in service provision.[2] FRCs play a crucial role in ensuring that families have access to resources and financial support in times of crisis and beyond.

In some states, networks of FRCs are organized through funding intermediaries that promote the collective impact of its member centers. These systems can provide the necessary infrastructure to develop replicable models that can be taken to scale and have community-wide impacts. In Colorado, the Family Resource Center Association (FRCA) serves as the statewide intermediary for 30+ FRCs operating in 58 counties.

A Framework for Family-Centered Support Services

FRCA developed the Family Pathways Framework to support consistency across FRCs in providing responsive services that are tailored to meet family needs. The Framework is based in research demonstrating that family-centered practices that are responsive to individualized family needs and involve family choice are associated with higher levels of participant satisfaction with programs and staff; increased self-efficacy beliefs, such as a sense of control over the help provided by the program; and improved parent, child, and family outcomes.[3] The Framework outlines three pathway of service: General Services, Center Services, and Family Development Services, which are each described in greater detail below.

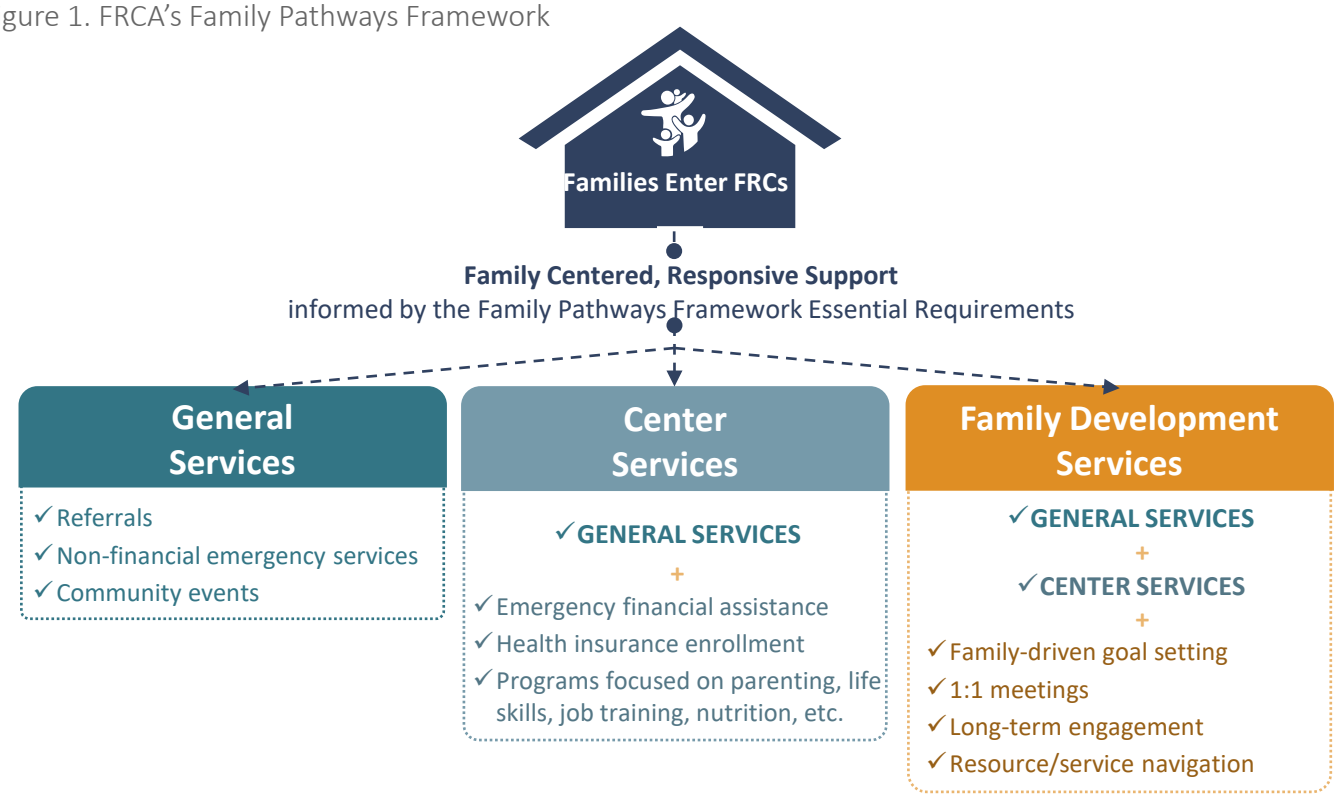
1 - National Scientific Council on the Developing Child. (2008/2012). *Establishing a level foundation for life: mental health begins in early childhood*: *Working Paper No. 6.* (Updated Edition). Cambridge, MA. Retrieved from https://developingchild.harvard.edu/

2 - Center for the Study and Prevention of Violence & OMNI Institute. (2013). *Key components of family resource centers: A review of the literature.* Denver, Colorado: Pampel, F., & Beachy-Quick, K. https://www.cofamilycenters.org/wp-content/uploads/2021/06/Key-Components-of-Family-Resource-Centers-A-Review-of-the-Literature.pdf

3 - Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2007). Meta-analysis of family-centered help giving practices research. *Mental Retardation and Developmental Disabilities Research Reviews, 13,* 370-378. doi:10.1002/mrdd.20176

In this study, we sought to examine whether families with unmet needs benefited from Family Development Services above and beyond access to General & Center Services

Figure 1. FRCA's Family Pathways Framework



General & Center Services

The General Services path consists of non-financial assistance designed to meet immediate needs (such as food banks), quick referrals to other organizations and providers, and community events. In the Center Services path, families can participate in programs such as emergency financial assistance, health insurance enrollment, and programs such as parenting/early childhood education; life skills; job training/education; and nutrition/cooking. Because each center is community-based and responsive to local needs, the exact programs that are available vary from one FRC to another.

Family Development Services

Family Development Services (FDS) are a core part of the Family Pathways Framework and are provided at all FRCA-member FRCs. In the FDS path families participate in coordinated case management that is characterized by client choice and personal goal-setting; ongoing, motivational meetings with Family Development Workers (FRC staff trained in FDS); and services and referrals. Families create and set SMART (specific, measurable, attainable, realistic and time-based) goals. SMART goals lead to the identification of referral or direct service delivery opportunities that are designed to support families in meeting their unique and often complex needs. Family Development Workers use motivational interviewing, an effective strategy to change behavior,[4,5] to initiate strength-based relationships that facilitate trust and elicit readiness to set goals that address family-identified priorities. All families can access standard services from the FRC, but only families in the FDS path receive coordinated case management and goal setting services.

4 - Hetteman, J., Steele, J., & Miller, W. R. (2005). Motivational Interviewing. *Annual Review of Clinical Psychology, 1,* 91-111. doi:10.1146/annurev.clinpsy.1.102803.143833

5 - Rubak, S., Sandboek, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *British Journal of General Practice, 55*, 305-312. PMCID: 146134

Research Questions

Over many years, evaluations assessing Colorado families before and after engaging in FDS have consistently demonstrated positive outcomes.[6,7] This study was designed to build on these observational evaluations to quantify the impact of FDS on family health and well-being over and above other participation in FRC services. The study was designed and piloted from 2018-2019, and officially launched in May 2019. The initial aims were preregistered with the Open Science Framework and can be accessed here. With the onset of the COVID-19 pandemic in Spring 2020, we expanded the focus of the study to broaden our understanding of the role of FRCs in supporting families in their communities during times of crisis. This report addresses the following research questions:

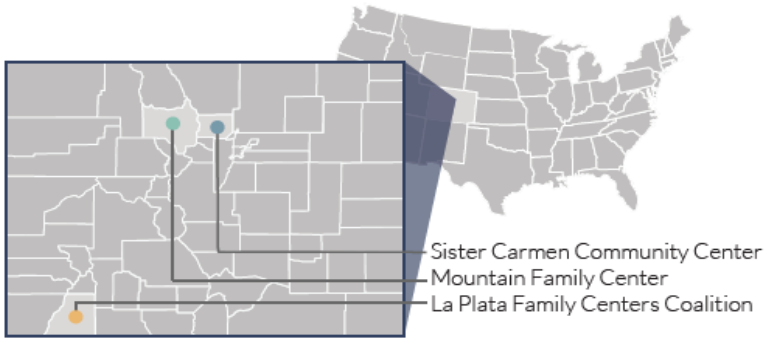
1. **Did families improve their economic security, resiliency, and health while participating in services and supports from FRCs?**
2. **Were there differences in family outcomes for families who were assigned to receive General and Center Services and families who were assigned to receive Family Development Services ?**
3. **To what degree, and in what ways, did COVID-19 affect service delivery and family outcomes?**

– This Study

Study Design

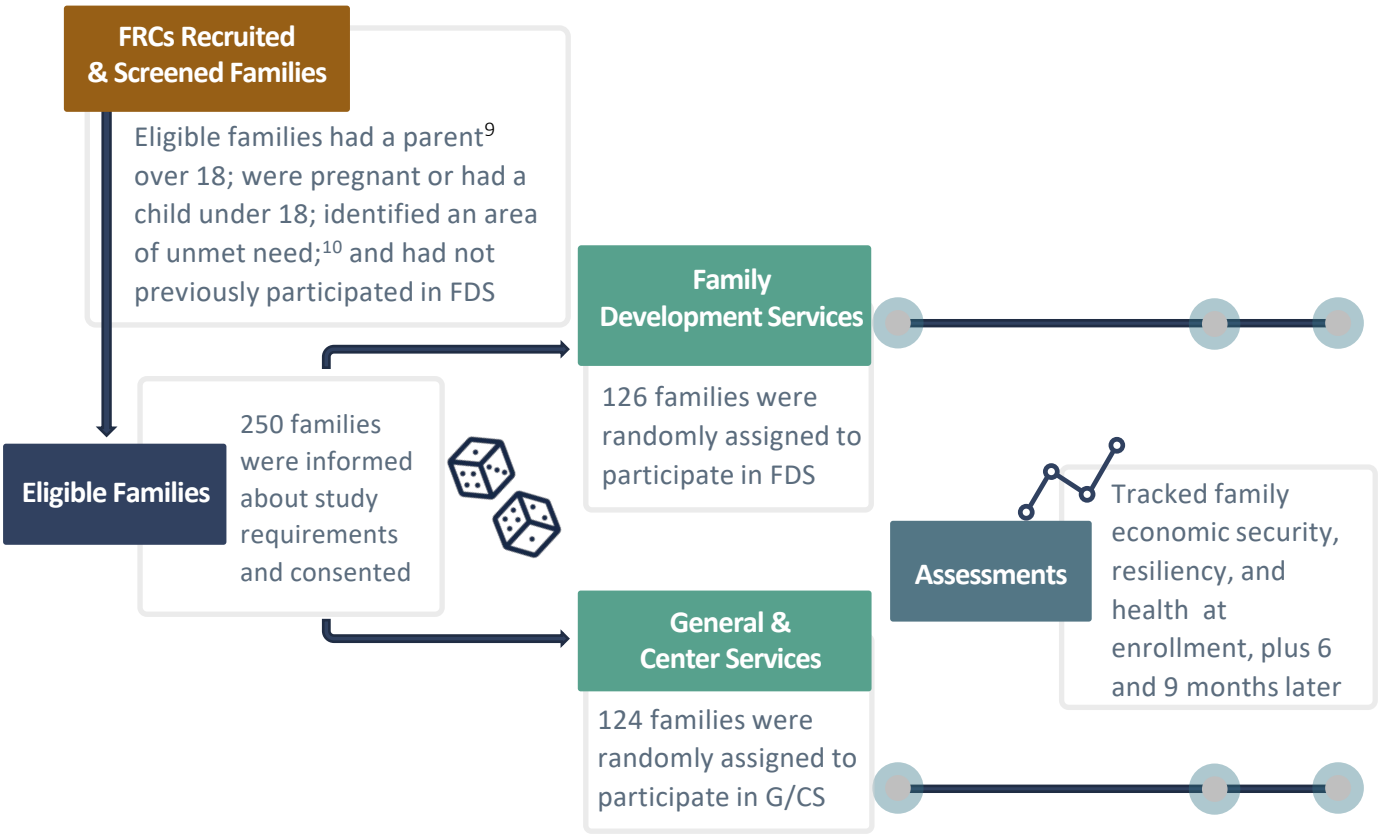
From May 2019 to September 2021, we conducted a multi-site randomized controlled trial in three FRCs in Colorado: La Plata Family Centers Coalition (LPFCC), Mountain Family Center (MFC), and Sister Carmen Community Center (SCCC). All three FRCs have a longstanding history serving their communities (30+ years) and as members of FRCA. LPFCC and MFC are in rural counties and SCCC is in an urban county. The study was designed so that all participating families could access General and Center Services throughout the entirety of the study. Half of families were randomly assigned to participate in Family Development Services during the study, and half were randomly assigned to participate only in General and Center Services (with the option to participate in Family Development Services once their study participation ended).

FRCs used a variety of methods to let families know about the opportunity to participate in the study, including distributing recruitment materials when families came to the centers to access basic needs services; they also distributed information through social media posts, e-newsletters, and physical post cards placed in partner organizations.[8] The design of the study, from recruitment through follow-up assessments, is depicted on the following page.



6 - The OMNI Institute (2018). Family Pathways and CFSA 2.0 Evaluation Report: July 1, 2017 - June 30, 2018. Submitted to Family Resource Center Association, Denver, CO.
7 - The OMNI Institute (2019). Family Pathways and CFSA 2.0 Evaluation Report: July 1, 2018 - June 30, 2019. Submitted to Family Resource Center Association, Denver, CO.
8 - Staff at each FRC study site recruited families to participate in the study. All staff involved in recruitment, enrollment, and data collection were trained by the research team in study protocols and completed Human Subjects Protection training. All recruitment materials were approved by the University of Colorado's Institutional Review Board. Recruitment materials were available in both English and Spanish.

Figure 2. Study Design



Throughout the report, families assigned to Family Development Services are referred to as *FDS families* and those assigned to General & Center Services are referred to as *G/CS families*

Before participating in services, and again six and nine months later, parents[9] completed a battery of measures to assess economic security, family resiliency, and health for themselves, their family, and one of their children. See Appendix A for a summary of these study measures. In Spring 2021, we also conducted focus groups with 18 FDS families so that they could share their personal perspectives about their experiences. Parents were compensated for their time at all study visits, $20 at baseline, $40 at the 6-month visit, $60 at the 9-month visit, and $50 for participating in a focus group.

The study spanned the outbreak of the COVID-19 pandemic. Study visits occurring prior to March 1, 2020 are considered before COVID-19; study visits occurring on March 1, 2020 or later are considered during COVID-19.

Most families (83%) enrolled in the study and completed their baseline study visit before COVID-19. The majority had their 6-month and 9-month study visits during COVID-19 (64% and 93%, respectively). Before COVID-19, all study visits were conducted in person; in accordance with local public health guidelines, many study visits occurring during COVID-19 were conducted virtually. Likewise, FRCs provided services to families (in both conditions) virtually during the early months of COVID-19.

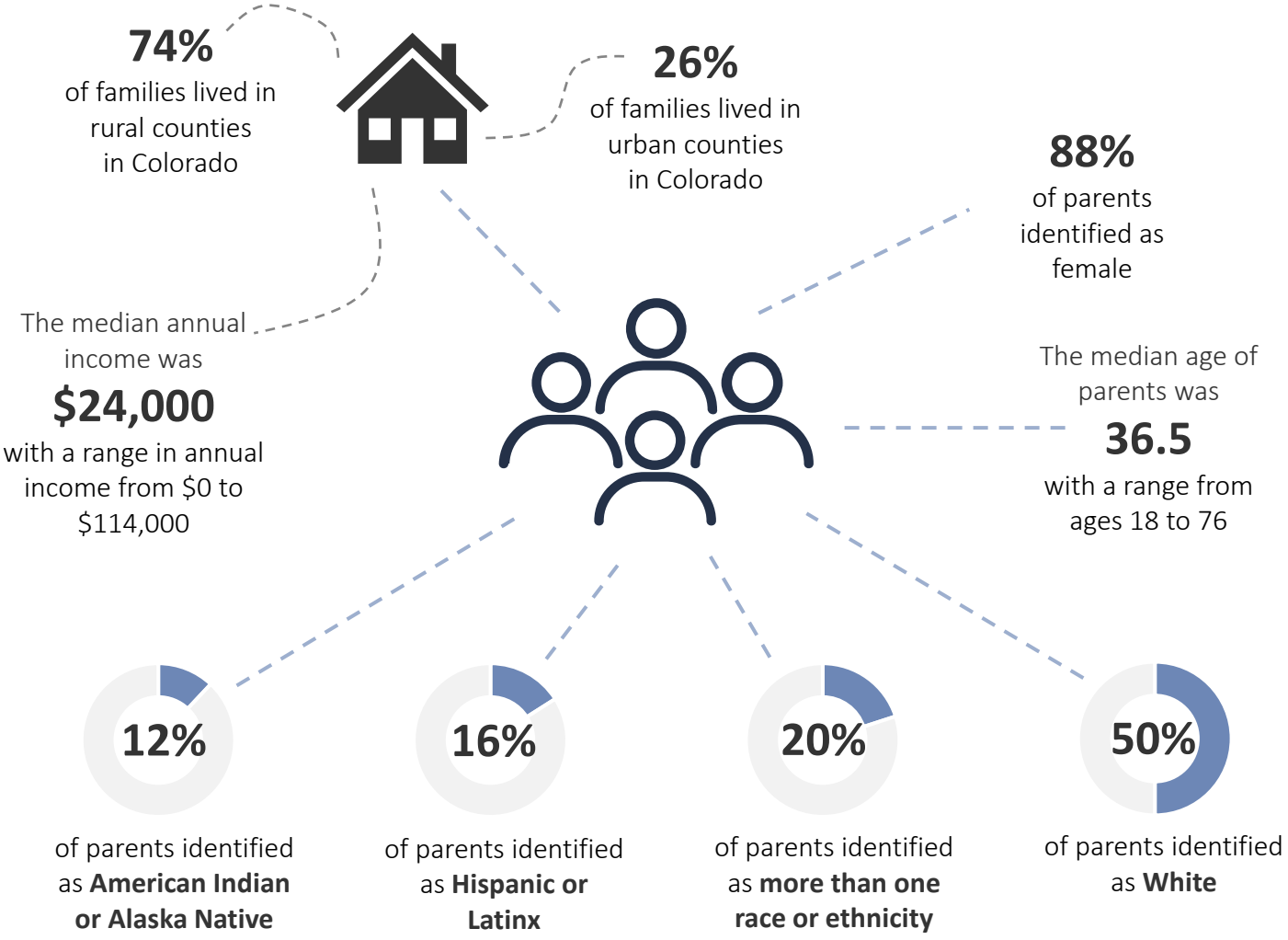
9 - Throughout this report, we use the term *parent* to refer to heads of households who were at least 18 years of age at the time of study enrollment and enrolled in the study on behalf of their family (including, but not limited to, parents, guardians, and caregivers). Families were defined as households of people residing at the same physical location.

10 - FRCs administer a standardized common screening tool to assess unmet needs in eight areas: employment, housing, transportation, food security, adult education, health insurance, quality child care, and children's education.

Participants

One parent per family enrolled in the study and completed assessments for the study visits. Descriptive characteristics of these 250 parents and their families are presented below.

Figure 3. Descriptive characteristics of participating parents and their families.



Two percent (2%) of parents identified with race/ethnicity categories not depicted above, including Asian, Black or African American, or Native Hawaiian or Other Pacific Islander. Parents who identified as more than one race/ethnicity are combined here, as further information on these parents was not available.

We conducted baseline equivalency analyses to determine whether G/CS and FDS families differed on ten different individual and family characteristics, and fifteen indicators of economic security, family resiliency, and health. Results indicated that the groups were, with few exceptions, equivalent at baseline, and the random assignment of families to the G/CS and FDS groups appears to be successful.[11] Of the 250 randomized families, 210 (84%) parents completed at least one of the two follow-up study visits and 172 (69%) completed both the 6- and 9-month study visits. Attrition rates were very similar across conditions.[12]

11 - Compared to families assigned to G/CS, families assigned to FDS had higher scores on the FRS-R Money scale (FDS M=1.56, G/CS M = 1.33; t(245)=-2.10, $p < .05$), lower scores on the Family Functioning Scale of the Protective Factors Survey (FDS M=5.28, G/CS M = 5.57; t(245)=-2.11, $p < .05$), and more areas of need indicated at screening (FDS M=.33, G/CS M = .26; t(118)=-2.09, $p < .05$).

12 - At the six-month follow-up visit, overall attrition was 13%, and differential attrition was 2.83%. At the nine-month follow-up, overall attrition was 24%, and differential attrition was 2.82%. According to the What Works Clearinghouse Guidelines, there is low risk of bias due to attrition. What Works Clearinghouse. (2020). What Works Clearinghouse Standards Handbook, Version 4.1. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. This report is available on the What Works Clearinghouse website at https://ies.ed.gov/ncee/wwc/handbooks.

Results

We present study findings in two sections. First, we present findings that characterize families' experiences participating with FRCs, including a description of the services in which they participated. Next, we present findings that characterize changes in outcomes that were observed for families during the study. In both sections, we address the role that COVID-19 played.

FRC Services

The following findings characterize families' experiences participating with FRCs, and how COVID-19 impacted those experiences.

G/CS and FDS families participated in Center Services to support basic needs and parenting practices.

All families, regardless of their study assignment, had access to General and Center Services.[13] The majority of families participated in Center Services that were categorized as Basic Needs (82%), and approximately one-third participated in Parenting services (36%). Less frequently used Center Services included Health Coverage (6%), Early Childhood Education (2%), Adult Education (<1%) and Healthy Living (<1%). Participation in all FRC services are voluntary, and for 16% of families (n=41) there were no registered Center Services over the course of the study.[14] For those who did participate in at least one Center Service, the median number of total services received was six.[15] There were no significant differences between FDS families and G/CS families in the average number or the type of Center Services.[16]

Almost all FDS families participated in goal-setting.

As part of FDS, families engage in goal-setting and ongoing, motivational meetings with program staff. Goal-setting is formally completed through the Colorado Family Support Assessment, Version 2.0 (CFSA 2.0), and fidelity guidelines include initial goal-setting and a 90-day follow-up. Almost all FDS families (98%) completed initial goal-setting, and 58% completed the 90-day follow-up. Additionally, 2% of G/CS families completed initial goal-setting and a 90-day follow-up; these G/CS families requested to participate in goal-setting and were not denied access despite their study assignment.

FDS families also completed the Standards of Quality for Family Strengthening and Support survey to assess the quality of their experience working with a Family Development Worker. The average score was 3.52 on a scale of 1-4, indicating that FDS was delivered in an accessible, family-centered, and inclusive manner. During the focus groups, FDS families reported that they found the goal-setting process easy, and their interactions with staff supportive, hands-on and trust-building. They identified benefits of working with a Family Development Worker to set goals, including keeping them accountable and focused on their goals; connections to services, resources, and tools to achieve goals; and building confidence to tackle issues.

> "I never felt judged, but I…felt like someone did care and I was going to have to follow up. So, I need to follow through because if I was left to my own devices, I may not follow through with those goals. Knowing that I was going to have another meeting, and someone is going to check on my progress and care about my progress, I thought that was beneficial.
>
> - FDS Parent, Spring '21 Focus Group

13 - Center Services are tracked at the family level. Because they are light-touch, General Services are only tracked in aggregate.
14 - These families may have only engaged in General Services, which are not tracked at the family level. It may also be that families participated in Center Services that were not tracked in the database due to disruptions that occurred at the outset of COVID-19.
15 - For all families, including those who did not receive Center Services, the median number of total services was four.
16 - There were no significant differences between G/CS and FDS families in the number of Center Services (G/CS M = 17.81; FDS M = 18.55; $t(207)=-.13$, $p = .90$); within Center Services, there were no significant differences between G/CS and FDS families in terms of Basic Needs services (G/CS M = 12.33; FDS M = 13.55; $t(184)=-.36$, $p = .72$), or Parenting services (G/CS M = 13.75; FDS M = 16.84; $t(75)=-.47$, $p = .64$).

In response to COVID-19, FRCs shifted to meet the emerging needs of families.

In Spring 2020, FRCs were adapting services to meet the needs of their communities as the pandemic was dramatically affecting families, exacerbating inequities, and creating challenges to delivering services in a manner that would keep families and staff safe. What's more, in addition to responding to the rapidly changing community needs, FRC staff were also contending with the impacts of COVID in their own lives and families. Notable changes to FRC service provision in response to COVID-19 included:[17]

Focus on immediate needs. FRCs increased provision of emergency services to an unusually high number of families and supported families with ensuring basic needs were met (such as rental assistance).

Competing priorities & increased stress. Families had multiple demands (online schooling, lack of child care) which pulled focus away from other appointments. The increase in stressors reduced families' prioritization of future-oriented goal setting.

Family disruptions. Families' life situations became more transient in nature as they responded to the economic downturn. This likely resulted in a higher number of missing follow-up study visits than anticipated.

Staff turnover. At some FRCs, staff that were providing family development left to prioritize family matters, resulting in higher caseloads for remaining staff. In some cases, these staff were replaced with staff who provided emergency services (foodbank/housing).

Data entry challenges. Higher volume of service provision created less time to document all the efforts in the data system and individual/family level data entry was deprioritized over increased volume of community need. Additional data entry barriers arose with remote service delivery and the inability to access paperwork from families.

Remote access to FRC services. In March 2020, direct services (such as food banks) transitioned to contact-less exchanges and remote visits to the best of centers' abilities. In August 2020, FRCA issued fidelity guidelines for providing FDS remotely.

COVID-19 impacted how FRC staff supported G/CS and FDS families.

FRCs reported that it was particularly challenging for FDS families to focus on long-term goals as COVID-19 was creating uncertainty across every aspect of their lives and creating greater short-term challenges that took priority (for example, children home from school meant that time was spent caring for them rather than preparing a resume). In response to the health crisis, Family Development Workers were often supporting families in revising goals to meet more immediate, short-term needs; however, in some cases, families were so overwhelmed that they were not working towards goals. When reflecting on their goal-setting progress in the focus groups, FDS families noted that they were able to meet some goals but not others. These FDS families surfaced challenges related to meeting financial/economic goals with the reality of managing everyday life; coping with mental health issues such as depression and anxiety; and the overall impact of COVID-19 on work and family. FDS families noted that FRCs played a key role in supporting families as they navigated hardships that resulted from the pandemic; when asked what they felt they needed to continue to work towards and achieve their goals, parents, by and large, shared the continuation of services that FRCs were already providing would be most helpful.

17 - The research team and the site coordinators at each FRC met weekly from June 2019 through July 2021. Beginning in March 2020, notes from these meetings captured how FRCs responded at the outbreak of COVID-19 and in the months that followed. Input on how FRCs across Colorado responded to the COVID-19 pandemic was also gathered to inform the 2021 evaluation of 12 FRCs funded by Family Support Services. The information provided in this report come from both data sources. The OMNI Institute (2021). Family Support Services: Evaluation Findings July 2020 – June 2021. Submitted to Family Resource Center Association and the Colorado Department of Human Services, Office of Early Childhood, Denver, CO.

When asked what they needed to work towards and achieve their goals during COVID-19, FDS parents largely identify the continuation of services that FRCs were already providing

Furthermore, study visits (often conducted remotely) with all families started by checking in on their well-being and assessing immediate needs. FRCs reported that for G/CS families this may have resulted in greater service provision than would have otherwise occurred; that is, because FRCs were doing outreach to parents to complete study visits, it was also an opportunity to connect with the family, assess current needs and offer access to referrals and services, and staff may have engaged with G/CS families in informal goal setting during these conversations.

Family Changes Over Time

Next, we review findings that assess changes in outcomes that were observed for families during the study, along with the impact of COVID-19. Specifically, we used mixed models to examine overall changes in the fifteen key outcomes over the study period (9 months) and differences in those changes between G/CS and FDS families,[18] and the impact of COVID-19 on those changes. Effect sizes (Cohen's d) are presented to quantify the magnitude of key significant findings. Traditional guidance has offered interpretations of effect sizes where .2 is a small effect, .5 is a medium effect, and .8 is a large effect;[19] however, recent research suggests that these guidelines are estimations, and that .30 (for example) should be considered a large effect size, particularly in social sciences where the effects have long-term implications[20] (such as in the case of economic security). Small and medium effects are common in the social sciences. Details of all models are provided in Appendix B and Appendix C. Additionally, we explored whether race/ethnicity were associated with family growth, and further details and results of these models are presented in Appendix D.

While participating in FRC services, families demonstrated improvements in economic security, resiliency, and health.

Economic security. There was significant growth for all three indicators of economic security. These results indicate that economic self-sufficiency, access to resources to cover basic needs, and availability of monetary resources increased for G/CS and FDS families. Effect sizes for the growth ranged from .30 to .48.

Resiliency. There was significant growth for all six indicators of resiliency. These results indicate that for parents in G/CS and FDS families, four factors that have been shown to protect against child abuse and neglect improved, including family functioning, social support, concrete support, and nurturing and attachment.[21] Effect sizes for the growth in these protective factors ranged from .16 to .38. Results also indicate that parents in G/CS and FDS families had more time for self and more time for their family, with effect sizes of .41 and .31, respectively.

Health. There were significant changes on four indicators of health, each indicating improvements for G/CS and FDS families. Specifically, results indicate that for parents in G/CS and FDS families, a self-rating of health (including mental and physical health) improved; the number of unhealthy days and the number of days that health negatively impacted their lives in the past month decreased; and stress decreased. Effect sizes for these improvements ranged from .17 to .38. For two other indicators of health, including a global assessment of parental health, and their rating of a child's overall health, significant change was not detected.

18 - We used an intent-to-treat approach; families were included in the analyses in the original condition to which they were assigned.
19 - Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd Edition). Hillsdale, NJ: Erlbaum.
20 - Funder, D. C. & Ozer, D. J. (2019). Evaluating effect sizes in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science,* 156-168. https://doi.org/10.1177/2515245919847202
21 - Center for the Study of Social Policy's Strengthening Families Protective Factors Framework. For more info, see https://cssp.org/wp-content/uploads/2018/11/About-Strengthening-Families.pdf

Improvements did not differ between G/CS and FDS families.

Across most indicators, there were no significant differences in changes over time between G/CS and FDS families. These results suggest that families participating in FRC services improved regardless of their assignment for this study. There were two exceptions to this pattern; for family functioning and time for family, results indicated that FDS families increased more over time than G/CS families. However, further examination of these two interaction effects suggest that the pattern was not robust, and the findings may not be reliable.[22]

Families with FRC support improved even during the COVID-19 pandemic.

We examined if the changes over time in economic security, resiliency, and health differed depending on whether assessments occurred before or during COVID-19. Across these fifteen tests, there was one significant finding; unhealthy days decreased over time before COVID-19 but not during COVID-19, suggesting that the effect of the pandemic may have erased the beneficial effect of FRCs on unhealthy days. However, given that this pattern of results was not replicated across any other outcomes, caution is warranted in interpreting this finding in isolation. Across all other outcomes, results suggest that the benefits of FRC services did not differ before and during COVID-19.

Parents also provided qualitative descriptions of how COVID-19 was impacting them and their families.[23] Content analysis of these responses indicated that employment and financial concerns were most salient for parents, with 40% describing challenges in these areas (such as losing their job). The next most common area of concern (30%) was in mental health, which included stress and anxiety about COVID-19 directly, about meeting their family's needs, and about other associated life changes. Another common response (20%) was isolation and a lack of socialization, particularly for children.

A Piece of the Bigger Picture: Federal Economic Stimulus Efforts

Beginning in April 2020, the federal government began distributing Economic Impact Payments to help offset the financial losses that many individuals were experiencing due to lock-downs and other impacts of COVID-19.[24] Eligibility for these payments was based primarily on adjusted gross income; using annual incomes provided by families, we estimate that 99% of parents in the study would have qualified for the full value of the stimulus payments.[25] Based on self-reports from parents, 60% indicated they had received a stimulus check during the study period. When reflecting on the impact of that stimulus check, the majority (62%) noted that they used the money to pay for bills, pay off debt, or help meet basic needs.[26]

22 - For both significant interactions, the pattern of growth shows a difference at baseline that narrows in the follow-ups, following classic examples of regression to the mean, which can make natural variations in repeated assessments appear to reflect real change (when in fact they do not). Additionally, the trends do not appear consistently across outcomes, and therefore should be interpreted with caution.

23 - Beginning April 5, 2020, and throughout the remainder of the study, parents were asked about the impact of COVID-19: *How has the coronavirus pandemic impacted you and your family?*

24 - The Internal Revenue Service issued three Economic Impact Payments (i.e., stimulus checks) to eligible individuals between April 2020 and March 2021. Amounts of $1200, $600, and $1400 were distributed. Eligibility was based in part on adjusted gross income and payments were scaled. To be eligible as a head of household for the full payment, the maximum adjusted gross income was $112,500. Source: https://www.irs.gov/coronavirus/economic-impact-payments

25 - Estimates are based only on adjusted gross income criteria for those filing as a head of household; other eligibility criteria, such as being a U.S. citizen, were not considered in these estimates, and thus 99% may be a high estimate.

26 - Beginning April 5, 2020, parents were also asked about the federal stimulus check. Items included: *In response to the coronavirus, the federal government is providing a direct stimulus check to families throughout the country.* (a) *Have you heard about this?* [Yes/No] (b) *Have you received it* [Yes/No]; and (c) *If you received it, how has it impacted you and your family?* [open-ended]. 87% of eligible parents (n = 133 out of 153 parents who were administered the survey items) provided responses to the federal stimulus survey question. Of those 133 parents, 80 indicated that they received a stimulus check during the study.

Conclusions

When families are connected to an FRC that follows the Family Pathways Framework, economic security, resiliency, and health improve, even during a pandemic.

FRCs are places that families can turn to when they need support. Through connection with an FRC that follows the FRCA Family Pathways Framework, families can access a suite of services, including access to a food bank, a referral to a mental health clinician, or participate in a parenting program (General & Center Services); they can also participate in coordinated case management in which a trained Family Development Worker helps them set and work towards their own goals (Family Development Services). Like many of the families that connect with FRCs every day across Colorado, families in this study were experiencing hardships in areas like income, employment, cash savings, and housing.

> We all may be in the same boat…, but the truth is there are those of us out there that don't have that life jacket and [the Family Resource Center] provides that for us and for this community.
>
> - FDS Parent, Spring '21 Focus Group

Results from this study show that over the course of nine months of being connected to an FRC, families' economic security, resiliency, and health improved relative to where they started. What's more, these improvements did not vary based on COVID-19, despite the direct challenges to economic security and health that the pandemic created. For example, from 2019 to 2020, household median income in the United States decreased and the rate of poverty increased for the first time in five years, and 1.1 million more children were living in poverty.[27] In Colorado, estimates from the start of the pandemic through 2021 suggest that nearly half of Colorado households with children lost employment income.[28] In a nationally representative survey conducted by the American Psychological Association in Spring 2021, 67% of Americans reported sleeping disruptions, and nearly half (47%) reported cancelling or delaying health care services since the start of the pandemic. What's more, 48% of parents said their stress had increased compared with before the pandemic.[29] Considering national and state trends demonstrating the negative impact of the pandemic, there is good reason to expect that families' economic security, resiliency, and health would have decreased during the course of the study; the fact that they made significant and relatively sizeable gains in key areas suggests that FRCs are meaningful community resources to help families weather challenging times. However, this study design did not include a direct comparison to families who did not participate in an FRC.

We hypothesized that FDS families would demonstrate greater gains in economic security, resiliency, and health compared to G/CS families because in the FDS Pathway, families typically receive a higher level of service. The hallmarks of FDS include ongoing support by Family Development Workers to set and work towards family-centered goals (often focused on these key areas of economic security, resiliency, and health), and coordination of services and referrals based on a deep understanding of each family's situation. Results indicated that there were no differences in growth between G/CS and FDS families. We offer the following reasons to help explain these unexpectedly parallel patterns of growth.

27 - Shrider, E. A., Kollar, M., Chen, F., & Semega, J. U.S. Census Bureau, Current Population Reports, P60-273, *Income and Poverty in the United States: 2020,* U.S. Government Publishing Office, Washington, DC, September 2021. Accessed online at https://www.census.gov/content/dam/Census/library/publications/2021/demo/p60-273.pdf *Note: 2021 estimates were not available before publication of this report.*

28 - Colorado Children's Campaign analysis of data from the U.S. Census Bureau's Household Pulse Survey, 2020-2021. As reported in *At a Tipping Point: Building Stronger Systems for Colorado Kids in the Aftermath of COVID-19.* Accessed online at https://www.coloradokids.org/wp-content/uploads/2021/08/2021-KC-Final-low-res-8.18.21-1.pdf

29 - American Psychological Association (2021). *Stress in America: One Year Later, a New Wave of Pandemic Health Concerns.* Accessed online at https://www.apa.org/news/press/releases/stress/2021/sia-pandemic-report.pdf

First, the COVID-19 pandemic profoundly affected families and FRCs. Many FDS families shifted their focus from long-term goals to meeting immediate needs resulting from the crisis; similarly, FRC staff likely provided a higher level of coordinated care to G/CS families during the pandemic to meet immediate needs. For these reasons, during COVID-19, responsive, family-centered service delivery may have looked similar for families across conditions. FRC staff were committed to supporting families during the crisis, regardless of study assignment, such that the experiences of families may have been closer than was expected.

Second, it may also be that the lack of observed differences between G/CS and FDS families in this study is an artifact of the study design, specifically resulting from the study visits that were required for data collection. FRC staff had specific and prescribed guidance to reach out to all families six and nine months after enrollment in the study; time-based follow-ups are an element of FDS but are not a part of standard G/CS practice. What's more, during these visits, the interview-based CFSA 2.0 tool provided an opportunity for FRC staff to learn more about what was happening with families in both conditions. The CFSA 2.0 includes three parts: Parts A and B are assessments used to capture areas of strength and opportunities for growth, and progress in these areas over time; Part C is used for the goal-setting component of FDS. Outside of this study, the CFSA 2.0 is typically only administered to FDS families. For the purposes of this study, Parts A and B were administered to G/CS and FDS families so that direct comparisons could be made in growth over time, and Part C was reserved for FDS families. Although we believed that Parts A and B could be administered as only assessment tools and that they would not influence practice, it may be that through interviewing families to complete these sections, FRC staff gained deeper insights into family situations. The combination of study visits as established times to check in with all families, and interviewing families in both conditions may have resulted in G/CS families receiving a higher level of coordinated care than they would have without the study protocols.

Finally, the study design of randomizing families based on unmet needs alone may have meant that we were not able to capture the role that family readiness and motivation play when receiving FDS services. To create the conditions for randomization without denying access to services, families who demonstrated unmet needs at enrollment had to agree to be randomly assigned to (1) participate in FDS now or (2) have access to these services in 9 months. This was done to make these groups as equivalent as possible at the start of services. In standard practice at FRCs, FDS is a pathway that families opt into when they are ready to make changes in their lives, which they leverage to set and work towards their goals. It is possible that this motivation and readiness to change are key components of what makes FDS successful, which the study was not able to account for. Indeed, if families came to the FRCs asking to participate in FDS, they were not considered eligible for the study, as we did not want to risk the possibility of denying them access to those services as a result of randomization. These considerations highlight the challenge of abiding by ethical guidelines while also implementing randomization in research studies to assess the effectiveness of social programs in which human elements of behavior change (like readiness and motivation) play a key role.

When communities face challenges, FRCs are well-positioned to react to those challenges through family-centered support.

Though COVID-19 is an unprecedented pandemic, community challenges (whether global, national, or local) are not unprecedented. In fact, during the study, Mountain Family Center's community of Granby, CO and the surrounding area was hit by a wildfire that burned 193,812 acres and 366 homes. Results from this study in which families were able to make progress amid such challenges suggests that when communities face public health crises, natural disasters, economic downturns, and other challenges, FRCs can serve as a critical resource for families.

When a family walks in the door of an FRC, the goal is to meet a family where they are, and that approach extends beyond that initial point of contact. As families, circumstances, and needs change, FRCs continue to meet families where they are and with what best supports them. It is likely that this type of responsiveness and family-centered services contributed to the growth that families experienced during the pandemic and study period.

Though challenging to implement, rigorous research is critical for advancing our understanding of effective, culturally responsive, and scalable service models designed to strengthen families and communities.

This research was designed to rigorously test the impact of a particular service delivery pathway (Family Development Services), over and above access to an array of other services (General & Center Services), as delivered by FRCs following the Family Pathways Framework. Implementing these types of efficacy studies, even without the occurrence of a global pandemic, is challenging. As such, there are several limitations that should be noted:

- While we observed improvement for families assigned to G/CS and FDS, without a third comparison group of families not served by an FRC, we cannot directly attribute those improvements to FRC services. Nonetheless, families improved during a time of extreme stressors, lending confidence that FRC services contributed to those changes.
- Families provided information via self-report and interview measures. Improvements in outcomes areas were not verified through other means (for example, we did not seek paystubs to verify employment or income). It is possible families reported improvements as a result of being asked to provide the same information at multiple points in time. However, the fact that results were largely consistent across the three areas of economic security, resiliency, and health, and triangulation through multiple indicators (i.e., eight well-validated and reliable assessments) helps limit concern about the observed changes over time being artificial.

- COVID-19 introduced systemic confounds that make attribution even more challenging. For example, families in the study were likely eligible to receive up to $3,200 in federal stimulus benefits that largely co-occurred with their participation in the study. Although these benefits were not enough to keep federal and state poverty levels from increasing, the effect of that additional money may have been captured in the observed improvements in economic security, resiliency, and health for families in this study. However, it may also be that the combination of additional money and FRC support helped families improve during such a challenging time.
- We were limited in exploring considerations of equity, such as whether there were disparities in outcomes among families from different racial/ethnic backgrounds. Major contributing factors include being underpowered[30] to examine potential differences, driven by the overall number of families enrolled in the study, small numbers of families from different racial/ethnic backgrounds, and greater specificity needed about the racial and ethnic backgrounds of family members (see Appendix D for further discussion).
- As an efficacy trial, this study aimed to capture the experiences of families as they engage with FRCs in a typical manner, not in an ideal manner. Interestingly, services data suggest that 16% of families did not participate in any Center Services. It may be that those families only participated in General Services (which are not tracked at an individual family level). Though the hope is that families will engage with available Center Services in a meaningful way once they make a connection to an FRC, the FRC model is family-driven and family-centered; therefore, there are no requirements for how or at what level families engage with those available services and these families may in fact not have engaged with the FRC, thus contributing to a diffusion of the effects observed in this study. It may also be that tracking of Center Services provision suffered during COVID-19, such that those families participated in Center Services, but it is not reflected in the data.

To build upon these findings, future research should consider alternative approaches to building the evidence base for family-centered, community-based models of family support. Though randomized controlled trials are a valuable gold-standard for evidence building, there are often challenges to implementation, including feasibility (such as implementing research without compromising fidelity of the model being studied) and ethical conundrums (such as denying families the supportive services they are seeking). Given these challenges, viable alternative approaches may include emerging experimental designs like preference trials that accommodate individual choice within at least one arm of the study; quasi-experimental designs that draw on administrative or secondary data; and conducting smaller, more in-depth or focused studies with communities in ways that center issues of equity and contribute to an understanding of the mechanisms by which FRCs help families make progress. Despite the limitations, this study provides new insights into the ways that families experience health and well-being benefits when connected to an FRC that follows the Family Pathways Framework, and a timely understanding of how FRCs support families during times of individual challenges and community-wide crises.

30 - Statistical power is the probability of detecting an effect if there is indeed an effect to be found. One contributing factor is sample size, such that as the number of participants increases it is more likely that you will detect an effect that exists.

– Appendix A: Study Measures

Table 1. Study Fidelity Measures

Indicator	Measure/Scale	Description	Unit
Quality of Services	Standards of Quality for Family Strengthening and Support[1]	Self-report: 13-items that assesses family experiences participating in Family Development Services, including perceptions of accessibility, family-centeredness, and inclusiveness	Parent

Table 2. Study Outcome Measures

Outcome	Measure/Scale	Description	Unit
Economic Security	Colorado Family Support Assessment, 2.0 (CFSA 2.0),[2] Economic Self-Sufficiency Scale (ESS)[3]	Interview: Assesses family self-reliance in 8 areas on a scale of 1 (in crisis) to 5 (thriving)	Family
	Family Resources Scale-Revised (FRS—R) – Money and Basic Needs Scales[4]	Self-report: 5 items that assess families' availability of monetary resources, and 7 items that assess families' access to resources to cover basic needs on a scale of 1 (not at all adequate) to 5 (almost always adequate)	Family
Family Resiliency & Supports	Protective Factors Survey (PFS)[5] as part of the CFSA 2.0	Interview: Assesses 5 factors that protect against child abuse and neglect on a scale of 1 (never/strongly disagree) to 7 (always/strongly agree)	Family
	FRS-R – Time for Self and Time for Family Scales	Self-report: 6 items and 2 items (respectively) that assess families' access to resources to support time for self and time for family on a scale of 1 (not at all adequate) to 5 (almost always adequate)	Parent / Family
Health	CFSA 2.0, Health Scale[3]	Interview: Assesses family health in 2 areas (physical and mental) on a scale of 1 (in crisis) to 5 (thriving)	Family
	Healthy Days Core Module of the Health-Related Quality of Life Measure (CDC HRQL-4)[6]	Self-report: 4 items that include a general assessment of overall health on a scale of 1 (poor) to 5 (excellent), assessments of physical and mental health, and assessment of how health has impeded daily life as measured by number of days in past month	Parent
	Global Rating of Child Health[7]	Parent-report: Single-item report of a target child's global health on a scale of 1 (poor) to 5 (excellent)	Child
	Perceived Stress Scale (PSS)[8]	Self-report: 10 items that assess the appraisal of stress in one's life over the past month on a scale of 0 (never) to 4 (very often)	Parent

1 - National Family Support Network. Available at https://www.nationalfamilysupportnetwork.org/_files/ugd/ec0538_237b76e7b73d4e52b283fc8ae74ba2c0.pdf
2 - Richmond, M., Pampel, F. C., Zarcula, F., Howey, V., McChesney, B. (2015). Reliability of the Colorado Family Support Assessment: A self-sufficiency matrix for families. *Research on Social Work Practice 27* (6). doi:10.1177/1049731515596072
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7 - Flaherty, E. G., Thompson, R., Litrownik, A. J., Theodore, A., English, D. J., Black, M. M., Wike, T., Whimper, L., Runyan, D. K., & Dubowitz, H., (2006). Effect of early childhood adversity on child health. *Arch Pediatr Adolesc Med, 160*(12), 1232–1238. doi:10.1001/archpedi.160.12.1232
8 - Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396. doi: 10.2307/2136404

– Appendix B: Family Changes Over Time

Background information and results of Appendix B can be accessed here.

– Appendix C: Impact of COVID-19

Background information and results of Appendix C can be accessed here.

– Appendix D: Considering Race/Ethnicity

Methods

To explore considerations of racial equity, we conducted supplemental analyses examining whether there were differences in changes over time based on parental race/ethnicity. In order to reduce data collection burden on participants, we used demographic information gathered by FRCs as part of their standard intake process. Half (50%) of parents identified as White (*n* = 125); 16% identified as Hispanic or Latinx (*n* = 40); and 12% identified as American Indian or Alaska Native (*n* = 30). There was a much smaller proportion (2%) of parents who identified as Asian, Black or African American, or Native Hawaiian or Other Pacific Islander (in total, *n* = 5); because there are so few parents who identified with these groups, we were not able to explore patterns of change for each of them separately. Although we recognize that Asian Americans, Black and African Americans, and Native Hawaiians and Pacific Islanders each have unique cultural backgrounds and differing histories of racialization, discrimination, and oppression in the United States, in these analyses we considered them as a collective group that is referred to as "others" in order to include them in the models (the alternative was excluding these five parents). Additionally, 20% of parents identified with multiple racial/ethnic groups (*n* = 50).

Because of the way data were reported, we were not able to disaggregate these parents to capture the specific racial/ethnic groups that make up their multiracial/ethnic identification. Therefore, although we recognize that this group also includes individuals who belong to different groups with different sociohistorical contexts (for example, an individual who identifies as White and Black would have a different

lived experience than someone who identifies as Black and Latinx), we included them in the models under a collective multiracial group.

We first considered whether outcomes differed between racial/ethnic groups by examining the main effects of race/ethnicity using dummy coding (see Model 5). We used White as the reference group because this was the largest proportion of parents, and because doing so compares those with a non-dominant identity (Hispanic/Latinx; American Indian/Alaska Native; multiracial; and other minority groups) to those with a dominant identity (White) allowing us to explore potential inequities. Next, we considered whether racial/ethnic groups fared differently over time by adding interaction terms (each race/ethnicity dummy by time) into the models (see Model 6). When interpreting interaction effects, we considered the statistical significance of coefficients along with improvement in Schwarz's Bayesian Information Criterion (BIC) given the increased risk of detecting a false positive with the number of interaction effects included in the models. Under a probabilistic model selection framework, the model with the lowest BIC is selected; that is, in this case if the model with the main effects for race/ethnicity has a lower BIC than the model with the interaction effects of race/ethnicity x time, interaction effects are not interpreted and the outcomes for the race/ethnicity groups can be seen as statistically similar. We also focused interpretations on comparisons between American Indian/Alaska Native and White parents, and Hispanic/Latinx and White parents, because in these cases specific group identification is available, and we can make more reasonable assumptions about the collective experience of membership than we can for those included in the multiracial and other groups. Detailed results from all models can be accessed here.

Results

Results indicated that there were some significant mean differences between racial/ethnic groups. On average, American Indian/Alaska Native parents had lower economic self-sufficiency, money, family functioning, and concrete support than White parents. Additionally, Hispanic/Latinx parents had lower economic self-sufficiency, concrete support, and child health than White parents. In the United States, families with American Indian/Alaska Native and Hispanic/Latinx backgrounds have experienced systemic racism and oppression that diminishes economic security, resiliency, and health relative to their systemically advantaged White counterparts. That is, these differences reflect larger societal trends of disadvantage and advantage conveyed to families because of their racial/ethnic background and are not specific to families participating with FRCs in this study.

When considering whether racial/ethnic groups fared differently over time, the results largely suggested that there were not observable differences in patterns of family growth by race/ethnicity, but confidence in these conclusions is limited. Of the sixty interactions tested (four interactions for each of the 15 outcomes), four were significant. One of these significant interactions was found for a comparison of focus; specifically, it suggested that there was a difference in changes in nurturing and attachment over time between Hispanic/Latinx and White parents. However, the BIC criteria indicated (in this case, and across all outcomes) that the interaction model was a worse fit than the main effect model. Further, there were no significant differences for change over time between American Indian/Alaska Native and White parents. Altogether, results do not suggest that parents from different racial/ethnic groups experience different growth in economic security, resiliency, and health.