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Implementing Triple P during the COVID-19 pandemic with families at risk for substance use

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ABSTRACT

Background: Many studies have examined the Positive Parenting Program (Triple P), yet few have considered its effectiveness during the twin challenges of the opioid crisis and COVID-19 pandemic

Objective: This study examines the implementation of, and parenting outcomes associated with the Positive Parenting Program (Triple P) in 13 counties in central Ohio.

Participants and setting: The program was provided to parents who were at heightened risk for substance use. From July 2020 through June 2021, 890 parents received services from Triple P. Methods: Parents completed pre- and post-test assessments of protective factors within their families and parenting behaviors. Parents also participated in qualitative interviews regarding their experiences in the program.

Conclusions: Overall, the results were promising, with improvements seen in family functioning/ resilience, nurturing and attachment, parental laxness, and parental over-reactivity. Parents reported positive experiences participating in the program and felt that their relationship with their child had improved. Despite the profound, recent challenges to parenting and service provision, Triple P continues to show promise as an approach to reducing child maltreatment. Expansion of Triple P to other areas may improve parenting behaviors and reduce child maltreatment among parents at risk for substance use.

1. Background

Over the past three decades, the increasing potency, affordability, and availability of opiates have fueled a massive epidemic in the US (Cerdá et al., 2021). Over 900,000 drug-related deaths occurred between 1999 and 2019, two thirds of which involved opioids (Centers for Disease Control and Prevention National Center for Health Statistics, 2020). De-industrialization, concentrated poverty,

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and low economic opportunity have created a particular vulnerability for substance use in the Midwestern and Appalachian regions of the US (Ghertner & Groves, 2018) with some of the largest increases in opioid prescriptions, hospitalizations, and fatalities in the nation (Singh et al., 2019). Ohio, in particular, is considered the epicenter of the epidemic (Bowman, 2018), with one of the top 5 highest opioid overdose rates in the US and an estimated 500,000 years of life lost between 2010 and 2016 alone (Hall, Hall, McGrath et al., 2020; Rudd et al., 2016). The central part of the state has been particularly impacted, with rates above the state average for opioid-related deaths, poisonings, treatment admission rates, and years of life lost in Franklin (home to the city of Columbus), Marion, Fairfield, and Richland counties (Caupp et al., 2018; Hall, Hall, McGrath et al., 2020; Kline & Hepler, 2020).

The opioid epidemic has had a particularly profound impact on the state's parents and young children. From 2009 to 2018, an estimated 6300 Ohio women of childbearing age died of accidental opioid overdose (including many pregnant and perinatal women), reflecting a 10-fold increase during this time (Hall, Hall, Rood et al., 2020). Furthermore, the number of delivering mothers diagnosed with opioid dependence increased every year from 2006 to 2015 in Ohio, and over 29,400 hospitalizations of drug abusing or dependent mothers were reported in the state. Finally, with a nearly 8-fold increase of over 11,000 hospitalizations of infants for neonatal abstinence syndrome (NAS) during this time, costing the state over \$133 million dollars to treat in 2015 alone (Ohio Department of Health Violence and Injury Prevention Program, 2018).

In the last two years, the COVID-19 has further burdened the economic and health resources of the state (Mallow, 2021). COVID has also exacerbated opioid overdose deaths (Currie et al., 2021) and created unprecedented challenges for the provision of social services to families experiencing or at risk for substance use. Many prevention and intervention programs and services such as parenting education had to be shifted to an online context, which presented barriers for families without reliable access to internet and changed the ways in which families interacted with one another in a group-based format. Parent educators were also faced with the stresses of the pandemic in their personal and work settings, having to provide their programs online, and had varying levels of comfort and training in providing teaching online.

1.1. Triple P positive parenting program

Triple P aims to prevent child emotional, behavioral, and developmental difficulties by developing parents' efficacy and competency in core parenting domains through a combination of quality parenting information and active skills training (Sanders et al., 2002). The model is grounded in a public health framework, employing a multi-tier system of increasingly intensive programming that provides families with the minimally sufficient intervention necessary, while maximizing providers' reach and identifying families more proactively, avoiding over-servicing, containing costs, and decreasing the stigma of participation (Sanders, 2012).

A robust body of evidence supports the efficacy of Triple P for strengthening children's social-emotional-behavioral outcomes, parenting practices, and parental wellbeing and adjustment. These results hold for each level of the Triple P system, and across diverse communities and multiple countries (Nowak & Heinrichs, 2008; Sanders et al., 2014). While no studies to date have assessed Triple P specifically for substance using families, it has been effective serving families with complex and diverse needs relevant to the central Ohio community, including mothers experiencing depression, children with and without disabilities, families living in homeless shelters, and in underserved rural communities when delivered in person or via telehealth (Goodman & Garber, 2017; Haskett et al., 2018; Nowak & Heinrichs, 2008; Reese et al., 2015). And to our knowledge, no studies have examined the implementation of Triple P or its effects on parenting outcomes during the COVID-19 pandemic.

Within the child welfare context, Triple P also offers a promising approach for prevention. In the most extensive assessment of the impact of Triple P on child maltreatment to date, Prinz et al. (2009) found large reductions of substantiated child maltreatment cases, placements out of home, and maltreatment injuries treated in hospitals for counties that implemented Triple P. This particular study has been critiqued for providing insufficient and inconsistent information about the methodology to present questions about the validity and reproducibility of the findings (Eisner, 2014). However, the authors have since published clarifications of their measurement, design, and procedures, as well as further analyses supporting the strength of effects over a longer time period (Prinz et al., 2016); and findings from a number of additional independent studies further support the effectiveness of Triple P in reducing child maltreatment indicators and risk factors. This includes the links between Triple P and reduced childhood unintentional injuries (Iskander et al., 2018), improved parenting and quality of life indicators for rural and mid-western families at high risk for or currently involved in the child welfare system (Abate et al., 2020; Lanier et al., 2018), and reductions in the rates of investigated maltreatment reports and numbers of entries into foster care following Triple P implementation (Schilling et al., 2020). Finally, interviews of parents who participated in Triple P while involved in the child welfare system reported finding the curriculum helpful, continuing to use its materials after finishing the intervention, and being likely to recommend the program (Lewis et al., 2016).

A local council charged with creating a plan to distribute child maltreatment prevention funds, the Central Ohio Regional Prevention Council, developed a plan to implement Triple P Levels 3 and 4 as part of a comprehensive prevention strategy combatting the effects of the epidemic for families in central Ohio (for the full plan, see Central Ohio Regional Prevention Council, 2018). The Council sought to fund a parenting program that was evidence-based for reducing child maltreatment, that could directly serve parents considered to be high risk for substance use due to various characteristics. The Triple P intervention was well suited for this goal because of its focus on universal service provision and adaptability of implementation format and intensity. A Triple P network of facilitators was established using a learning community model with a lead agency providing mentoring and technical assistance. This model leverages service provision by local agencies in each community, building engagement with parents via relationships with the community and local systems/agencies. In addition to groups held in community settings, the local provider also partnered directly with agencies providing substance use recovery and treatment services to provide Triple P to families who were at risk for additional substance use. These included two urban residential treatment centers for women, an urban, hospital-based outpatient high risk

perinatal clinic for expecting mothers with a recent history of opioid misuse, a rural inpatient and outpatient recovery center, a small city men's residential recovery center, a small city supportive housing community for families with a history of substance use disorder, and a rural residential recovery center for women.

The Level 3 program is a short-term intervention providing parenting information training and skills to manage mild to moderate behavioral difficulties, typically consisting of a one-time educational program lasting 2 h. The Level 4 program provides more intensive training and practice generalizing parenting skills for parents of children with greater behavioral concerns (Sanders et al., 2002), typically provided over the course of 5 to 8 weeks. Ultimately, Levels 3 and 4 were assessed to be the best match for the target population; both intensive enough to address the increased risks associated with opioid abuse, but no more intensive than necessary given the goal of serving families with no prior history of child welfare cases. Additionally, while the council planned for the implementation prior to the emergence of COVID-19, as that epidemic unfolded the council added Triple P Primary Care in 2019 and Triple P Online in 2020*—additional modalities provided individually to caregivers—in line with feedback from providers' initial experiences. Following Ohio's statewide COVID-19 shutdown in March 2020, most Triple P activities moved online. By July 2020 (the beginning of the current study), even Level 3 sessions and Level 4 cohorts that typically met as in-person groups switched almost exclusively to a videoconference format. Triple P Online differs from the standard Triple P intervention delivered virtually – Triple P Online is a series of self-paced webinars that cover the content provided in Level 4. Standard Triple P delivered virtually due to the pandemic involved synchronous sessions with a trained facilitator and other parents.

1.2. Current study

This study assesses the extent to which the Triple P program improved parenting knowledge and practices among families, including those at risk for substance use, and within the context of the ongoing COVID-19 pandemic. This includes assessing the program's reach (the number, and demographic characteristics of participants), quantitative outcomes data, as well as qualitative participant feedback and recommendations.

2. Methods

2.1. Design

The study was approved by the Institutional Review Board of (blinded for review) and included both quantitative and qualitative components. Participants from all groups completed a demographic questionnaire. The evaluation was designed to minimize burden on participants. Because Level 3 is a one session two-hour group, there are fewer assessment tools than Level 4, which involves a 5–8-week group with intentional work on practicing skills between sessions. For the quantitative portions of the evaluation, Level 3 participants completed a satisfaction survey at the end of their parent education discussion group. Level 4 and Triple P Online participants also conducted pre- and post-test surveys including the Protective Factors Survey (FRIENDS National Resource Center for Community Based Child Abuse Prevention, 2011) and the Parenting Scale (Arnold et al., 1993).

For the qualitative portion of the evaluation, Level 3 and Level 4 participants were asked to provide their first name and phone number to their parent educator if they were willing to be contacted by the research team to complete a qualitative interview about their experiences. These interviews were conducted quarterly by a team of research assistants. Annually, providers were contacted for qualitative interviews about their experiences providing Triple P.

2.2. Quantitative sample

The sample consists of 890 Triple P participants from central Ohio between July 1, 2020 and June 30, 2021, including 204 Level 3 participants, 187 Level 4 participants, 464 Primary Care participants, and 35 Triple P Online participants. The numbers within each program modality (e.g., Level 3; Primary Care) refer to unduplicated clients. The total number (n = 890), however, likely includes some duplicated individuals who participated in more than one program modality. The logistics of program implementation limited our ability to identify individuals who participated in more than one program modality.

2.3. Quantitative measures

2.3.1. Demographic information

The survey materials begin with questions related to the caregiver's gender, age, race, ethnicity, marital status, family living situation, family income, parent and education level, as well as whether they received social welfare benefits (e.g., SNAP, Medicaid)

2.3.2. Protective Factors Survey

The Protective Factors Survey (PFS; FRIENDS National Resource Center for Community Based Child Abuse Prevention, 2011) is a 20-item measure consisting of Likert scale questions in four subscales; family functioning and resilience (5 items; Cronbach's α = 0.913), social support (3 items; α = 0.914), concrete support (3 items; α = 0.753) and nurturing and attachment (4 items; α = 0.833). The various questions fall on two different Likert scales, one with the response options: "Strongly Disagree," "Mostly Disagree," "Slightly

Disagree," "Neutral," "Slightly Agree," "Mostly Agree," and "Strongly Agree." The other response options include: "Never," "Very Rarely," "Rarely," "About Half the Time," "Frequently," "Very Frequently," and "Always." An example item from the family functioning and resiliency subscale is: "In my family, we talk about problems." An example item from the social support subscale is: "I have others who will listen when I need to talk about my problems." From the concrete support subscale, an example item is: "I would have no idea where to turn if my family needed food or housing." Finally, from the nurturing and attachment subscale, an example item is: "I am happy being with my child." The Cronbach's alpha for the various subscales range from 0.753 to 0.914.

2.3.3. Parenting Scale

The Parenting Scale (Arnold et al., 1993) is a 30-item scale intended to measure aspects and styles of parenting. It includes scenarios (e.g. "When I am upset or under stress") with two response option anchors on a 7-point Likert scale (e.g. "I am picky and on my child's back," and "I am no more picky than usual."). Three subscales were included from the Parenting Scale: laxness (5 items, Cronbach's $\alpha = 0.697$), over-reactivity (5 items; $\alpha = 0.786$), and hostility (3 items; $\alpha = 0.403$). An example item from the laxness subscale is: "When I want my child to stop doing something," with the response options: "I firmly tell them to stop," and "I coax or beg my child to stop." For the over-reactivity subscale, an example item is "When my child misbehaves," with the response options: "I usually get into a long argument with my child," and "I don't get into an argument." Finally, an example item from the hostility subscale is: "When my child misbehaves," with response options "I rarely use bad language or curse," and "I almost always use bad language." The Cronbach's alpha a for the entire 30-item (total parenting) scale is 0.834.

2.4. Quantitative analytic plan

All data were analyzed using Stata MP version 15.1. For descriptive statistics, the means, standard deviations, and ranges were calculated. Paired t-tests examined differences on pre-and post-test measures of protective factors and parenting outcomes. For multi-item scales the PFS (family functioning/resiliency, social support, concrete support, nurturing & attachment) a clinically significant change was defined as raw score difference of ± 0.5 from pretest to posttest. For the Parenting Scale, thresholds for clinically significant change vary by scale and respondent gender (Arnold et al., 1993). For female and male caregivers respectively, the threshold values are laxness (3.6, 3.4); over-reactivity (4.0, 3.9); hostility (2.4, 3.5), total score (3.2, 3.2). Statistical testing with a p value of <0.05 helped identify noteworthy results.

2.5. Qualitative sample

Of the Level 3 and Level 4 participants, 367 were contacted via phone and text message and asked to complete a qualitative phone interview about their experiences. Of those contacted, 122 voluntarily completed the interview. Respondents identified primarily as biological parents of one or multiple children, varying in age and parenting experience. Participants in Triple P also identified as grandparents or other adjacent familial caregivers, such as caring for nieces and nephews. A few respondents identified as foster parents, and one respondent identified as a working professional in the childcare setting who had taken the course as professional development.

From April through June 2021, providers of Triple P were also contacted via phone and text message and asked to complete a voluntary phone interview to provide feedback on Triple P and their experience implementing the curriculum. Fourteen providers were contacted, and six expressed interest in completing an interview. Of those six, five interviews were conducted, with one interview canceled due to illness and unsuccessful rescheduling attempts.

2.6. Qualitative measures

Participants were asked about their experiences participating in Triple P, including exploring aspects of the program that were particularly helpful, and parts that they thought could be improved. The open-ended interview guide included questions surrounding barriers and facilitators of program participation, program strengths, program areas for improvement, outcomes, and final impressions. Providers were asked about their successes and challenges in implementing Triple P, and with an additional component added as the pandemic progressed to focus on the ways in which changes made in response to COVID-19 affected experiences within the program.

2.7. Qualitative analytic plan

Qualitative interviews were conducted by four research assistants. Interviewers recorded responses from the participants while conducting the interviews. These transcripts were then used to generate themes using content analysis techniques (Hsieh & Shannon, 2005). At each interview timepoint, a minimum of two interviewers participated in the interviews and thematic analysis. A third research assistant examined the themes and findings from the interviews and compiled all the findings into one summary document.

3. Results

3.1. Quantitative survey results

3.1.1. Descriptive statistics

Table 1 includes the descriptive statistics for the quantitative surveys, organized by the type of Triple P modality. From the overall total, 81.6% of participants were female, 12.2% were male, and 6.2% were not reported. In terms of race, 69.7% of participants were white, 13.8% of participants were African American, 10.2% were another race, and 6.3% were not reported. In terms of relationship status, 41.0% of participants were married, 5.3% were partnered, 37.3% were single, 11.1% were divorced, separated, or widowed. Regarding living situation, 37.8% of participants owned their own home, 37.6% of participants rented their home, 10.8% of participants shared with a friend or relative, 6.2% were living in a temporary arrangement (e.g. shelter), and 1.2% of participants were currently homeless. Finally, in terms of education level, 9.8% of participants had less than a high school education, 25.1% had a high school degree or equivalent, 19.2% had a vocational degree or some college, while 32.8% had a two-year college degree or higher.

3.1.2. Parenting outcomes

Table 2 includes the pre- and post-test results from the PFS (N=104) and the Parenting Survey (N=102), completed by Triple P Level 4 participants. Of the protective factors, participants had statistically significant improvements on two subscales, family functioning/resiliency and nurturing and attachment. At pre-test, the mean family functioning/resiliency score was 5.41 (SD = 1.01) and at post-test it had increased to 5.61 (SD = 0.86). Mean score on the nurturing and attachment subscale at pre-test was 6.05 (SD = 0.91) and 6.22 (SD = 0.84) at post-test. There were no statistically significant improvements in the social support and concrete supports subscales.

In terms of the Parenting Survey, there were statistically significant improvements in the laxness and over-reactivity subscales as well as the overall parenting scale. The laxness scale decreased from a mean of 2.93 (SD = 1.21) to 2.26 (SD = 1.03), over-reactivity decreased from a mean of 2.72 (SD = 1.20) to a mean of 2.41 (S.D. = 1.26), and overall problematic parenting decreased from a mean of 3.02 (SD = 0.67) to 2.57 (SD = 0.70). There were no statistically significant changes in the hostility subscale.

Table 1Characteristics of Triple P participants, by session type.

	Primary care $\frac{N = 464}{N}$	Level 3 $\frac{N = 204}{N}$	Level 4 $\frac{N = 187}{N}$	$\frac{\text{TPOL}}{N = 35}$	Total $N = 890$	
					N	Percent
Sex						
Female	385	163	152	26	726	81.6%
Male	39	30	32	8	109	12.2%
Missing	40	11	3	1	55	6.2%
Race						
White	290	155	143	32	620	69.7%
African American	75	24	22	2	123	13.8%
Other race	57	14	19	1	91	10.2%
Missing	42	11	3	0	56	6.3%
Relationship status						
Married or partnered	190	106	93	23	412	46.3%
Single	196	63	64	9	332	37.3%
Divorced, separated, or widowed	37	25	25	3	90	9.1%
Missing	41	10	5	0	56	6.3%
Housing status						
Own	121	119	77	19	336	37.8%
Rent	218	44	62	11	335	37.6%
Housing insecure ^a	82	30	45	5	162	18.2%
Missing	43	11	3	0	57	6.4%
Education						
High school or less	188	47	62	13	310	34.9%
Some secondary education	115	54	54	4	227	25.5%
4-Year college degree or more	116	90	68	18	292	15.8%
Missing	45	13	3	0	61	6.9%

Note: TPOL stands for Triple P Online.

^a Housing insecure: shared with relatives/friends, temporary (e.g. shelter), or homeless.

Table 2Parenting changes from pre-test to post-test, Level 4 participants.

	Pre-test score		Post-test score	
	Mean	S.D.	Mean	S.D.
Protective Factors Survey (N = 106)				
Family functioning/resiliency ^a	5.41	1.01	5.61	0.86
Social support	5.92	1.19	6.09	1.01
Concrete support	5.63	1.41	5.78	1.53
Nurturing and attachment ^a	6.05	0.91	6.22	0.84
Parenting Survey ($N = 102$)				
Laxness ^a	2.93	1.21	2.26	1.03
Over-reactivity ^a	2.72	1.20	2.41	1.26
Hostility	1.71	0.80	1.59	0.85
Parenting (total) ^a	3.02	0.67	2.57	0.70

^a Denotes statistically significant changes (p < 0.05), paired t-test.

3.2. Qualitative results – participant interviews

From the participant interviews, three themes emerged from the qualitative interviews with parents. These included: helpfulness of Triple P, reasons for engaging in Triple P, and suggestions for improving Triple P.

3.2.1. Helpfulness of Triple P

Overall, respondents interviewed described Triple P as helpful, with praise given to the open and non-judgmental format and the opportunity to connect one-on-one for a follow-up consultation to address any individual parental concerns. Participants felt the program helped them (1) establish rules in the household, (2) instill discipline that may impact behavioral outcomes, (3) manage misbehavior with new techniques and scenarios, (4) set realistic expectations for their children, (5) strengthen the parent-child relationship and other familial connections. To that end, one participant noted, "It's worked a lot. It helped me to not lose my temper. Now I can handle it. If they don't listen they don't get things. I have a certain spot where they eat and they have to sit at the table."

Participants also noted that sharing experiences, challenges, and advice with other caregivers was beneficial, creating a sense of empowerment and validation that reminded them they were not alone in their experience. The Triple P staff was also praised as being highly professional and helpful in fostering open conversation and consultation among participants. One participant stated "I felt like I was important and whatever I had to say [the instructor] listened very well and would comment on our questions, nobody was ignored in the class."

3.2.2. Reasons for engaging in Triple P

Respondents cited wanting to participate in Triple P for more structure and to establish more consistent caregiving strategies in the household. One participant said, "I had to take these classes on how to deal...because [my cousin] wants [her children] to come over and they stress me out so bad so I needed to figure out how to deal with it. I needed to set timeouts and use a calmer voice to communicate with them." Additionally, caregivers sought to feel more connected, empowered, and in control with new, reestablished, or improved methods to address child behaviors, manage caregiver reactions to misbehavior, and learn from other caregiver experiences by building a sense of community to share alternative caregiving methods. Their participation was guided by seeking strategies to address behavior issues, obtain additional feedback on their caregiving strategies and connect with other caregivers regarding the frustrations and successes of raising children. To that end, one participant noted "a. My children are 12 and 10 years old and all they do is yell, scream. My 10 year old has ADHD and bipolar so she's a lot to handle." Caregivers were looking for ways to be "the best parent they can be," in whatever way that looked for their situation. Caregivers sought strategies to deescalate outbursts, reduce stress (especially during COVID-19), continue their caregiver education, and acquire tools to care for their children. Others were thinking about how best to get their children back into their lives, earn child care, or earn hours for foster care licenses. Two respondents specifically mentioned wanting to participate due to behavior regression and increased stress due to COVID-19. Other reasons include a healthy environment for children to play, help with grandchildren at bedtime, and interest in the positive parenting style. Participants noted that the program was helpful, and caregivers often needed to seek out "this type" of help. Participants also commented that the program was suitable for single caregivers, struggling children, and those who wanted to become calmer parents by trying new things.

3.2.3. Suggestions

Respondents had a few suggestions for the materials used in Triple P. One participant suggested more inclusivity in the textbook language. For example, it was noted that the textbook discussed the "mother," predominantly, while the participant identified as a "grandfather," pointing out the diverse range of caregivers who utilize Triple P. Specifically, he stated, "You need to be more accommodating with different parent structures. Even just offering gender neutral all the way down and be careful about the wording. That was the only thing I noticed in the whole book. I thought it really pushed that the mother was the sole caretaker of the children. Now we have gay families and people without mothers. I think going gender neutral would be the best option." Other suggestions for

materials included creating a more time-sensitive set of tools for behavior tracking for busier caregivers and more accurate links and information provided in outdated PowerPoint presentations. Additionally, participants thought revising the course videos to be more realistic, including updating workshop videos to include more modernized content, would benefit the program. Finally, sending the workbook and other resources to participants or having them otherwise available before the first session so that program participants could follow along right away was suggested for moving forward (for online groups initiated during COVID).

3.3. Qualitative results - provider interviews

The provider interviews resulted in three themes: challenges the COVID-19 pandemic posed for Triple P implementation, strategies for overcoming challenges, and unexpected positive impacts on programming.

3.3.1. Challenges the COVID-19 pandemic posed for Triple P implementation

When discussing barriers families report for accessing Triple P programming, facilitators listed internet access barriers, stability and broad experience with technology, lack of childcare, Triple P's inability to offer childcare during the COVID pandemic, transportation, and fear of COVID-19 transmission. One parent educator reflected on their perception of 'parental overwhelm,' which they believed was the stress of schedule instability and fatigue compounded by COVID-19 measures, week-to-week schedule changes, and risk factors. Another educator stated that online registration being the only avenue to register for Triple P successfully is an immense barrier to clients; they noted how difficult it is to work with hard-to-reach populations when we assume they know how to use or even have access to computers or high-speed internet to register for such programming.

3.3.2. Strategies for overcoming the challenges posed

When asked how facilitators are addressing these barriers, one educator mentioned explicitly asking if potential participants had access to a computer where they could sign up or offered to complete the admissions paperwork for them on the spot. Educators also mentioned creating plans to assist clients in sorting out how much time they could commit to the program and meeting that self-determined goal. Meeting caregivers where they were at became one educator's goal and mantra. Sending reminders before classes, making sure that people understand Zoom and their devices, offering make-ups for missed classes have all been employed by facilitators.

3.3.3. Unexpected positive impacts on programming

Parent educators pointed out that the ability to facilitate online courses created a helpful avenue to reaching caregivers who might not be able to attend in person. A facilitator mentioned that online courses are doing exceptionally well in retaining participants, and Level 4 specifically sees a higher retention and graduation rate with the introduction of online courses. They commented that only a few participants tend to fall off during week two due to the inability to access childcare and uncertain schedules.

4. Discussion

The current study sought to understand the helpfulness of the Triple P intervention in improving parenting outcomes of caregivers at risk for substance use when administered mostly online during the COVID-19 pandemic. This is the first study to our knowledge to assess the helpfulness of the Triple P program for this specific population and within the climate of the COVID-19 epidemic. The program was implemented with the intention of serving parents considered to be high risk for substance use and poor parenting outcomes, however the program was successful in reaching a broader population, with diverse education, income, and family structure characteristics.

The program had positive impacts on parents in some domains of caregiver protective factors, including nurturing and attachment and family functioning/resilience. The nurturing and attachment scale (FRIENDS National Resource Center for Community Based Child Abuse Prevention, 2011) is directly related to parenting behaviors and the relationship with the child, which is a target of intervention within the Triple P program. On the other hand, the family functioning/resilience subscale relates to having adaptive skills to persevere in times of crisis, including things like "My family is able to solve our problems," and "My family pulls together when things are stressful." Although the program is very focused on parenting behaviors versus general behaviors, these aspects of the curriculum overlap with problem solving and self-regulation as well. Additionally, it is possible that the experience of participating within the program may increase feelings of self-efficacy and empowerment within the family unit because the participant is working on an identified issue within the Triple P program.

Unfortunately, the program did not have the anticipated impact on social support or concrete supports. Although group-based parenting programs have the potential to increase social support by connecting parents who are at similar parenting stages and have children at similar development stages, social support is not a direct focus within the Triple P program. Additionally, the ability to informally make connections with other parents while attending the session may have been hindered through the online delivery of services in the 2020–2021 fiscal year due to COVID-19, and exacerbated by the more universally widespread feelings of isolation from the cancellation of interpersonal events and requirements for social distancing (Pantell, 2020). Likewise, concrete resources and supports are also not explicit focuses of the Triple P program. However, given the correlation between poverty and child maltreatment (Drake & Jonson-Reid, 2013), this is an area that the funder has identified for expanding the program in future years.

Related to parenting outcomes, the program had positive impacts on parental laxness and overreactivity. Because of its focus on positive parenting strategies and dealing with various difficult parenting situations, it is promising that there are statistically

significant improvements in these areas. There were no significant impacts on the hostility subscale. This subscale includes the most extreme parenting behaviors on the overall scale and represents behaviors that could be considered abusive by many. These include physically punishing the child by hitting, slapping, spanking, or grabbing the child; using bad language or cursing at the child; and insulting the child, calling them mean names, or saying mean things to the child. It is likely that the lack of findings on this specific subscale is related to the overall low base rate of parents reporting these types of behaviors. While the means at pre-test for the laxness and overreactivity subscales were close to 3, the mean for the hostility subscale was 1.71, demonstrating very few parents reporting these behaviors at pre-test. This suggests that there was little room for improvement in this area due to the, thankfully, low reliance on abusive behaviors even prior to entering the program. Due to funding restrictions, the program was only able to be provided to families who did not have existing child welfare cases. We may have seen greater levels of improvement if the program had been provided to families with child welfare involvement.

In terms of parental experiences within the program, overall parents were very pleased with their experience and felt that the program had taught them valuable parenting skills. There were varied opinions on the experience of attending the program online during the COVID-19 pandemic. Many parents reported difficulties with technology or with engaging in the online environment, while others reported satisfaction with the online delivery and reported that they hope that an online option will continue to be provided.

Provider interviews largely coincided with participant experiences during COVID-19. They reported significant concerns about their ability to reach high-risk populations in an online environment, but also reported that attendance at sessions has improved since the switch to the online format. Overall, providers reported looking forward to a return to in-person provision of Triple P.

5. Limitations

This study was limited to one region in a midwestern state. The region included 13 counties, with both rural and urban representation, but the findings may not generalize to other places. Additionally, the study did not have the benefit of a comparison group, therefore the findings from this program should not be interpreted as causal in nature; we are unable to determine that the changes in family experiences and behaviors are due to the program itself. Although we had pre- and post-test measures, the time between the two measures was somewhat limited, representing a 5–8-week span. It is unknown the extent to which the changes demonstrated on these measures would be sustained in the long-term. Finally, because of the logistical challenges of identifying individuals, the study was unable to measure the differences in the level of program participation. As such, analyses could not examine whether parenting outcomes were associated with varying levels of engagement with Triple P.

6. Conclusion

The current study provides encouraging evidence that Triple P can benefit families at risk for substance use issues even when implemented mostly online during the COVID-19 pandemic. Increasing accessibility of this intervention to more families may improve parenting outcomes and reduce child maltreatment. Triple P should consider the inclusion of concrete supports, using more inclusive language surrounding caregivers, and provision of childcare during programming to better meet the needs of higher risk parents.

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