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Ultra-rapid development and deployment of a family resilience program during the COVID-19 pandemic: Lessons learned from Families Tackling Tough Times Together

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- 1 **RUNNING HEAD:** Development, Deployment, and Lessons Learned from *Families Tackling*
- 2 Tough Times Together

- 4 Ultra-rapid Development and Deployment of a Family Resilience Program During the
- 5 COVID-19 Pandemic; Lessons Learned from Families Tackling Tough Times Together

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- 19 **Acknowledgements:** We would like to acknowledge the helpful feedback made to earlier
- versions of this paper by Purdue University's William M. Oates, Senior Writer/Editor,
- 21 Communication Specialist, and Denise M. Buhrmester, Health and Human Sciences' Director of
- 22 Communications. We would also like to thank them for their role in marketing and
- 23 disseminating information related to the FT program.

25 ABSTRACT

The COVID-19 pandemic brought uncertainty, anxiety, and stress into households;
however, it also created an opportunity as many families, sequestered at home, found themselves
spending much more time together. To support families and improve their ability to cope,
recover, and build resilience amid the pandemic, Purdue University's College of Health and
Human Sciences (HHS) launched Families Tackling Tough Times Together (FT), a strength-
based multi-week online program informed by scientific evidence about family resilience.
Offered through Facebook group, FT targeted parents or caregivers, children, youth, young
adults, older adults and helping professionals serving families. FT was designed to appeal to both
military and civilian families, in part because both groups were experiencing similar challenges
associated with the pandemic. This was not only an opportunity to bring civilian and military
families together, but also for civilian families to learn from the experiences of military families
in surmounting significant challenges. This paper describes the development and implementation
of the FT program, as well as lessons learned. Strategies highlighted in this paper may be helpful
to researchers or practitioners who wish to implement a rapid-response intervention aimed at
building family resilience.

As the COVID-19 pandemic spread, many countries declared health emergencies and implemented strategies such as travel restrictions, closures of schools and nonessential businesses, and stay-at-home orders. These rapid changes brought uncertainty, anxiety, and stress into households, as families faced isolation and found themselves teleworking -- or abruptly unemployed -- while caring for children who were home from school or day care. Additionally, fear of contracting or dying from COVID-19 and risks for loved ones heightened anxiety levels. These challenges were compounded by the alarming rate at which information and misinformation about COVID-19 quickly circulated, causing confusion and people feeling overwhelmed.

The pandemic presented several challenges for families and those interested in supporting them. It also presented an opportunity for promoting family resilience amid the pandemic, as many families were now sequestered at home, spending much more time together than usual. In response, Purdue University's College of Health and Human Sciences (HHS) rapidly built and launched *Families Tackling Tough Times Together* (FT), a strength-based multi-week online program informed by scientific evidence about family resilience. Resilience goes beyond simply enduring hardship to encompass developing, through suffering and struggle, capacities that allow families, to grow, change, heal, and emerge stronger and better equipped to tackle future problems and uncertainties.^{5,6} This paper describes the development, implementation, and lessons learned through implementing the FT program.

The FT program leveraged expertise from 70 faculty, staff and students from all nine HHS units, along with academic and support partners across Purdue and organizations across the country (Table 1). The approach used to build FT reflected the time constraints during the

pandemic – because it was important for scientists to respond while lockdown periods were still in effect, the program moved from conception to launch in 23 days. Resilience experts were consulted during the design phase to verify that the program approach would be appropriate and safe for families who were already overburdened by the pandemic. Due to time constraints for obtaining financial resources, in-kind sources were sought. A network of volunteers from multiple areas of expertise was quickly constructed to produce, review, and distribute program materials (Table 1). Partner organizations (Table 1) readily shared developed programs, curriculums, instruments, and expertise. The program emphasized curation of existing content that was evidence-informed, consistent with the theoretical framework, and able to be adapted to fit current circumstances. We aimed to provide a limited set of carefully selected resources to make it easier for families navigate flows of information and misinformation about the pandemic that could be overwhelming. The program incorporated efforts to assess reach and use, but participation in assessment was not a prerequisite for access to materials.

TABLE 1 ABOUT HERE

84 METHODS

Participants and setting

We focused on families because the pandemic imposed particularly intense demands on them, including providing care for children, carrying out educational and employment activities in close quarters, and often providing assistance for older adult family members. The initiative targeted parents/caregivers, children, youth, young adults, older adults, community service, and helping professionals serving families. The program was designed to appeal both to military and civilian families, as both groups were experiencing similar pandemic associated challenges. We also saw this as an opportunity to bring civilian and military families together and for civilian

families to learn from the experiences of military families in overcoming significant challenges. We selected a public Facebook group as the delivery platform because Facebook is used by over 69% of U.S. adults,⁷ and offers a variety of appealing technical features including the ability for group administrators to "push" information to group members, for group members to connect directly, and for both administrators and members to communicate publicly or privately with one another.⁸

Development of the FT program

Four strength-based goals were selected for the program:

- 1. To increase awareness of the concept of family resilience among adults and children;
- 2. To help families develop and grow resilience skills as they face challenges;
- To identify and provide activities and resources so families could practice resilience skills;
 - 4. To build communities of support through the use of online platforms such as Facebook.

Program design was guided by Walsh's Family Resilience framework, a well-established and widely cited model that is consistent with current evidence, easily modularized for program delivery, relevant for many disciplines, and easily adapted for a diverse array of families. The framework comprises nine key elements organized into three domains: 1. Shared Belief Systems (making meaning of adversity, positive outlook, transcendence and spirituality); 2.

Organizational Processes (flexibility, connectedness, mobilizing social and economic resources); and 3. Communication/Problem-solving Processes (clarity, open emotional sharing, collaborative problem solving). The program was structured to focus on one key element each week (see Table 2 for sequence of weekly topics).

Each week, a "kit" was prepared that included information, activities, and resources tailored for different audience groups, including parents/caregivers, children, youth, young adults, and older adults. The team was attentive to family diversity in terms of structure, socioeconomic status, culture/ethnicity, living in urban vs. rural areas, and the presence of family members with special needs. Additionally, content each week emphasized the importance of strengthening relationships with extended family, friends, and the greater community to prevent or minimize boredom and social isolation that might result from sheltering in place. To accommodate families with limited internet access, program modules were disseminated via PDF documents issued individually and as one consolidated document each week; materials also were made available to helping organizations for easy dissemination.

FIGURE 1 ABOUT HERE

The process of kit creation and dissemination is depicted in Figure 1. In brief, module materials were curated by working groups composed of scientists and clinicians with expertise relative to the content and audience group, as well as expert practitioners such as university extension educators with extensive expertise in preparing materials for lay audiences (Table 1). These working groups were responsible for locating and vetting content for each week. In addition to kit content, working groups created or identified evidence-informed experiential activities to offer families convenient ways to apply and practice new resilience skills through relatable exercises spanning multiple domains such as parenting, education, psychological well-being, nutrition and food preparation, and financial well-being.

Once working groups prepared initial drafts of content for each week, a steering committee reviewed all content and made final selections for each week's kit. After final

selections were made, kit content was forwarded to an implementation team for editing, layout, and posting.

Implementation and assessment of the FT program

Both a Facebook page and Facebook group were established that included introductory information about the initiative. Group rules were posted that included requirements for courteous and supportive communication, and avoidance of politically- or commercially-oriented behavior. Families were invited to join FT Facebook group

(https://www.facebook.com/groups/HHSFamiliesTogether) through social media accounts, announcements shared with personal and organizational contacts, and media outlets.

The implementation team also posted additional content aimed at emphasizing or elaborating kit content and encouraging members to engage with the Facebook group. Special engagement activities were posted on set days throughout the week so members would come to expect them. An interview with Froma Walsh, developer of the Family Resilience Framework, was released each Saturday to introduce the weekly theme; kit materials were released on Sundays. On "Wellness Wednesdays," resources or specific questions about wellness-related topics were released. Additional activities and posts (approximately three per day) included introduction of experts who could answer questions from group members, videos and podcasts, community engagement activities, and excerpts of video-recorded interviews with families who had overcome serious challenges.

Several strategies were put in place to evaluate the FT program. In addition to examining content posted by group members, Facebook analytics are being monitored, which provide summaries of behavior, such as joining the group, viewing, and responding to posts. Although attempts were made to have group members' complete quantitative assessments of resilience,

well-being, and COVID-19-related circumstances, this proved unsuccessful due to a variety of technical challenges. For example, it was not possible to send an individual message to each group member to invite them to complete the assessment. Moving forward, qualitative interviews will be conducted with FT program users as well as individuals involved in creating the FT program to understand involvement with, use of, and the impact of FT.

To date 1,363 members from 25 countries have joined the Facebook group. Figure 2 summarizes metrics associated with the behavior of group members to date. The number of members grew rapidly at the outset, and then at a slower rate in later weeks. On average, 34% of the members were active in any given week, meaning that they viewed or reacted to one or more posts. There were a total of 308 posts, 355 comments, and 2,437 reactions (e.g., "likes," "shares") over the 10-week program period. The busiest days of the week in terms of user activity were Mondays, which immediately followed kit releases, and Wednesdays.

FIGURE 2 ABOUT HERE

STRENGTHS AND LIMITATIONS

Strengths of this effort include rapid dissemination to families, tailoring to specific demands posed by the pandemic (i.e., limited access to computer resources, etc.), grounding in a cohesive theoretical framework, a multidisciplinary approach, and its attention to multiple target audiences within and beyond families. The public Facebook group offered easily accessible technology with low barriers to entry for project builders, ease of "pushing" content to group members that could be read on multiple devices, ease of access for group members all over the world, and the ability for group members to exchange information with one another as well as with group administrators.

Limitations, in addition to difficulties implementing survey assessments, included our inability to simultaneously build a companion website, thus limiting the audience, and difficulties encountered in drawing group members into conversations and mutual exchanges of support. While every post was viewed and most were responded to in some way, these typically took the form of "likes" and to a lesser extent, "shares" or "comments," a substantial proportion of which came from individuals working on the initiative. We learned through anecdotal evidence that the group reached an audience somewhat different than anticipated, specifically an unexpectedly high proportion of "intermediaries," including family support professionals looking for resources to help families they serve.

193 DISCUSSION

FT was developed as a "pop-up" program produced through ultra-rapid development and deployment using volunteer scientists. While informed by scientific evidence it has not been subjected to rigorous randomized controlled trials. If such a program were to be refined for use beyond the pandemic, thoughtful revisions and systematic testing should be completed.

In the urgency of the pandemic environment, the approach used here holds some appeal relative to common alternatives. One set of alternatives is well-established evidence-based programs, such as parent training. While effective under typical circumstances, such programs were generally not designed to the circumstances of a pandemic (i.e., families unable to leave their homes, limited computer resources). Another set of alternative approaches comprised lists of resources, fact sheets, web pages, and webinar series organizations produced tailored to the pandemic. While highly relevant, these generally were not programmatic in design and thus could create work for families to assess the relevance of the suggested resources. FT was designed to be programming grounded in a particular theoretical perspective, but it was not

intended to require families to use content in any particular sequence, or to have content released each week aimed to "build" on prior material. Ongoing research will reveal the degree to which such an approach was perceived as helpful and impactful.

FUTURE DIRECTIONS

The FT initiative will be continue, with the goal of helping families and the professionals who support them to address continuing challenges related to the pandemic. In the near term, the companion website will be completed, and a "light" cycle of themes will be provided via the Facebook group to correspond with summer school holidays in the northern hemisphere.

Anticipating that restrictions may resume, we also are making plans for the next academic year. Future refinements will aim to resolve challenges associated with assessment and engagement, as well as more strategically involving helping professionals as intermediaries who can help to use the initiative to support families.

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WORKING GROUPS				
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CHILDREN		Megan Jaspersen ^{S, 12}	Meagan Carrero Alessi ^{S, 8}	
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Boldface = Member of the steering committee

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Table 2. The FT's weekly structure guided by theoretical domain

Week	Label for Theme	Theoretical Domain
1	Believing, Sharing, Acting	Shared Beliefs: Communication; Organizational Patterns
2	Our family can do this!	Shared Beliefs: Sharing a positive outlook
3	Our family is creative!	Communication/Problem solving: Collaborative problem-solving
4	We care about each other!	Organizational Patterns: Connectedness
5	Our family will get through this!	Shared Beliefs: Making meaning of adversity
6	We share our feelings constructively!	Communication/Problem solving: Open emotional expression
7	Our family is adaptable!	Organizational Patterns: Flexibility to change
8	We can get stronger!	Shared Beliefs: Transcendance and spirituality
9	We tell each other the truth!	Communication/Problem solving: Clear consistent messages
10	We take action!	Organizational Patterns: Mobilizing social and economic resources

Figure 1. FT's weekly kit creation and dissemination process

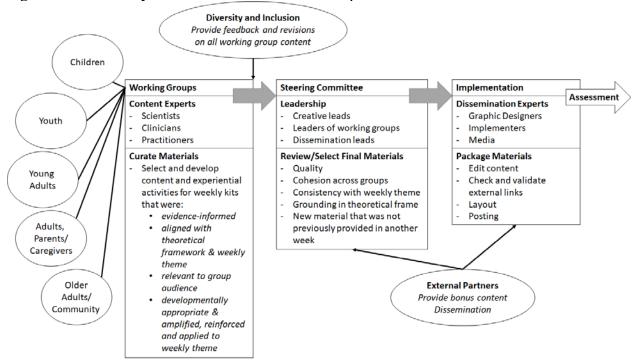


Figure 2. The FT Program Metrics: Behavior on the FT Facebook Group:

