

Creative approaches to mixed-methods data collection in the context of the COVID-19 pandemic: Investigating families, emotions, and collective coping in a prospective sample

Chelsea Reaume¹, Madeleine Alie, Kristel Thomassin

University of Guelph

This research brief describes an ongoing, multi-timepoint investigation of parental emotion socialization and child functioning. We utilized a prospective design to explore the impact of the COVID-19 pandemic on our research participants' emotion functioning. This follow-up study included 102 parents who were initially interviewed and surveyed on psychological well-being, parenting behaviours, and child functioning. Researchers incorporated parent and child report measures alongside recorded parent-child discussions to comprehensively capture how families have coped during pandemic. This brief provides descriptions of secure methods for remotely collecting observational data that can be implemented using Qualtrics and Microsoft OneDrive. This method was generated by the researchers with both participant convenience and privacy in mind. This forthcoming study will further highlight the need to prospectively analyze the collective impact of COVID19 within the family system. Methods described herein may inform future qualitative virtual research through increasing naturalism and accessibility to remote areas and diverse populations.

Keywords: COVID-19, parenting, family system, child functioning, naturalism
parent emotion socialization

Reaume, C., Alie, M., & Thomassin, K. (2021). Creative approaches to mixed methods data collection in the context of the COVID-19 pandemic: Investigating families, emotions, and collective coping in a prospective sample. *Emerging Perspectives*, 5(2). 6-12.

¹ creaume@uoguelph.ca

The COVID-19 pandemic has necessitated diligent shifts in the conduct of family science research (Brock & Laifer, 2020). While recent pandemic research has examined parenting and child well-being (e.g., Brown et al., 2020; Gadermann et al., 2021; Tso et al., 2020), minimal literature has explored parent and child functioning longitudinally throughout the pandemic from an emotion socialization (i.e., the ways in which parents teach their children about emotions) lens (Eisenberg et al., 1998). This is surprising given that the family environment plays such a considerable role in child emotion skill development, which in turn facilitates children's psychosocial well-being (e.g., Ellis et al., 2014; Seddon et al., 2020). The role of parent emotion skills and socialization behaviours (i.e., parental reactions to child emotion expression; Eisenberg et al., 1998) on child functioning is particularly relevant in the context of the COVID-19 pandemic, which has placed unique challenges on the family system (e.g., caregiving burden and lack of social support, confinement-related stressors, financial instability; Prime et al., 2020). Given that parental stress plays a considerable role in the socialization of their children's emotions (Shaffer et al., 2011), these enduring stressors on the family unit resulting from the pandemic may have unique impacts on child emotion development and functioning that merit further investigation.

Our decision to extend a previously completed study emerged, in part, from standstills in data collection due to province-wide shutdowns. We saw emerging studies examining the impact of school closures and other public health measures on children; however, we observed minimal research considering prospective samples of parents and children. In addition, we saw little to no qualitative work on the topic, despite qualitative inquiry being a crucial component to studying new and understudied phenomena (Braun & Clarke, 2006). Given the novelty of changes experienced as a function of non-pharmaceutical interventions implemented to slow the spread of COVID-19 (e.g., social distancing, lockdowns, changes to work and school environments), we felt it crucial to provide parents and children with open-ended questions to gain a full picture of the challenges and triumphs they experienced as family units during the pandemic. Finally, no research to date has examined the pandemic's effects from an emotion socialization perspective. As a result, our research team believed we could devise a prospective study that contributed uniquely to the literature on COVID-19 and family functioning.

As such, the present brief describes our endeavors to address the limitations of the current literature on family functioning and COVID-19 through an ongoing, multi-timepoint investigation of parental emotion socialization and child functioning. Specific research questions include:

1. How do pre-COVID parent characteristics (e.g., gender, emotion regulation, psychopathology) interact with the practical impacts of the pandemic (illness risk, potential financial and income insecurity, loss of social support) to predict parent functioning mid-pandemic?
2. What benefits and challenges are parents and children experiencing in the context of the pandemic? Are these benefits and challenges shared family-wide?
3. How do pre-COVID parent characteristics, child characteristics, and the endorsed positive and negative impacts of the pandemic within the family environment relate to reciprocal affect within parent-child discussions?

Method

Participants and Initial Timepoint Procedure

Our follow-up study included 102 parents of children ages 8-12 who had previously completed two data collection sessions. Initially, parents participated in focus groups that examined parental beliefs about child emotion expression (see Thomassin et al., 2019). At a twelve-month follow up, parents completed questionnaires examining their own emotion regulation (i.e., the ability to manage one's emotional experiences) and psychopathological symptoms (e.g., anxiety, depressive symptoms), emotion socialization behaviours (i.e., responses to child expression of positive and negative emotions), and child emotion regulation and psychopathology. Given the time elapsed between the original data collection timepoints and the present day, children in the current wave of data collection were between the ages of 12 and 16 (current $n = 38$).

Follow-Up Timepoint Procedure

Once parents consented to participate in the follow-up study, they were asked to complete a number of questionnaires that had been grouped within a single Qualtrics survey. This survey examined similar constructs to the first timepoint as well as additional measures exploring trauma symptomatology (i.e., agitation, avoidance, and hyperactivity) and practical impacts of the pandemic (i.e., illness, lost income, lost social support). They were also asked to report on their child's emotion regulation, psychopathological symptoms, and overall functioning in the context of COVID-19. Children were also offered the opportunity to complete their own survey asking about their emotion regulation, psychological symptoms, and mental health in the context of COVID-19. Finally, parents and children recorded and uploaded a brief video discussion task, wherein dyads were asked to discuss their perceived positive and negative effects of COVID-19 within their family, as well as any strategies or tactics that they had been using to cope.

Video Discussion Task

We utilized a virtual format of assessment to capture nuances of family interaction as naturalistically as possible. We felt this was important when considering the variability amongst different families' coping strategies and experience through COVID-19 and its related changes. This method to integrate filmed conversations into the Qualtrics-based component was developed with the following factors in mind: (a) accommodating dual-pair (i.e., parent and child) convenience to participate in research while navigating COVID-19 related disruptions to their typical family routine, (b) upholding the rigorous standards associated with collecting child health information (i.e., children responding to questions regarding their mental health), and (c) maintaining feasibility for researchers and families. When collecting children's health information for research, there are increased requirements for researchers to ensure there is no linkage between participant responses and identifying information (i.e., emails, ages, names) in accordance with the *Personal Health Information Protection Act (PHIPA)*.

To accommodate families' altered schedules and ensure maximal convenience for participants, individual surveys were available for several weeks once a participant first began

(2021)

responding. Within the laboratory's Qualtrics account, the survey was duplicated for each participant (i.e., each parent-child dyad) prior to distribution. An anonymized link to each individual survey was sent in a participation invitation email from our laboratory Outlook account. To anonymize survey responses, individual participant IDs were only recorded within the actual interface of each survey as a validation question, with the corresponding link to a given participant's OneDrive folder also directly embedded within the Qualtrics interface. The sole documentation linking participants' emails to their ID, survey responses, and video recordings within the OneDrive folders was stored as an encrypted file on the secure laboratory drive.

In adherence to PHIPA's requirement for an active, explicit method to provide participant consent and child assent, this study used a forced text entry of the word "yes" into a text field following the consent form. This provides a feasible method for gathering "active" study consent for related virtual research moving forward. Following survey completion, participants were automatically redirected to a separate Qualtrics form to enter their email to receive compensation.

Unlike other available marketed software that "pipes" video recording capabilities directly into the Qualtrics interface, Microsoft Suite encrypts in-transit media files (i.e., videos filmed on individuals' devices, such as a tablet or phone) and securely stores files. Although a promising next step for virtual qualitative research, piping software does not relinquish video ownership and often stores saved recordings on international servers. In compliance with PHIPA's requirement for data encryption, we securely stored all media files on the laboratory drive by downloading and subsequently deleting a given participant's submitted video file from their corresponding OneDrive folder. This method supports various media files (i.e., different operating systems), thereby providing enhanced feasibility for participant involvement in this research step. See Figure 1 for full Qualtrics and OneDrive workflow.

Completion of Data Collection and Ethical Considerations

After final follow-up, we received a response rate of 37% ($n = 38$), with 19% ($n = 19$) of the parent-child dyads completing the video. Several parents within our prospective sample kindly declined recruitment emails, citing feelings of stress or being overwhelmed as their reason for not participating at the current juncture. This process raised considerations regarding the ethics of recruiting parent and child participants during stressful life circumstances such as a pandemic. The researchers believe that it is crucial to include the perspectives of relevant stakeholders in order to understand and address ongoing mental health concerns in children, and parents, many of which are likely to persist after the cessation of the pandemic (Tambling et al., 2021). Additionally, some parents may find it cathartic to share their experiences within the context of a research study. That said, it is critical to ensure parents, as a special population of study, are not inundated with requests that could increase their burden. This was addressed in the present study in part by allowing participants to record and upload their video discussion task at a convenient time, thus maximizing feasibility and accessibility.

It is also critical to consider sample representativeness in the context of family stress. It may be that parents who are most likely to participate are those who are the least taxed by the pandemic and related changes, and/or whose families are coping relatively well during the pandemic. This may provide the false impression that families, on the whole, are coping more effectively than they actually are. Given the unequally distributed harm of the COVID-19 pandemic and related changes (Statistics Canada, 2021; Van Lancker & Parolin, 2020), researchers should consider developing

(2021)

effective methods to reach higher-risk populations in order to gain a sense of their functioning and needs, while simultaneously ensuring minimal response burden on participants.

Conclusions

Overall, the current brief provides insight into the methodology used to continue previous studies in a virtual format. The ongoing study described in the brief contributes to the literature by employing a multimodal approach to family-wide emotional and psychological functioning emphasizing the need for increased feasibility and accommodation when conducting virtually based qualitative studies within the COVID-19 pandemic. Furthermore, this is one of few studies to examine impacts of the pandemic longitudinally within a Canadian sample of parents and children, and the first to do so from an emotion socialization perspective. Insights from this research may go on to inform other family scientists on methods of collecting qualitative or mixedmethods data from children and families remotely in a way that is both accessible for families and provides meaningful output for researchers.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brock, R. L., & Laifer, L. M. (2020). Family science in the context of the covid-19 pandemic: Solutions and new directions. *Family Process*. Advance online publication. <https://doi.org/10.1111/famp.12582>
- Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse & Neglect, 110*(Pt 2), 104699. <https://doi.org/10.1016/j.chiabu.2020.104699>
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental Socialization of Emotion. *Psychological Inquiry, 9*(4), 241–273. https://doi.org/10.1207/s15327965pli0904_1
- Ellis, B. H., Alisic, E., Reiss, A., Dishion, T., & Fisher, P. A. (2014). Emotion regulation among preschoolers on a continuum of risk: The role of maternal emotion coaching. *Journal of Child and Family Studies, 23*(6), 965–974. <https://doi.org/10.1007/s10826-013-9752-z>
- Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., McAuliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: Findings from a national cross-sectional study. *BMJ Open, 11*(1), e042871. <https://doi.org/10.1136/bmjopen-2020-042871>
- Prime, H., Wade, M., & Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist, 75*(5), 631–643. <https://doi.org/10.1037/amp0000660>
- Seddon, J. A., Abdel-Baki, R., Feige, S., & Thomassin, K. (2020). The cascade effect of parent dysfunction: An emotion socialization transmission framework. *Frontiers in Psychology, 11*, 579519. <https://doi.org/10.3389/fpsyg.2020.579519>
- Shaffer, A., Suveg, C., Thomassin, K., & Bradbury, L. (2011). Emotion socialization in the context of family risks: Links to child emotion regulation. *Journal of Child and Family Studies, 21*. <https://doi.org/10.1007/s10826-011-9551-3>

(2021)

Statistics Canada. (2021). COVID-19 in Canada: A one-year update on social and economic impacts. [Report]. Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/11-631-x/11631-x2021001-eng.pdf?st=wMxnCpjJ>

Tambling, R., Russell, B., Tomkunas, A., Horton, A., & Hutchison, M. (2021). Factors contributing to parents' psychological and medical help seeking during the COVID-19 global pandemic. *Family & community health*, 44(2), 87–98. <https://doi.org/10.1097/FCH.0000000000000298>

Thomassin, K., Buceasa, O., Chan, K. J., & Carter, E. (2019). A thematic analysis of parents' gendered beliefs about emotion in middle childhood boys and girls. *Journal of Family Issues*, 40(18), 2944–2973. <https://doi.org/10.1177/0192513X19868261>

Tso, W. W. Y., Wong, R. S., Tung, K. T. S., Rao, N., Fu, K. W., Yam, J. C. S., . . . Lp, P. (2020). Vulnerability and resilience in children during the covid-19 pandemic. *European Child & Adolescent Psychiatry*. Advance online publication. <https://doi.org/10.1007/s00787-02001680-8>

Van Lancker, W. & Parolin, Z. (2020). COVID-19, school closures, and child poverty: a social crisis in the making. *The Lancet Public Health*. 5. [https://doi.org/10.1016/S24682667\(20\)30084-0](https://doi.org/10.1016/S24682667(20)30084-0)

Figure 1.

Qualtrics and OneDrive Workflow for Mixed-Methods Virtual Data Collection

