

Not at the Dinner Table:

Caregiver Engagement with Personal Devices and Their Child in Restaurants

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## Abstract

This observational study of caregiver engagement with personal devices and their child in family-friendly restaurants compared Canadian families with past studies to determine parent-child communication and parental levels of engagement with their personal device in the presence of their child and the accuracy of the hypothesized result of a negative relationship between the number of people seated together and the duration of time each individual spends on a personal device. More specifically, to note if larger gatherings of people seated together in family-friendly restaurants is associated with decreased time spent on personal electronic devices for caregivers. The study compared Canadian data with data collected in similar studies conducted in Europe and the United States.

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### Caregiver Engagement with Personal Devices and Their Child in Restaurants

Time spent on personal devices has raised concerns for parents, caregivers and health care workers over the past two decades with research into the advantages and disadvantages of allowing children access to technology and potential harms caused by the distraction or addiction to technology witnessed in social and cultural contexts. Recent studies observed the potential for parent distraction on personal devices while caring for children in public places such as shopping malls, or playgrounds. Other recent studies considered the use of personal devices in restaurants to control child behaviour. The use of a personal device could be seen in this way as a replacement for colouring sheets that were given out forty years ago to calm the time between ordering food and having the meal brought to the table. Likewise, communication with children can be difficult for caregivers when alone in a restaurant seated together waiting for an ordered meal. The relationship between a child and caregiver has been observed under different naturalistic settings offers the ability to consider a positive or negative relationship between time spent in restaurants with varying sizes of families seated together and the use of personal devices.

In the past two years multiple observational studies have been published in academic journals (see *Children*; *Computers in Human Behavior*; *International Journal of Communication*; *International Journal of Environmental Research and Public Health*; *Journal of Child and Family Studies*; *Mobile Media & Communication*; and *Pediatrics*) considering relationships for the use of mobile phones/ personal devices when parents and/or caregivers are accompanied by children aged 12 or under (Bury et al., 2020; Elias & Lemish, 2021; Ewin et al., 2021; Kiefner-Burmeister et al., 2020; Lemish et al., 2020; Wolfers et al., 2020). These studies have been conducted in hopes of

informing both parents and healthcare providers who work with parents on guidelines for uses of devices.

Areas of interest for past studies on relationships in this area have included: understanding the relationship between supervision, mobile phone use and injury in the playground setting (Bury et al., 2020); to keep children occupied and regulate their mood (Elias & Lemish, 2021); potential impact on parent sensitivities and conscientious use (Ewin et al., 2021); parental meal-time device uses in Italy (Kiefner-Burmeister et al., 2020); the impact of mobile device use on the quality of parent–child interaction in early childhood (Lemish et al., 2020); and boundary conditions and effect on maternal sensitivity (Wolfers et al., 2020). These six articles (Bury et al., 2020; Elias & Lemish, 2021; Ewin et al., 2021; Kiefner-Burmeister et al., 2020; Lemish et al., 2020; Wolfers et al., 2020) were reviewed prior to this research proposal to inform the researcher of current trends related to studies with mobile phone use and to guide the researcher towards a question of interest (Price et al., 2015, p. 35).

One approach to unobtrusive data collection is to observe participant’s behaviour in natural settings (p. 144). Naturalistic observation is used by Elias & Lemish (2021), Ewin et al. (2021), Kiefner-Burmeister et al. (2020), and Wolfers et al., (2020) in their studies of mobile phone use in public settings where Price et al. (2015) notes, individuals do not have an expectation of privacy in public. Ewin et al. (2021) study which noted eligibility criteria used in the study was common in the field and cited earlier studies by Radesky et al. (2014) as requiring visible adult caregivers for the period of observation. Ewin et al. (2021) further suggested that established procedures in numerous studies of similar methods observe one caregiver/child dyad at a time (see Bury et al., 2020; Elias et al., 2020; and Lemish et al., 2019).

Kiefner-Burmeister et al. (2020) study noted an emphasis on ‘family-friendly’ nature and proximity to transit. Further Ewin et al. (2021) suggests ethically examiners proceed with notetaking ensuring a lack of judgment or categorizing the behaviour of those observed and the researcher will follow these guidelines as recognized by the field to be common of naturalistic observations. The consideration of limitations noted by past studies (Ewin et al. 2021; Kiefner-Burmeister et al., 2020) related to household income and proximity of transit is a reflection of the ethical consideration to ensure marginalized populations are not excluded from participating in the study and diverse populations are observed. Price et al. (2015) notes that interestingness is determined based on three factors related to gaps in the literature, practical implications and questionable reports that may lead to doubt. Of particular interest to the researcher were studies situated in the United States and Europe that observed parental meal-time device uses as a potential area for gaps in the literature related to research of Canadian parents, and specifically for the purposes of this study parents and healthcare providers who work with parents in Canada. There are practical implications for Canadian parents and healthcare providers if the data collected in this study is similar or offers variances in parental meal-time device uses.

For this study my hypothesis identified the number of people seated together at a family friendly restaurant and the duration of time each individual spends on a personal electronic device. As such, I hypothesized there was a negative relationship between the number of people seated together and the duration of time each individual spends on a personal device. More specifically, the larger the number of people seated together the less time each person would spend on a personal electronic device. The objectives of the study are twofold. Primarily the objective is to add to the scholarly research present in the field for this area of research. Secondly, to use the data to inform both parents and healthcare providers who work with

Canadian parents on guidelines for uses of devices. The two variables observed were the number of people seated together and the time spent on a personal device. The number of adults seated together must have been seated for a period of ten minutes or more to be considered part of the gathering. Personal devices included cell phones, tablets, laptops brought to the restaurant and used while seated at the table or while the group gathered together was seated at the table. Time spent on the device was determined to be three or more seconds continuous or greater which allowed the ability to check incoming text messages, or emails and was inclusive of longer periods of time spent on the device. The specific observation period for each table remained constant for all subjects at ten minutes. In order to control variables, the inclusion criteria for the study consisted of a specific location, and time of day for one restaurant.

## Method

### *Participants*

For a hypothetical study of this nature, a total of 50 hours of observation over 25 visits made between the months of May to November would be an ideal sample size to provide the researcher with multiple data sets and ample time to review a variety of participants. For this study, the sample included observations of parents/guardians/caregivers seated with children aged 12 or under in a family friendly restaurant Denny's. Although children were present, the sample provided observational data of adults only. The family friendly restaurant was chosen for its ethical considerations of justice to ensure all members of the community had the ability to be represented. Denny's restaurant has both a kid's menu and a 55+ menu which afforded greater inclusiveness of family members and group sizes, with menu prices ranging from free to \$15.99 for a complete meal.

### *Design and Procedure*

The observations were held on Tuesdays from 4pm to 10pm when Denny's hosts a Kids Eat Free option. Gatherings that were observed consisted of two or more people seated at the same table, but no more than six people to ensure the researcher did not experience difficulties when observing time on the device. The researcher limited observations to only observing one group seated together at the restaurant at a time. Exclusion criteria consisted of other restaurants, other locations of the restaurant Denny's, and any observations that would have been noted at a different time of day or day of the week than the specified Tuesdays from 4pm to 10 pm. Gatherings of groups larger than 6 were excluded due to the challenging nature to observe. In order to remain unobtrusive, the researcher chose a seat against a wall, where the researcher did not need to turn their head/body to observe others behind or beside them and working on a laptop as the researcher eats or consume coffee. The researcher did not approach any participant or initiate conversation with those observed, and appeared to be engaged in independent work on a personal laptop device. The researcher recorded the number of individuals seated at the table and the number of seconds that each individual was engaged in using a personal device. All observations were recorded on the researcher's laptop and saved for subsequent analysis, following the observation period. The researcher limited observations to only observing one group seated together at the restaurant at a time and excluded group observations that were less than ten minutes in total time seated together or did not have an adult present during the ten minutes observed. The study procedure was consistent with the three core ethical principles due to its unobtrusive naturalistic observation design that allowed all participants observed in the study to be unaware of their involvement in the study. The concern for the welfare of the participants observed was made evident through the care taken to not judge the observations made, nor to classify beyond the type of activity. The ethical consideration of justice was

carefully considered when choosing a location and restaurant by considering accessibility such as bus transit, affordability concerns related to the average cost of a meal, seating areas large enough for six members of a gathering, and age-appropriate menus and sizes, Finally, the lack of interaction between the researcher/examiner and those observed ensured participants were anonymized to protect their confidentiality.

## Results

This observational study of caregiver engagement with personal devices and their child in family-friendly restaurants compared Canadian families with past studies to determine parent-child communication and parental levels of engagement with their personal device in the presence of their child and the accuracy of the hypothesized result of a negative relationship between the number of people seated together and the duration of time each individual spends on a personal device. More specifically, to note if larger gatherings of people seated together in family-friendly restaurants is associated with decreased time spent on personal electronic devices for caregivers. The study compared Canadian data with data collected in similar studies conducted in Europe and the United States to help inform psychologists, social workers and other caregivers who work with parents of children aged twelve and under. The researcher limited observations to only observing one group seated together at the restaurant at a time and excluded group observations that were less than ten minutes in total time seated together or did not have an adult present during the ten minutes observed. Gatherings of groups larger than 6 were also excluded due to the challenging nature to observe.

## Discussion



The scholarly significance of the study is in its contribution to ongoing research for parent-child communication and parental levels of engagement with their personal device in the presence of their child (Lemish et al., 2020). This study also contributes to research into missed opportunities for social learning in public places such as restaurants. The advantage for a naturalistic observation approach in this study can be shown through its provision of mundane realism of parent engagement with personal devices in the presence of their child(ren). The limitations of the study as with others included the general household income of the participants at the restaurant and proximity to a transit station, while steps were taken to ensure these were planned for and accessibility through proximity to transit was considered when selecting a restaurant, it cannot be discounted.

## References

- Bury, K., Jancey, J., & Leavy, J. E. (2020). Parent mobile phone use in playgrounds: a paradox of convenience. *Children*, 7(12), 284-295. doi: 10.3390/children7120284
- Elias, N., & Lemish, D. (2021). Parents' social uses of mobile phones in public places: The case of eateries in two national contexts. *International Journal of Communication*, 15, 2086-2104. doi: 1932–8036/20210005
- Ewin, C. A., Reupert, A., & McLean, L. A. (2021). Naturalistic observations of caregiver–child dyad mobile device use. *Journal of Child and Family Studies*, 30(8), 2042-2054. doi: 10.1007/s10826-021-01993-5
- Kiefner-Burmeister, A., Domoff, S., & Radesky, J. (2020). Feeding in the digital age: An observational analysis of mobile device use during family meals at fast food restaurants in Italy. *International Journal of Environmental Research and Public Health*, 17(17), 6077-6086. doi:10.3390/ijerph17176077
- Lemish, D., Elias, N., & Floegel, D. (2020). “Look at me!” Parental use of mobile phones at the playground. *Mobile Media & Communication*, 8(2), 170-187. doi: 10.1177/2050157919846916
- Price, P., Jhangiani, R., & Chiang, I. (2015). *Research methods of psychology – 2nd Canadian edition*. Victoria, B.C.: BCcampus. Retrieved from <https://opentextbc.ca/researchmethods/>.
- Radesky, J. S., Kistin, C. J., Zuckerman, B., Nitzberg, K., Gross, J., Kaplan-Sanoff, M., ... & Silverstein, M. (2014). Patterns of mobile device use by caregivers and children during meals in fast food restaurants. *Pediatrics*, 133(4), e843-e849. doi:10.1542/peds.2013-3703

Wolfers, L. N., Kitzmann, S., Sauer, S., & Sommer, N. (2020). Phone use while parenting: An observational study to assess the association of maternal sensitivity and smartphone use in a playground setting. *Computers in Human Behavior, 102*, 31-38. doi: 10.1016/j.chb.2019.08.013