ARTICLE

Title: The Impact of Family Ablution on Child Outcomes

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Abstract: The purpose of this study was to investigate the relationship between family blurring and child outcomes. Specifically, we aimed to determine if family ablation, as defined by the loss of family members through death, separation, or divorce, is associated with adverse child outcomes. The research design involved a longitudinal study with a control group and an intervention group. The intervention group received family support services, while the control group did not. The main outcomes measured were academic performance, behavioral problems, and emotional well-being. The results indicated a significant decrease in behavioral problems and an improvement in academic performance for the intervention group compared to the control group. The study also highlighted the importance of family support services in mitigating the negative effects of family blurring on child development.
and one parent is prevented. There is also some evidence that the etiology of family abductions all along this continuum of seriousness may be similar (Plass, Finkelhor, & Hotaling, 1994).

Clearly, some of the most important questions to be asked regarding the nature and dynamics of these events are those associated with outcomes. For example, what differentiates between episodes that are easily resolved and those that persist for long periods? How are children likely to be affected by these events, and what differentiates between episodes in which children appear to be traumatized and those in which the effects are less disruptive?

One of the difficulties with asking such questions regarding what variables may affect outcomes of family abductions has been the fact that most data available about abductions have been taken from official sources (police or court records, missing children's organizations, and the like). In these samples, which tend to be uniformly quite serious cases, serious outcomes are the norm—most of these cases are likely to be of quite long duration, and to result in considerable trauma for children. In the absence of such outcomes, they would probably not have been reported to official agencies in the first place.

This article makes use of the only data regarding family abductions currently available that were not drawn from such official sources. The National Incidence Studies of Missing, Abducted, Runaway, and Throwaway Children (NISMART) relied on a national population survey, so that it uncovered many of the kinds of abduction cases that were resolved relatively quickly without the assistance of agencies (as well as more serious episodes that did involve the intervention of, for example, the police). We focus here on two abduction outcomes: (a) duration of the episode (i.e., how long aggrieved parents and children were separated from one another) and (b) whether an episode resulted in emotional harm or trauma to a child involved. Factors associated with each outcome measure are examined separately in the analyses that follow. In addition, however, as it is also quite likely that these two indicators would be related to one another (e.g., duration might play a role in the effect an episode had on children involved), we also provide discussion of possible links between these two indicators themselves. Before presenting any data, it is necessary to clarify some methodological issues surrounding the study and the ways in which events were defined.

STUDY METHODOLOGY

THE NISMART SAMPLE

In NISMART's national probability sample, telephone contact was made with 10,544 households, where primary caretakers were asked about the experiences of 20,505 children age 17 or younger. Starting with a sampling frame of 60,000 telephone numbers, which yielded 11,617 actual households in which a child resided for at least 2 weeks during the previous year, interviews were completed with caretakers in all but 1,250 households, for a response rate of 89.2%. (A more detailed description of the design is available in Finkelhor, Hotaling, & Sedlak, 1990; and Sedlak, Mohadjer, McFarland, & Hudock, 1990.

DEFINING FAMILY ABDUCTIONS

The ultimate operationalization of family abduction events in NISMART was designed to reflect the ways in which such events are defined under the law as well as the way in which they might be perceived by lay persons. Thus two types of situations were included in the intentionally broad definition of family abduction employed by NISMART, namely (a) situations in which a family member took a child in violation of a custody agreement or decree ("takings") or (b) situations in which a family member (in violation of a custody agreement or decree) failed to return a child at the end of a legal or agreed on visitation period, with the child being away at least one additional night in these cases ("keepings"). Three elements of this definition deserve further comment, namely the nature of the taking and keeping distinction, the issue of the custodial status of the perpetrator (abductions could have been perpetrated by custodial as well as by noncustodial parents), and the way in which the concept of family itself was classified.

Taking and Keeping Distinction

A family abduction could have involved either unauthorized keeping or taking of children. Thus, in addition to the stereotypical abduction scenario in which children are whisked away and hidden by a
The concept of family residence
of a parent. In addition, it was not necessary for the child's parents to
reside with the child on a daily basis. The issue was what contact with
the child the parent should have (or the extent of such contact)
between the time the child was awarded the custody of the
parent's residence, the amount of time the child lived with the
parent's residence, and the interaction between the parent and
the child during this period. The NISAMART provides a special
category of keeping children in their natural families, and
therefore, it is not necessary for the child's parents to
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Table 2 provides descriptive statistics for the duration of NISSMART events. Most of the episodes were resolved in a matter of a few days, but a fairly large percentage of the 102 episodes took more than a week to be resolved. (Note that 2 of the 104 cases in the sample are lost, because of missing data on the duration variable. These were cases in which the parent-respondent either refused to answer a question about duration of the episode, or said that he or she did not know how long the episode lasted.) The average episode duration was almost 12 days, whereas the median length was 3 days. The discrepancy between these two measures of central tendency and the values of the skewness and kurtosis statistics indicate that the distribution of the duration variable is considerably skewed. This issue is one of concern, as skewness of this magnitude may affect the outcome of analyses. Consequently, a data transformation strategy was developed to normalize the distribution, and hence make the variable more amenable to analysis.

There are basically three strategies for dealing with skewness of this sort in a variable. The variable can be mathematically transformed (a logarithmic transformation would be appropriate in the case of positive skew revealed in the duration variable); the variable can be truncated in some way (shortening the tail of the distribution in a sense); or the variable can be categorized (distributing raw values into categories on the basis of, for example, quartiles). We decided to truncate the high values of the original variable. Specifically, we took the highest 20% of the duration values (from 21 days to 180 days; see Table 2 for the distribution of these values), and recoded them all to a value of 21 (which then became the highest value in the distribution). Relevant statistics for the resulting recoded variable are found in the bottom panel of Table 2, and reveal that, although still somewhat positively skewed, the variable now has a much more acceptable distribution, which should make accurate analysis possible.1

GENERAL HYPOTHESES

Both previous research and simple logic can suggest several factors that might be expected to influence the duration of abduction episodes. We identified four such factors, and established indicators for each in the NISSMART data. First, factors that are associated with simple convenience, or increased ease of accommodating a child or children

<table>
<thead>
<tr>
<th>Percentage of Abducted Children*</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 0-4</td>
<td>23</td>
</tr>
<tr>
<td>Age 5-9</td>
<td>39</td>
</tr>
<tr>
<td>Age 10-13</td>
<td>28</td>
</tr>
<tr>
<td>Age 14-17</td>
<td>11</td>
</tr>
<tr>
<td>White</td>
<td>87</td>
</tr>
<tr>
<td>African American</td>
<td>10</td>
</tr>
<tr>
<td>Other race</td>
<td>3</td>
</tr>
<tr>
<td>Male</td>
<td>57</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
</tr>
<tr>
<td>Total individual children involved</td>
<td>100</td>
</tr>
</tbody>
</table>

* All percentages are of valid responses; that is, missing values for a variable are excluded from the denominator in calculating the percentages that appear in this table.

abduction event, and to restore the legal and desired contact between an aggrieved parent and his or her child(ren).
We predicted that episodes in which the exposure made things to
become more likely to beexperienced in everyday life, would
be more likely to beexperienced in everyday life, would
result in exposure. Exposure to violence in school and exposure
to violence in school would be more likely to beexperienced in
everyday life, would
result in exposure. Exposure to violence in school and exposure
to violence in school would be more
Third, factors that were related to difficulty in actually physically locating a child would be expected to be associated with episodes of longer duration. Concealment of a child not only can be expected to complicate efforts at recovery, but is also indicative of events in which the perpetrator's intent, as suggested above, is to permanently disrupt custody arrangements. The NISMA RT data offered three indicators of this element of concealment:

1. We predicted that episodes in which aggrieved parents did not know the physical location of their children for at least half the time of the episode would be of longer duration.
2. We predicted that episodes in which the perpetrator made some attempt (regardless of whether this attempt was successful) to conceal the location of the child would be of longer duration.
3. We predicted that those episodes in which children were taken out of state would be of longer duration.

Fourth, we expected that official sanctioning—for example, the legal status of the custody agreement—might play a role in the duration of episodes. It has been assumed, for example, that it is harder to recover children in the absence of a formal legal custody agreement. We selected two indicators of this element of legal sanctioning from the NISMA RT data:

1. We predicted that episodes which did not involve a formal custody order would be of longer duration.
2. We predicted that episodes which involved ex-relatives as perpetrators (e.g., ex-spouses or in-laws) would be of shorter duration. (Those episodes involving current relatives would presumably be less likely to involve a formal custody order, and would most likely be occurring in the early stages of marital dissolution, when issues such as child custody arrangements were not well established.)

DURATION OF EPISODES—RESULTS OF ANALYSIS

Because of the relatively small number of cases available for analysis, and because of the interrelationship of many of the independent variables of interest here (and the associated problems of multicollinearity), a multivariate analysis strategy in which all of the indicators identified above are entered in the same model is somewhat impractical, and most likely not the best way to illustrate the relevant relationships between independent and dependent variables. However, elements of the NISMA RT sampling design do require controlling for a key demographic characteristic—namely, education level of the head of household—in doing any household (or episode) level analyses of these data. Hence the first step in our analysis was to enter each of the indicators identified above into a regression equation while controlling for education of head of household in which the child lived. Column 1 of Table 3 provides the regression coefficients for these equations.

Clearly, factors associated with convenience (found in the first panel of Table 3) and with intent (found in the second panel) are most influential in determining the duration of abduction events. All of the convenience factors (with the exception of the number of children involved and the presence of at least one very young child in the abduction), and our measure of intent appear to have strong (and significant) effects in the direction we hypothesized. None of the measures in the other two categories (i.e., factors associated with physically locating a child, or with the legal status of the custody relationship) had a significant effect on the duration of abductions. We interpret this as indicating that factors associated with intent and with preplanning, convenience, or preparedness—the availability of resources, if you will—are likely to be associated with increased duration of episodes. Thus cases in which time to care for the child and an established place (and routine) to keep him or her exist are apparently likely to take longer to resolve.

The strongest predictors of duration—whether an episode was a keeping (as opposed to a taking), and whether an episode was a denial of visitation type event—are obviously related to one another. Denial of visitation events is in fact a special subset of all keeping events. We expected that these status of event indicators might be related to some of the other measures in the table. For example, denial of visitation events (by definition; see above) is not likely to involve situations in which the physical whereabouts of children are unknown. Furthermore, as suggested above, they might be more likely to be perpetrated by women (who are more likely to have primary custody of children). Hence we thought it prudent to perform an additional series of regression analyses in which we also controlled for the status of an
DETERMINANTS OF EMOTIONAL TRAUMA FOR CHILDREN

Although parents were asked about questions regarding whether their child(ren) had been harmed during pregnancy and if they were present in all cases of NISMAINT, the younger age group was not included in the study.

DEFINING EMOTIONAL TRAUMA FOR CHILDREN

Children who are abducted by family members or by others are more likely to report an increased frequency of episodes of emotional trauma than those who are not. The measures of emotional trauma, including the frequency of episodes, the duration of episodes, and the intensity of the trauma experienced, were analyzed.

The table below illustrates the results of regression analysis for emotional trauma.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Financial Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Isolation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The factors that were not found to be significant in predicting emotional trauma included:

- Age of child
- Gender of child
- Race of child
- Economic status
- Parental support

The factors that were found to be significant in predicting emotional trauma were:

- Domestic violence
- Parental conflict
- Financial stress
- Social isolation
- Educational status
physical or sexual abuse, very few reported that these kinds of harm were outcomes of a family abduction—so few, in fact, that an analysis of risk factors for this type of harm was virtually precluded by the small number of cases available. Consequently, our focus in the analyses that follow is on factors associated exclusively with the risk of emotional trauma for children involved in an abduction episode.

The fact that most of the harm experienced by children in the NISMART sample was of the psychological variety is consistent with the literature on the effects of family abductions (Agopian, 1984; Greif & Hagar, 1993; Terr, 1983). Unfortunately, the measure of mental harm provided by the NISMART interview was a crude one: simply the aggrieved parent’s global judgment that a child experienced some serious mental harm. In an effort to assess what parents meant by this serious mental harm, we examined uncoded respondent comments from the interview forms. Verbal descriptions of the behaviors parents described among children whom they defined as having experienced serious mental harm included such things as nightmares, crying, nail biting, decline in school performance, and general fearfulness. We found these characteristics to be consistent with literature describing responses of traumatized children (e.g., Greif & Hagar, 1993). Altogether, the parent respondent reported that at least one child involved in an episode had suffered serious mental harm in 21 events, or about 20% of the whole sample. (The parent respondent was unwilling or unable to assess the mental harm experienced by a child in 6 of the 104 episodes, resulting in missing data for these cases.)

General Hypotheses

We identified three broad factors that might be expected to be associated with a higher or lower likelihood that an episode would result in emotional trauma for any child involved. As in our examination of factors associated with duration of episodes, we then established indicators of each factor in the NISMART data. First, we expected that factors associated with a child’s awareness of what was happening would have an effect on the likelihood of emotional harm. We assumed that measures associated with a child’s awareness of what was happening to him would have an influence on the likelihood that he would experience some sort of mental harm. We selected one indicator of this factor from the NISMART data:

1. We predicted that very young children (between the ages of 0 and 4) would be less likely to experience emotional trauma in an episode than would children of older ages. Very young children might be expected to have little or limited knowledge of what was happening to them in an abduction event, and would hence be less likely to suffer serious mental harm.

Second, factors that are associated with a greater amount of disruption in a child’s routine would be expected to be associated with an increased likelihood that an episode would be associated with emotional trauma for one of the children involved. Disruption of a child’s usual lifestyle can be expected to be associated with the types of emotional trauma identified by parents in the NISMART sample. We identified six indicators of such disruption:

1. We predicted that episodes which involved extended kin—either as abductors or as the parent respondent—would be associated with a higher likelihood of emotional trauma for a child involved. The involvement of extended kin might be an indicator of greater disruption in the child’s family life in general. If the child was living with extended kin and abducted by a parent, it would seem as if the parent must have had significant life problems in the first place to have lost or given up custody of a child to extended family. If the abductor was a nonparent, he or she might be expected to be less likely to provide a care setting for a child that would be very familiar, and might (especially in the case of grandparents) have quite different rules and regulations for the child’s behavior. In either case, we expected cases that involved extended kin to be associated with more disruption—and more emotional trauma—for children.

2. We predicted that denial of visitation events would be associated with a lower likelihood of emotional trauma. Because in denial of visitation events children were by definition kept in their usual place of residence, we assumed that this type of event would be least disruptive to a child or children involved.

3. We predicted that as the duration of episodes increased, the likelihood that a child would be traumatized would increase as well. Longer
1. Emotional trauma in children—Results of the analyses

A distinction between the adult parties after the event

4. We predicted that episodes in which the perpetrator knew the

5. The role of emotional trauma between the adult parties involved might be

6. We predicted that episodes were preceded by emotional episodes

3. Emotional trauma in children—Results of the analyses

2. Emotional trauma in children—Results of the analyses

1. Emotional trauma in children—Results of the analyses

Post-trauma syndrome in the NSWNT.

Children exposed to previous episodes of emotional trauma as a result of the perpetrator's actions would be associated with a higher likelihood of emotional trauma. This might also be considered an indicator of emotional trauma, which would be associated with a higher likelihood of emotional trauma. The perpetrator's actions that led to these episodes were associated with a higher likelihood of emotional trauma. The perpetrator's actions that led to these episodes were associated with a higher likelihood of emotional trauma. The perpetrator's actions that led to these episodes were associated with a higher likelihood of emotional trauma.

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1. Emotional trauma in children—Results of the analyses

Post-trauma syndrome in the NSWNT.
TABLE 4
Odds Ratios Predicting the Likelihood of Emotional Trauma

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Odds Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child awareness indicators</td>
<td></td>
</tr>
<tr>
<td>Child was &lt; 5 years old</td>
<td>.09*</td>
</tr>
<tr>
<td>Disruption indicators</td>
<td></td>
</tr>
<tr>
<td>Involvement of extended family in event</td>
<td>4.06**</td>
</tr>
<tr>
<td>Event was a denial of visitation</td>
<td>.61</td>
</tr>
<tr>
<td>Duration of event (in days)*</td>
<td>1.09**</td>
</tr>
<tr>
<td>Perpetrator tried to prevent contact</td>
<td>5.15**</td>
</tr>
<tr>
<td>Holiday onset of event</td>
<td>1.32</td>
</tr>
<tr>
<td>Perpetrator education level*</td>
<td>.35**</td>
</tr>
<tr>
<td>Conflict/uniformity between adults indicators</td>
<td></td>
</tr>
<tr>
<td>Perpetrator threatened to use event to disrupt</td>
<td>6.92**</td>
</tr>
<tr>
<td>Custody permanently</td>
<td></td>
</tr>
<tr>
<td>Perpetrator tried to conceal</td>
<td>2.27</td>
</tr>
<tr>
<td>Violence between adults in the household</td>
<td>.77</td>
</tr>
<tr>
<td>Perpetrator is a current relative</td>
<td>1.49</td>
</tr>
<tr>
<td>Knew location &lt; 1/2 time</td>
<td>1.93</td>
</tr>
</tbody>
</table>

a. All odds ratios in this table were computed from logistic regression equations in which the education of the child(ren)'s head of household was held constant.

b. The unit of analysis used in computing the odds ratio for age was an individual child. All other odds ratios in this table were computed using an event unit of analysis.

c. The measure of duration used here is the same as that used in Table 2; that is, one in which the high levels of the variable were truncated to compensate for skewness.

d. This is an ordinal measure, ranging from 1 (less than high school education) to 4 (college degree or higher).

* p ≤ .05. ** p ≤ .01.

Awareness that a child has as to what is happening in an abduction event is quite important in affecting the likelihood of mental harm. It would also appear, however, that measures of disruption to a child's life or general routine, as well as indicators of conflict between adults involved in an event, are quite important as well.

The emotional trauma of an episode seems related to factors associated with disruption of the routine of the child(ren), with the presence of an increased level of conflict between adults, and with the general awareness of the child(ren) as to what is happening. We found that episodes which did not involve young children (under age 5) and those which went on for longer periods were more likely to involve mental harm. Likewise, abductions involving extended kin—perhaps an indication of more widespread familial conflict—along with those in which the abductor adopted a threatening posture toward the aggrieved parent carried an increased likelihood that a child involved in the event would experience emotional trauma. Because our analysis focuses on emotional trauma, however, it is important to consider that these results might not be as applicable in predicting the likelihood of sexual or physical abuse, which might occur in an abduction.

DISCUSSION

A certain degree of caution should be used in interpreting these findings, and an awareness of the study's potential limitations should be part of any conclusions drawn here. One limitation is that NIS-MART uncovered only a small number of episodes that took a long time to resolve. Only 14% of the cases used in our analyses had been ongoing for more than 3 weeks. It is not uncommon for nationally representative samples to fail to procure enough rare cases for analysis, but it can produce problems for policy. Family abductions in which children are gone for months or perhaps years are precisely those of greatest interest to law enforcement and missing children's organizations. Our findings about factors affecting the duration of episodes may not be completely applicable to the extremely long duration episodes found in agency files. It is possible that cases that go on for months or years, or those that are never concluded, are different in many respects from episodes that take only up to a month to resolve.

A second, and perhaps more complex, limitation of the study is that our information was gathered from the point of view of only one party to a frequently complicated conflict: the aggrieved parent. It is likely that the information gleaned from the other (abducting) parent (and perhaps also from the abducted child) would have been quite different. It is possible that biases and grievances on the part of the aggrieved parent may create spurious findings or associations in the data. One variable particularly vulnerable to such biases is the measure of emotional trauma to a child. As stated above, we considered an episode to have produced an emotionally harmed child based on the perceptions of the child's caretaker. Thus extra caution is required in considering the findings related to emotional harm, and an awareness of how this variable was defined must be maintained.
REFERENCES

The presentation of this document was prepared by the author of the document. The abstract describes the main findings of the study, which are based on a literature review. The study found that educational interventions, particularly those that focus on educational and behavioral strategies, can help improve academic performance and reduce behavior problems in children. The study also highlights the importance of early intervention, as children who receive these strategies at a young age tend to have better outcomes than those who do not.

NOTES

Given these limitations, however, these findings also provide valuable insights for future research on predictors of educational outcomes, especially in the context of early intervention.


Peggy S. Plass is an Assistant Professor at James Madison University. She holds a doctorate degree in sociology from the University of New Hampshire. Her current research interests are in the area of criminal victimization of children and adolescents.

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