Substantiation: 
Current Knowledge and Policy Options

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Presentation overview

• History
• Harm Evidence Model
• Validity of Substantiation
• Substantiation and Differential Response
Legalistic and social work perspectives

- Child Abuse and Neglect is a Multi-disciplinary Field with corresponding influences
  - Law
  - Medicine
  - Social work

- Main Issues in the Formation of Early Laws and Policies
  - Balance the tendency to prosecute with tendency to help families
  - Balance law enforcement facts gathering orientation with social work assessment
  - Early laws/policies were an attempt to achieve these sorts of balance
  - We are now able to see how this has played out to some extent in the manifestation of diverse CPS systems
Is state child welfare more like “criminal justice” or “friendly visitors?”

A key dimension to consider is the evolving nature of Child Welfare practice. The continued emphasis on community engagement and multiple-track systems (Assessment vs. Investigation) have lent a more “Social Work” or “Public Health” quality to Public Child Welfare.

• Perhaps substantiation is a better fit with the Criminal Justice approach, being related to the “guilty/not guilty” dichotomy.

• What might a more service oriented, public health type construct look like? Perhaps some indicator of service need would provide useful information for families being assessed, rather than investigated? On the other hand, we still need information about child abuse and neglect.
The Harm-Evidence model of substantiation
An overview of the process

Report is made by mandated or permissive reporter (ratio is about 56/44)

Report is screened in or not (60% nationally, vast state variation)

SINGLE TRACK STATES:
Cases are investigated and substantiation determination is made. Gates services in 11 states.

“SUBSTANTIATED”
Higher rates of service delivery (60%), Employer-searchable central registry membership sometimes.

TWO TRACK STATES:
“Assessment” or “investigation” track. Assessment tracks often do not make substantiation judgment.

“UNSUBSTANTIATED”
Lower rates of service delivery (30%). No employer-searchable record, report destruction often happens.
What might people *think* substantiation means?

**Substantiated**
- “Child abuse happened”
- “Guilty Verdict”

**Unsubstantiated**
- “Nothing happened,” and maybe “the state child welfare agency hassled innocent people for no reason”
- “Not Guilty”
We could draw it like this:

Unsubstantiated cases from families in which nothing really happened.

- Low risk for maltreatment
- Low rate of re-report
- Low rates of other problems in the family

Substantiated cases from families in which something serious happened.

- High risk for maltreatment
- High rates of re-report
- High rates of other problems in the family
The “Harm/Evidence” Model:

- **SUBSTANTIATED**
  - High Harm
  - Strong Evidence

- **UNSUBSTANTIATED**
  - None Harm
  - None Evidence

- **INDICATED**
  - Insufficient Harm
  - Insufficient Evidence
  - (Three-tier States Only)

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American Humane
Protecting Children & Animals Since 1877
Example: Kid with belt bruise

Child has bruising in the shape of father’s belt buckle, tells credible story, father admits.
Possible SIDS case

Family has history of neglect, 2\textsuperscript{nd} child in family dies, diagnosis given is possible SIDS.
Preteen injury

11 year old child in tumultuous home has repeated minor bruising which appears consistent with abuse. Reports that injury was from discipline, but gives somewhat unclear and conflicting history.
What implications can we draw from this model?

The main implication I draw is that substantiated and unsubstantiated cases may not be as different as we think. On the whole, you would expect substantiated cases to represent somewhat more serious situations than unsubstantiated cases, but perhaps this difference will not be very great.
It is easy for an unsubstantiated case to be far more serious than a substantiated one.
The H/E model suggests that the Sub/Unsub difference is less important than we thought.

Old Model: Big Harm Differential

Harm/Evidence Model: Lower Harm Differential
Let’s back up and think about **service need**, which has nothing whatsoever to do with evidence.
If you only serve substantiated cases, you miss all the needy (green) people in the lower right. That isn’t good if your agency has a prevention mission.
Summary:

• The Harm/Evidence Model gives us a new way to look at substantiation.

• It implies that the differences between substantiated and unsubstantiated cases may not be that large.

• It implies that services must be gated by actual service need, not by substantiation status.
How well does Brett’s model fit actual decision-making?

• Data from the National Survey of Child and Adolescent Well-Being, a national study of child welfare

• Used Drake’s model to look at relationship between caseworker judgments and substantiation

### Results on harm, evidence and substantiation per 100 children

<table>
<thead>
<tr>
<th>Category</th>
<th>Little or no harm</th>
<th>Moderate to severe harm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Probably to clearly sufficient evidence</strong></td>
<td>![Figures]</td>
<td>![Figures]</td>
</tr>
<tr>
<td><strong>No to probably insufficient evidence</strong></td>
<td>![Figures]</td>
<td>![Figures]</td>
</tr>
</tbody>
</table>

*Each figure represents 1 out of 100 children. Red = substantiated.*

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**Credits:**
- School of Social Work, University of Illinois at Urbana-Champaign
- American Humane

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*Slide 20*
How well did Brett’s model fit these 100 children?

- The substantiation outcome matched Brett’s model in 85 out of 100 cases.
- The model is mostly accurate but some decisions that are hard to predict.
Key results

• Evidence was a stronger predictor of substantiation than harm

• In 9 out of 100 cases, children were judged to be harmed but reports were not substantiated
  – Evidence was judged insufficient in 5 of these cases
  – Evidence was *judged sufficient in 4 of these cases and the case was still not substantiated*
Validity and substantiation
Validity and substantiation

• Validity
  – Form of validity, e.g., face, content, concurrent, predictive/criterion, etc.
  – Fundamental Question - Is it maltreatment?
    • Evidence – Harm Framework
    • Risk of Harm
    • Safety
  – If it’s maltreatment, how sure are we (precision)?
  – If it’s maltreatment, what we have to do about it may confound things.

• Rereporting and recurrence and evidence of predictive validity for substantiation
  – If it happened before is it more likely to happen again?
  – If it didn’t happen but the child was at risk did it happen later?
Substantiation and maltreatment recidivism: A propensity score analysis

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Previous research

• Early studies looked at the bivariate relationship between substantiation and recidivism; results were mixed

• More recent studies have used multivariate analytic methods to examine recidivism while “accounting for” the effect of other child and case characteristics, such as age of child and type of maltreatment
Research question and methods

The current study uses a sophisticated methodology known as Propensity Score Matching (PSM) to answer the question: Are initially substantiated cases more likely to be re-reported to child protective services within 12 months of the initial investigation when compared to initially unsubstantiated cases?
Study sample

- Sample data taken from IDCFS administrative database
- Started with population of all child reports 1999-2004 (n=605,026)
- Sample limited to children with no prior investigations (n=386,231)
- Sample excluded cases opened for intact family services or substitute care (n=325,209)
- If household had more than one investigated child, one child was randomly chosen (n=203,768)
- Children with missing data excluded (n=188,471)
Comparison of sample before and after matching

<table>
<thead>
<tr>
<th>Matching variables</th>
<th>Before Match</th>
<th>After Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>More females unsubstantiated</td>
<td>No difference</td>
</tr>
<tr>
<td>Child’s Race</td>
<td>No difference</td>
<td>No difference</td>
</tr>
<tr>
<td>Child’s Age</td>
<td>Lower % under 3 Substantiated</td>
<td>No difference</td>
</tr>
<tr>
<td>Geographic region</td>
<td>Lower % substantiated in Cook</td>
<td>No difference</td>
</tr>
<tr>
<td>Type of maltreatment</td>
<td>Lower % sexual &amp; physical abuse among substantiated</td>
<td>No difference</td>
</tr>
<tr>
<td># of allegations</td>
<td>Higher % among substantiated</td>
<td>No difference</td>
</tr>
<tr>
<td>Maltreatment reporter</td>
<td>Higher substantiated: Law officers &amp; medical personnel</td>
<td>No difference</td>
</tr>
<tr>
<td># of other children</td>
<td>Higher % none substantiated</td>
<td>No difference</td>
</tr>
<tr>
<td>Mother as perpetrator</td>
<td>Higher among substantiated</td>
<td>No difference</td>
</tr>
</tbody>
</table>
## Survival analysis

<table>
<thead>
<tr>
<th>Variables in the model</th>
<th>Risk of Re-report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>No significant effect</td>
</tr>
<tr>
<td>Race</td>
<td>Caucasian &gt; Latino, African American</td>
</tr>
<tr>
<td>Child’s Age</td>
<td>Linear relation with highest for under 3</td>
</tr>
<tr>
<td>Geographic region</td>
<td>Cook County &lt; rest of the state</td>
</tr>
<tr>
<td>Type of maltreatment</td>
<td>Sexual abuse &lt; physical abuse, neglect</td>
</tr>
<tr>
<td>Number of allegations</td>
<td>Two or more allegation &gt; One allegation</td>
</tr>
<tr>
<td>Maltreatment reporter</td>
<td>social service worker &gt; family &amp; neighbors, law</td>
</tr>
<tr>
<td></td>
<td>enforcement, medical personnel</td>
</tr>
<tr>
<td>Number of other children in home</td>
<td>one or more child in home &gt; only child</td>
</tr>
<tr>
<td>Perpetrator</td>
<td>Mother &gt; all other adults in home as a group</td>
</tr>
<tr>
<td><strong>Initial Substantiation Status</strong></td>
<td><strong>Substantiated &gt; Unsubstantiated</strong></td>
</tr>
</tbody>
</table>
Implications of results

What function should substantiation have in child welfare?

• Gatekeeper for services?
• What is the best way to target limited services when almost all investigated families have some level of service need?
• Targeting more intensive services to substantiated cases makes sense in a system where resources are limited
Implications of results

• It has been argued that although recidivism rates among substantiated cases are higher, the volume of unsubstantiated cases that return to the system is greater

• This is true, but only because the vast majority of all investigations are initially unsubstantiated (about 75%)

• These two issues of high unmet service needs and high volume of cases that return to the system have led many states to implement differential response systems
Time to Leave Substantiation Behind

Findings From A National Probability Study

Patricia L. Kohl
Melissa Jonson-Reid
Brett Drake
Washington University
What this talk is about:

We will be over-viewing findings from a paper using NSCAW data. This paper tries to determine if substantiated and unsubstantiated cases are at similar or different risk of recidivism.
Synopsis of findings on substantiation using NSCAW data

So what is NSCAW anyway?
It’s the “National Survey of Child and Adolescent Wellbeing.” We use the NSCAW I data (II is still ongoing)

• It is a $74M federally funded study on child maltreatment, the largest ever.
• NSCAW I has a carefully constructed sampling procedure using about 6,000 kids, intended to make the study’s results representative of the USA in general.
• The sample is composed of children who were contacted by state child maltreatment agencies.

http://www.rti.org/page.cfm?objectid=D688C979-8B27-456E-AD0AF638862E7365
Why did we write this article?

It was partly as a follow-on to another article, based on a different large child welfare consortium study: LONGSCAN.
Our NSCAW sample:

We looked at the 6,000 NSCAW kids and kept the 1,820 kids who:

• Remained in the home following the index (first) investigation

• Had no known prior maltreatment reports (this cut our sample by more than half)

• Had data available on all outcome measures.
Our analyses

NSCAW uses a complex sampling design and requires weighting to be carefully accounted for in the analysis. This necessitated use of SUDAAN (version 9.01).

Since our question was simple, we decided to use simple statistics to show our results. You will see that we use Chi-Square tests (bivariate tables) and event history analyses (multivariate Cox regression models). We also present survival curves.
Recidivism as **Any Re-Report (17.4%)**

**Bivariate Results**

**Red predictors are nonsignificant, Green predictors are p<=.05**

- Substantiation Status (NS, 15.3% of Sub’d vs. 18.0% of Unsub’d)
- Gender
- Race
- Child Age
- **Family Income** (Below poverty families about 2x as likely)
- Caregiver Education
- **Child Developmental Problems** (almost 2x as likely)
- Caregiver Mental Health Problems
- Caregiver Substance Abuse Problems
- Maltreatment type
Recidivism as **Substantiated Re-Report (5.3%)**

**Bivariate Results**

Red predictors are nonsignificant, Green predictors are p<=.05

Substantiation Status (NS, 8.1% of Sub’d vs. 4.5% of Unsub’d, p=.09)
Gender
Race
Child Age
Family Income
Caregiver Education
**Child Developmental Problems (still almost 2x as likely)**
Caregiver Mental Health Problems
Caregiver Substance Abuse Problems
Maltreatment type
Recidivism as **Foster Care (4%)**

Bivariate Results

**Red predictors are nonsignificant, Green predictors are p<=.05**

Substantiation Status (NS, 5.3% of Sub’d vs. 3.7% of Unsub’d, p=.09)

Gender

Race

Child Age

Family Income

Caregiver Education

Child Developmental Problems

Caregiver Mental Health Problems

Caregiver Substance Abuse Problems

Maltreatment type
What about multivariate results?

They’re up next, and use “Hazard Rates.” A Hazard Rate is how much increase one thing shows over another. If you believe that Women are twice as likely to ask directions as Men, then the “Hazard Rate” for asking directions is 2 for Women (twice as likely = 2:1 = HR of 2).
### Cox Regression Models of Recidivism

<table>
<thead>
<tr>
<th></th>
<th>Any Rereport</th>
<th>Substantiated Rereport</th>
<th>Foster Care Placement</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$ = 39.3, 12 df, $p &lt; .001$</td>
<td>$\chi^2$ = 59.9, 12 df, $p &lt; .001$</td>
<td>$\chi^2$ = 68.8, 12 df, $p &lt; .001$</td>
</tr>
<tr>
<td></td>
<td>Hazard Rate</td>
<td>$p$ Value</td>
<td>Hazard Rate</td>
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<tr>
<td>Substantiation status</td>
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<td></td>
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<tr>
<td>Substantiated</td>
<td>0.8</td>
<td>.017</td>
<td>1.8</td>
</tr>
<tr>
<td>Unsubstantiated</td>
<td>1.0</td>
<td></td>
<td>1.0</td>
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<tr>
<td>Gender</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>1.3</td>
<td></td>
<td>1.1</td>
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<tr>
<td>Female</td>
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<td>Race</td>
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<tr>
<td>White</td>
<td>0.7</td>
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<tr>
<td>Non-White</td>
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<td>1.0</td>
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<tr>
<td>Child age</td>
<td>0.9</td>
<td>.033</td>
<td>1.0</td>
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<tr>
<td>Family Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below poverty</td>
<td>1.6</td>
<td></td>
<td>1.7</td>
</tr>
<tr>
<td>Above poverty</td>
<td>1.0</td>
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<tr>
<td>Caregiver’s education</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Completed high school</td>
<td>1.0</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>No high school completion</td>
<td>1.5</td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>Child developmental problems</td>
<td></td>
<td>.004</td>
<td>.002</td>
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<tr>
<td>Yes</td>
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<td>Caregiver mental health problem</td>
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<td>.142</td>
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<td>Yes</td>
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<tr>
<td>Caregiver substance abuse problem</td>
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<td>.411</td>
<td>.752</td>
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<tr>
<td>No</td>
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<tr>
<td>Maltreatment type</td>
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<tr>
<td>Physical abuse</td>
<td>1.0</td>
<td></td>
<td>1.0</td>
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<tr>
<td>Sexual abuse</td>
<td>1.5</td>
<td></td>
<td>1.9</td>
</tr>
<tr>
<td>Neglect</td>
<td>1.3</td>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td>Other/unknown</td>
<td>1.7</td>
<td></td>
<td>2.2</td>
</tr>
</tbody>
</table>

Note: Inclusion of cases with prior reports did not substantially change the findings.
Comparison to prior work:

These survival curves are similar to those found in a single state (Missouri) sample using far more subjects (60,000 children from the mid 1990’s). In that study, no difference was found at the any rereport level, and moderate differences were found at the substantiated rereport and the foster care levels.

So the takeaway message is....

• We found no real differences in terms of any re-report. Sub’d and Unsub’d cases come back at about the same rates.

• We found that substantiated might possibly have higher rates of (substantiated) re-report, but this was not statistically significant, probably due to power issues.

• We found smaller, also nonsignificant differences terms of recidivism resulting in foster care.
Based on these data, it looks like the chance of future Child Welfare contact does not vary radically based on substantiation. We suggest that since unsubstantiated cases are at high risk of recidivism, they are logical candidates for service provision.
Summary/Implications

- Drake’s conceptual model of substantiation based on threshold levels of harm and evidence fits most cases
  - Doesn’t fit every case
  - Most worrisome are cases with moderate to severe harm that are not substantiated (9% of cases in the NSCAW sample)
Summary/Implications

• Mixed evidence on validity of substantiation
  – Fuller & Nieto study of Illinois cases 1999-2004 found that substantiated cases had a significantly higher risk of re-report
  – Kohl, Drake et al NSCAW study found that substantiation was not significantly related to re-report, substantiated re-report or foster care placement
Summary/Implications

• Current status of substantiation
  – Debate continues over value of substantiation as a gatekeeper for services and measure of maltreatment
  – The role of substantiation is likely to change with the increasing implementation of differential response system
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