Can We Trust Parental Reports of Child Care Subsidy Receipt?

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Survey-Based Parental Reports of Child Care Subsidy Receipt

Early Childhood Longitudinal Study-Kindergarten Cohort

"Did any of the following people or organizations help to pay for...this provider to care for [CHILD]...?"

"a social service agency or welfare office"

Fragile Families and Child Well-Being Study

"Does any person or agency give you money, a voucher, or a scholarship to help pay for child care?"

"a government agency"
Previous Research Using Parental Reports of Subsidy Receipt

- Subsidies on the left-hand-side (predictors studies)
  - Maternal employment (e.g., Blau & Tekin, xxxx)
  - Child care choices (e.g., Tekin, 2005)
  - Child care quality (e.g., Johnson et al., xxxx)
  - Child development (e.g., Herbst & Tekin, 2010)
  - Maternal health (e.g., Herbst & Tekin, 2011)

- Subsidies on the right-hand-side (impact studies)
Concerns Regarding Measurement Error

- Recall or memory lapses
- Stigma tied to receipt of public assistance
- Confusion with other forms of subsidized care
- Lack of awareness that child receives a "subsidy"
  - Copayment is made, thus not receiving a subsidy
  - Full cost of care is paid by the state (i.e., "free" care)
When is Measurement Error Problematic in Ordinary Least Squares Regressions?

Subsidies on the left-hand-side (predictors studies)

- Measurement error is unobserved (i.e., in the error term)
- No bias, unless it is correlated with the covariates
- More noise means inflated standard errors

Subsidies on the right-hand-side (impact studies)

- Measurement error is unobserved (i.e., in the error term)
- Classical errors-in-variables
- Downward bias (i.e., biased against finding a subsidy effect)
Fragile Families and Child Well-Being Study

- Subsidy utilization data collected from parents AND providers

Providers: "Is any part of [focal child's name] care paid for by government support?" and those that responded affirmatively were then asked "what local, state, or federal programs provide these funds?"

Focal child is coded as receiving a subsidy if the provider explicitly said that the CCDF directly (or indirectly through another agency) pays for child care

Mother: "Does any person or agency give you money, a voucher, or a scholarship to help pay for child care?" and those who responded affirmatively were then asked "who or what agency gives you money or the voucher or scholarship?"

Focal child is coded as receiving a subsidy if mother responded "a government agency" or "child care center"

Analysis plan:
Analysis 1: Overlap of Provider and Parental Reports of Subsidy Receipt

<table>
<thead>
<tr>
<th>Provider Report</th>
<th>Parent Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidy</td>
<td>N=104</td>
</tr>
<tr>
<td></td>
<td>N=62</td>
</tr>
<tr>
<td>No Subsidy</td>
<td>N=70</td>
</tr>
<tr>
<td></td>
<td>N=368</td>
</tr>
</tbody>
</table>

Agreement Rate: 78.1%
Analysis #2: Compare the Demographic Predictors of Subsidy Receipt

- Estimate logit regressions of the parent- and provider-based measures of subsidy receipt on a common set of family characteristics.

- Test the null hypothesis of the equality of the logit coefficients across both models.

- Key finding: the demographic determinants of subsidy receipt do not depend on the subsidy measure used.
  - Of the 20 variables in the model, coefficients on only three differed across the subsidy measures.
  - Of the three that differed (maternal education dummies), the signs on the coefficients were the same.
Analysis #3: How Similar are the "Agreers" and "Disagreeers"?

Estimate logit a regression of disagreement between the parent and provider measures of subsidy receipt on the set of family characteristics

Assumption is that disagreement is a potential source of measurement error, or noise in the data

Test whether such error is systematically related to a number of observable family characteristics

Key finding: measurement error is largely random with respect to family characteristics

Of the 20 variables in the model, coefficients on only two are related to the likelihood of parent-provide disagreement

The two that are related: number of children and another adult is present
Conclusions and Cautions

- Results from our simple tests consistently suggest that there is more signal than noise in parental reports of subsidy receipt.

- Cautions are in order: can we trust provider reports of subsidy receipt?; time differences in the data collection on parents and providers; generalizability to other datasets.

- Linked survey-admin data would be beneficial.

- Recommendation: use multiple measures.