Explaining Disparate Findings on from the Three-City and the MDRC Next Generation Studies on the Employment and Welfare Impacts on Children and Adolescents

Robert Moffitt
Johns Hopkins University

P. Lindsay Chase-Lansdale
Northwestern University

Andrew Cherlin
Johns Hopkins University

June 3, 2004
Introduction and Summary

Two recent studies of the effect of welfare reform programs and of welfare and employment transitions on children and adolescents appear to have reached contradictory conclusions. Results from randomized trials synthesized as part of the MDRC Next Generation Project (Gennetian et al., 2002; Morris et al., 2001; Morris et al., 2003) have been widely reported as having found positive effects of welfare reform on young children and negative effects on adolescents. On the other hand, a recent study from the Three-City Project (Chase-Lansdale et al., 2003a, 2003b) found no effects of employment and welfare transitions on young children and none, if not positive effects, on adolescents. See Table 1.

In fact, the two studies are not necessarily contradictory. The questions asked, samples, and outcome measures in the two studies were different, and a detailed examination of their findings reveals no necessary inconsistency.

In particular,

- The two studies asked different questions. The Next Generation Studies estimated the impact of specific welfare reform policies which were bundles of work, employment, sanction, time limit, and other policies and which could have had their effects through many pathways. The Three-City Study estimated the effect of movements into and out of employment, and on and off of welfare, regardless of whether those movements were caused by welfare reform policies or other forces.

- The Next Generation Studies found only weak evidence that increased employment per se, independent of other factors, was the cause of the negative effects on adolescents, and that those negative effects were probably either caused by some factor other than employment or some factor working in conjunction with employment; consequently, there is no contradiction with the Three-City Study, which found that employment transitions per se had little or no effect on adolescents.

- The negative effects on adolescents in the Next Generation Studies were found on school achievement, while the neutral or positive effects for adolescents in the Three-City Study were found on mental health, suggesting that adolescents may

---

1 Portions of this document were developed collaboratively with Lisa Gennetian, Greg Duncan, and Pamela Morris. Since the two groups' interpretations of the results differ somewhat, we have agreed that each group should post its own version of the synthesis. A link to the Gennetian et al. paper will be forthcoming.
have felt better about themselves while still performing more poorly in school

- The Next Generation Studies found positive effects on young children only for reforms which offered earnings supplements; earnings supplements were not offered in any of the cities in the Three-City Study

- The Next Generation Studies of preschoolers based their findings primarily on school performance of children after they had entered school, whereas the Three-City Study measured preschooler performance with cognitive tests conducted prior to school entrance

- Myriad other differences between the studies exist, including the time frames of the study, the welfare policies in place in the areas of the two studies, sample sizes, ages of the adolescents, and measures of child outcomes.

Another important difference between the studies is that the Next Generation Studies were based on randomized trials whereas the Three-City Study was based on a longitudinal comparison group design. The two methodologies have different strengths and weaknesses, but could certainly be a reason for the difference in findings. However, as we have summarized above and will discuss further below, there are many other reasons that could explain the differences in the two studies' findings without appealing to such methodological differences.

This paper discusses the differences between the studies in more detail. The goal of the paper is to assist interested parties in understanding the reasons for the apparent differences in findings. We organize our discussion into differences in (1) design issues including questions asked, sample sizes, and populations; (2) mechanisms; (3) welfare program environments and time periods; and (4) measures of child outcomes.

**Design Issues: Questions Asked, Sample Sizes, and Populations**

Table 2 summarizes the overall designs of the two studies. The Three-City and Next Generation Studies were designed to address very different questions—one about the effects of policy (Next Generation) and one about the effects of employment and welfare transitions (Three-City). The Three-City study focused directly on child and adolescent impacts of employment and welfare transitions, but because these transitions could have any number of causes (e.g., mothers' personal decisions to seek work when their child reached school age, the economy, etc.), they could be the result of factors other than policy. The Next Generation Studies focused directly on policy impacts, asking what difference did a change in welfare policy (e.g., a requirement that recipients participate in employment and training services) have on parents' employment and on their children's well being. The experiments did not provide direct estimates of whether the programs had their effects through employment or welfare transitions, and it could be that they had their effects through other channels.

Sample sizes differed across the two studies substantially. The power to detect small
effects was stronger in the Next Generation Studies. However, it is difficult to compare sample sizes for the same age ranges in the two studies because the data were not grouped in the same way by age. As shown in Table 2, the Three-City Study involved 563 preschool children, outcomes measured at ages 3.5-5.5, 83 of whom had mothers who moved into employment and 83 of whom had mothers who moved off welfare. Their adolescent sample, age 11.5-15.5 at time of measurement, numbered 895, 132 of whom had mothers who moved into employment and 102 of whom had mothers who moved off welfare. The number of young children in the Next Generation Studies was 8,733 in one study, but including children 5-12; it is not known how many were in the 3.5-5.5 range, but probably very few. The comparable figures to the number of transitions for the Three-City Study just mentioned would be the relative number of experimentals and controls in the 3.5-5.5 age range in the Next Generation Studies, but these figures are not available. One study of adolescents in the Next Generation Studies had 6,569 children 12-18, but this is again broader than the Three-City age range, and it is not known how many experimentals and controls were in the age range 11.5-15.5. Another Next Generation study by Morris et al. (2003) reported sample sizes for narrower age ranges, but only by age at baseline; the outcomes were measured 2-5 years afterwards. In addition, the study reported the number of child observations, not the number of children; the two differ because there were multiple observations per child (for the overall sample, the sample size was reduced by about one-fourth to adjust for this difference). Thus, for example, the sample of children 0-1 at baseline, which is the most comparable age group to the Three-City Study prescolier sample given the Next Generation Study lag in measurement, contained 1,803 child measurement observations, suggesting about 1,353 child observations; about 60 percent of these may have been experimentals. The number of adolescent measurement observations in the ranges 10-11 at baseline was 2,558, which suggests about 1,919 adolescent observations; again, the best estimate is that 60 percent of these were experimentals.

The Three-City Study drew its sample to be representative of low-income families living in low-income neighborhoods in three U.S. cities – Boston, San Antonio and Chicago. Next Generation study samples encompass a much larger number of communities in 8 states and two provinces in Canada. The representative nature of the Three-City study sample provides observations of low income mothers both off welfare and on, and employed and not employed. In fact, only about 38% of mothers in the Three-City study were receiving welfare at the 1999 baseline. This design provides a broad look at families making welfare and employment transitions in sampled neighborhoods. In contrast, the policy focus of the Next Generation Studies produced samples of families which, for the most part, included only children whose families were on welfare initially, or who had applied for welfare.

Although about 40% of Next Generation families had worked in the year prior to their participation in the experiments, they are much more likely to have been long-term welfare recipients than families in the Three-City Study. Other noteworthy sample differences are that

---

2 Footnote 26 in the online version of Chase-Lansdale et al. (2003a) incorrectly stated that the number who moved into employment was 32.
3 The New Hope Study is the only exception, since the New Hope program was available to all individuals and families who met the income requirement and lived in designated neighborhoods.
4 Morris et al. (2003) tested for whether child impacts differed by length of time on AFDC at baseline and for
the Three-City Study had a much larger fraction of Hispanics (48% vs. 11%) and married parents (27% vs. 2%).

Mechanisms and Pathways

The Three-City Study provides rich information on the ways in which the employment and welfare transitions may have affected adolescents. Family processes are not as well measured in Next Generation Studies because of lesser data collection on this topic and because experiments are not designed to directly measure such impacts, although they do provide some circumstantial evidence on why program impacts occurred in the way that they did.

In the Next Generation Studies, employment and welfare transitions were two possible pathways, or mechanisms, out of many, by which effects of welfare reform policies could have occurred. In the Three-City Study, the effect of employment and welfare transitions was directly studied. The initial issue is, therefore, whether the significant impacts found in the Next Generation Studies worked through employment and welfare transitions in a way that is inconsistent or consistent with the Three-City Study findings.

The Next Generation Studies did not examine welfare transitions as a possible pathway of effect, so no comparison can be made on that dimension. For employment, the Next Generation Studies found that employment per se did not appear to be a pathway for the effects on young children but might have had an effect for adolescents. However, the latter finding is based on the fact that virtually all programs increased employment and most had negative impacts on adolescents, which is not strong evidence because some other factor could have been the mechanism as well and employment may not have been the main factor. In addition, the Next Generation Studies found that the magnitude and presence of adolescent impacts did not covary consistently with the size of the employment impact. The conclusion that employment per se was not likely to be the main pathway for the Next Generation Studies effects removes any inconsistency between it and the Three-City Study, which also found no impacts of employment transitions per se on child outcomes.

Family Income. While employment and earnings increased in nearly all Next Generation programs, only the programs with earnings supplements boosted total family income. In the other programs, earnings increases were offset by drops in welfare income, leaving total income largely unaffected. And it was precisely in the earnings supplement programs where the gains for preschoolers were concentrated. Thus, it appears from Next Generation studies that increased family income played a role in boosting achievement for younger children. In the Three-City Study, income increased dramatically for those moving into employment (but not a great deal for those who left welfare). However, the magnitude of the income improvement was not correlated with the magnitude of the changes in child outcomes. The seemingly differing results for the role of income increases in promoting the well-being of younger children is one of the

whether the mother worked in the year prior to baseline and found no significant interactions
most puzzling differences between the studies. It may be that it was increases in unearned income that were behind the Next Generation Studies findings, or that earnings supplement programs have effects through some other pathway as yet undetected. Alternatively, the differences may be due to the differences in the decisions parents made subsequent to work transitions, in the income change they experienced as a result of those transitions, or in the sample, design, and populations studied that differed markedly between the two studies.

Income increases were apparently not helpful for older children in the Next Generation studies, since negative adolescent impacts were as apparent in programs that boosted total income as in programs that did not. Thus there is no inconsistency between the studies for this group.

Other pathways. The Three-City Study examined whether time use could have been an intervening variable in explaining the effect of employment transitions on children. For adolescents, mothers reported that their increased employment had taken them away from their children, but that they had simultaneously cut back on personal uses of time to make up for this, with the result that the total time they spent with their adolescent children did not materially change. For preschoolers, on the other hand, the total time spent by mothers with young children went down because the increased work time was not made up. This suggests that this might have been the reason for the greater evidence of positive effects among adolescents resulting from increased employment, as compared to preschoolers.

The Next Generation Studies did not collect time use data but did have information in a few studies on whether adolescents increased their after-school activities, with the expectation that such activities might be hoped to increase to compensate for mother's additional time at work. No increases were found, suggesting that adolescents might have been monitored less (the direct time use evidence from the Three-City Study suggests that this was not the case, however).

The Next Generation Study examined whether the welfare reform and work programs might have led adolescents to spend more time caring for their young siblings because their mothers had gone to work, which might interfere with their ability to get to school on time, do homework, or have effects in other ways that lead to detrimental schooling effects. It found that negative effects were indeed greater for those adolescents who had younger siblings than for those who did not.

The Next Generation Study of adolescents also examined a variety of other possible mechanisms, including changes in family structure, geographic mobility and neighborhood quality, and parenting. The evidence was too fragmentary to be anything other than suggestive; increases in harsh parenting were raised as one possible mechanism. The Next Generation study of young children did not direct much attention to explanatory mechanisms, but noted that child care, participation in after-school activities, marriage, reduced domestic abuse, parental emotional well-being were correlated with positive child outcomes in some cases, but not consistently across studies. The study also found no evidence of parenting as a mechanism. Finally, the Three-City Study examined self-esteem of mothers and found that it increased when
mothers went to work, possibly contributing to the few positive effects of employment on adolescents found in that study.

Welfare Programs and Environments

Differences in the welfare programs tested in the Next Generation and Three-City studies are summarized in Table 3. The welfare programs in the Three-City study cities during the 1999-2001 study period had all of the time limits, work requirements, sanctions, and, in some cases, diversion policies mandated or allowed by the 1996 legislation and implemented in the three particular cities. But while the particular package of reforms differed between the three cities, it was not possible to attribute differing child outcomes to city-specific differences in welfare programs.

All of the Next Generation Study programs were developed prior to the 1996 legislation. In some cases, these were in response to the 1988 Family Support Act; in others they were tests that states chose to perform prior to 1996 in anticipation of the welfare reform law changes. Almost all had mandatory employment services. Because time limits were present in only a few pre-PRWORA waiver states, only two of the Next Generation programs had time limits. A number of the Next Generation studies had welfare-reform-type earnings supplements, although in several cases the generosity of the supplements exceeded that of post-PRWORA programs in general and those in the Three-City Study in particular.

The diversity of the programs implemented in Next Generation studies provides the opportunity to test whether child outcomes differed by program type. For example, the positive effects for young children in the Next Generation studies were not found in programs with time limits and were only found in those with earnings supplements (Table 1; Morris et al., 2001; Morris et al., 2003). That the Three-City Study areas all had time limits and none had earnings supplements may resolve some of the difference in the two studies' findings for young children. But the Next Generation Study found that the negative adolescent effects were not consistently related to any program characteristic, suggesting that the absence of time limits and the presence of earnings supplements may not explain the difference in findings for that group of children. These conclusions have to be tempered by the recognition that the Next Generation programs were not randomly assigned across the entire range of program types or across areas, and therefore the linkage between program type and outcomes is non-experimental and subject to qualification.

Measures of Child Outcomes

As shown in Table 4, the two studies differed substantially in the child outcomes examined and the ages of the children at time of measurement, which may explain some of the variation in findings. The Three-City Study collected high-quality measures of child test scores, behavior, and mental health for two age ranges. The Next Generation Studies samples spanned the entire 0-15 age range but child outcomes for the older children were of lower quality and
mostly limited to achievement measures. Most of the positive adolescent impacts observed in the Three-City studies were for anxiety and depression, which were not measured in any of the Next Generation Studies.

The Three-City Study collected quite comprehensive information from children who were between the ages of 2-4 in 1999 and from adolescents who were between 10 and 14 in 1999. The Next Generation Studies collected fairly comprehensive information about younger and early-middle childhood children (who were typically elementary school-aged during the assessment periods), but only more limited information about adolescents. Further, the estimates from the Next Generation Studies for achievement did not separate out those based on school performance after preschoolers had entered school from preschool test scores, and only the latter are comparable to the Three-City Study measures. For adolescents, the Three-City Study collected a range of cognitive, behavioral, and psychological well-being measures, reported both by mothers and adolescents, whereas the Next Generation Study only collected parental reports of schooling outcomes (performance, grade repetition, dropout, etc).

Differences in measured outcomes are key for explaining the differing adolescent findings in the two studies. Adolescent improvements associated with transitions into employment and off of welfare in the Three-City study were most consistent for mental health measures (depression and anxiety). These outcomes were not measured in any of the Next Generation studies. It is possible that adolescents may experience positive effects with regard to their mental health-related outcomes, feeling positive about their increased responsibilities as parents move to work, but still be performing more poorly in school.
References


# Table 1

Three-City and MDRC Next Generation Results: Summary of Effects on Child Outcomes, by Age of Child

<table>
<thead>
<tr>
<th>Age at baseline</th>
<th>Three-City Study</th>
<th>MDRC Next Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants</td>
<td>Not studied</td>
<td>Generally neutral</td>
</tr>
<tr>
<td>Preschoolers</td>
<td>No effects of mothers' employment or welfare transitions prior to entering school</td>
<td>Positive impacts on some mix of school achievement and preschool test scores of work and welfare reform programs that offered earnings supplements; no effects for other programs</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Not studied</td>
<td>Few effects of any welfare reform or work programs</td>
</tr>
<tr>
<td>Adolescents</td>
<td>No effects of maternal employment and welfare transitions on most outcomes; transitions into employment sometimes improved adolescents' mental health</td>
<td>Welfare reform and work programs often produced unfavorable effects on schooling outcomes; mental health outcomes were not measured</td>
</tr>
</tbody>
</table>

Sources: Chase-Lansdale et al. (2003), Morris et al. (2001), Gennetian et al. (2002); Morris et al. (2003).

Note: In the Three-City study, “preschoolers” were ages 2-4 in 1999; “adolescents” were ages 10 to 14 in 1999. For the purposes of this table, Next Generation ranges of ages at baseline were: 0-1 for “infants”, 2-5 for “preschoolers”, 6-11 for “elementary school”, and 11-15 for adolescents.
Table 2

Comparison of Questions Asked and Methods Used in Three-City and Next Generation Studies

<table>
<thead>
<tr>
<th></th>
<th>Three-City Study</th>
<th>Next Generation Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions Asked</td>
<td>The effect of maternal transitions onto or off of welfare or into or out of employment between 1999 and 2001</td>
<td>The effect of various welfare and work programs developed prior to the 1996 welfare reform legislation</td>
</tr>
<tr>
<td>Relationship to Policy</td>
<td>Estimation of impacts of employment and welfare transitions without attribution to specific welfare or other policies</td>
<td>Evidence on impacts of welfare and work policies, but at best circumstantial evidence on role played by employment and welfare transitions and other changes</td>
</tr>
<tr>
<td>Study Design</td>
<td>Longitudinal survey design, comparing changes over a 16-month period in child outcomes for mothers making and not making transitions</td>
<td>Random assignment design, comparing outcomes of children in experimental and control groups 2-5 years after random assignment</td>
</tr>
<tr>
<td>Analytic Method</td>
<td>Regression analysis of the effect of maternal welfare and employment transitions on child outcomes, controlling for child and maternal characteristics</td>
<td>Regression-adjusted comparisons of post-random-assignment outcomes between children in experimental and control group</td>
</tr>
<tr>
<td>Sample sizes</td>
<td>Preschoolers 3.5-5.5: 564 Adolescents 11.5-15.5: 895</td>
<td>Young Children 5-12: 8733 (Morris et al., 2001) Adolescents 12-18: 6569 (Gennetian et al., 2002) Young Children 0-1: less than 1,803 (Morris et al., 2003) Young Children 2-3: less than 9,021 (Morris et al., 2003) Adolescents 10-11: less than 2,558 (Morris et al., 2003) Adolescents 12-13: less than 1,498 (Morris et al., 2003) All ages 0-15 (Morris et al., 2003): 25,828</td>
</tr>
<tr>
<td>Populations</td>
<td>Children in sampled low-income families and neighborhoods in three U.S. cities; mothers were both on and off welfare and employed and not employed at baseline</td>
<td>Children living in nine states and two Canadian provinces, but in most cases, mothers were either on welfare or applying for welfare at point of random assignment but nearly half were working or had worked recently</td>
</tr>
<tr>
<td>Specific Transitions</td>
<td>All transitions onto welfare and off of welfare and into employment and out of employment except those involving on-welfare-employed, which were excluded</td>
<td>All transitions into and out of employment captured for women staying on or leaving welfare; most transitions onto welfare excluded</td>
</tr>
</tbody>
</table>

Sources: see Table 1.
### Table 3

**Welfare Programs and Welfare Environments in the Three-City Study and Next Generation Study**

<table>
<thead>
<tr>
<th></th>
<th>Three-City Study</th>
<th>Next Generation Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Areas</strong></td>
<td>Three U.S. cities (Boston, Chicago, San Antonio)</td>
<td>8 U.S. states, and 2 Canadian provinces</td>
</tr>
<tr>
<td><strong>Types of program characteristics</strong></td>
<td>All three cities had work requirements, time limits, and sanctions, although varying in degree; one had an official diversion policy</td>
<td>Experimental groups faced either mandatory employment services, earnings supplements, or time limiting welfare, and sometimes more than one of these. Control group in U.S. sites continued with AFDC rules for at least several years.</td>
</tr>
<tr>
<td><strong>Time Period</strong></td>
<td>1999-2001</td>
<td>Random assignment in U.S. sites occurred as early as 1991 and as late as 1999, with child outcomes measured as early as 1993 and as late as 1998; Canadian study randomized in 1992 and followed up in 1995</td>
</tr>
</tbody>
</table>

Sources: see Table 1.


<table>
<thead>
<tr>
<th>Child Outcomes</th>
<th>Three City Study</th>
<th>Next Generation Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preschoolers</td>
<td>Adolescents</td>
</tr>
<tr>
<td>Schooling</td>
<td>Not studied</td>
<td>Not studied</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Test scores measured prior to entering school</td>
<td>Test scores</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Internalizing and externalizing behavior</td>
<td>Internalizing and externalizing behavior; delinquency and drug abuse</td>
</tr>
<tr>
<td>Physical Health</td>
<td>Not studied</td>
<td>Not studied</td>
</tr>
<tr>
<td>Mental health</td>
<td>Not studied</td>
<td>Psychological distress (anxiety, depression, somatization)</td>
</tr>
</tbody>
</table>

Sources: see Table 1.
The preschoolers in the Three-City Study were between the ages 3.5 and 5.5 at the time of measurement, whereas most of the Next Generation measures for preschoolers were after they had entered elementary school. The adolescents in the Three-City Study were between the ages 11.5 and 15.5, whereas those in the Next Generation Studies were between the ages 12 and 18 at the time of measurement.
\(^a\) Achievement includes parent and teacher reports of school achievement, and some preschool test scores
\(^b\) Estimates of effects on internalizing behavior have not been published.