



Does the Loss of Welfare Income Increase the Risk of Involvement with the Child Welfare System?

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This analysis is based on administrative, survey, and qualitative data from a study of welfare recipients in the Chicago metropolitan area. A relationship between welfare income reductions and child welfare risk is tested, and employment is found to moderate this relationship. Respondents who lacked employment income when their welfare grants were substantially reduced faced greater odds of child welfare system involvement than those with intact grants and those with employment income, controlling for various child welfare risk factors. This relationship is also partially mediated by environmental hardships such as food, housing, and utility service problems. Other stressful life events slightly compounded child welfare risk when combined with welfare grant reductions. In light of these findings, a discussion is offered on the potential impact of welfare reform policies on child welfare systems.

Numerous studies document a relationship between welfare use and child welfare risk (Bath & Haapala, 1993; Gil, 1970; Jones & McCurdy, 1992; Russell & Trainor, 1984). According to Pelton (1994, p. 167), close to half of all iden-

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tified incidents of child maltreatment occur in families receiving welfare and "the great majority" of these families have received welfare at some point. In the state of Illinois, over 40 percent of the children placed in foster care each month come from families who received welfare in the same month and an additional 20% come from families who received welfare or food stamps in the recent past (Shook, 1998). By comparison, 15% of the children under 18 years old in Illinois are beneficiaries of welfare (Committee on Ways and Means, 1993). The fact that an association between welfare use and child welfare system involvement exists warrants an exploration of how changes in one system affect the risk of involvement with the other. This becomes all the more necessary in the wake of large-scale reforms of federal and state welfare policies.

Since the central components of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) are related to mandatory work requirements and time limits on welfare assistance, a portion of families receiving welfare will lose some or all of their welfare benefits in the near future. An attempt is made in this study to isolate the effect of welfare income declines from the effects of other commonly-identified risk factors on child welfare system involvement, in order to better understand how recent changes in welfare policy may affect the child welfare system.

Economic Hardship and Child Welfare Risk

Three processes are hypothesized to explain a relationship between welfare income loss and child welfare risk. Psychosocial theories of economic hardship and parenting predict that financial strain leads to heightened feelings of stress and depression, or lower feelings of life satisfaction, self-efficacy and self-esteem, which in turn diminish the quality of care that a parent provides (Conger, Ge, Elder Jr., Lorenz, & Simons, 1994; Elder, Jr., Eccles, Ardelet, & Lord, 1995; Elder, Jr., Nguyen, & Caspi, 1985; McLoyd, 1990; McLoyd, Jayaratne, Ceballo, & Borquez, 1994; Simons, Beaman, Conger, & Chao, 1993; Voydanoff & Donnelly, 1988; Voydanoff, 1990). Within this framework, declines in the quality of parenting are conceptualized as changes in the nature of parent-child interactions (e.g., an increased reliance on physical punishment or a withdrawal from caregiving responsibilities).

Welfare income losses may also produce a general deterioration in the home environment if families are left without adequate resources for basic necessities. Families who experience difficulties with utility assistance, food shortages, and housing may face an increased likelihood of child welfare in-

tervention because these factors, in and of themselves, present a risk to child well-being. Studies show that the quality of the home environment deteriorates as family income declines (Garrett, Ng'andu, & Ferron, 1994; Miller & Davis 1997), and families who are identified for child maltreatment experience more intense poverty and greater material deprivation than non-maltreating families (Giovannoni & Billingsley, 1970; Wolock & Horowitz, 1979). However, the role of inadequate resources as a precipitating factor in child welfare system involvement has not been effectively demonstrated.

A third possibility is that the occurrence of multiple stressful events, such as income loss, heightens child welfare risk, rather than economic pressures per se. Research suggests that negative, stress-producing events are more common among families identified for maltreatment (Whipple & Webster-Stratton, 1991), and also among families experiencing economic distress (Simons, Beaman, Conger, & Chao, 1993). Income loss may be just one of many life stressors that negatively affect parenting, particularly when combined with other stressors within a short period of time. Barth & Blythe (1983) describe the life change model, which posits that a series of life crises can lead to heightened stress, which in turn leads to child maltreatment. In this model, the important risk factor is change or instability, although Barth and Blythe caution that certain individual characteristics may predispose families to disruptive events.

In the present study, an attempt is made to test whether (1) income losses stemming from welfare grant reductions are associated with child welfare risk; (2) this relationship is moderated by the availability of employment income; (3) this relationship is mediated by worsened environmental conditions (e.g. food shortages, utility shut-offs, and housing problems), and (4) this relationship is moderated by the occurrence of other stressful life events. Although the study design precludes a test of psychosocial explanations for child welfare system involvement, the issues relevant to this theoretical framework will be addressed.

Administrative Systems and Child Welfare Risk

The theoretical models outlined above address the roles of various individual, social, and environmental characteristics in the relationship between economic hardship and child welfare risk. However, in order to apply these models to the present study, it is important to understand how public aid and child welfare administrative systems may affect the hypothesized relationship.

Welfare income losses can occur for a number of reasons. They are sometimes applied in the form of a sanction, defined as a partial welfare grant reduction related to client "non-cooperation" with administrative requirements. Reductions in the welfare grant can also occur when the number of eligible children changes or a recipient's earnings from employment changes. Previous research has demonstrated that grant reductions are sometimes made in error (Brodkin, 1986), and that sanctions are related, in part, to organizational characteristics (Hasenfeld & Weaver, 1996). As a result, the personal characteristics and circumstances of recipients do not always relate to the reasons such reductions are implemented.

The relationship between economic hardship and child welfare risk also depends on whether child welfare systems are reactive to risk factors that stem from material deprivation. Current perspectives in child welfare adhere to the belief (in both rhetoric and in law) that children should not be removed from their parents for "reasons of poverty alone." Indeed, the original mothers' pension and state welfare programs were created, in part, to prevent this from happening. In the absence of a guaranteed base of income from welfare, however, this issue is likely to be revisited in the next several years. States will need to consider whether families are capable of caring for their minor aged children when they have insufficient income, and this decision will need to be made at both the front-end (i.e., child protection investigations) and the back-end (i.e., "return home" decisions) of child welfare systems. Since the ability of child welfare systems to respond to any increased child welfare risks stemming from welfare reform partially depends on issues of system capacity and fiscal resources, the results from the present study are not necessarily indicative of future changes in child welfare caseloads. However, the findings reported here are likely to raise questions regarding child and family well-being for families who are sanctioned or who reach welfare time limits.

Method

Data Sources and Sample Selection

Sixteen consecutive months of cross-sectional public aid data from the state of Illinois were used to construct a longitudinal database beginning in late 1995 and ending in 1996. For each month, the amount and sanction status of the welfare grant is known. Prior to sample selection, the public aid data

were linked to the administrative data of the state child welfare system.¹ Information on the earliest contact with the child welfare system during the study period, as well as previous involvement ending prior to the study period, was known for each sample member. The type of child welfare system involvement (i.e., indicated report, intact family case, or substitute care placement) and the allegations of maltreatment associated with any involvement were included in the available data.

A random sample of 706 single-parent Aid to Families with Dependent Children (AFDC) cases² was drawn from a sampling frame consisting of families in the Chicago metropolitan area who were receiving a welfare grant in October, November, or December, 1995, and who had been receiving their full grant for at least three months.³

The sample was stratified according to (1) whether the family received an AFDC grant sanction in October, November, or December, 1995 and (2) whether the family became involved with the child welfare system within one year of this time period. Sanctions are defined as grant reductions imposed for "non-cooperation" with child support enforcement or with work and training requirements of the public aid system. During the period of this study (i.e., 1995 and 1996), formal welfare sanctions were imposed on only the caregiver's portion of the AFDC grant in Illinois and, in some instances, her

¹The administrative data linking was accomplished with a probabilistic matching process. This process makes use of various pieces of identifying information and combinations of identifiers to assess the likelihood that two clients from separate data systems are, in fact, the same person. Based on the probabilistic record-linkage method (Jaro, 1989; Newcombe, 1988), the estimated rate of Type I errors (i.e., the probability of making a match when there is no match) is less than 1%. The Type II error rate (i.e., the probability of missing a match when there should be a match) is not problematic for this study, since families who were known to become involved in the child welfare system during the study period were intentionally over-sampled, and the annual incidence of child welfare system involvement in the Cook County welfare population is less than 5%.

²The period of observation defined for this study pre-dates the implementation of Temporary Assistance to Needy Families (TANF), the federal welfare program under PRWORA. The acronym AFDC is, therefore, used in place of TANF unless I am specifically referring to the latter welfare program.

³This latter criterion was used because one of the stratification variables used for sample selection is related to the sanction status of the AFDC case as of the sampling month. Sanctions are sometimes imposed at the point that a case is opened or soon thereafter. In such cases, the sanction may not represent an AFDC income loss, but rather an initial grant amount that is less than the eligibility level. By requiring that all families had been receiving a full AFDC grant for at least three months, it was more likely that a sanction did, in fact, represent a welfare income decline. Sixteen months of information related to the grant status of each sample member was, therefore, used to construct 13-month accounts of welfare receipt.

Medicaid coverage if a recipient was unable to demonstrate a "good cause" exemption from state program requirements.

Reductions in the AFDC grant amount can occur for other reasons, as well, such as when the number of eligible children in the home changes or when a recipient's earnings from employment change leading to increases or decreases in the AFDC amount she is eligible to receive. Although other grant reductions may not be administratively defined as sanctions, they may stem from similar circumstances. That is, grant reductions can occur when recipients miss scheduled appointments for redetermining their benefits, when they fail to bring required forms and documents to their public aid workers, and when other required procedures are violated. It should be reiterated that sanctions and other reductions may also result from administrative error. In the analyses, sanctions and other types of grant reductions are combined into one measure of welfare income reductions, however sample weights are used to adjust for the over-sampling of cases that were formally sanctioned in the original sampling month.

Child welfare system involvement is defined as an indicated child maltreatment report or a child welfare case opening. Child welfare cases can involve "intact families" (i.e., when families receive services to alleviate risks associated with child maltreatment), or substitute care placements (i.e., when one or more children are removed from parental custody and placed in state-supervised living arrangements). It should be noted that not all indicated maltreatment reports result in a child welfare case opening. Of the 344 families who experienced child welfare system involvement in the selected sample, 32% received an indicated allegation in the absence of a case opening, 41% had an intact family case opening, and 27% had at least one child placed in substitute care. Within this same group of families ($N=344$), 27.6% received an indicated allegation of "risk of harm," 25.6% received a "lack of supervision" allegation, 14.8% were indicated for physical abuse, 11.9% received an environmental neglect allegation (e.g., inadequate food, shelter, or clothing), and 8.7% received an indicated allegation for some other form of neglect.⁴

⁴The allegation categories are not mutually exclusive. Families can be indicated for more than one form of maltreatment. Slightly over one quarter of the child welfare-involved families did not have an indicated allegation associated with their case. This can occur if children are placed in substitute care for reasons of "dependency" (e.g., they lack an adult caregiver), however it is likely that the allegation information is missing for some families.

Table 1
Survey Sample Cells

Group A (<i>N</i>=175) No AFDC sanction in sampling month and no child welfare system involvement within one year	Group B (<i>N</i>=175) No AFDC sanction in sampling month and had child welfare system involvement within one year
Group C (<i>N</i>=175) Received an AFDC sanction in sampling month and no child welfare system involvement within one year	Group D (<i>N</i>=175) Received an AFDC sanction in sampling month and had child welfare system involvement within one year

This sampling strategy resulted in a two-by-two design, with approximately 175 families represented in each of the four sample cells. Table 1 below describes the four sample cells:

In the population from which the sample was selected, 4.4% of the recipients had an indicated child maltreatment report or a child welfare case opening associated with their families over the course of one year. The incidence of sanctioning in the months from which the sample was selected was 2.6%, however this percentage includes only those sanctions related to work and training requirements or to paternity establishment imposed after three consecutive months of full-grant receipt. It excludes cases in which there was an existing sanction, in which a sanction was imposed shortly after a new case opening, or in which the grant was not reduced.⁵ Sanctions were used only as a proxy for welfare income loss in order to ensure that enough families in the sample had experienced a decline in welfare income. Information on the AFDC grant amounts for each month of the study observation period was later incorporated in the data used for the analyses.

Because the incidence of both sanctioning and child welfare system involvement was so low in the sampling frame, groups B, C, and D were greatly

⁵This can occur when a recipient is able to get the sanction immediately removed, or when the sanction is appealed (in which case, the grant cannot be reduced until the appeal process is completed).

over-sampled. The proportion of the AFDC population represented by each of the above sample cells is: Group A (93.1%); Group B (4.2%); Group C (2.4%); and Group D (0.3%). Since the four sample cells contained an equal number of sample members, weights are used in several of the analyses to "correct" for the disproportionate number of sample members in groups B, C, and D. When these weights are used, the reported statistics more accurately reflect the population from which the sample was drawn.

Survey Interviews

Letters explaining the study were sent to sample members with information for contacting the principal investigator (i.e., a toll-free number to reach the project's staff as well as stamped envelopes and "consent cards" which sample members could return to the project if they were interested in participating). Sample members were told that participation was voluntary, and that their involvement would be kept strictly confidential. They were also told that they would be compensated \$20.00 for participating. Addresses were updated once during the study period, and a maximum of four letters were sent out to sample members over a three-month period.

The survey was conducted in respondents' homes or, at the request of a respondent, in a neighborhood restaurant. The survey addressed topics such as family structure and living arrangements, two year employment and housing histories, parenting beliefs, instrumental support, major life events, financial hardships, domestic violence, childhood abuse, literacy, feelings of self-efficacy, and experiences with the welfare system. Information from the survey was then linked to the administrative data from the state public aid and child welfare departments with the permission of survey respondents, allowing for the construction of a longitudinal service history from both systems for each family. The resulting data set is, therefore, comprised of information reported by respondents, as well as information from administrative records.

A small number ($N=10$) of open-ended interviews were conducted with a group of welfare recipients selected from the same sampling frame as the survey sample. Although the survey instrument incorporated open-ended questions about various life experiences, it can be argued that respondents become quickly attuned to the type of information that the researcher is trying to elicit, and then constrain their answers accordingly. To address concerns about this potential bias, the 10 respondents were asked to talk about significant experiences in their lives during the past two years, and also about their experiences with the welfare system and their views and concerns about welfare reform.

Aside from these general questions, there were very few prompts to discuss specific topics. Despite the different techniques, the information learned from the survey and qualitative interviews was very similar in content. However, the quotes and viewpoints of the qualitative interview sample are used in conjunction with those of survey respondents to provide context and illustrate points in the discussion of findings.

Survey Response Rate and Potential Bias

The full sample included 706 members, however the final response rate of the survey was 25% ($N=173$). Because the administrative data contained information on all recipients for a limited number of characteristics, an analysis of several differences between respondents and non-respondents could be conducted.⁶ Table 2 presents the results for these difference of means tests.

There were no statistically significant differences between respondents and non-respondents in terms of the four sample cells. However, sample members who were interviewed were slightly more likely to have experienced child welfare system involvement ($p<.12$), and they were more likely to have had a previous child welfare case that was closed prior to the study period than non-respondents ($p<.10$).

While very few differences between these two groups emerged overall, differences that did emerge help shed light on potential sample biases. Respondents were significantly less likely to have had one or more months without an AFDC grant during the study period than non-respondents (22.0% vs. 33.0%), and nearly half as likely to be without an AFDC grant during the final month of the study observation period (13.3% vs. 25.5%). Respondents were slightly more likely to be black and to live within Chicago city limits than non-respondents, and they were much less likely to have one or more of the study's letters returned due to incorrect address information.

Several of these differences indicate that survey respondents are likely to represent individuals who face greater difficulties in the welfare-leaving process. They were more likely to still be receiving AFDC at the end of the study period, and they were more likely to have their current addresses known by the public aid system when the sample was selected in early 1997.

⁶ In this and other analyses with the full sample ($N=706$), all identifying information was removed from the data sets that were used.

Table 2
Difference of Means and Proportions by Respondent Status

	Respon- dents (N=173) Mean (SD)	Non- Respon- dents (N=533) Mean (SD)	T-statistic ¹
Stratification groups			
No sanction/No child welfare	.231 (.423)	.261 (.440)	.792
No Sanction/Child welfare	.272 (.446)	.220 (.414)	-1.359
Sanction/No child welfare	.225 (.419)	.270 (.445)	1.20
Sanction/Child welfare	.272 (.446)	.250 (.433)	-.571
AFDC grant variables			
Received AFDC < 5 years	.509 (.501)	.501 (.501)	-.176
Number of AFDC grant reductions	1.190 (1.04)	1.20 (1.16)	.127
Grant ever reduced < \$75	.173 (.380)	.141 (.348)	-1.004
Grant ever reduced > \$75	.671 (.471)	.719 (.450)	1.178
Number of months without AFDC grant	.280 (.630)	.350 (.550)	1.333
At least one month without AFDC grant	.220 (.415)	.330 (.470)	2.942***
No AFDC grant in last month of study period (12/96)	.133 (.341)	.255 (.436)	3.813***
Child welfare variables			
Child welfare case closed prior to study period	.451 (.499)	.368 (.483)	-1.919*
Substitute care placement during study period	.140 (.350)	.130 (.340)	-.493
Intact family case during study period	.240 (.430)	.190 (.390)	-1.446
Indicated maltreatment allegation with no case opening during study period	.160 (.370)	.150 (.360)	-.308
Demographic variables			
(Race or ethnicity of grantee):			
-Black	.815 (.389)	.734 (.443)	-2.309**
-White	.064 (.245)	.083 (.276)	.858
-Hispanic	.087 (.282)	.116 (.321)	1.158
Age of grantee: over 34	.116 (.321)	.105 (.307)	-.380
Number of children	2.780 (1.65)	2.97 (1.78)	1.302
Chicago (vs. suburbs)	.890 (.314)	.779 (.416)	-3.734***
Letter returned due to incorrect address information	.081 (.274)	.248	5.960***

¹Equal variances not assumed.

*** $p < .01$; ** $p < .05$; * $p < .10$.

Although they were just as likely as non-respondents to experience grant reductions of any amount, multivariate analyses (not shown) indicate that substantial grant reductions experienced within the past three months increase the odds of child welfare system involvement among only the respondent group (odds ratio 2.60, $p < .01$), controlling for various demographic and case characteristics as well as recent grant increases. Substantial grant reductions had virtually no relationship with child welfare risk among the non-respondent group. One interpretation is that the relationship between welfare income loss and child welfare risk may apply mainly to individuals who are more entrenched in the welfare system. This should be kept in mind as the analyses predicting child welfare system involvement among the survey respondent group are presented.

Confidentiality Issues

Since these systems contain sensitive information that is tied to the benefits of recipients, survey respondents were asked for their permission to access this information. Of the 173 respondents interviewed, 13 chose not to consent to the administrative data linking. This subset of interviewees was asked supplementary questions about involvement with the child welfare system during the past two years. In the analyses predicting child welfare system involvement, these 13 individuals are included in the sample, but the self-reported information on child welfare system involvement is used in place of information from the administrative data.⁷

Measures

The control variables used for the survey analyses can be broken down into three broad categories. The first category of control variables used in the survey analyses involves various income-related factors. Within this category, measures of welfare income, monthly income level, other income sources,

⁷Dummy variables for "missing" information on welfare grant indicators were created to complement each independent variable derived from the administrative data for the non-consenting individuals. For example, the indicator that captured declines in welfare assistance was coded as "0" for these 13 individuals, but they received a "1" for a dummy variable indicating "missing" welfare grant information. This strategy removes the 13 individuals from the intercept term when the effects of grant-related factors on child welfare system involvement are estimated, but allows them to remain in the analysis while simultaneously testing for differences between them and the remainder of the sample.

stressful life events (i.e., potential sources of income strain), and environmental hardships are all included. Measures of welfare income include grant reductions of greater than \$75⁸ and grant increases of similar magnitude. Employment is a dummy variable measured in monthly intervals as paid informal or formal work of at least 20 hours per week, for one or more weeks in a month. The welfare income and employment status measures are time-varying predictors in the analyses. Four dummy variables capturing the interaction between welfare income declines and employment are used in the analyses, with the omitted category representing the "intact welfare grant/no employment" group. Additional income-related variables include the base monthly income as of the sampling month (measured as a percentage of the poverty line for a family of the relevant size) and a dummy variable for financial support from family or friends (which is assigned a "1" if the respondent indicated that she did not receive more than \$50 from any family member or friend at any time during the study period).

Four life events, aside from grant reductions, are measured as monthly time-varying dummy variables. These include housing moves, births, major household expenses (which is assigned a "1" if the respondent indicated that "a major appliance or a car broke down and had to be fixed" in a given month), and serious illnesses or accidents involving a household member (which is assigned a "1" if the respondent indicated that "someone had a very serious accident and got hurt" or "someone got very sick and required a lot more care than normal" in a given month).

Finally, a time-varying indicator of whether the respondent experienced environmental hardship in the form of an eviction threat, a food shortage, or a utility shut-off in a given month is included as an income-related factor in the statistical models.

The second category of control variables is comprised of demographic controls and case characteristics, including the age of the welfare grantee, her education level, her race or ethnicity, the number of children associated with her welfare grant, the cumulative number of years she has received welfare as the head of a grant, and whether her family was involved with the child wel-

⁸ This amount was determined during pilot tests ($N=10$) of the survey instrument. Respondents were asked how likely it was that they would remember an income loss of \$50 or more versus an income loss of \$100 or more 12 months later. Approximately half of the respondents from the pilot interviews reported that they would be likely to remember a \$50 loss, while all of the respondents indicated that they would be likely to remember a \$100 loss. The midpoint of these two amounts was used in this study to represent a "substantial" welfare income reduction.

fare system as part of an intact or placement case that was closed prior to the study observation period. Each of these variables is measured as of the sampling month from which the respondent was selected. An additional control for time is incorporated, measuring the number of months since the sample selection month.

The third category of control variables is comprised of measures of characteristics and life circumstances that have been commonly identified as child welfare risk factors in the literature (Browne & Saqi, 1988; Gelles, 1992; Jones & McCurdy, 1992; Kaufman & Zigler, 1989; Kelley, 1992; Simons, Beamin, Conger, & Chao, 1993; Testa, 1992; U.S. Department of Health and Human Services, 1993; Whipple & Webster-Stratton, 1991; Wolock & Horowitz, 1979; Wolock & Magura, 1996; Zuravin & DiBlasio, 1992; Zuravin & Greif, 1989). These measures include whether the respondent was using alcohol or drugs frequently (i.e., "a few times a week" or "almost every day" for illicit drugs, or "almost every day" for alcohol) in the last few months of 1995; whether she reports being physically or emotionally abused by a partner at some time during the past two years (as of the interview date); whether she reports being physically punished or abused (e.g., spanked very hard, hit, slapped, whipped, punched, shoved, shaken, or kicked "several times" or "a lot of times") by a parent during childhood; whether she reports that her health is fair, poor, or very poor compared to others her own age (as of the interview date); whether she reports that any of her children "had any health problems that required frequent attention from a medical professional (including emergency room visits) or that required regular use of any medicine or prescribed drug during the past two years;" whether the respondent reports "some" to "quite a bit of trouble" reading and understanding most books and newspapers; whether the respondent gave birth to her first child as a teenager; and whether or not she has completed high-school or received her General Education Degree (GED).

In addition, two scale measures of parenting beliefs and self-efficacy are used in the analyses. The measure of parenting beliefs is an 11-item scale constructed with selected statements from the Adolescent and Adult Parenting Inventory, Form B (Bavolek, 1984) and from the Michigan Screening Profile of Parenting (Schneider, 1984). These statements assess parents' beliefs about the importance of obedience (e.g., "It is extremely important for me to have my children behave well, even when they are younger than two"); the use of physical punishment (e.g., "Parents should never use physical punishment to teach their children right from wrong"); and parental warmth (e.g., "Children who are given too much love often grow up to be stubborn and spoiled"). Re-

spondents were asked about the extent to which they agreed with each statement using a 4-point Likert scale. After reverse-coding responses to certain statements, the average score was computed for each respondent. Higher scores indicated less parental affection, an endorsement of punishment, and a stronger desire for obedience. Pearlin and Schooler's (1978) Mastery Scale is used to assess the degree to which a respondent feels she is able to control the things that happen to her. The average score from the 5-point Likert scale was computed, and higher scores indicated feelings of less control.

The resource inadequacy model posits that the relationship between welfare income loss and child welfare risk will be moderated by supplemental income (e.g., from formal or informal employment) and mediated by worsened environmental conditions. The life change model predicts that stressful life events heighten child welfare risk and that an interaction between welfare income losses and other stressful life events will emerge. Once the controls from the second and third categories of measures are added to statistical models, I hypothesize that any detected relationship between welfare income loss and child welfare system involvement will be diminished if such characteristics and circumstances do, in fact, confound this relationship.

Table 3 presents the means and standard deviations for the above variables. These statistics are given in both unweighted and weighted form, so that the actual sample characteristics can be compared to estimates of these characteristics for the sampling population.

The outcome of interest, child welfare system involvement, refers to the first child welfare case opening (i.e., substitute care placement or intact family case) or indicated maltreatment report during the study observation period. The weighted percentage of survey respondents who became involved with the child welfare system over a one-year period is 4.4%. The unweighted percentage is 54.3%. The multivariate analyses do not weight for the over-sampling of child welfare-involved families.⁹

⁹ Because of the possibility that the sanction status of respondents interacts with other predictors in the statistical models, this weight adjustment was made. A weight adjustment was not made for the other stratification variable, child welfare system involvement, since the effect sizes of the control variables are very similar when weights for the dependent variable are also employed. The decision to weight only for sanction status represented a slightly more conservative approach in terms of hypothesis testing.

TABLE 3
Survey Respondent Characteristics: Means and Proportions (N=173)

	Unweighted Mean (SD)	Weighted Mean (SD)
<i>Welfare Income</i>		
Grant reduction of \$75 or less during study period ^{1,2,3}	.17 (.38)	.31 (.47)
Grant reduction of more than \$75 during study period ^{1,2,3}	.65 (.48)	.43 (.50)
Grant terminated at least one month during study period ^{1,2}	.14 (.35)	.13 (.34)
Receiving AFDC in last month of study period (12/96)	.41 (.49)	.36 (.48)
Grant increased by more than \$75 during study period ^{1,2}	.53 (.50)	.38 (.49)
<i>Income Level and Other Sources of Income</i>		
Total income in sampling month	\$1,174 (\$614)	\$1,138 (\$497)
Monthly income < 50% of poverty threshold	.09 (.28)	.03 (.17)
Employed part- or full-time at least one month during study ²	.45 (.50)	.52 (.50)
Number of months employed part- or full-time during study ²	3.04 (4.46)	3.33 (4.54)
Employed in last month of study period (12/96)	.29 (.45)	.32 (.47)
Received no financial support from family or friends during study period ⁴	.13 (.34)	.15 (.36)
<i>Disruptive Life Events/Other Sources of Income Strain</i>		
Gave birth during study period ²	.17 (.38)	.06 (.24)
Moved once or more during study period ²	.30 (.46)	.24 (.43)
At least one major household expense during study period ²	.10 (.29)	.08 (.27)
At least one serious accident or severe illness episode involving a household member during study period ²	.17 (.38)	.25 (.43)
<i>Environmental hardships</i>		
Utility shut off, eviction threat, or food shortage during study ²	.27 (.44)	.19 (.39)
<i>Demographic and Case Characteristics</i>		
Age < 25 as of interview	.21 (.41)	.11 (.31)
Age > 34 as of interview	.37 (.48)	.47 (.50)
Had more than two children as of sampling month	.47 (.50)	.36 (.48)
Race: not black	.21 (.41)	.18 (.39)
Cumulative AFDC receipt < 5 yrs.	.30 (.46)	.25 (.44)
Received sanction in sampling month ¹	.51 (.50)	.03 (.17)
Child welfare system involvement during study period	.54 (.50)	.04 (.21)
Intact or placement case closed prior to study period ¹	.38 (.49)	.24 (.43)

Table 3, Continued on next page.

Table 3, Continued

	Unweighted Mean (SD)	Weighted Mean (SD)
Other Child Welfare Risk Factors		
Used alcohol or drugs almost every day as of sampling month	.27 (.45)	.23 (.42)
Experienced physical or emotional abuse from a partner in past 2 years ⁴	.27 (.45)	.21 (.41)
Has a self-reported history of childhood physical abuse by a parent	.20 (.40)	.16 (.36)
Has received a mental illness diagnosis ⁴	.26 (.44)	.29 (.45)
Reports poor health compared to others of same age ⁴	.20 (.40)	.18 (.39)
Reports at least one child needing frequent medical attention during past 2 years ⁴	.38 (.49)	.29 (.45)
Parenting index [range: 1-5 (5=lowest score for realistic expectations of young children)]	3.05 (.61)	3.04 (.62)
Mastery scale [range: 1-5 (5=lowest score for self-efficacy)]	2.17 (.68)	2.12 (.68)
Reports having difficulty reading and understanding most books and newspapers	.24 (.43)	.21 (.41)
No high school degree in sampling month	.38 (.49)	.26 (.44)
Gave birth to first child as a teenager	.63 (.48)	.62 (.49)

¹For these variables, the 13 individuals who denied access to the administrative data pertaining to their cases are excluded from statistical calculations.

²For these count variables or events, indicators are all censored at the point of child welfare system involvement.

³These measures exclude the original sanction from the sampling month.

⁴These indicators were measured at the point of the survey interview, and are not censored at the point of child welfare system involvement.

Procedure

Many of the variables used in the analyses were constructed using retrospective, self-reports of events that occurred during the past two years of each respondent's life. While the exact timing of these events may be difficult to remember, several strategies were used to enhance recall. First, only questions related to significant life events were asked (e.g., births, housing moves, employment gains and losses, utility shut-offs, etc.). Second, a time line was constructed during the survey interview in cooperation with the respondent. Re-

spondents were shown the time line at the start of the interview, and told that their significant life events would be recorded on it. Throughout the interview, respondents referred to the time line and used it as an aid to recall the specific months in which certain events occurred. They were encouraged to offer information about significant events along the way, and to point out inaccuracies discovered in the course of completing the time line. The time-varying event information incorporated in the analyses includes only those events that respondents had very little difficulty remembering. Information on the welfare grant changes and dates of child welfare system involvement was extracted from the administrative data.

Since a number of indicators in the analyses change from month to month, it is important that the statistical procedure allow for time-varying covariates. Using discrete-time event history techniques (Allison, 1995), a database was constructed in which the unit of observation is a family-month record. In other words, each family has multiple records, dependent on the number of months they remain at risk of having child welfare system involvement. Once a report is made or a case opens with the child welfare department, the family is removed from the risk pool. The time-varying indicators, including welfare grant reductions, all precede child welfare system involvement (i.e., a grant loss does not occur as a result of child welfare system involvement). Logistic regression was used to analyze the data.

Results

A set of multivariate analyses is presented in Table 4. Five separate models are presented. In the first, only interactions between welfare grant reductions and employment are included. In these models, the grant reduction/employment interaction terms are time varying. That is, an individual's status for each of the four terms can change with each passing month. It was felt that measuring these items only for the current month was not sufficient, since losing part of one's AFDC grant in the recent past could also affect the likelihood of having child welfare system involvement (i.e., the effect of such an income loss may not be immediate, but could manifest over a slightly longer period of time).

Table 4
Logistic Regressions Predicting Child Welfare Involvement
(N=1,809 person-months pertaining to 173 respondents)

Independent Variable	Model 1		Model 2		Model 3		Model 5	
	Coef	(SE) Odds	Coef	(SE) Odds	Coef	(SE) Odds	Coef	(SE) Odds
Income Indicators (In past 3 months): ¹								
-lost > \$75 in AFDC w/ no subsequent work	1.12** (.31)	3.08	.92* (.45)	2.51	.65 (.47)	1.92	.77 (.48)	2.17
-lost > \$75 in AFDC w/ subsequent work	.13 (.45)	1.14	-.10 (.49)	.91	-.39 (.54)	.68	.11 (.57)	1.12
-intact grant w/ subsequent work	-.18 (.30)	.83	-.08 (.31)	.92	.001 (.31)	1.00	.15 (.34)	1.16
AFDC grant reinstated in past 3 months	-.10 (.35)	.90	-.08 (.42)	.93	-.09 (.43)	.92	.06 (.44)	1.06
Denied access to adminis- trative data			.01 (.36)	1.01	.15 (.37)	1.16	.08 (.43)	1.08
50% of poverty threshold in sampling month			1.13** (.36)	3.10	.91* (.37)	2.48	.84* (.39)	2.31
No financial support from family/friends in past 2 yrs.			-.33 (.32)	.72	-.21 (.32)	.81	-.24 (.37)	.79
Other stressful events			1.63** (.24)	5.11	1.51** (.25)	4.54	1.59** (.26)	4.89
Lost >\$75 w/ no subse- quent work * Other in- come strain in past 3 months			.21 (.65)	1.24	.70 (.68)	2.02	.65 (.71)	1.92
Environmental hardship in past 3 months					1.46** (.33)	4.30	1.31** (.34)	3.69

Table 4, Continued

Independent Variable	Model 4		Model 5	
	Coef (SE)	Odds	Coef (SE)	Odds
Demographic and Case Characteristics				
Age less than 25	.32 (.41)	1.38	.29 (.40)	1.33
Age greater than 34	-.40 (.25)	.67	-.17 (.27)	.85
Race: not black	-.16 (.33)	.85	--	
Has more than 2 minor children	.29 (.26)	1.34	.62* (.26)	1.86
Received AFDC < 5 years	-.13 (.35)	.88	--	

Table 4, Continued

Independent Variable	Model 4		Model 5	
	Coef (SE)	Odds	Coef (SE)	Odds
Previous child welfare involvement	.70** (.24)	2.02	.63* (.27)	1.88
Number of months since sampling month	.08** (.03)	1.08	.06* (.03)	1.07
Other Child Welfare Risk Factors				
Used alcohol or drugs frequently as of sampling month	.23 (.31)	1.26	.38 (.26)	1.47
In domestic violence relationship in past 2 years	.12 (.28)	1.13	--	
R reported being physically abused as child	.13 (.30)	1.14	--	
R in poor health	.09 (.76)	1.10	--	

Table 4, Continued

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
			Coef (SE)	Odds Rto	Coef (SE) Odds Rto
Other Child Welfare Risk Factors, cont.					
At least one child in poor health in past 2 years			.80** (.24)	2.23	.74** (.25) 2.10
Gave birth to first child as a teenager			.21 (.28)	1.24	.42 (.28) 1.52
Literacy problems			.20 (.27)	1.22	.40 (.29) 1.49
Lower feelings of self-efficacy			.30 (.20)	1.35	.25 (.18) 1.28
Unrealistic expectations of young children			-.05 (.18)	.95	--
Constant	-2.98** (.14)	-3.48** (.19)	-3.59** (.19)	-4.99** (.77)	-6.06** (.62)
-2 Log Likelihood	724.17	665.69**	648.83**	691.74	613.47**

** $p < .01$; * $p < .05$; _ $p < .10$;

¹ Comparison group had at least one month of employment in the past 3 months, and received grant in the past 3 months.

In the same way, one's employment status could have a "lagged" effect. Therefore, each of the interaction terms captures whether a respondent lost more than \$75 in welfare income in the current or past two months, and whether she was employed in the month of a grant reduction or in the one to two months subsequent to the grant reduction (depending on when the reduction occurred).¹⁰

In the second model, other supplemental income sources and stressful life events are added, along with a term interacting the "grant reduction/no employment" dummy variable with other stressful life events. The third model adds the environmental hardship indicator, which is hypothesized to mediate the relationships between welfare income loss and child welfare system involvement and between the cumulative events interaction term and child welfare system involvement. The fourth model includes only controls for demographic and case characteristics as well as other child welfare risk factors. The final model includes all the income-related factors, stressful life events, and the environmental hardships indicator, in conjunction with statistically or substantively relevant controls from the fourth model.

In model 1 in Table 4, it can be seen that experiencing a grant reduction without supplemental employment income increases the odds of child welfare system involvement three-fold compared to those who remained unemployed with intact grants. No statistically significant differences emerged between the reference group and those who were employed (irrespective of whether their grants were reduced). It appears that employment does, in fact, moderate the relationship between AFDC income loss and child welfare system involvement, as predicted by the resource inadequacy model. No differences emerged between respondents who denied access to administrative case information and those who granted permission, suggesting that no significant bias is introduced to the model by including these respondents. This remains true for the rest of the models predicting child welfare system involvement.

¹⁰For instance, a respondent received a "1" for the "grant reduction/no employment" variable if her grant was reduced two months ago, and she was unemployed in that month, the subsequent month, *and* the current month. If she was employed at any time during the month a grant reduction was experienced or in the one to two months subsequent to the loss, she receives a "0" for the first dummy interaction term, and a "1" for the "grant reduction/employment" interaction term. The reference group for these interaction terms is the group of individuals who neither receive a grant reduction nor work within the current or past two months. In this way, I can be more certain that supplemental employment income was not available to a recipient following a welfare grant reduction of more than \$75.

In the second model, other supplemental income sources (i.e., grant reinstatement and financial support from family and friends) do not emerge as significant predictors of child welfare system involvement. Respondents with lower monthly income levels ($< 51\%$ of the poverty threshold) at the beginning of the study period are over three times as likely to become involved with the child welfare system.

The "stressful life event" dummy variable in the second and subsequent models is assigned a "1" if the respondent had a birth, housing move, major household expense, or a household member who became seriously ill or had a major accident within the current or past two months. These four life events were collapsed for the sake of efficiency, since the direction of their effects was positive and reasonably similar in magnitude. Respondents who experienced at least one of these events in the recent past were five times as likely as those who did not experience such events to enter the child welfare system. To further test the life change model, the interaction between the "grant reduction/no employment" dummy variable and other life events was also included in model 2. This interaction did not reach statistical significance, although it was in the expected direction.

In model 3, the indicator for environmental hardships was entered. This indicator is assigned a "1" if the respondent's family experienced an involuntary utility shut-off, a food or diaper shortage lasting more than one day, or an eviction threat within the current or past two months.¹¹ Adding the environmental hardship control significantly improves the fit of the model. It is strongly related to child welfare system involvement, and it appears to partially mediate the relationships between grant reductions in the absence of employment and child welfare system involvement, and between stressful life events and child welfare system involvement. The "grant reduction/no employment" effect loses statistical significance when the environmental hardship indicator is added to the model, and the effect size for this variable is reduced slightly. The stressful life events variable maintains a statistically significant effect, although the effect size is diminished slightly. The inclusion of environmental hardships does not reduce the effect of the life change interaction term--in fact, this effect grows stronger (although still does not attain statistical significance).

¹¹ Since housing moves are part of the income strain variable and could be associated with an eviction threat in the environmental hardship indicator, eviction threats were restricted to the current month unless it could be determined from the survey interview that the eviction threat related to the post-move housing situation.

Model 4 in Table 4 presents findings related to demographic and case characteristics and other child welfare risk factors. No demographic factors reach statistical significance in this model. With regard to the case characteristics of the public aid and child welfare systems, the only effect that emerges is a positive relationship between having child welfare system involvement in the past (i.e., involvement that ceased before the study observation period), and experiencing child welfare system involvement during the study period. A control for the passage of time is included in this model, as well as the final model. The number of months since the sampling month is positively associated with child welfare system involvement.

With the exception of having a child that requires frequent medical attention, none of the other child welfare risk factors were significant predictors of child welfare system involvement. The odds of child welfare system involvement were over twice as high for respondents with children in poor health compared to respondents with healthy children.

The last column in Table 4 presents the findings from the full model for child welfare system involvement. All of the income-related factors are included in this model, however the controls from model 4 are selected based on their effect sizes (i.e., controls with effects between .20 and -.20 are excluded from model 5, unless they produced statistically significant effects in bivariate tests or model 4). The indicators of domestic violence, childhood physical abuse or punishment, poor health relative to others, unrealistic parenting beliefs, shorter durations of AFDC receipt, and race were all dropped from the final model due to their small and insignificant effects in model 4. Notably, the effect of the welfare grant reduction/no employment term appears to be quite robust. The effect for losing a portion of the grant combined with unemployment is not substantially altered by the inclusion of the additional controls from model 4, increasing just slightly from .65 (odds ratio 1.92) to .77 (odds ratio 2.17).

Having a larger family associated with the AFDC grant in the sampling month emerges as a significant predictor in the full model (i.e., having more than two children nearly doubles the likelihood that child welfare system involvement occurs compared to having only one or two children), and having prior child welfare system involvement remains positively associated with child welfare system involvement during the study period. Having at least one child who required frequent medical attention in the past two years remains a robust predictor of child welfare system involvement in the final model. Although the effects are not statistically significant, using alcohol or drugs frequently, having given birth as a teenager, and reporting difficulty reading most

books and newspapers all gained strength in the full model. The effect of having lower feelings of self-efficacy remained stable in the final model. Finally, the effect of the passage of time on the likelihood of child welfare system involvement remains intact in the full model.

Discussion

Substantial support for the resource inadequacy model was found in this investigation. Declines in welfare income increased the risk of child welfare system involvement net of other personal and family characteristics, and this relationship is partially mediated by environmental hardships. Stressful life events increase the risk of child welfare system involvement, as predicted by the life change model. However only marginal support emerged for a moderating effect of stressful life events on the relationship between welfare income loss and child welfare intervention.

It is difficult to discern from the findings of the analyses whether unstable employment or unstable welfare grants are more problematic for recipients of welfare. The fact that the group of respondents who were unemployed with intact grants faced the lowest odds of child welfare system involvement suggests that a decline in welfare income has a more powerful effect on child welfare risk than one's employment status (see Model 5). This resonates with many of the statements made by respondents regarding the primary importance of their welfare benefits. Among those who had worked in the recent past or were currently working, employment income was simply just one part of a monthly income package. Other elements included food stamps, help from family and friends, and welfare grant money. A substantial number of the respondents from both the qualitative and survey interviews stated that they rarely reported earned income to their workers, because they needed both the AFDC money and employment income to get by. For example:

Dee,¹² a 27 year-old woman with three children, states that she has always worked, and always received public aid (i.e., since the birth of her first child). At the time of the interview, Dee was working one full-time job and one part-time job at a nearby fast food restaurant. However, her

¹²Pseudonyms were selected by respondents so that their stories and quotes would not identify them.

welfare income is described as her “stable money.” Her full-time job only recently became available, and her part-time jobs in the past have not lasted for more than several months at a time, once because an employer gave her erratic schedules and could never guarantee enough hours, and other times because an employer was not able to pay her for work she had already performed. There were also several jobs Dee had to quit due to emergencies with her children that were not excused by her supervisor. For Dee, welfare represents her “base income.” Since neither work nor welfare offered enough income to live on, she combined both, but primarily counted on the latter each month.

Individuals whose welfare grants decline during a period of unemployment face the highest risk of child welfare system involvement. An example from the survey interviews is offered to illustrate how the simultaneous loss of welfare income and lack of employment compounds this risk for families:

Trina is a 26 year-old mother of four. All of her children have experienced medical problems ranging from viral infections to severe asthma over the past year. Trina’s oldest daughter was also hit by a car in the summer of 1996 and had to be hospitalized. Trina has not been able to work during this time as a result. Starting in the fall of that year, Trina gave birth to her fourth child during the same month that her AFDC grant was terminated. Her landlord threatened to evict her for non-payment of rent, and the newborn often had to go without diapers or milk. It was at this time that Trina’s family was reported to child protection workers and an intact family case was opened.

While one’s unemployment status alone does not necessarily heighten the risk of child welfare system involvement, nor is it the case that employment guards against this outcome. The coefficients for the grant reduction/employment interaction terms show that employed respondents faced slightly greater odds of child welfare system involvement compared to the reference group (i.e., no grant reduction/no employment), although these findings were not statistically significant. It can be hypothesized that parents who are away from home due to employment obligations are more likely to leave their children unattended or in unreliable child care arrangements. It is difficult to know from the empirical models what the process of coming to the attention of the child welfare department looks like in such cases. An example from the survey interviews is offered to illustrate this process:

Mae is a 19 year-old mother of four. In November, 1995, one month after the birth of her third child, Mae began working full-time at a local fast food restaurant. When this restaurant closed, in March of 1996, she found employment at a different fast food chain. At this time, she was living with a family friend. One afternoon when Mae was at work, her 18 month-old daughter fell out of a second story window. Since her roommate had stepped out to run an errand, child protection workers were called and Mae received substantiated allegations of "risk of harm" and "lack of supervision."

In this example, the important risk factor is the employment-related absence of the parent from the home. This scenario is supported by findings from the statistical analyses. Families who become involved with this state's child welfare system for reasons of "lack of supervision" tend to have received welfare for shorter durations, to have fewer children, to be more likely to have had a work history at the point of application for welfare assistance, and to have a high school education. This suggests that these heads-of-household may be more attached to the labor force, and thus at greater risk of being absent from the home due to employment obligations.

The above scenarios point to environmental hardships and employment-related absences as two potential mediators in the relationship between welfare income reductions and child welfare system involvement. However, while controls for each of these mediating factors reduce the size of the grant reduction effect when introduced in the statistical models (and improve the fit of the models), not all of the grant loss effect is explained by these factors. Additionally, only the dummy variable for "grant reduction/no employment" produces a statistically significant effect on the tested outcome (although there is a positive, albeit small, relationship between employment status and child welfare system involvement captured by the other two employment/welfare grant interaction terms in the models).

One possibility is that the statistical models are not correctly specified. A welfare grant reduction is not necessarily a reflection of an income loss. Although I control for employment income and informal support from family and friends, there are other income sources not measured for these analyses that may supplement a grant reduction (e.g., emergency assistance payments), or survival strategies that enable families to live on less income temporarily. Likewise, there may be unmeasured forms of environmental hardship predictive of child welfare system involvement. The employment variable in the sta-

tistical models also may not adequately capture employment income. Although both informal and formal employment is measured, this variable includes only work activities of 20 or more hours per week.

Another possibility is that the group of respondents who experience welfare grant reductions with no subsequent employment have different characteristics or life circumstances than other respondents. Difference of means tests (not shown) comparing respondents who had their grants reduced without subsequent employment to all other respondents indicate that the grant reduction/no employment group experienced a higher rate of domestic violence within the past two years, lower feelings of self-efficacy, less instrumental support from family and friends, and they were more likely to report being in poor health compared to all other respondents. Although they were no more likely to move during the study period, they did move more frequently than other respondents, and they were also more likely than other respondents to give birth during the study period. All of these mediating and moderating factors are controlled in the statistical models, however there may be other unmeasured characteristics which "explain away" the grant reduction effect. For example, welfare income reductions may produce changes in psychological or emotional states (e.g., depression, psychological stress, etc.), which in turn diminish parenting capacities. Such changes may be compounded during periods of unemployment. These kinds of "psychosocial" changes were not measured, however, since the data collection methods were retrospective and information on previous states of mental health would have been highly unreliable.

An additional possibility is that individuals who do not readily turn to employment following a welfare grant reduction are those that did not anticipate the reduction. That is, there may be organizational factors (e.g., administrative error) or problems with mail delivery that produce unexpected grant reductions, and families are "taken off-guard" by the loss of income. Re-arranging daily activities and child care arrangements in order to find work on short notice may prove to be insurmountable for some families.

Some interviewees voiced confusion about administrative rules. Several respondents interviewed for this study were not even aware that their grants would be terminated when their youngest child turns 18. Some women who combined welfare and employment similarly expressed concerns that their grants would be unexpectedly stopped if they reported their earned income, even though Illinois allows recipients to keep one-third of their earned income in addition to their full grant for a period of time. Even when individuals were

aware of what they needed to do to maintain their assistance, some simply did not trust that efforts to “comply” would be rewarded.

One of the strongest predictors of child welfare system involvement in this study sample is the recent occurrence of a stressful life event, such as the birth of a child. Many respondents reported that births disrupted their employment, or compelled them to remain at home due to a lack of trustworthy child care arrangements. Others made ad-hoc arrangements and expressed high levels of stress stemming from their concern about the quality of care their children were receiving. It is not clear from this investigation how the birth of a child increased child welfare risk. It may be the case that the added expense of a new infant placed increased financial strain on the household, leading to other hardships (e.g., food shortages or evictions), or it could be that giving birth simply raises the “visibility” of an impoverished family (e.g., due to contact with public hospitals and community health centers), leading to a greater likelihood of child protective intervention.

Housing moves (another event captured by the stressful life events measure) were also predictive of child welfare system involvement. Although housing moves may be an indicator of improved economic circumstances for a family, most of the moves experienced by respondents in this sample were described as disruptive and financially difficult. In the example below, the survey respondent experienced several housing moves which resulted in economic strain:

In the past two years, Betty and her children have lived in four different residences. Each time she moved, it was to get away from “the drugs and lots of shooting,” as well as extremely poor building conditions. In May of 1996, Betty’s landlord threatened to evict her family because they were behind on their rent. This occurred because her previous landlord never returned her security deposit to her. She felt extremely tired and depressed at this time. Betty applied for disability benefits because of “mental anguish and depression” (due to an abusive relationship with her husband), but these benefits were denied. The divorce she had filed for became final in August of 1996, and she reports experiencing a bout of depression at this time. She moved once more in November of 1996, and again lost her security deposit. At this time, she was reported to child protection authorities and a family case was opened.

Although Betty’s diminished ability to function (resulting from her physical victimization and subsequent depression spells) may have increased her

risk of coming to the attention of child protection authorities, her series of housing moves undoubtedly compounded this risk. Each move resulted in the loss of a large sum of money (i.e., the security deposit), which over time severely strained the family's economic situation. The child maltreatment allegation was missing from the administrative records pertaining to Betty's family, so it was not possible to determine if her involvement with the child welfare system was related to financial strain (e.g., approximated by an environmental neglect allegation). It is just as likely that a psychosocial explanation is warranted, particularly given Betty's reported bout of depression following the 1996 eviction threat.

The life change model points to "stress" as the primary factor responsible for an increased risk of child maltreatment. What is not clear from these analyses is whether "stress" or financial strain associated with stressful life events is the predominant mechanism through which child welfare risk is influenced.

Like housing moves and the birth of a child, major household expenses and serious accidents and injuries (also captured by the stressful life events indicator) are likely to deplete resources or heighten feelings of stress. However, both child births and serious accidents and injuries are also more likely to bring a family in contact with a mandated child abuse reporter (i.e., a health professional) than housing moves and major household expenses. This raises an additional question of whether the potentially greater visibility of a family with health care needs poses a risk in and of itself. For the present study, information on the source of the child maltreatment report was not available, so it was not possible to know whether families with newborns or health episodes were more likely than other families to be reported to the child protection system by health professionals. However, examples like the one below are, at least, suggestive of this.

Natalie is a 24 year-old mother of one child, who lives with her parents and siblings. Her son was born in the summer of 1995, and was hospitalized for one month because he was premature. Natalie received regular and timely prenatal care when she was pregnant, and has never had a problem with alcohol or drugs. From the time he was born, though, her son has been very sick, with problems ranging from difficulty breathing to insufficient weight gain. Natalie is unable to work, because she has to bring her son to doctor's appointments several times a month, and everyone in the household (except her mother) works full-time and is unable to help with this responsibility. Her mother helps when she can, but has young children of her own to care for. The baby's father is no longer in the picture (they

broke up when he was incarcerated in 1996), but he regularly helped out when their child was first born. Natalie herself has diabetes and high blood pressure. She is supposed to visit a doctor regularly to monitor these conditions, but is too preoccupied with her son's health to follow through. After months of regular visits to the doctor, Natalie's son was hospitalized for failing to gain enough weight. Child protection authorities were called by the hospital, and an intact family case was opened for reasons of physical neglect.

Of course, only the mother portrays the parental side of the story in the above example, so it is not possible to know whether there actually was compelling evidence to support physical neglect. However, given the extensive support network of this woman, her relatively stable financial and housing situation, and her reported diligence in keeping doctor's appointments for her son, it seems at least plausible that it was the ongoing visibility of the child in question by a system of mandated child maltreatment reporters that in fact led to the child welfare system involvement.

The findings from this investigation suggest that the occurrence of various stressful life events produces an increased risk of child welfare system involvement. Because monthly measures of total family income were not collected, it was not possible to assess the extent to which financial strain associated with stressful life events contributed to this risk. However, since the majority of events captured in the analyses are likely to be indicators of either income losses (welfare grant reduction, environmental hardships) or added expenses (e.g., giving birth, moving, child health problems), this possibility deserves further investigation.

Conclusion

One of the central tenets of welfare reform policies is the imposition of time limits on assistance, and an explicit assumption behind this tenet is that recipients of welfare should find alternative sources of income, namely employment. In this study, an attempt was made to determine how the reduction of a family's welfare grant is likely to affect their risk of child welfare system involvement. There appears to be substantial evidence that such a loss does, in fact, heighten the risk of involvement, but namely for families who are unable to secure employment. Still, the question remains of whether it is the grant decline itself, or the inability of some recipients to find or sustain employment

in the face of economic strain; that determines child welfare system involvement. In terms of prevention strategies, it is important to understand whether income supplementation or intensive job placement efforts presents a more effective solution for child welfare risk. It will, therefore, be important to monitor the immediate effects of grant losses on children and families, particularly when employment is not a viable option.

This study uncovered a high rate of disruptive life events, such as housing moves, births, and health problems within the welfare population. Given the relationship between these types of events and the risk of child welfare system involvement, it is recommended that particular attention be paid to the availability of emergency services to prevent long-term intervention from the child welfare system. Many of the child welfare episodes that occurred in the study sample followed recent income losses, other economic hardships, or events such as those listed above. Although the mediating role of these risk factors could not be clearly specified in the relationship between welfare income loss and child welfare system involvement, their occurrence did compound child welfare risk. If emergency resources were amply available and families were aware of how to access them, many of the child welfare episodes that occurred among these families may have been avoided.

A second recommendation stems from the first. Even when families have access to emergency resources in the form of alternative income sources, there may still be a need for child protection workers to intervene. Families with income-related problems that are not immediately alleviated by emergency assistance may benefit from programs such as the "Norman Fund" Program in Illinois,¹³ where families are deemed eligible for emergency cash assistance to

¹³In 1990, a class action law suit was filed against the Illinois Department of Children and Family Services in which the plaintiffs were impoverished caregivers whose children were at risk of being placed in substitute care due to conditions of poverty (e.g., inadequate food, clothing, shelter, or environmental neglect). The Department signed a consent order containing a requirement for developing and providing assistance to families in similar situations in order to prevent the need for substitute care or to enable the reunification of children in substitute care with their families. Currently, families who are certified as eligible for this assistance, based on an indicated allegation of environmental neglect, can receive money from a fund (called the "Norman Fund," after the principal plaintiff) for such things as rent, security deposits, utilities, furniture, clothing, and food. If the children are not deemed to be at "imminent risk of harm" from conditions of economic deprivation, and their families are eligible to receive Norman funds, the State is not permitted to remove the children from their caregivers (i.e., in the absence of other allegations). However, cases in which the family remains "intact" can be opened for these reasons. The family then receives services from the Department to reduce the need for substitute care.

prevent the need for a child substitute care placement while simultaneously under the supervision of the child welfare department. There are some problems, such as substance use and low levels of literacy, that will be much more difficult to address with temporary forms of financial assistance. Families with multiple problems and barriers to employment are likely to need highly individualized assessments and supports.

While this research provides insight into the mechanisms through which welfare income losses translate into heightened child welfare risk, the findings discussed here cannot be considered conclusive. Without the benefit of prospective research designs, changes in the emotional health and parenting practices of individuals receiving welfare are not easily measured. Efforts to secure larger and more representative samples of the welfare population should also be supported.

The potential consequences of welfare reforms also include serious implications for the budgets and service capacities of child protection systems (Courtney, 1998). This is because even a slight increase in the rate of child welfare system involvement from the population receiving welfare can lead to a large increase in the number of children who enter the child welfare system due to the sizable difference in the scale of these two populations (Shook, 1998). It should also be noted that the historical association between the number of children in the public aid system and substitute care placements may begin to weaken as welfare reforms are implemented. As more families are deemed ineligible for public assistance, either at the point of application for TANF benefits or due to exhausted time-limits on assistance, the number of substitute care placements from "non-welfare-reliant" homes may begin to grow.

As we implement welfare reform policies, we should be engaging in policy discussions about the role we think poverty and income should play in our definitions of child maltreatment, as well as our readiness to accept family policies that directly affect the risk of child welfare system involvement. Anticipating the potential consequences of welfare reform for child welfare is only the starting point. We should be carefully monitoring families as they reach their limits on public assistance, and be prepared to deal with their crises on an individual basis.

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