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Involvement of TANF Applicants with Child Protective Services

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Abstract

This paper presents findings from an exploratory study of Temporary Assistance for Needy Families (TANF) applicants in Milwaukee County, Wisconsin. We examine the level of involvement of TANF applicants with the child welfare system both before and after their application for TANF assistance and inclusion in our study. We also present preliminary multivariate models of the hazard of our sample's CPS involvement with child protective services subsequent to their application for TANF. We find a high level of overlap between TANF and child welfare populations. We also find a set of correlates of CPS involvement after TANF application that are robust to a variety of model specifications. Although our findings are preliminary and further analyses based on longer-term follow-up of our sample will no doubt provide greater clarity, we believe that our findings to date provide food for thought for the designers and administrators of both TANF and child welfare programs.

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INTRODUCTION

One of the "sleeper" issues surrounding welfare reform is the extent to which changes in public assistance programs may affect the demand for child welfare services, including child protective services (CPS), foster care, kinship foster care, and adoption. A variety of lingering questions call for an examination of welfare reform's relationship to the child welfare system and its clients. Some observers have noted that any significant change in the economic circumstances of low-income families owing to welfare reform could affect demand for child welfare services (Courtney, 1998; Knitzer and Bernard, 1997). Though there is no compelling evidence to suggest that welfare reform has, to date, led to a significant increase in this demand, the rapid reduction in cash public assistance caseloads has not been accompanied by a comparable reduction in child welfare services caseloads. As of September 1998, the U.S. foster care caseload had reached an all-time high of 560,000 (U.S. Department of Health and Human Services, Administration for Children and Families, 2000a). If reductions in Temporary Assistance for Needy Families (TANF) caseloads are an indication of improvements in the conditions of low-income families, then it is reasonable to ask why such reductions have not been accompanied by a decreasing need for child welfare services intervention, particularly out-of-home care. Federal funding streams affected by welfare reform (e.g., the Title XX Social Services Block Grant, the old Emergency Assistance program under Title IV-A, Supplemental Security Income, and Medicaid) have provided significant support, particularly in recent years, for child welfare services (Geen, Waters, and Tumlin, 1999).

The fundamental change of public assistance from primarily an income transfer program under Aid to Families with Dependent Children (AFDC) to a set of services intended to help parents function effectively in the workforce calls for an examination of how this new mission is related to the mission of child welfare services (Courtney, 1998). What are the challenges facing TANF-involved parents' ability to hold down a family-supporting job, and are they similar to those facing parents who become involved with

child welfare programs? To what extent do the two caseloads overlap over time? Should TANF managers and child welfare services managers be coordinating their efforts, and if so, how?

This paper presents findings from an exploratory study of TANF applicants in Milwaukee County, Wisconsin. We examine the level of involvement of TANF applicants with the child welfare system both before and after their application for TANF assistance and inclusion in our study. We also present preliminary multivariate models of the hazard of CPS involvement of our sample subsequent to their application for TANF. We find a high level of overlap between TANF and child welfare populations. We also find a set of correlates of CPS involvement after TANF application that are robust to a variety of model specifications. Although our findings are preliminary and further analyses based on longer-term follow-up of our sample will no doubt provide greater clarity, we believe that our findings to date provide food for thought for the designers and administrators of both TANF and child welfare programs.

BACKGROUND: TANF AND CHILD WELFARE SERVICES IN WISCONSIN

From September 1997 to June 1999, Wisconsin experienced a decline of 74 percent in the number of families receiving cash assistance under its TANF program, Wisconsin Works (W-2). In other states, too, caseload reductions have typically followed welfare reform, although they have been smaller than the Wisconsin declines. These declines have raised questions about what has happened to the AFDC families that failed to make the transition to TANF, and numerous so-called “leavers” studies have sought to determine the experiences of these families. In addition, now that reductions in TANF caseloads have begun to taper off, there is increasing interest in the characteristics, needs, and well-being of the residual TANF caseload. A few studies are in the field, and more are planned, that will provide a better understanding of the characteristics and experiences of the residual TANF caseload. Our study in Wisconsin is of special interest for several reasons:

- W-2 is generally regarded as one of the most radically work-driven of the state welfare reform programs that were initiated following the dismantling of AFDC under the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). W-2 participants receive

monthly cash payments only if they are actively participating in activities intended to prepare them for unsubsidized employment.

- Unlike many other studies, our study examines *applicants for TANF assistance*, not those whose welfare experience was conditioned, at least initially, on the transition from older welfare regimes. Thus, we enhance our understanding of how this program works, which is critical for policy makers considering a change to a more rigidly defined work program.
- Wisconsin's early caseload decline preceded by several years that of many states. Wisconsin had already experienced a significant reduction in its AFDC caseloads prior to the implementation of W-2. Between January 1993, when 81,291 families received AFDC, and January 1997, Wisconsin's caseload declined by 44 percent. (U.S. Department of Health and Human Services, Administration for Children and Families, 2000b). Therefore, observed behaviors by both the agencies and the participants may reflect the opportunities and problems associated with a "postdecline" program. Other states may eventually need to confront similar issues.
- Wisconsin has pioneered the use of private agencies to provide TANF services. Five private agencies have contracted with the state to administer W-2 in six regions of Milwaukee County. These five agencies differ in terms of their organizational status (e.g., for-profit versus not-for-profit), their program emphases, and the services they provide.

Milwaukee is also an important place to study child welfare services. Like other urban child welfare jurisdictions, Milwaukee has seen its caseloads rise consistently, and often rapidly, during the 1990s. The out-of-home care caseload has grown by 86 percent during the past 10 years from 3,065 at the end of 1990 to 5,712 at the end of 1999 (Courtney and Dworsky, 2000). Moreover, like many child welfare agencies around the country, Milwaukee has been engaged in child welfare services reform owing to litigation brought against the county and the State of Wisconsin by child-welfare advocates. In 1997 the State of Wisconsin created the Bureau of Milwaukee Child Welfare (BMCW) as an arm of the Wisconsin Department of Health and Social Services. The BMCW was formed in response to court challenges alleging serious problems in the existing child welfare system in Milwaukee County. Prior to the state takeover, Milwaukee's child welfare programs were administered, under state supervision, by Milwaukee County. All other counties in the state still operate their own child welfare programs. The BMCW was intended to correct these problems by placing control of child welfare services in the county under the auspices of the state, streamlining services and contracting for some of them through private agencies, and providing additional revenue to increase services and the number of staff, thereby improving the performance of the child welfare system.

Cases enter the system as a result of a report of alleged child maltreatment being made to the phone intake unit for the county. State workers screen the call to determine whether it is appropriate for investigation. Investigations are also conducted by state workers who, with their supervisors, then decide on one of three courses of action: (1) conclude that the report does not require immediate child welfare services intervention and close the case, perhaps referring the family to voluntary services in the community; (2) conclude that the report is valid but that the victim is not in immediate danger, in which case he/she remains in the home while the case is referred for in-home voluntary services for the family provided by contract agencies paid by BMCW; or (3) conclude that the report is valid and that the victim would face an unacceptable risk by staying in the home, in which case court consent is sought to place the child in out-of-home care. These latter cases are referred to ongoing case-management services, also provided by agencies under contract to BMCW. Staff in contract agencies, located in five different geographic districts, may be either county or private-agency workers.

Thus, in many ways Milwaukee is a laboratory for Wisconsin's efforts to reform both its welfare and child welfare programs. Both efforts rely on significant privatization of services that were, for the most part, previously provided by the county. But whereas W-2 was from the beginning a high-profile initiative of Governor Tommy Thompson's administration, the state's takeover of the Milwaukee child welfare system was undertaken, at least initially, with some reluctance.

RECENT RESEARCH ON WELFARE AND THE RISK OF CHILD WELFARE INVOLVEMENT

Recently published research using state- and county-level administrative data has explored some important dimensions of the relationship between the use of welfare program and child welfare services. In a descriptive study based on administrative data from 10 California counties[1] over a 5-year period (1990–1995), Needell et al. (1999) sought to identify several key characteristics of families most at risk for

[1]Counties included: Alameda, Contra Costa, Fresno, Orange, San Diego, San Mateo, Santa Clara, Santa Cruz, Sonoma, and Tulare.

involvement with both the welfare and child welfare systems. Their analysis focused on the demographic and case characteristics of children, less than 18 years old, who first entered California's AFDC program (N=63,768) and had contact with the child welfare system over the course of the 5-year study period.

Needell et al.'s multivariate analyses of child welfare involvement used logistic regression models to determine the odds ratios associated with four types of child welfare events: child maltreatment report, case investigation, case opening, and foster placement. The authors found that the total time on welfare and the number of spells on welfare were positively associated with three of the four child welfare events. They explained the association this way: "If two children spent an equivalent amount of time on aid, but one child's participation was continuous while the other's was characterized by breaks, the child with breaks would be more likely to experience a child welfare event than the child with continuous receipt. Generally, such breaks in the receipt of aid might signify greater family instability or other factors associated with child maltreatment" (p. 835). In addition, they noted that children with discontinuities in Medicaid receipt were, in general, more likely to experience three of the four child welfare events studied. Similar to the bivariate results, the authors found that child welfare involvement of AFDC entrants was more likely for children who entered care as infants, for whites, for children from single-parent families, for those born into larger families, for those born at low birth weight, and for those whose mothers had late or no prenatal care. The authors noted that limitations of their study included the potential for biased estimates due to missing data for several counties in 1990 and 1992 and the lack of a comparison group consisting of non-AFDC children. In addition, the study is limited by the relatively small number of measures available in the administrative databases used by the researchers.

A study by Shook (1999) was based on administrative, survey, and qualitative data on welfare recipients (N=173) residing in the Chicago metropolitan area. She tested three theoretical models hypothesizing the relationship between change in the recipients' welfare grants, its impact on child welfare risk, and the interaction effects of various individual, social, and environmental covariates. The outcome variable, child welfare involvement, was operationalized as (p. 794): "the first child welfare case opening

(i.e., substitute care placement or intact family case) or indicated maltreatment report during the study observation period." Several indicators of change in welfare income were used, including grant reduction of $75 or less during the study period, grant reduction of $75 or more during the study period, grant increase of more than $75 during the study period, receipt of AFDC in the last month of study period (12/96), and grant termination at least 1 month during the study period.

Shook's study found employment income to be a significant moderating variable of child welfare involvement in this population. Specifically, the odds of child welfare system involvement were greatest when welfare recipients were confronted with grant reductions and unemployment together, controlling for the other child welfare risk factors. Some of these risk factors that resulted in statistically significant effect sizes ($p < .05$) included respondents who were living in poverty at the beginning of the study period, respondents who experienced at least one of the life stress events measured (birth of a child, housing move, major household expense, or major illness), and respondents who experienced environmental hardships (involuntary utility shutoff, a food or diaper shortage lasting more than 1 day, or an eviction threat within the past 2 months). These tentative findings appear to fit the conclusions drawn by Needell et al. (1999) in that both studies point to a relationship between inadequate financial resources, greater risk for child maltreatment, and involvement with the child welfare system. Although the design of Shook's (1999) study is strengthened by the integration of survey data with administrative data, the response rate for the survey was only 25 percent, thus requiring caution in interpreting the findings.

Further evidence regarding the overlap between the welfare and child welfare systems comes from a project examining administrative data from California, Illinois, and North Carolina over the 2-year period (1995–1996) immediately prior to the implementation of PRWORA (U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2000). This effort focused on the "changing transition rates" of children between AFDC, Medicaid, and foster care. In each of the states studied, researchers found that a majority of the new entries to foster care were from existing AFDC cases. The central objective was to establish "baseline figures" concerning the caseload dynamics for three

programs related to welfare reform: TANF, Medicaid, and the foster care system. Of course, as the authors point out, interpreting such figures is difficult given the profound changes occurring in many, if not most, state welfare programs well before the passage of national welfare reform.

The researchers drew two overarching conclusions from their longitudinal analysis of the transition from AFDC to foster care at the 2-year mark following entry into the AFDC program. First, they noted significant variation in the percentage of AFDC entries that had entered the foster care system: 2 percent of entrants in California, 2.5 percent in North Carolina, and 2.6 percent in Illinois (i.e., the rates in Illinois and North Carolina were roughly 25 percent higher than in California). Second, the vast majority of foster care entrants came directly from families receiving welfare grants (85 percent in Illinois, 96 percent in California, and 90 percent in North Carolina), with the remainder coming from cases where there had been "an interim of no cash assistance before entry into foster care" (p. 6). This, the authors argue, is significant, since many current attempts to evaluate welfare reform have limited their focus to closed welfare cases. Consistent with Needell et al.'s (1999) findings discussed earlier, the authors found that infants on AFDC were much more likely to enter foster care than older, teenaged children (15 to 17 years old). Additionally, they found that children, particularly infants, from AFDC families were more likely to enter foster care during the first 10 months of their spell on welfare. They interpret this finding to imply that "foster care entry from AFDC is more likely to occur for young children at a time of crisis or stress that has caused a family to move onto the AFDC rolls" (p. 7).

The limitations of the research reviewed here call for caution in drawing meaning from the studies. First, all three of the studies consider transitions between public assistance and child welfare programs *prior* to the implementation of TANF. Public assistance caseloads have continued to decline in the years since the data for these studies were collected, and both public assistance and child welfare policies have experienced rapid change. Thus, the findings of these earlier studies may have limited relevance to the situation today. Second, the reliance on administrative data limits the ability of research in this area to shed light on the reasons for transitions between these programs because administrative data typically do not tap a very rich

array of variable domains. Third, the lone study to go beyond administrative data (Shook, 1999) suffers from potentially great sample selection bias due to the low survey response rate of 25 percent. Still, taken together the studies clearly indicate a substantial overlap of welfare and child welfare services populations. In addition, keeping the limitations in mind, the studies suggest that (1) total time on welfare and the number of spells on welfare are positively associated with child welfare involvement, (2) the majority of foster care entrants come directly from families receiving welfare grants, and (3) conditional effects are important. In other words, the types of effects caused by welfare reform on child welfare involvement may not be additive, but moderated by other sources of income and mediated by factors associated with economic hardship. The authors all conclude that more refined analyses are needed to better understand the risk factors associated with children in transition from welfare to child welfare services. Their recommendations for future studies include employing more sophisticated methods, such as prospective research designs that can "enrich" the analysis of administrative data; examining additional factors predicting movement into child welfare that are currently understudied (e.g., measures of other social outcomes, such as high school dropout rates, or the degree of contact with other aid programs, such as Food Stamps); and extending the number of links between administrative data sets to include other socioeconomic information, such as Unemployment Insurance and SSI data.

STUDY SAMPLE AND DESIGN

Our analysis of child welfare services involvement among TANF applicants is based on data generated by our study of applicants for TANF assistance in Milwaukee County in 1999. Currently the study is funded through 2002 to include three waves of survey data collected at 15-month intervals and linking of this survey data with a variety of sources of administrative data on the family members. The analyses presented here rely on data from the initial survey and from linked data on CPS investigations. Among the primary outcomes of interest in the overall study are the labor market experiences of family heads; barriers to (e.g., child care problems, educational deficiencies, lack of job skills) and conditions promoting (e.g., prior

work experience) their employment; the occurrence of events indicative of economic hardship (e.g., homelessness, utility shutoffs, food insecurity); and child and parent well-being.

The first wave of survey data collection began in March 1999 and was completed in August 1999. The study sample now consists of 1,179 families, approximately 200 families who applied for W-2 in each of the six service areas covered by the five agencies administering W-2 in Milwaukee. The subjects of our surveys are heads of households who applied for assistance from one of the W-2 agencies in Milwaukee (see Table 1 for descriptive statistics on the sample). Nearly all of the participants in the study are female, and a similarly large number were born in the United States (95 percent). Over four-fifths have never been married. The respondents are overwhelmingly people of color.

The families were selected into the sample when they arrived at each agency to apply for W-2. On arriving at the agency that administered W-2 in their neighborhood, applicants met with an intake worker serving as a program gatekeeper. The gatekeeper distinguishes individuals whose requests signify possible eligibility for W-2 services (e.g., jobs and/or cash assistance) from those whose requests indicate the need for other forms of assistance such as Food Stamps, Medicaid, and child care subsidies, all of which continue to be the responsibility of the Milwaukee County Welfare Department. Families which at this point were believed to be eligible for W-2, and for whom an interview with a project employee was immediately possible, were then asked to participate in a structured interview. Approximately 98 percent of those asked to participate agreed to do so, an extremely high response rate probably due to such factors as (1) the vast majority of interviews were conducted at the agencies just after sample members had applied for W-2 assistance, (2) child care was provided at no charge to sample members during their survey interviews, and (3) sample members were paid $25 for their participation.

W-2 was implemented beginning in 1997, so a significant gap in time occurred between the initiation of W-2 and the first wave of surveying conducted as part of our study. As a result, the respondents included persons who either had no history of public assistance receipt, had previously received AFDC but

had not previously participated in W-2, had no history of AFDC receipt but had previously participated in W-2, or had previously received AFDC and had participated in W-2.

For the present study, we linked our survey data to information from the Wisconsin Statewide Automated Child Welfare Information System (WiSACWIS). WiSACWIS maintains records of reports to child protective services agencies that are deemed worthy of investigation,[2] the results of such investigations, child welfare services provided to families, and the out-of-home care placement histories of children removed from their parents' care. Our study focuses on investigated reports of child abuse and/or neglect made to the Milwaukee CPS agency from June 1989 through September 2000. The primary method of linking our survey data to the CPS data was through the parent respondents' Social Security numbers (n = 439).[3] An additional 18 matches were made using last name, first name, and birth date of the parent respondent. Thus, a total of 457 of our respondents have been the subject of at least one CPS investigation over the time period in question (see Table 1). We believe that this significantly underestimates the prevalence of CPS involvement among our sample for at least two reasons. First, only 72 percent of the case heads in the CPS data have Social Security numbers. Our match may have missed other sample members who had been investigated by CPS but whose Social Security numbers were not in the WiSACWIS database and whose names and/or birth dates were not recorded identically in both WiSACWIS and our survey database. Second, some of our sample members have lived outside of Milwaukee County for some of the time covered by the Milwaukee CPS data. Data from other Wisconsin counties are not currently included in WiSACWIS.

We decided to include all reports that warranted investigation, not only those that were "substantiated," as indicative of abuse or neglect. We did this for several reasons. First, reports clearly not appropriate for CPS response were screened out prior to investigation and are not included in WiSACWIS.

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[2]No identifying information is maintained in WiSACWIS for reports that are "screened out" by CPS intake workers as inappropriate for CPS investigation.

Thus the remaining investigations were of situations deemed significant enough to send out a child welfare worker to contact family members, informed collaterals, etc. Second, many CPS reports go "unsubstantiated" because corroborating evidence is lacking about the risk to child safety necessary for a child welfare worker to substantiate child maltreatment, but for them nevertheless to call attention to significant risks to children's health and development (Finkelhor, 1990). In fact, many of the "front-end" CPS diversion and prevention programs pursued by child welfare agencies in recent years focus on families reported to CPS that are not deemed to be in immediate need of child welfare services, but that are believed to be at risk of future CPS involvement. Third, a growing body of evidence suggests that, particularly in cases of neglect, several reports and investigations may be required for the child welfare system to categorize a family problem as "maltreatment," and even more for a child to be removed from the home. Thus, initial reports are often followed by other reports that over a longer period lead to more authoritative CPS intervention. In fact, relatively few of our sample members with a history of CPS involvement (28 percent) have had only one investigation. As Table 1 indicates, the mean number of investigations was 3.76 with a median of 3 investigations per family. Although we have not yet identified the substantiation rate for the investigations to which our sample has been subject, in recent years the substantiation rate for all investigated reports in Wisconsin has been about 37 percent (U.S. Department of Health and Human Services, Administration for Children, Youth and Families, 2000) and about 38 percent in Milwaukee County (Wisconsin Department of Health and Social Services, 1994). The rate for our sample is undoubtedly higher than this since later reports are on average more likely than initial reports to be substantiated, and many of the reports on our sample are repeat reports on the same family.

Our study suffers from limitations that should be considered when interpreting its findings. First, our dependent variable is not the only, or perhaps even the best, measure of CPS involvement. Other measures, such as whether a parent is the subject of a substantiated report of maltreatment, whether a

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[3]We obtained verbal permission from approximately 95 percent of respondents (n = 1,143) to use these administrative data when they were interviewed in the first wave.

TABLE 1
Involvement with Child Welfare System by W-2 Sample Members

Type of Involvement	Number	Percentage of Sample
Any CPS investigation in Milwaukee County since 1989	457	38.8%
CPS investigation in Milwaukee prior to application for W-2 at time of interview (1999)	431	36.6%
CPS investigation in Milwaukee after interview at time of W-2 application	167	14.2%
Of those with subsequent CPS investigation, those with *prior history* of CPS involvement	141	11.9%
Of those with subsequent CPS investigation, those with *no prior history* of CPS involvement	26	2.2%
Court-ordered placement of one or more children concurrent with or prior to interview (self-reported)	70	5.9%
	Mean	Median
Number of CPS investigations (parents with at least one investigation)	3.76	3

family is offered in-home child welfare services, or whether a child is placed in out-of-home care, are certainly worthy of study and may turn up distinctly different findings from those described here. Second, the extent to which parents who are listed in the CPS data with Social Security numbers differ systematically in some way from those parents who are not could introduce bias into our study's results. Third, the advantages of Milwaukee as a study site may limit the external validity of our study to the extent that other TANF and child welfare jurisdictions operate differently from those in Milwaukee, or serve different populations. Fourth, our use of the family as the unit of analysis limits our ability to focus on child-specific factors that may be related to CPS involvement in this population. We plan in the future to analyze the correlates of CPS involvement among the focal children in our sample families (one randomly selected child per family). This should allow us to include a number of child-level variables into our models. Finally, our project was not designed specifically to study recipients of child welfare services and therefore we may have omitted measures that would better capture the predictors of CPS involvement among our study sample. In spite of these limitations, we believe that our study improves on the sparse body of knowledge available in this area. In particular, by moving beyond the variables available in administrative databases, the data used most frequently to study the involvement of public assistance recipients with child welfare programs, we provide a richer view of the correlates of CPS involvement.

FINDINGS

Table 1 demonstrates the significant level of involvement of our sample with the CPS authorities in Milwaukee County. Nearly two-fifths of our respondents (n = 457; 38.8 percent) have been investigated for child abuse and/or neglect since June 1989 and only slightly fewer (n = 431; 36.6 percent) had been investigated at least once prior to their interview with us at the time of their TANF application. About 14.2 percent of the overall sample, 36.5 percent of all those ever involved with CPS, were investigated after our interview with them. The average amount of time that sample members could be tracked after their interview (i.e., until the end of September 2000) was approximately 16 months. Although we know of no data that are

strictly comparable to ours, the investigation rate for our sample over an average of 16 months is considerably higher than either the 1-year (4.7 percent) or 2-year (9.4 percent) investigation rate for the most recent AFDC entry cohort (1994) for which Needell et al. (1999) had 2 years of data. In addition to our link to CPS data, we also asked respondents a set of questions about whether they had ever had a child in out-of-home care, including kinship foster care, and whether they currently had a nonresident child in such a living arrangement. Almost 6 percent of the sample (n=70) answered "yes" to one or more of these questions.

We estimated Cox models (Cox, 1972; Yamaguchi, 1991) of the hazard of CPS investigation among our sample members after their application for TANF at the time we first interviewed them. This approach reflects the longitudinal focus of our overall project and our desire to minimize the problem of endogeneity in understanding contributors to CPS involvement among our sample members. As the project progresses and we have more interview waves and longer follow-up with CPS data, our analyses should become more powerful. Table 2 shows the explanatory variables included in the Cox models, descriptive statistics pertaining to these variables for the total sample, and variation on these dimensions between parents with CPS investigations after our interview and those with no subsequent CPS involvement. Given the scarcity of research in this area, we consider our study to be exploratory in nature. Although we made no attempt to evaluate any specific theoretical model of the involvement of TANF clients with the child welfare system, in some cases we had hypotheses regarding the expected impact of specific variables, and these hypotheses are indicated below.

The variables in the Cox models cover five domains. First, we included basic demographic information about sample parents (gender, race/ethnicity, age, marital status) and information about their children. The age of the youngest child by birth or adoption residing in the subject's home was included to control for the fact that younger children are generally considered to be more vulnerable than older children to the risks of child maltreatment. The number of resident children was included as a potential indicator of parenting stress and because previous research has found family size to be related to CPS

TABLE 2
Bivariate Relationships between Explanatory Variables and CPS Investigation Subsequent to Request for W-2 Assistance

Variable	Total	Without CPS Investigation	With CPS Investigation	p value
Total	1179 (100%)	1012 (85.8%)	167 (14.2%)	n.a.
Gender				**
Female	1134 (96.2%)	968 (85.4%)	166 (14.6%)	
Male	45 (3.8%)	44 (97.8%)	1 (2.2%)	
Race/Ethnicity				
Black	901 (76.4%)	767 (85.1%)	134 (14.9%)	
Hispanic	128 (10.9%)	114 (89.1%)	14 (10.9%)	
White	118 (10.0%)	103 (87.3%)	15 (12.7%)	
Other	32 (2.7%)	28 (87.5%)	4 (12.5%)	
Marital Status				
Married	55 (4.7%)	48 (87.3%)	7 (12.7%)	
Single, Divorced, Separated, Never Married	1124 (95.3%)	964 (86.8%)	160 (13.2%)	
Education				**
High School/GED	500 (42.4%)	441 (88.2%)	59 (11.8%)	
No High School/GED	679 (57.6%)	571 (84.1%)	108 (15.9%)	
Work History				***
Working Now or in Past Year	961 (81.6%)	837 (87.1%)	124 (12.9%)	
Never or Last Worked More Than 1 Year Ago	218 (18.4%)	175 (80.3%)	43 (19.7%)	
Public Assistance History				***
AFDC Only	366 (31.0%)	302 (82.5%)	64 (17.5%)	
W-2 Only	101 (8.6%)	93 (92.1%)	8 (7.9%)	
Both AFDC and W-2	376 (31.9%)	306 (81.4%)	70 (18.6%)	
No Prior History	336 (28.5%)	311 (92.6%)	25 (7.4%)	
Housing at Time of Interview				
Homeless or Doubled Up	332 (28.2%)	286 (86.1%)	46 (13.9%)	
Renter	801 (67.9%)	688 (85.9%)	113 (14.1%)	
Owner	46 (3.9%)	38 (82.6%)	8 (17.4%)	
Parent in Unsafe Relationship				
Yes	168 (14.3%)	139 (82.7%)	29 (17.3%)	
No	1011 (85.7%)	873 (86.3%)	138 (13.7%)	
Alcohol Problem in Past Year				**
Yes	69 (5.9%)	52 (75.4%)	17 (24.6%)	
No	1110 (94.1%)	960 (86.5%)	150 (13.5%)	
Drug Problem in Past Year				***
Yes	46 (3.9%)	33 (71.7%)	13 (28.3%)	
No	1133 (96.1%)	979 (86.4%)	154 (13.6%)	
Parent Has Nonresident Child(ren)				***
One or More	120 (10.2%)	88 (73.3%)	32 (26.7%)	
None	1059 (89.8%)	924 (87.2%)	135 (12.8%)	

TABLE 2, continued

Variable	Total	Without CPS Investigation	With CPS Investigation	p value
Current or Prior Child Welfare Placement of a Child[a]				***
One or More	70 (5.9%)	41 (59.6%)	29 (41.4%)	
None	1109 (94.1%)	971 (87.6%)	138 (12.4%)	
W-2 Agency				
A	199 (16.9%)	173 (86.9%)	26 (13.1%)	
B	201 (17.1%0	167 (83.1%)	34 (16.9%)	
C	203 (17.2%)	171 (84.2%)	32 (15.8%)	
D	173 (14.7%)	144 (83.2%)	29 (16.8%)	
E	203 (17.2%)	178 (87.7%)	25 (12.3%)	
F	200 (17.0%)	179 (89.5%)	21 (10.5%)	

Variable	Mean	Median	Correlation With CPS Investigation	p value
Parent's Age in Years	28.11	27	.115	***
Previous Year's Reported Earnings in Dollars/100	55.43	38.03	-.083	***
Number of Financial Hardships Experienced in Past Year	3.16	3	.126	***
CES-D Score	17.31	14	.107	***
Parental Stress Measure	8.10	7	.116	***
Age of Youngest Child in Years	4.33	3	.035	
Number of Resident Children	2.23	2	.231	***

Note: *** = p < .01; ** = p < .05; * = p < .1.

[a]This refers to parental self-report of current or prior court-ordered placement of at least one child in out-of-home care, including state-funded kinship care.

involvement among families receiving public assistance (Needell et al., 1999). We included a variable indicating that a parent has one or more nonresident children (about one-tenth of our sample) because we believed that this might identify families with a lowered risk of CPS involvement due to their ability to find alternative living arrangements for children they could not or did not want to care for (the vast majority of nonresident children in our sample were living with the child's other parent or a grandparent)

Second, we included variables that assess the human capital and economic well-being of the respondents. We categorized respondents' education by whether or not they had a high school or general equivalency degree. Although all of the families represented in the study have low incomes, the observed relationship between poverty and child maltreatment (Drake and Zuravin, 1998) called for the inclusion of a variety of measures of economic well-being. Connection to the workforce was captured with a dichotomous variable that compared respondents who were currently working or had worked in the past year to those that either had never worked or had most recently worked over 1 year before the interview. We also included reported earnings over the past year in the model. We included a variable that categorized the respondents' current living situation. Lastly, we included a summary score of economic hardships experienced by the respondents in the past year.[4]

Third, we included descriptors of the sample members' use of public assistance. One variable captured whether respondents had, previous to our interview with them, been on AFDC, W-2, both AFDC and W-2, or neither program. The other variable identifies which of the six W-2 agencies they were applying to.

Fourth, we incorporated several measures of the parent's behavioral health. We included the Center for Epidemiological Studies Depression (CES-D) scale, which has been used to measure depressive symptoms in the general population (Radloff and Locke, 1986). One indicator variable assessed whether the

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[4]The economic hardships score includes questions about whether in the past 12 months the respondent has ever not had enough money to buy food or clothing that the family needed or to pay the rent, mortgage, or other important bill, and another set of questions about whether certain events indicative of economic hardship (e.g., eviction, cutoff of utility or phone service, use of a food pantry) had happened in the previous 12 months (alpha = .83).

respondent reported being in an "unsafe relationship" at the time of the interview. Two other indicator variables captured whether the respondent admitted to having had a problem at some point in the previous year with either alcohol or drugs. We also included a measure of how much stress a parent was currently experiencing with respect to a randomly chosen child in each family.[5] This variable serves as a proxy for parenting stress in general.

Fifth, we included two measures of prior or current involvement with child welfare services. The first variable indicates whether Milwaukee CPS had investigated the parent prior to our interview. The second indicates whether they currently have, or ever have had, a child in court-ordered out-of-home care.

Bivariate Relationships between Explanatory Variables and CPS Investigation

Table 2 shows the results of bivariate analyses of the relationship between the selected characteristics of our sample parents and whether they were investigated for child maltreatment after our interview with them. Women were much more likely than the small number of men in the study to have been involved with CPS during our follow-up period. Older respondents were more likely than younger ones to become involved with CPS during follow-up. Race and marital status were not related to the likelihood of subsequent CPS involvement. Although the age of the youngest child in the family was not related to later CPS involvement, the other child-related variables were related in the expected direction. More education, recent paid work experience, and higher earnings in the previous year were associated with a decreased risk of CPS investigation, whereas economic hardships experienced in the previous year increased the risk. Housing status was not associated with CPS involvement. All of the parental behavioral health problems, with the exception of parental report of being in an unsafe relationship, were associated with an increased likelihood of CPS involvement.

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[5]The parenting stress score sums the answers from a series of eight questions about stresses associated with parenting a particular child (alpha = .83). Examples of these questions include: "How often do you lose patience with your child? How often do you feel angry with your child? How often do you feel trapped by your responsibilities as a parent?"

Cox Models of the Hazard of CPS Investigation

Table 3 shows the parameter estimates associated with the Cox proportional hazards models of the first CPS investigation subsequent to application for TANF assistance in Milwaukee.[6] Each of these models is based on 167 "events" (respondents' experience of a CPS investigation at some point in the follow-up period) with the other observations being censored as of the end of September 2000, the last date for which we had CPS data at the time of our data analysis. Table 3 shows hazard ratio coefficients and whether they are statistically significant at various levels of probability. These hazard or "risk" ratios rather than log-odds coefficients are presented since the former are more intuitively appealing. A ratio greater than 1 indicates a higher risk for CPS investigation while a ratio of less than 1 implies a lower risk. For a continuous variable, the hazard ratio shows the multiplicative change in the hazard of CPS involvement owing to a one-unit increase in the value of that variable. For a categorical variable, the risk ratio corresponds to the multiplicative change in the hazard of CPS investigation associated with a particular value of the variable relative to the comparison category for that variable (where comparison categories are not obvious they are listed before other categories for variables in Table 3).

Table 3 presents estimates for five Cox models. Model 1 includes only parent demographic information and family structure variables. Model 2 adds measures of human capital and economic functioning. Model 3 adds the respondent's experience with cash public assistance programs, including the W-2 agency where we interviewed them. Model 4 adds measures of parental behavioral health. Model 5

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[6]The hazard functions being estimated in this study identify the probability of CPS investigation at time *t* given that a respondent's family has not experienced an investigation subsequent to our interview with them, and therefore remained "at risk" of CPS intervention, until time *t*. Many regression models of timed event data express hazard rates as a function of covariates and a function of time. The most common form of the proportional-hazards model used in this study expresses the hazard rate in terms of an unspecified function of time, $q(t)$, and a log-linear function of observed variables. This model can be written as $h(t) = q(t)e^{xB}$, where B represents a vector of regression parameters corresponding to the vector of covariates. Proportional-hazards models assume that the hazard rates of two individuals with different characteristics are proportional over time (Cox, 1972; Yamaguchi, 1991). Therefore, if two individuals have respective sets of characteristics represented by covariate vectors X_1 and X_2, the ratio of their hazard functions, $h(t \mid X_1)/h(t \mid X_2)$, does not vary with time. Although some of our sample members were investigated more than once subsequent to our interview, we have only modeled the first subsequent investigation here.

TABLE 3
Cox Models of CPS Investigation Following W-2 Application, 167 Events, 86% of Observations Censored

	Risk Ratios and Corresponding p Values[a]				
Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Female	8.83 **	7.72 **	6.26 ***	6.20 *	1.82
White					
Hispanic	.76	.66	.76	.80	1.19
Black	.95	.90	.89	1.06	1.39
Other Race/Ethnicity	1.04	.91	.92	1.05	1.13
Age of Parent in Years	1.02 *	1.01	1.01	1.01	.99
Single, Separated, Divorced, Never Married					
Married	.81	.88	.85	.88	.85
Age of Youngest Resident Child in Years	1.01	1.01	1.01	1.00	.98
Number of Resident Children	1.30 ***	1.30 ***	1.29 ***	1.29 ***	1.17 ***
Parent Has One or More Nonresident Child(ren)	2.35 ***	2.40 ***	2.31 ***	2.06 ***	1.32
No High School Degree or GED					
High School Degree or GED		.86	.83	.85	1.05
Never Worked or Last Worked over 1 Year Ago					
Currently Working or Worked in Past Year		.63 **	.62 **	.60 **	.60 **
Earnings in Dollars in Past Year Divided by 100		.99	.99	.99	.99
Renter					
Homeless or Doubled Up		1.08	1.09	1.07	1.17
Owner		1.21	1.20	1.11	.98
Number of Economic Hardships in Past Year		1.10 ***	1.09 ***	1.07 **	1.05 *

TABLE 3, continued

Variable	Risk Ratios and Corresponding p Values[a]				
	Model 1	Model 2	Model 3	Model 4	Model 5
Never Received Cash Public Assistance					
Received Only AFDC in Past			1.70 **	1.67 **	1.25
Received Only W-2 Assistance in Past			.81	.81	.71
Received Both AFDC and W-2 in Past			1.55 *	1.45	1.07
Agency A			1.37	1.47	1.49
Agency B			1.15	1.09	1.13
Agency C			1.27	1.37	1.58
Agency D			1.15	1.19	1.12
Agency E			1.23	1.30	1.21
CES-D Score				1.01	1.01 *
Parent Reports Being in an Unsafe Relationship				1.01	.92
Parent Reports Having Problem with Alcohol in Past Year				1.58	1.53
Parent Reports Having Problem with Drugs in Past Year				1.43	1.07
Parental Stress Score				1.04 **	1.05 **
CPS Investigation Prior to W-2 Application					8.91 ***
Child Placed in Out-of-Home Care Currently or in Past					1.81 **
Likelihood ratio chi-square (df)	78.1 (9)	103.3 (15)	111.9 (23)	125.5 (28)	258.0 (30)

Note: n = 1,179.

[a]*** = p < .01; ** = p < .05; * = p < .1.

includes measures of current and past involvement with child welfare services. We present the models in this order to illustrate the robustness of some of the variables to the inclusion of additional variable domains.

We focus our presentation of study findings on Model 5 since it is the most complex of the models and explains much more of the variance in outcomes than any of the other models. We also attend to differences between Model 5 and the other models. Not surprisingly, a history of CPS involvement prior to our contact with respondents was associated with a very large increase in the risk of subsequent involvement (risk ratio = 8.91). Similarly, all else being equal, having at some time had a child placed in out-of-home care increased the estimated hazard of CPS involvement by about 80 percent. Clearly, at least with respect to the data available from this study, the best predictor of future CPS involvement is past involvement with child welfare services.

Still, several other variables are related to CPS involvement across all models in which they are included. The number of children living with a respondent is associated with the hazard of CPS involvement, with larger families having a higher estimated risk. The magnitude of this effect is not altered noticeably by inclusion of variables in Models 2 through 4, but is reduced somewhat by the inclusion of information on prior child welfare involvement. Still, even after controlling for prior involvement, each additional child in a family increases the estimated risk of subsequent CPS investigation by about 17 percent. Work history is associated with CPS involvement, and the magnitude of its effect is virtually unchanged across Models 2 through 5. All else being equal, the parameter estimate suggests that respondents who were working or had done so in the past year experienced CPS involvement at about three-fifths the rate of those who had not worked in the past year. Parental stress increased the estimated hazard of CPS investigation, and this effect was not significantly changed by inclusion of data on prior child welfare services involvement. A 1-point increase in the parental stress score was associated with an estimated 5 percent increase in the hazard of CPS involvement. An increase of one standard deviation in this score (SD = 4.01) is associated with a 20 percent increase in the hazard of CPS involvement.

Two other variables are statistically significant in the final model, but only at the $p < .10$ level. Respondents who had experienced more economic hardships in the prior year were more likely than those with fewer hardships to experience subsequent CPS involvement ($p = .089$). Also, in Model 5 a higher CES-D score, indicative of increased depressive symptoms, was associated with an increased estimated risk of CPS involvement ($p = .058$).

Three variables had significantly less relationship with CPS involvement of our sample members in Model 5 (after controlling for a history of child welfare services involvement) than they did in the other models. Most notably, whereas the effect of gender on the estimated hazard of CPS involvement was quite large in Models 1 through 4, it is no longer statistically significant in Model 5, though the parameter estimate is still fairly large (risk ratio = 1.82). The instability of the findings with respect to gender is due to the small number of male parents in the sample with any CPS involvement. Only two of the 44 males (4.4 percent) had been investigated by CPS before our interview with them, and only one had contact after our interview. The male sample member with subsequent CPS involvement was one of the two with previous involvement, hence the notable change in the gender parameter estimate when prior CPS involvement is included in the model. The variable that captures whether a parent had a nonresident child (a strong predictor in Models 1 through 4 with only a modest decrease in effect size across models) lost statistical significance in Model 5. Similarly, the effect of the respondent's history of public assistance utilization, evident in Models 3 and 4, lost statistical significance in Model 5.

The reductions in effect size and statistical significance of several variables between Models 4 and 5 are better understood when put in the context of the relationship between these variables and *prior* CPS involvement of our sample. To provide some clarity, we estimated a logistic regression model of whether our respondents had been investigated by CPS before their application for TANF at the time we interviewed them (see Table 4). Prior to our interview, about 37 percent ($n = 431$) of the total sample had been investigated at least once by CPS in Milwaukee. Of these 431 respondents, 141 (36.6 percent) experienced at least one subsequent CPS investigation in the follow-up period. In contrast, of the 748 sample members

(63.4 percent of the sample) with no previous record of CPS involvement, only 26 (3.5 percent) experienced a subsequent CPS investigation during follow-up. These numbers are consistent with the estimated effect size for the prior CPS involvement variable in Model 5.

Thus, it should not be surprising that variables associated with prior CPS involvement have less import in Model 5. In fact, our logistic regression model of prior CPS involvement found gender, number of nonresident children, economic hardships, and public assistance history—all variables that change in effect size and/or statistical significance between Models 4 and 5—to be strongly related to the estimated relative odds of prior CPS involvement. In addition, as shown in Table 4, race/ethnicity, respondent's age, and respondent's education level are all related to the estimated probability of prior CPS involvement at the $p < .05$ level. The results of this model should of course be regarded with caution since the CPS investigations in question took place, in many cases, several years prior to our contact with the respondents, and nearly all of the explanatory variables in our models capture phenomena that can and do change over time. It is difficult to make clear meaning of the findings. For example, parental age may be related to prior CPS involvement simply because younger parents did not have children over much of the prior 10-year period. The primary purpose of estimating this model was to demonstrate that shared variance between prior CPS involvement and several explanatory variables is the likely cause of the reduction of the significance of these variables in Model 5.

DISCUSSION

This study finds a high level of involvement of TANF applicants with CPS agencies both before and after their application for TANF. Moreover, the imperfect nature of the matching process used to identify TANF applicants who have been investigated by CPS implies that our numbers are in fact lower-bound estimates of the true level of involvement. If we are able through more sophisticated methods to match our sample to parents in the CPS data without Social Security numbers at the same rate that we were

TABLE 4
Logistic Regression Model of CPS Investigation Prior to W-2 Application

Variable	Odds Ratios and p Values[a]
Female	26.85 ***
White	
Hispanic	.34 **
Black	.64 *
Other Race/Ethnicity	.97
Age of Parent in Years	1.06 ***
Single, Separated, Divorced, Never Married	
Married	1.04
Age of Youngest Resident Child in Years	1.04 *
Number of Resident Children	1.35 ***
Parent Has One or More Nonresident Child(ren)	2.56 ***
No High School Degree or GED	
High School Degree or GED	.59 ***
Never Worked or Last Worked over 1 Year Ago	
Currently Working or Worked in Past Year	.71
Earnings in Dollars in Past Year Divided by 100	1.01
Renter	
Homeless or Doubled Up	.87
Owner	1.17
Number of Economic Hardships in Past Year	1.06 **
Never Received Cash Public Assistance	
Received Only AFDC in Past	2.14 ***
Received Only W-2 Assistance in Past	1.16
Received Both AFDC and W-2 in Past	2.06 ***
Agency A	1.06
Agency B	.91
Agency C	.77
Agency D	1.13
Agency E	1.19
CES-D Score	.997
Parent Reports Being in Unsafe Relationship	1.20
Parent Reports Having Problem with Alcohol in Past Year	1.12
Parent Reports Having Problem with Drugs in Past Year	1.77
Parental Stress Score	1.01
Likelihood Ratio Chi-Square (df)	305.4 (28)

Note: n = 1,179
[a]*** = p < .01; ** = p < .05; * = p < .1.

able to match those with Social Security numbers, then we may ultimately find that over half of our sample of TANF applicants has been investigated at some point by CPS.

This level of overlap between service populations has implications for both TANF and child welfare agencies. How does the involvement of a TANF applicant with the child welfare system impact the applicant's ability to meet the work-related requirements of TANF? Conversely, does TANF service delivery help or hinder parents in their efforts to comply with the dictates of child welfare agencies? For example, parents involved with child welfare agencies may be required to attend court meetings and participate in a variety of court-ordered services in order to retain or regain custody of their children. To what extent do these demands conflict with the requirements imposed by the TANF agency regarding participation in work training or education programs? Our study suggests that the overlap in these populations is large enough that the functioning of either of these service systems could conceivably have a significant impact on the success of the other in achieving its mission.

This need not be framed only as a problem. Many commentators have noted that TANF represents not only a shift away from cash entitlements but also a return of sorts to seeing the welfare office as a social service enterprise. TANF agencies now arrange for child care, transportation, and education for working parents and are increasingly providing behavioral health services to help parents address substance abuse and mental health problems. All of this is done in the name of supporting parents' ability to function effectively in the workforce. Ironically, many of these same services are provided by child welfare agencies, almost exclusively to low-income families, in the name of helping them to function effectively as parents. But it may be that many if not most of the challenges that limit some parents' ability to parent are the same as those that limit their ability to work. If this is true, then maintaining two distinct systems to meet these common challenges may make little sense. The overlap identified in our study between these two populations suggests at a minimum that more attention be paid to when and how TANF and child welfare agencies should coordinate efforts.

Further support for this argument comes from the results of our multivariate models, though clearly more research needs to be done in this area before any firm conclusions can be reached. One explanation for why more children in a family could heighten the risk of CPS involvement is the idea that more children increase the stresses on parents, including the stress associated with arranging child care. Availability of appropriate child care may also play a significant role in parents' labor force participation. Both CPS and TANF agencies have an interest in, and in many cases provide funding for, child care, though their efforts are seldom coordinated. More generally, parental stress is associated with increased risk of CPS involvement in our study, and may very well be associated with a parent's ability to hold down a steady, family-supporting job. To the extent that economic hardships play a role in CPS involvement, as suggested in our findings, CPS agencies ought to be interested in TANF agencies helping families to become economically self-sufficient. Finally, and most important with respect to the debate over welfare reform, why does involvement in the workforce appear to substantially decrease the risk of CPS involvement among the population receiving TANF? Clearly this is a question that should be of interest to anyone involved in the debate over the effects of welfare reform on child well-being. As our study progresses through future waves of survey data collection, we hope to help answer some of the questions raised above by developing a better understanding of the factors that challenge the ability of low-income families both to work and to parent.

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