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Dynamics of Material Hardship in the Women's Employment Study

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Abstract

There is an abundance of literature examining dynamics and durations of poverty, but little research has examined the dynamics of specific forms of material hardship. This paper addresses the following research questions: Within a welfare sample, how common are experiences of material hardship *over time*? Are some forms of material hardship more common than others? Do women experience multiple hardships? I analyze data from five waves of the Women's Employment Study on six different forms of material hardship (food insufficiency, telephone disconnection, utility disconnection, unmet medical needs, improper winter clothing, and housing problems). I find that although the cross-sectional reports of material hardship were comparable to those found in other studies, the level of women *ever* reporting each form of hardship was substantially higher. Furthermore, women were likely to experience multiple forms of hardship over the observation period, suggesting that overall quality of life within these households was quite low at some point(s) during the transition from welfare to work.

Dynamics of Material Hardship in the Women's Employment Study

I. INTRODUCTION

Scholars have heavily studied the determinants and dynamics of poverty (Bane and Ellwood 1986; Blank 1997; Gottschalk and Danziger 1993; McKernan and Ratcliffe 2005). The literature is rich with studies indicating individual characteristics (such as race, teen motherhood, unmarried parenthood) as well as life events (such as divorce or unemployment) that increase the risk of experiencing a poverty spell. The interest in determinants of poverty is part of a larger discussion regarding the needs of economically vulnerable members of the society. As Mayer and Jencks argued in 1989, most Americans are more concerned that their fellow citizens have their material needs met (food, housing, clothing, health care) than whether they have adequate incomes. Yet, with few notable exceptions (Mayer and Jencks 1989; Alaimo et al.1998; Beverly 2001b; Rose 1999; Iceland and Bauman 2004; Ribar and Hamrick 2003), little research has directly measured determinants of specific forms of material hardship, such as food insufficiency, and the cross-sectional nature of the research conducted to date has limited its usefulness in the policy arena.

I utilize a longitudinal data set of women on welfare, the Women's Employment Study, to examine experiences of six different forms of material hardship (food insufficiency, telephone disconnection, utility disconnection, unmet medical needs, inadequate winter clothing, and housing problems) to answer the following questions: Within a welfare sample, how common are experiences of material hardship *over time*? Which types of hardship are most common? Do women experience multiple types of material hardship?

This research has important implications for public policy. By examining data from a longitudinal survey, we can begin to understand whether cross-sectional estimates are good approximations of the spread of material hardship across vulnerable populations. Furthermore, we can explore whether food insufficiency is a good proxy for other forms of material hardship or if we need to conceptualize the populations who experience distinct forms of material hardship differently. Finally, by examining

multiple experiences of hardship, policy makers will have some information about the depth and breadth of material hardship in a welfare sample.

II. BACKGROUND LITERATURE

The Relationship between Poverty and Material Hardship

There is an abundance of research examining determinants of poverty. McKernan and Ratcliffe (2005) provide a good summary of this literature. In general, researchers tend to find that changes in household composition, disability status, and labor supply are important determinants of entering or exiting poverty. Mckernan and Ratcliffe compare the relative strength of these factors over the 1988–1992 and 1996–1999 time periods using data from the Survey of Income and Program Participation (SIPP). They find that changes in employment were more important in recent periods and that shifts from a two-parent household to a female-headed household, and vice versa, were less important.

Yet, while income poverty is well understood, it is also a much criticized measure of family well-being. Common critiques of the federal poverty threshold tend to focus on measurement issues. One set of suggestions is to change the calculation of family income to include the value of public transfers, such as food stamps, Medicaid, and housing subsidies, and exclude some types of expense, such as medical, child care, and work-related expenses as well as taxes (Citro and Michael 1995). Other comments focus on the need to revise the federal threshold itself and to possibly tie it to "average" family expenditures (Citro and Michael 1995).

In tandem with the criticism of the income poverty measure, there is growing interest in using measures of material hardship to identify individuals who do not consume minimal levels of basic goods and services such as food, housing, clothing, and medical care (Beverly 2001a; Boushey and Gundersen 2001; Ouellette et al. 2004). This interest is fueled by a number of issues. First, some argue that the American public is or should be more concerned with meeting a basic set of necessities rather than providing a basic level of income (Mayer and Jencks 1989; Rector 1998). Second, there are large

differences in those who are income poor and those who are consumption poor (Meyer and Sullivan 2003; Meyer and Sullivan 2004). Third, individuals are more likely to be "productive" when their basic food, shelter, clothing, and medical needs are met (Beverly 2000; Beverly 2001a; Bauman 2002). Finally, researchers such as Amartya Sen (1999) argue that we should focus on the deprivations that are *intrinsically* important, as opposed to income, which is only *instrumentally* important.

Mayer and Jencks (1989) first noted the important conceptual and empirical differences between material hardship and poverty. From a survey of Chicago residents, they found that income explained only about 14 percent of the variation in material hardship. The empirical literature on the association between income poverty and other measures of well-being indicates that, on the one hand, poor people are more likely to report suffering a variety of material hardships than are nonpoor people (Boushey and Gundersen 2001; Iceland and Bauman 2004). For example, Boushey and Gundersen report that although about 13 percent of respondents under 200 percent of the poverty level in their study reported not having enough food to eat, only 2 percent of those over 200 percent of the poverty line said the same. On the other hand, as these findings indicate, many people with low income do not report various types of material hardship, and some people who are not poor do report hardship. One of the best-developed measures of material hardship, the food security scale, correlates with income and poverty at approximately 0.33 (Hamilton et al. 1997).

Iceland and Bauman (2004) examine the relationship between poverty and self-reported experiences of material hardship using the 1996 SIPP. They find that poverty is more strongly associated with some measures of material well-being, such as food insecurity, difficulty paying bills, and possession of consumer durables, and less strongly associated with others, including housing and neighborhood problems and fear of crime. They conclude that various measures of well-being should not be considered monolithically from a conceptual or even a policy perspective, where, for example, short-term income transfers would likely have different effects on different dimensions of well-being.

Much less is known about the relationship between poverty and material hardship specifically among the welfare population. Using data from the Michigan sample also used here, studies found that work effort and income were associated with declining levels of material hardship (Danziger et al. 2000; Danziger et al. 2002). Cancian and Meyer (2004) examine this question with some precision, and find that measures of poverty and material hardship are not highly correlated. For example, among those who did not report any hardship (measured hardships included food, shelter, and telephone), 64 percent were poor. Among those who were not poor, 32.5 percent report at least one hardship. Thus, while it is clear that poverty and material hardship measure distinct concepts, the relationship between the two remains unclear.

Previous Estimates of the Level of Material Hardship

Previous estimates of material hardship are summarized in Table 1 and vary greatly across time and samples. The first estimates of material hardship were produced by Mayer and Jencks (1989) from a sample of Chicago residents which included an oversample of low-income households. The time period referenced for these reports was the recession of the early 1980s. Mayer and Jencks find that 21 percent of individuals reported food hardship, 7 percent utility disconnection, 12 percent housing problems, and 9 percent unmet medical needs.

In contrast, Bauman (1999) reported much lower levels of material hardship using the 1995 data from the nationally representative SIPP. Bauman finds that only 5 percent of all households reported food hardship, 2 percent utility disconnection, 6 percent unmet medical needs, and 4 percent telephone disconnection. Thus, findings from the most recent nationally representative data indicate that household-level material hardship among the general population is relatively rare—much rarer, at any rate, than poverty, which in 1995 was 12.3 percent (DeNavas-Walt, Proctor, and Hill 2005).

With the signing of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy Families (TANF), interest in assessing rates of material hardship among women as they transition

Table 1
Prior Findings Regarding Material Hardship

	Data	Year	Estimate of Hardship	%
General Population				
Mayer and Jencks (1989)	Chicago Survey	1983–1985	Food hardship	21%
			Utility disconnection	7
			Housing problems	12
			Unmet medical need	9
Bauman (1999)	SIPP	1995	Food hardship	5
			Utility disconnection	2
			Unmet medical need	6
			Telephone disconnection	4
Welfare Sample				
Edin and Lein (1997)	Snowball sample:	1988–1992	Food hardship	31
	Charleston		Utilities disconnected	17
	San Antonio		Winter clothes	12
			Telephone disconnection	34
	Chicago		Housing problems	25
	Boston		Unmet medical need	7
Acs and Loprest (2001)	Leaver studies in 15 sites	1996–1998	Food hardship	25–50
			Utility hardship	22–48
			Medical hardship	8–40
Boushey and Gundersen (2001)	NSAF	1996	Food hardship	14
			Unmet medical needs	14
			Telephone disconnected	21.50
	SIPP	1995	Food hardship	19.60
			Utilities disconnected	7.6
Cancian and Meyer (2004)	Wisconsin	1999	Food hardship	15
			Shelter hardship	33
			Utility disconnection	20
			Telephone hardship	50
Corcoran, Heflin, and Siefert (2002)	Michigan	1997	Food hardship	24.4

from welfare to work bloomed. Each of the so-called "Leaver Studies" funded by the U.S. Department of Health and Human Services included some measure of material hardship, as did many independent state studies of women on welfare. Acs and Loprest (2001) summarized the results from the federally funded leaver studies and reported wide variance in the rates of reported material hardship. For example, rates of reported food hardship varied from 25 to 50 percent, utility hardship from 22 to 48 percent, and medical hardship from 8 to 40 percent. These wide ranges are a function of different measurement tools used to assess each of the types of hardship, some being more sensitive than others. Also, sampling schemes and the referenced time period varied across the studies.

Reports of similar measures as those reported here were generated by Edin and Lein (1997), who interviewed a snowball sample of welfare-reliant mothers in the late 1980s and early 1990s. They report high levels of material hardship, using measures which became the basis for those used for this study. They find that 34 percent reported a telephone disconnection, 31 percent a food hardship, 25 percent housing problems, 17 percent utilities disconnection, 12 percent inadequate winter clothing, and 7 percent an unmet medical need.

Other estimates of material hardship among the welfare population were produced by examining the welfare subsample present in larger representative surveys, such as the SIPP and the National Survey of America's Families (NSAF). Boushey and Gundersen (2001) report somewhat similar levels of food hardship across the two different data sources and the two different measures. They also find that rates of reported utility disconnection among the welfare subsample of the SIPP were 7.6 percent (versus 1.9 in the general population). From the NSAF, they find that 21.5 percent reported having a telephone disconnection and 14 percent an unmet medical need.

Finally, a number of state studies of welfare recipients have included measures of material hardship. Cancian and Meyer (2004) recently reported that 15 percent of welfare leavers in Wisconsin experienced a food hardship, 33 percent a shelter hardship, 20 percent a utility disconnection, and 50

percent a telephone hardship. Corcoran, Heflin, and Siefert (2002), using the same data from Michigan as in the present study, reported higher rates of food hardship, 24.4 percent.

Research on material hardship discussed so far has been largely descriptive in nature. However, one serious limitation of even the descriptive information is that we only know about levels of hardship at a point in time, because all of the previous studies have relied upon cross-sectional data. One of the major contributions of this project to the field of material hardship research is that I can estimate the extent that cross-sectional results correctly capture dynamics of material hardship over time.

III. DATA AND METHODS

Data

Ideally, I would like to use national-level data to answer the research questions posed here. However, I need repeated measures of different forms of material hardship and no national-level longitudinal data sets contain this information. Therefore, in order to answer my research questions, I turn to an information-rich source for a smaller geographic area. While this compromises the generalizability of my research, I believe that it does move the literature in this area forward.

In this study, I analyze data from the five waves of the Women's Employment Study (WES), a panel survey of barriers to employment among 753 mothers who were receiving cash assistance in an urban Michigan county in February 1997. Trained staff of the Survey Research Center of the Institute for Social Research of the University of Michigan conducted face-to-face, in-home, structured interviews between August and December of 1997, August and December 1998, November 1999 and March 2000, September and December 2001, and November 2003 and March 2004. The first two interviews lasted approximately one hour; the third, about 90 minutes; and the fourth and fifth, about 85 minutes. Women were eligible if they resided in the study county, received cash assistance in February 1997, were single, a U.S. citizen between the ages of 18 and 54, and claimed a racial identity of white or African American (there were too few other minority residents of this county to conduct reliable analyses).

A simple random sampling scheme was used. Cases were systematically selected with equal probability from an ordered list of eligible single mothers. To derive a representative sample of the metropolitan area and the study population, cases were proportionately selected by zip code, race (African American or non-Hispanic white), and age. The response rate was 86.2 at wave one; 92 percent at the second wave; 91 percent at the third wave; 90 percent at wave four; and 91 percent at wave five. About half the respondents were African American, 26.6 percent were age 35 years or older, 36.0 percent had three or more children, and 29.5 percent had not completed high school.

Measures

There is no established set of measures to gauge material hardship (Ouellette et al., 2004).[1] Building on the findings of Iceland and Bauman (2004), this project examines changes in six forms of material well-being: food insufficiency, telephone disconnection, utility disconnection, unmet medical needs, improper winter clothing, and housing problems. Wording for each measure of material hardship is given below:

1. **Food insufficiency** is measured at five time points using the single item, "Which of the following best describes the food eaten in your household in the last 12 months: enough to eat, sometimes not enough to eat, or often not enough to eat?" Those answering "sometimes" or "often not enough to eat" are coded as food insufficient.

2. **Utilities shut-off** is measured at five time points with the following item: "Has your gas or electricity been turned off since [PRIOR WAVE] because you couldn't afford to pay the bill?"

3. **Telephone disconnection** is measured at three time points with the following item: "Has your phone been disconnected or have you gone without a phone at any time since [PRIOR WAVE] because you could not afford to pay the bill?"

4. **Medical care** is measured at three time points with the following item: "Was there a time since [PRIOR WAVE] that you needed to see a doctor or dentist but could not afford to go?"

[1]Some disciplines, such as economics, clearly prefer consumption data to self-reports of material hardship due to possible error in reporting issues. A thoughtful summary of the arguments in favor of consumption data versus income data can be found in Meyer and Sullivan (2004).

5. **Improper clothing** is measured at three time points with the following item: "Did you or your children go without proper winter clothing at any time since [PRIOR WAVE] because you could not afford it?"

6. **Housing problems** are measured at three time points. Respondents were asked if they had experienced eight housing upkeep problems in the year prior to the interview—leaky roof or ceiling; plumbing problems; rodents or insects; broken windows; broken heating system; electrical problems; lack of stove or refrigerators; inadequate garbage pickup. Those who reported three or more are coded as having housing problems.

The six domains include items which can be categorized as both "critical" and "serious" hardships (Boushey and Gundersen 2001; Beverly 2001b). Boushey and Gundersen (2001: 20) contrast the two as follows: "Critical hardships explain the extent to which families fail to meet their basic needs for survival. In comparison, serious hardships explain the extent to which families lack the goods, services, and financial ability to maintain employment and a stable, healthy home environment." In particular, the following can be classified as critical hardships: food insufficiency, utilities disconnected, and unmet medical needs. The rest of the items, telephone disconnection, improper winter clothing and housing problems, can be considered serious hardships.

After reporting descriptive information on the occurrence and co-occurrence of different forms of material hardship, I examine the correlation between material hardship and income. My income variable is generated from a detailed measure of gross monthly income and then adjusted for taxes. For more information on this measure and how it correlates with annual measures of income in this sample, see Danziger et al. (2002).

IV. RESULTS

Table 2 presents the prevalence at each wave of observation of each of the six forms of material hardship. Having an unmet medical need and a telephone disconnection are the most frequently cited forms of hardship—fully one-third of the sample report these hardships at each of the three waves at which they are measured. Living in housing with three or more critical problems is the next most frequently cited form of hardship—just under one in four women report this form of hardship at each wave. Levels of food insufficiency appear to have fallen slightly over the observation period from one in

Table 2
Descriptive Statistics: Hardship Measures

	W1	W2	W3	W4	W5
Food Insufficiency	24.6%	22.7%	23.3%	16.8%	18.7%
	(0.431)	(0.419)	(0.423)	(0.375)	(0.390)
Utility Disconnection	9.4	10.6	9.0	8.1	11.8
	(0.292)	(0.308)	(0.287)	(0.274)	(0.322)
Telephone Disconnection	NA	NA	31.7	29.0	31.3
			(0.466)	(0.454)	(0.464)
Unmet Medical Needs	NA	NA	29.3	31.9	33.0
			(0.455)	(0.466)	(0.470)
Improper Winter Clothing	NA	NA	10.4	10.1	9.0
			(0.306)	(0.301)	(0.286)
Poor Housing	NA	NA	26.0	23.6	22.2
			(0.439)	(0.425)	(0.416)

Note: Standard errors are in parentheses.

four women in 1997 to one in eight women in 2003. Finally, having utilities disconnected or improper winter clothing are the least frequently cited hardships, with about one in ten women at each wave citing these as occurring for financial reasons. The only racial difference in the likelihood of experiencing material hardship is for unmet medical needs. Whites face a higher likelihood of having unmet medical needs at each of the three time periods measured.[2]

The cross-sectional results are within the range of results reported by others. The food hardship reported in WES starts outs on levels close to the leaver studies (Acs and Loprest, 2001) and then falls to levels close to that reported in SIPP in 1995 (Boushey and Gundersen 2001). Levels of utility disconnection are also similar to results from the SIPP (Boushey and Gundersen 2001). Levels of reported telephone disconnection are above those reported by the NSAF (Boushey and Gundersen 2001), but much lower than those found in Wisconsin (Cancian and Meyer 2004). Levels of reported unmet medical needs are within the range found in the leaver studies (Acs and Loprest 2001). Improper winter clothing and poor housing conditions are comparable to those reported by Edin and Lein (1997).

Table 3 presents information regarding the dynamics of each form of material hardship. It is clear that there is substantial movement into and out of each type of material hardship, resulting in a high proportion of women experiencing most types of material hardship at some point over the observation period. Half or more of households were food insufficient, had a telephone disconnection, had unmet medical needs, or poor housing. Experiences of improper winter clothing and utility disconnection were somewhat less common—80 percent of households never experienced improper winter clothing and 68 percent never experienced a utility disconnection. One positive finding from Table 3 is that all the churning in the population reporting material hardship necessarily means that relatively few households reported multiple experiences of the same form of material hardship. This means that the population at

[2]The racial difference in the prevalence of unmet medical needs was 34.2 vs. 25.4 at wave one, 40.3 vs. 25.1 at wave two, 41.6 vs. 25.9 at wave three for whites and blacks, respectively.

Table 3
Dynamics of Hardship Measures

	Never Observed	Observed 1 Wave	Observed 2/3 Waves	Observed 4/5 Waves	More than One Observed Spell
Food Insufficiency	50.28%	20.4%	22.1%	7.29%	29.32
Utility Disconnection	68.35	21.4	9.2	1.1	13.6
Telephone Disconnection	45.51	25.8	28.7	NA	11.68
Unmet Medical Needs	43.84	28.4	27.8	NA	5.71
Improper Winter Clothing	80.34	11.6	8.1	NA	5.65
Poor Housing	51.89	28.4	19.7	NA	7.87

risk of hardship is larger than previously thought, but that the average household experiencing hardship does not tend to do so in every observation period.

Another characteristic of interest is the number of repeated spells of hardship. The last column in Table 3 indicates that 29 percent of all spells of food insufficiency are repeat spells—the highest by far for any type of material hardship but consistent with results by Ribar and Hamrick (2003). Fourteen percent of spells of utility disconnection are repeat spells and a similar 12 percent of spells of telephone disconnection are repeat spells. In contrast, repeat spells are relatively rare for unmet medical needs (6 percent), improper winter clothing (6 percent) and poor housing (8 percent). Lower levels of repeat spells may be due to the shorter observation period for these forms of hardship. That is, if we could observe the same households over a longer period of time it is possible that we would observe just as high levels of repeated spells for telephone disconnection, unmet medical needs, improper winter clothing, and housing problems. Alternatively, the welfare sample has been transitioning from welfare to work over the observation period and it is possible that individuals are doing better at later observations points. In either case, care must be taken when trying to generalize these results to other populations.

A comparison of the cross-sectional results in Table 2 with those shown in Table 3 demonstrates that cross-sectional results tend to understate the levels of material hardship present over time. For example, whereas 17 to 25 percent of women report food insufficiency at one point in time, over the total observation period approximately 50 percent report food insufficiency at some time. This may be particularly important for research into the consequences of material hardship as cross-sectional data will not capture the exposure to material hardships that households face over time.

Table 4 presents the correlation of poverty and material hardship. Mayer and Jencks (1989) and Cancian and Meyer (2004) show that material hardship is not highly correlated with poverty. Results shown here suggest that correlations are generally low and positive between a dichotomous variable

Table 4
Correlation of Poverty and Hardship Measures

	Correlation	<1.0 FPL	1.0–2.0 FPL	>2.0 FPL
Food Insufficiency	0.2080	70.29%	26.84%	2.87%
Utility Disconnection	0.1639	71.91	23.83	4.26
Telephone Disconnection	0.2424	65.65	29.20	5.15
Unmet Medical Needs	-0.0717	45.69	46.44	7.87
Improper Winter Clothing	0.1940	69.64	27.98	2.38
Poor Housing	0.1304	61.92	33.17	4.91

Note: Food insufficiency and utility disconnection are measured at five points in time. The other four measures are measured at only three points in time. Correlation presents the tetrachoric correlation coefficient. The p-value of the Pearson chi-square test is < .000001 in all cases.

indicating that the household's income is below the federal poverty threshold[3] and contemporaneous reports of material hardship. Reports of unmet medical needs provide an exception to this, with a negative correlation.

Results shown in Table 4 also suggest that material hardship is most often experienced by those categorized as poor with income-to-needs ratios of less than 1.0. For example, of all women who were food insufficient, 70 percent were poor. The exception to this pattern can be found for those with an unmet medical need. Women reporting this form of material hardship were just as likely to be poor or near poor (income-to-needs ratios between 1.0–1.5). These results are consistent with those reported by Boushey and Gundersen (2001).

Table 5 presents information on experiences of multiple hardships. I find that women who report hardships usually report three to four out of the six forms of hardship measured over the observation periods. Column 1 indicates, for example, that women who are food insufficient experience on average 3.7 types of hardship (or 2.7 types of hardship in addition to food insufficiency). Improper winter clothing stands out as the form of hardship accompanied by most hardships in other areas, perhaps indicating that women try to avoid experiencing this type of hardship. Unmet medical need is the type of hardship accompanied by the least average experiences of hardship—3.3 types of hardship.

The rest of Table 5 indicates what forms of hardship are most often experienced by the same household over the observation period. The first row indicates, for example, that among households that are food insufficient, 46.2 percent also experience a utility disconnection, 72 percent also experience a telephone disconnection, 61.7 percent have unmet medical needs, 32.6 percent improper winter clothing, and 56.9 percent poor housing. Keep in mind that Table 5 presents results on co-occurrence of hardship

[3]Income-to-needs ratio is based on after-tax reported annual household income, the federal poverty threshold, and the household size.

Table 5
Multiple Hardship Measures

	Mean Types of Hardship Experienced	Food Insufficiency	Utility Disconnection	Telephone Disconnection	Unmet Medical Needs	Improper Winter Clothing	Poor Housing
Food Insufficiency	3.69%	100.00%	46.20%	72.45%	61.65%	32.57%	56.9%
Utility Disconnection	4.05	73.20	100.00	79.60	65.10	30.95	53.9
Telephone Disconnection	3.58	65.97	45.86	100.00	60.82	30.79	56.3
Unmet Medical Needs	3.26	54.48	36.78	59.00	100.00	23.66	52.0
Improper Winter Clothing	4.56	81.90	49.52	84.76	67.62	100.00	70.9
Poor Housing	3.46	58.27	35.18	63.63	60.63	28.96	100.0

Note: Food insufficiency and utility disconnection are measured at five points in time. The other four measures are measured at only three points in time.

experiences over the entire observation period. It does not necessarily indicate that a household experienced the hardships simultaneously.

Several patterns are apparent from Table 5. First, food insufficiency and telephone disconnection are the most commonly reported forms of hardship for households experiencing any hardship. This suggests that when households are faced with scarce resources, one of the first places to cut consumption is often on food and the telephone bill. Improper winter clothing is the hardship least often to co-occur with other experiences of material hardship: 30 percent or fewer households who experienced one of the other five forms of hardship also indicated that they had improper winter clothing. This indicates that those experiencing this form of hardship either have nowhere else to reduce consumption or else did not have knowledge of or access to charity or low-cost coat programs. About 60 percent of households who experienced one of the forms of hardship also had unmet medical needs. Finally, utility disconnection was experienced by 35–50 percent of households who experienced other forms of hardship.

In Table 6, I present findings regarding how common different types of hardship are across all households by constructing an index summing reports. Beverly (2001a) cautions against using this approach, because not all hardships are equally severe. While this is a fair criticism, I believe that there is enough important information generated from hardship indexes to present results here. I find that across the observation period, 1997–2004, only 9.6 percent of all households surveyed reported *never* experiencing any of the six types of hardship examined here. Roughly one in five households experienced one form of hardship, another 20 percent experienced two types of hardship, 18 percent experienced three forms of hardship, and 17 percent experienced four forms of hardship. About one in ten households experienced five types of hardship and 5 percent experienced all six types of hardship measured here. The mean number of types of hardship experienced by all households is 2.6. This result cannot be directly compared with other findings, since I am analyzing longitudinal data and measuring a different and larger number of hardships than most studies.

Table 6
Total Number of Types of Hardships Ever Experienced

	Percent
0 Experiences of Hardship	9.6
1 Hardship	21.5
2 Hardships	19.8
3 Hardships	18.2
4 Hardships	17.1
5 Hardships	8.6
6 Hardships	5.2
Mean number of types of hardship ever experienced	2.58

Since each type of hardship is measured at multiple points, it is also interesting to examine the total number of times a household experienced any hardship type. Table 7 presents the total number of hardships experienced across the observation time and hardship types. For example, a woman had five opportunities to report food insufficiency but only three to report an unmet medical need. There are 22 total different points at which a woman could have reported material hardship. When hardship is measured in this manner, it appears even more prevalent than that suggested by Table 6. While 28.6 percent experienced some form of hardship once or twice, 19.4 percent experienced hardship 3–4 times, 17.7 percent experienced hardship 5–6 times, and 10 percent experienced hardship 7–8 times. At the top of the scale, I find that 7.7 percent experienced hardship 9–10 times, and 6.7 percent experienced hardship eleven or more times. Here, the mean number of experiences of hardship is 4.41. Since this number is larger than the mean number of types of hardship experienced (2.6), this suggests that the average household experiences the same form or forms of material hardship in multiple time periods.

It is perhaps helpful to note once again that one limitation of this data is that four of the six types of material hardship are not asked about in waves one and two of the study. This suggests that actual reports of material hardship may be even more common than my findings here indicate.

VI. CONCLUSION

I began by asking a series of research questions. In this section, I answer those questions using longitudinal data from the Women's Employment Study, a random sample of women on the welfare caseload in one urban county in Michigan in February 1997. First, I find that although cross-sectional reports of material hardship were comparable to those found in other studies, the level of women *ever* reporting each form of hardship was substantially higher, ranging from 20 percent for improper winter clothing to 56 percent reporting an unmet medical need. This indicates that exposure to material hardship among a welfare sample is much higher than cross-sectional analysis suggests. Reports of telephone disconnection and having an unmet medical need were the most frequently reported forms of material

Table 7
Total Number of Experiences of Hardships Reported

	Percent
0 Experiences of Hardship	9.6
1–2 Experiences	28.6
3–4 Experiences	19.39
5–6 Experiences	17.66
7–8 Experiences	10.37
9–10 Experiences	7.67
11+ Experiences	6.71
Mean number of experiences of hardship	4.41

hardship, followed closely by food insufficiency and poor housing. Reports of utility disconnection and improper winter clothing were less common.

Furthermore, women were likely to experience multiple forms of hardship over the observation period, suggesting that overall quality of life within these households was quite low at some point(s) during the transition from welfare to work. In fact, only one in ten households never reported material hardship over the five-year observation period. The average number of types of material hardship reported was 2.58 and the average number of reports of material hardship across all types was 4.41.

There are at least two main limitations of this work, mentioned earlier but worth repeating. These results are not generalizable outside of the welfare population. Furthermore, since they are from a single county in Michigan, they may not be considered to be representative of the national welfare sample.[4] Additionally, four of the six measures are only measured at three instead of five time points. This means that my results are biased downward.

Several research implications can be drawn from this work. First, while studying food insufficiency is important and useful, it is necessary to extend the discussion to cover other forms of material hardship. Food insufficiency is not a good proxy for material hardship. Although food insufficiency is one of the more frequently cited forms of material hardship, many households that experience material hardship never report being food insufficient. Furthermore, little is known about the consequences of other forms of material hardship.

Second, joint experiences of material hardship are relatively common in this sample. Therefore, models need to incorporate joint experiences of hardship to test the possibility, for example, that experiencing food insufficiency is more detrimental to your health if you also experience a utility disconnection or have an unmet medical need.

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[4]Work participation among the welfare caseload was extremely high in our sample, and Michigan is one of a handful of states that does not have a time limit.

Third, in order to study material hardship more broadly we need nationally representative data and valid measures. And we need panel data to be able to study the dynamics of material hardship. Results from this small sample of welfare mothers in Michigan suggest that there is still much to learn about the ability of vulnerable populations to stretch scarce resources to meet basic needs.

Finally, in terms of policy implications, my results suggest that social policy needs to do a better job of targeting resources to those at greatest need. While reasonable people may differ about the appropriate level and definition of the poverty line, each of the serious hardships—food insufficiency, utility disconnection, and unmet medical needs—falls below accepted norms of minimal existence in our affluent society. Given the possible deleterious consequences for adult and child well-being of experiencing these serious forms of material hardship, it can be argued that it is the nation's interest to ensure that basic levels of existence are met.

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