



United States Department of Agriculture

Providing Time to Find Income Records-- Does it Help? Some Evidence from the National Household Food Acquisition and Purchase Survey (FoodAPS)

Consumer Expenditure Survey
Survey Methods Symposium
July 12, 2016
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Disclaimer

- The analyses and opinions expressed today are the author's own and do not represent those of the ERS or the USDA.



Plan for Presentation

- Describe FoodAPS, its Income Worksheet, and purpose of worksheet
- Present results on who did and did not use the worksheet
- Present results on relationship between using the worksheet and data quality



Key Characteristics of FoodAPS

- National Household **Food Acquisition and Purchase Survey** - USDA
- Oversampled households participating in the Supplemental Nutrition Assistance Program (SNAP) and other low-income households
- Nationally representative, $N \approx 5,000$
- Fielded from April 2012 to January 2013



Key Characteristics (cont)

- Measured all purchases and other food acquisitions reported by all household members for 7 days
- Primary respondent (PR) identified as the person “who does most of the grocery shopping or who is the main meal planner”



Overview of planned data collection week

Mon	Tues	Wed	Thu	Fri	Sat	Sun	Mon	Tue
0	1	2	3	4	5	6	7	8

Members track food acquisitions in booklets and with scanner



PR calls to report



PR calls to report



PR calls to report

Screeener

Initial Interview and training

Final Interview

Feedback Survey



Collecting Income Data

- Household screener asked about total household income
- Final Interview collected detailed information on monthly income for each household member aged 16 and over



Income Worksheet

- At Initial Interview, interviewer left an Income Worksheet for PR to fill out before Final Interview.
- PR could assemble income records for all members at his or her convenience
- Purpose was to improve accuracy of income data to be collected and to reduce respondent burden.



Income Worksheet



OMB Control Number: XXXX-XXXX
Expiration Date:

The National Food Study Income Worksheet

This worksheet will help you to prepare for the final interview at the end of the survey week. To better understand your household's food purchases, we will ask you about your household income. This information helps us understand how much money your household has available to spend on food. Complete this worksheet during the study week and refer to it during the final interview to make the interview go faster! We will not collect this worksheet, so feel free to put notes on it.

Remember, your information will be kept private and will not be released in a form that might identify you. We are required by law to use your information for statistical research only and to keep it confidential. The law prohibits us from giving anyone any information that may identify you or your family. The information you provide will not affect any benefits or services received by anyone in your household. Participation is voluntary.

- 1 **REVIEW** this worksheet with your interviewer during their first visit.
- 2 **COMPLETE** the forms in this worksheet during the study week. If you need to, check your recent paystubs or statements and ask other household members for their information.
- 3 **REPORT** this information during the final interview when the interviewer returns at the end of the study week.

Questions? Call our toll free number: 1-866-275-8659

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is xxx-xxxx. The time required to complete this information collection is estimated to average 8 minutes, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Total Household Gross Income (last month)

INSTRUCTIONS

Use the table below to list the name of each person living in your household who receives income from any source. Next to each person's name, list each type of income received **last month** and how often it was received. List the **gross income** from work. This is not the same as take-home pay. See the definitions at the bottom of the page for the items to include in each category.

First Name	Gross income and how often it was received <i>For example: \$100 / month, \$100/ twice a month, \$100 / every other week, \$100 / week</i>					
	Earnings from Work (before deductions)	Unemployment Compensation	Welfare, Child Support, Alimony	Retirement and Disability Income	Investment Income	All Other Income
Jane	\$ 200 / week	\$ 0 /	\$ 150 / month	\$ 0 /	\$ 0 /	\$ 0 /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /

Earning from Work (before deductions)

Enter the total amount each household member earns from work before taxes and other deductions (such as union dues, insurance premiums, and contributions to retirement plans). This amount should be listed on your pay stub. If a household member is paid in cash, enter that amount. If your income is not always the same, list the amount that you normally get. For example, if you normally get \$1000 each month, but you missed some work last month and only got \$900, list \$1000 per month. If you normally get overtime, include it, but not if you get it only sometimes.

Welfare, Child Support and Alimony

Most welfare comes from the Temporary Assistance for Needy Families (TANF) program (which may have a different name in your state) or from General Assistance, General Relief, or the GA program. These programs provide financial assistance to people with little or no income. In this column also include child support payments that are paid by a former husband, wife, or parent of a child living in your household; include child support payments paid through a welfare agency or court, and include alimony received by a member of your household. Alimony is court-ordered support paid by one spouse to another after they are separated.

Retirement and Disability Income

Enter retirement income from pension payments, retirement account withdrawals, and Social Security Retirement Benefit (SSA) payments. SSA is received by persons who have worked long enough and had enough Social Security deductions taken from their salary to be entitled to payments (these payments may be made to the spouse or dependent children of a covered worker). Enter disability income from Social Security Disability Benefit (SSDI) payments which are received by persons who cannot work because of a medical condition. Also include: (1) black lung benefits; (2) workers compensation; and (3) Supplemental Security Income (SSI).

Investment Income

Include: (1) income from rental properties; (2) interest, dividends and capital gains; and (3) trust fund payments.

All Other Income

Include any other income, such as: (1) strike benefits; (2) fuel assistance; (3) roomers, lodgers or tenants; (4) educational grants, loans or stipends; (5) insurance settlement payments; (6) Veterans Affairs benefits; (7) lottery winnings; and (8) employment bonuses.

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Income Worksheet – page 1

2

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Income Worksheet Instructions

Use the table below to list the name of each person living in your household who receives income from any source. Next to each person's name, list each type of income received last month and how often it was received. **List the gross income from work. This is not the same as take-home pay.** See the definitions at the bottom of the page for the items to include in each category.



Income Grid

First Name	Gross income and how often it was received <i>For example: \$100 / month, \$100/ twice a month, \$100 / every other week, \$100 / week</i>					
	Earnings from Work (before deductions)	Unemployment Compensation	Welfare, Child Support, Alimony	Retirement and Disability Income	Investment Income	All Other Income
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	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /
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	\$ /	\$ /	\$ /	\$ /	\$ /	\$ /



Six income types

- Earnings (gross) from work
- Unemployment compensation
- Welfare, child support, alimony
- Retirement and disability income
- Investment income
- All other income



Use of Worksheet

- 60 % of households completed the worksheet, in whole or in part.
- Worksheet was not collected, but respondent could refer to it during the interview.
 - We cannot differentiate between “in whole or in part”



Who used the worksheet?

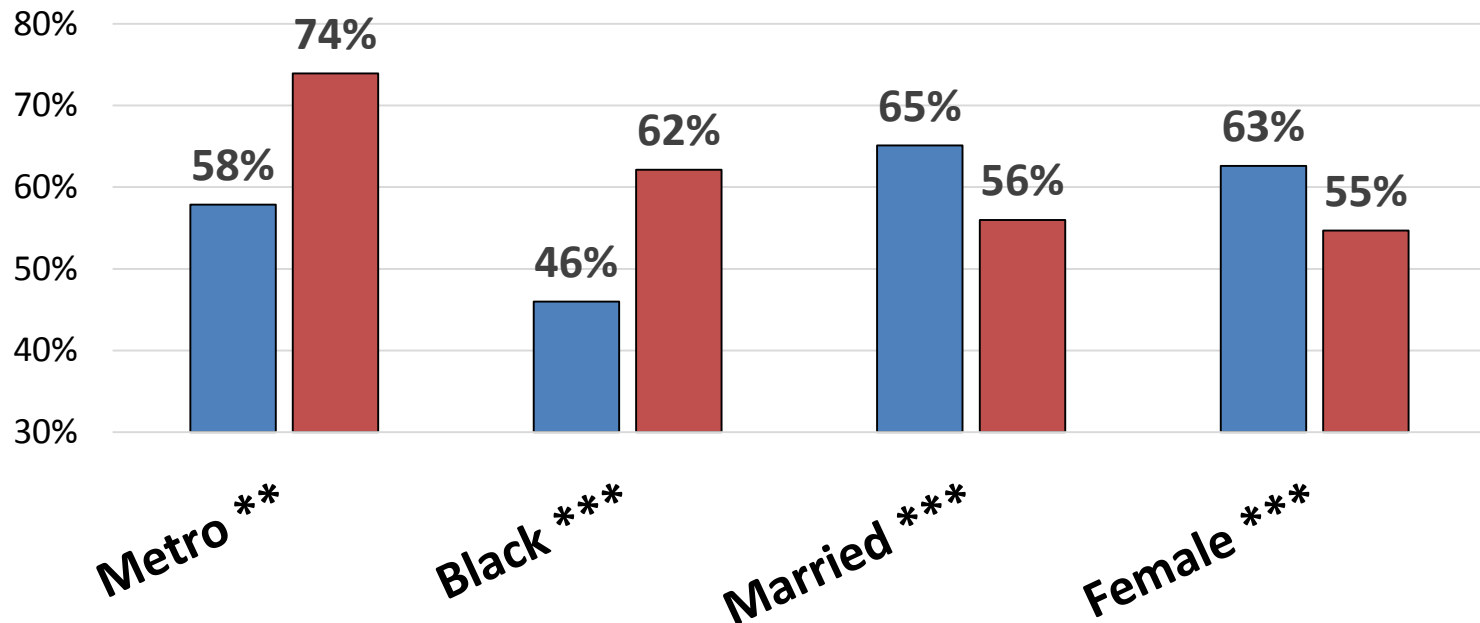
Logit model covariates

- Age (PR)
- Sex (PR)
- Married (PR)
- Race (PR)
- Ethnicity (PR)
- College education (PR)
- Metropolitan area
- Rural area
- Assets > \$3,000
- Gave consent for data matching
- Own home
- Household size



Percent completing worksheet

Differences are statistically significant



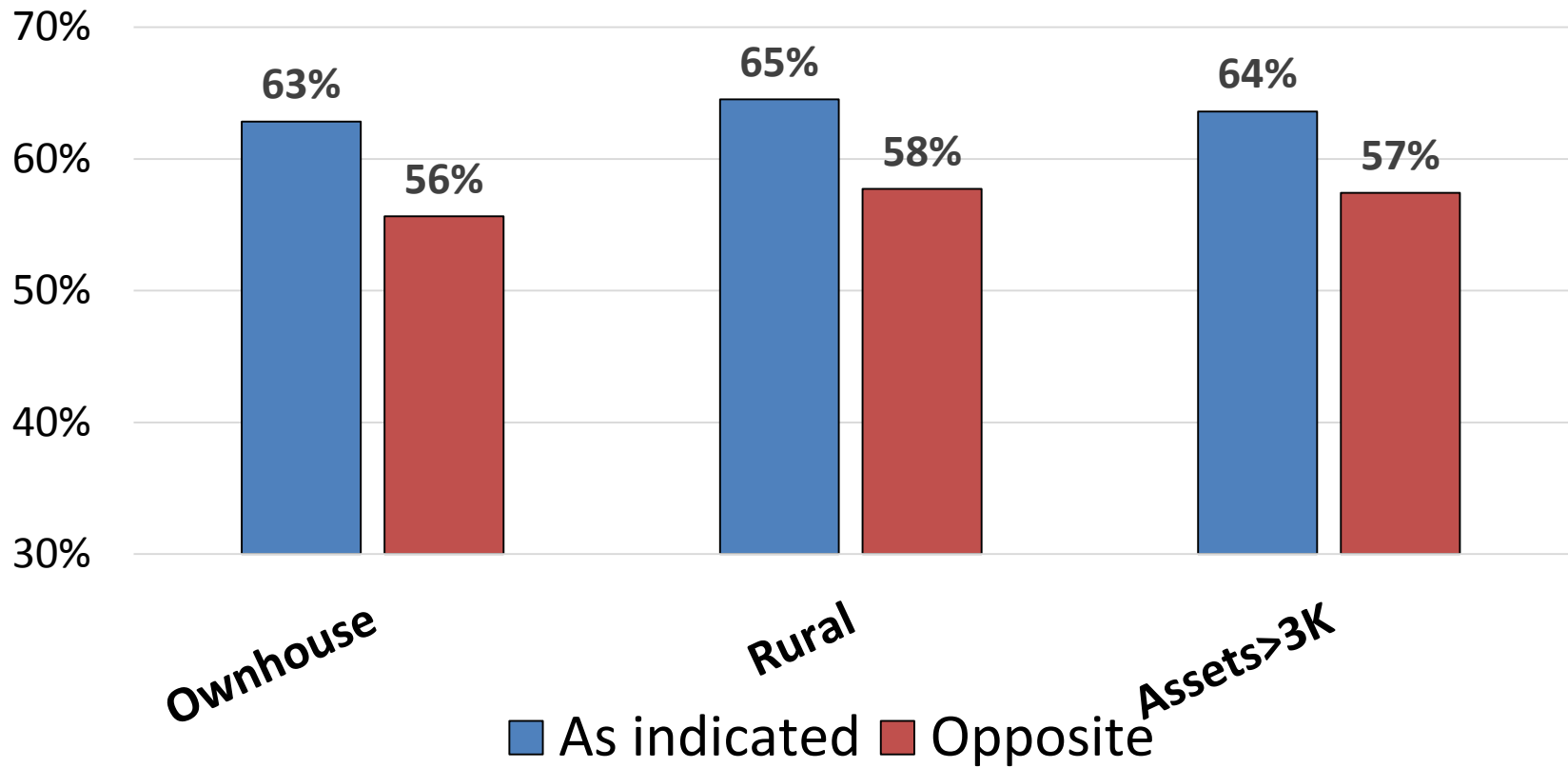
* = $p < 0.10$
** = $p < 0.05$
*** = $p < 0.01$

■ As indicated ■ Opposite



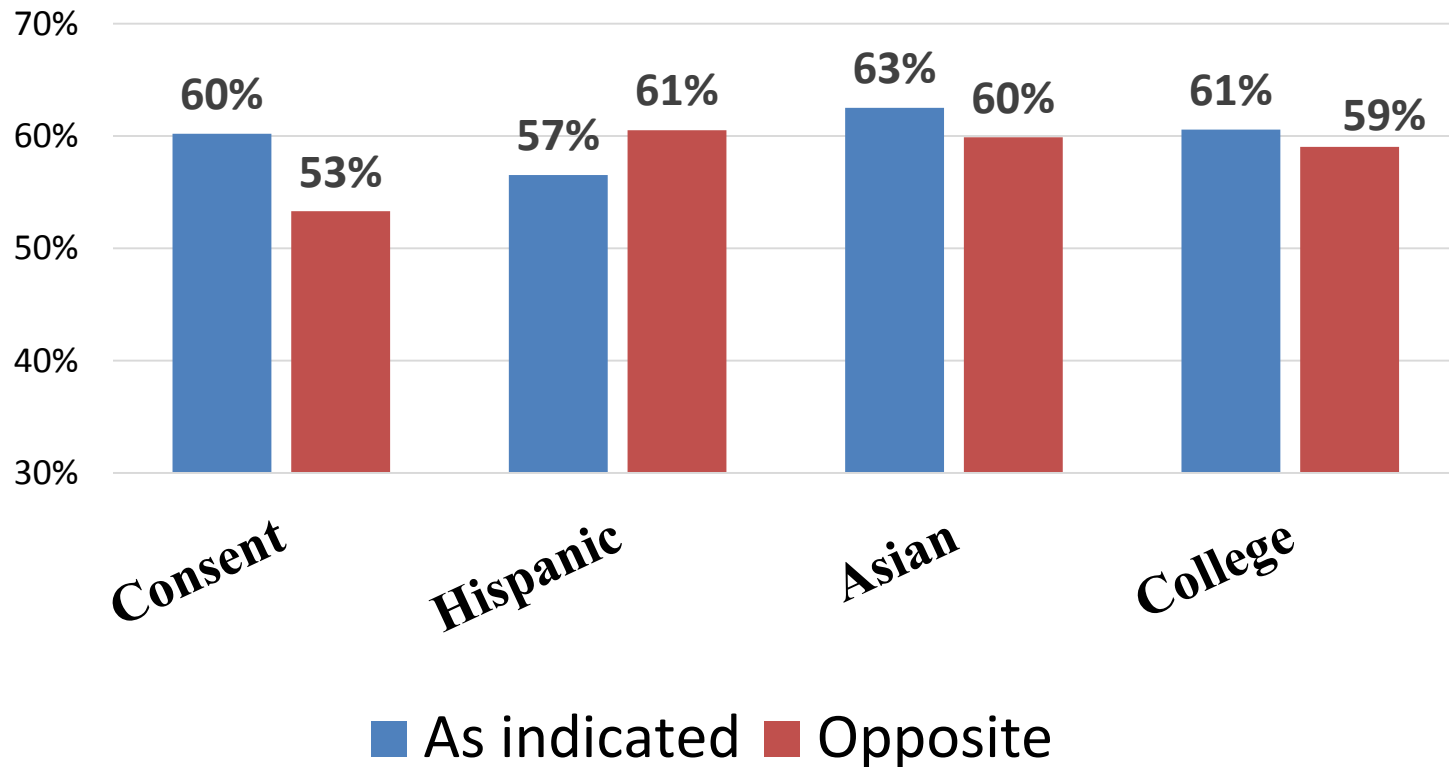
Percent completing worksheet

Differences not statistically significant



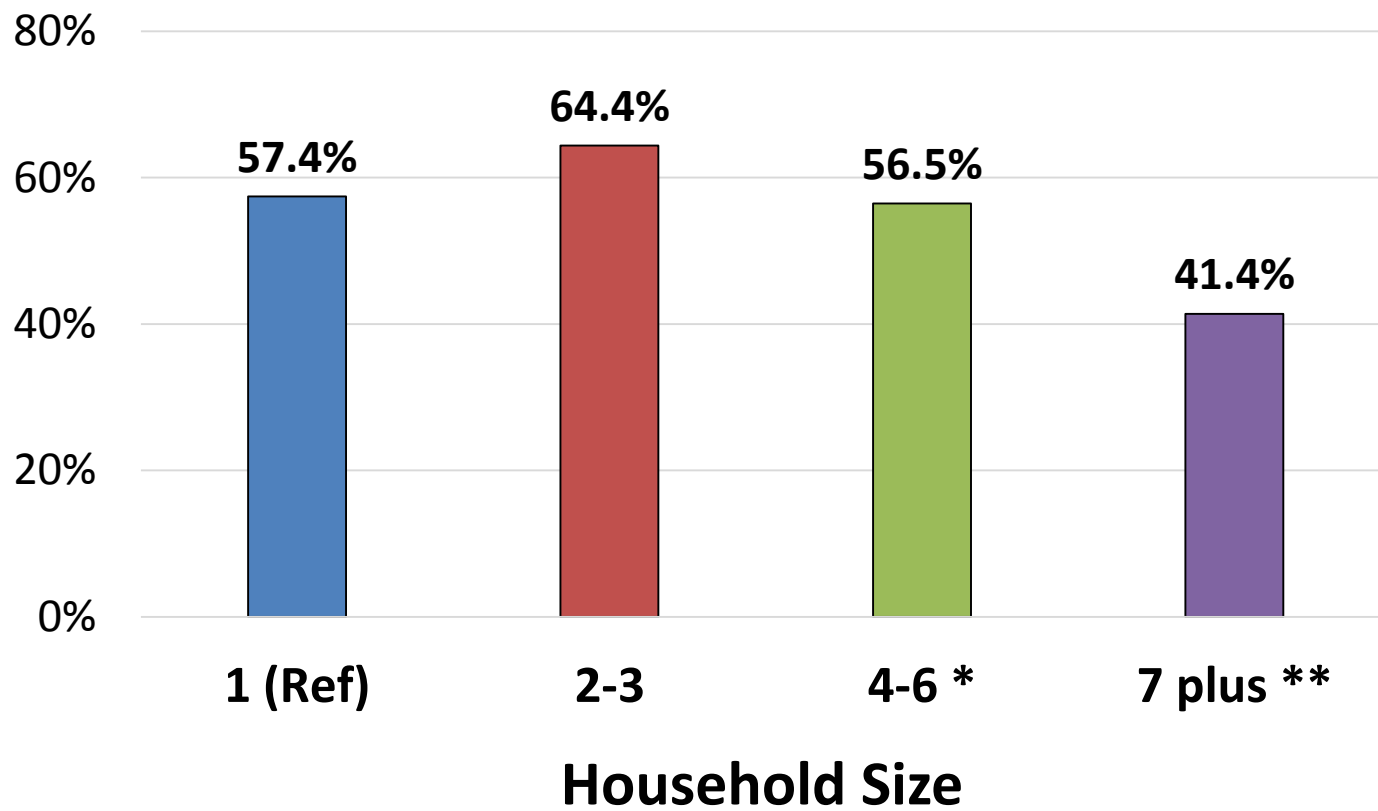
Percent completing worksheet

Differences not statistically significant



Percent completing worksheet

Differences statistically significant as shown



Hypothesized outcomes

- Households that fill out the Income Worksheet will:
 - Have fewer missing data (needing imputation)
 - Be less likely to “correct” reported income data
 - Provide more accurate data (gross vs. net earnings, fewer “outliers”)



Measured Outcomes

- Any missing income data at individual level, by income type?
- Any missing income data at household level?
- Any need to “correct” reported income?
- Any presence of “outliers”?



Income “corrections”

- After all income questions asked, interviewer showed complete grid to PR on laptop screen and asked if there were any errors or omissions
- If yes, then errors corrected and new income amounts added
- Mostly new income amounts



Income “outliers”

- Generally, in top 1% of distribution
- For income types with few positive values, outliers identified subjectively



Hypothesized outcomes - caveat

- Relation between use of worksheet and measured outcomes is probably endogenous.
 - Those more likely to fill out worksheet may be more likely to give accurate and complete information anyway.
- Cannot infer causality

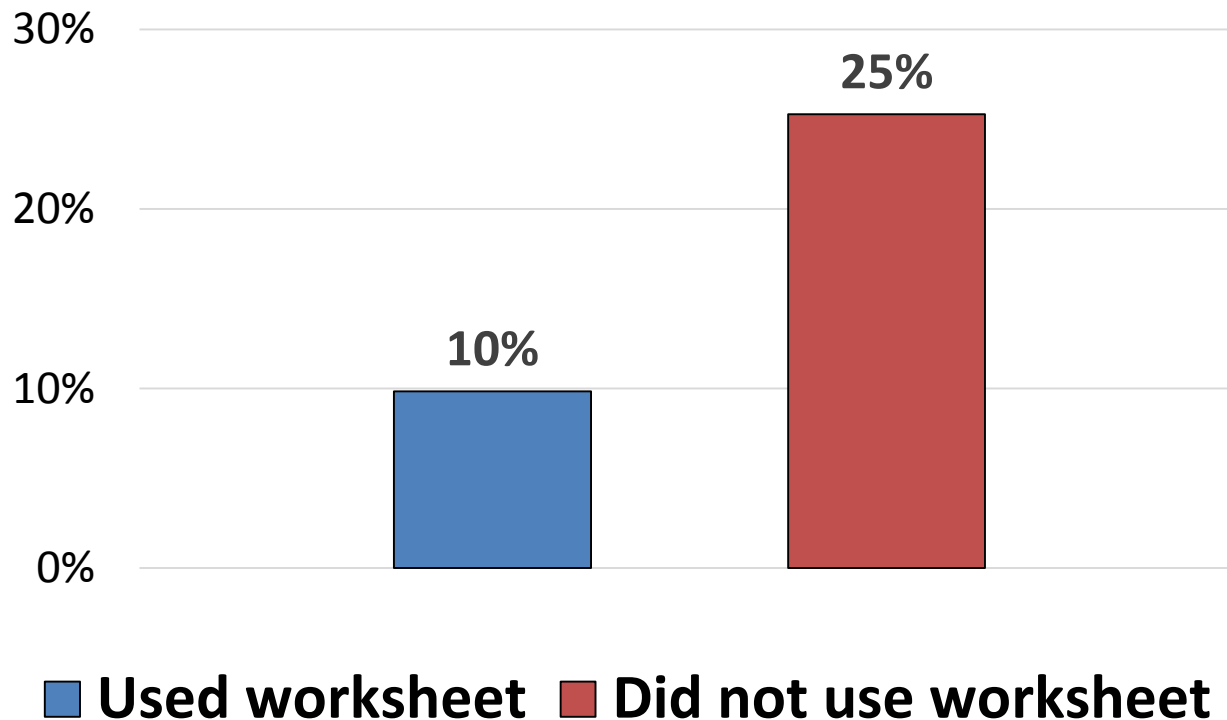


Outcome variables

Variable	N	Percent (weighted)
Households with missing income data	853	16.0
Individuals with:		
Missing/imputed earnings	339	7.0
Missing/imputed UI income	338	6.8
Missing/imputed transfer income	344	7.0
Missing/imputed retirement/disability income	549	10.0
Missing/imputed investment income	361	7.8
Missing/imputed other income	329	7.0
Corrected income data	94	2.1
Income outliers	51	2.2
Gross income reported	1,048	51.8

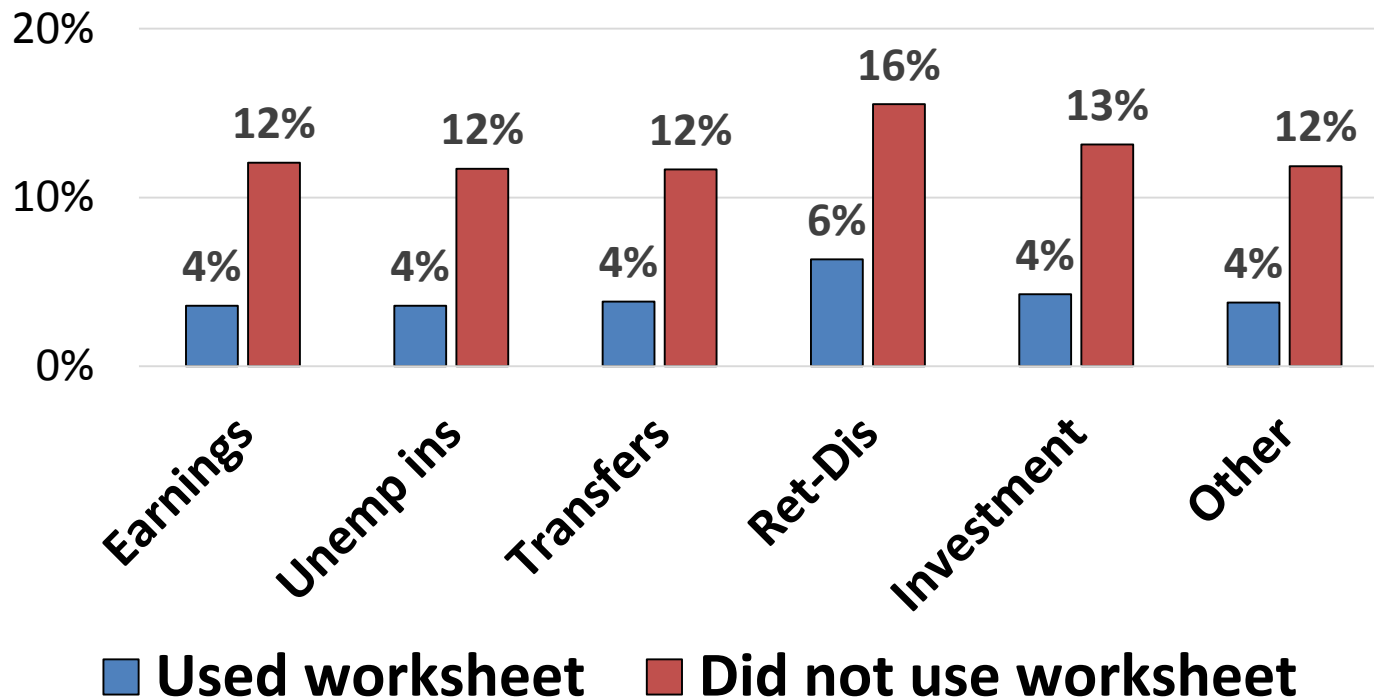


Percent of household records with any missing income

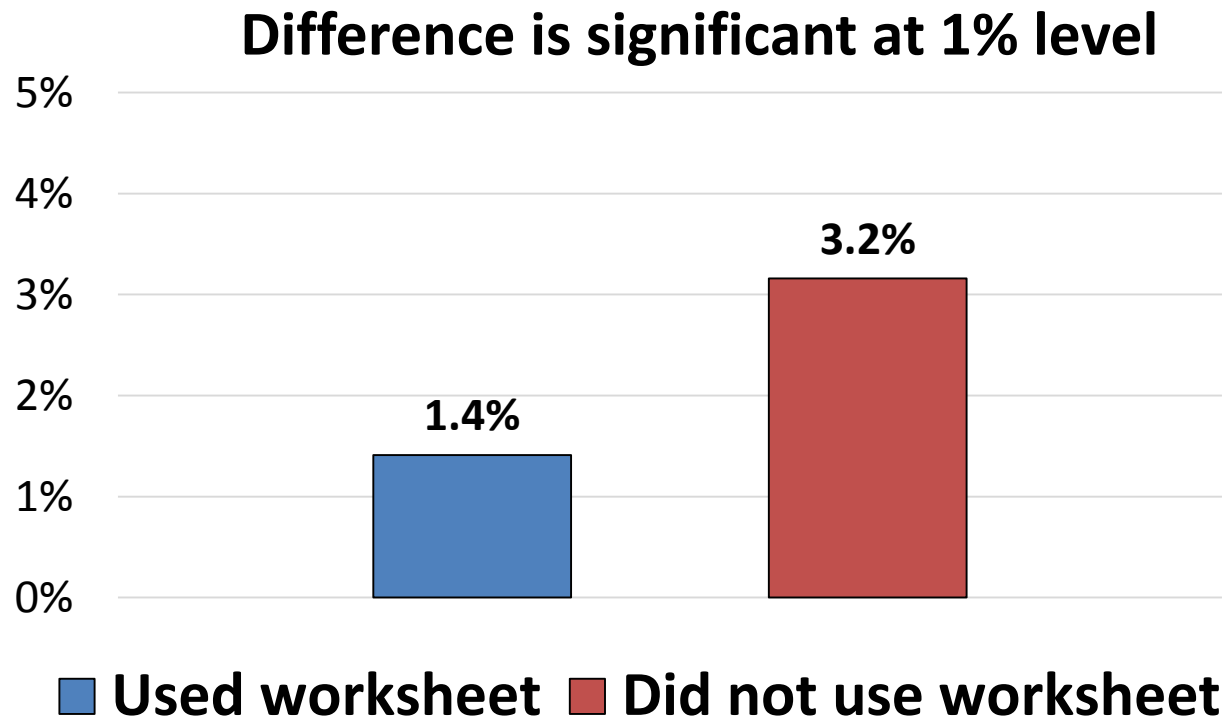


Percent of individual records with missing income, by type

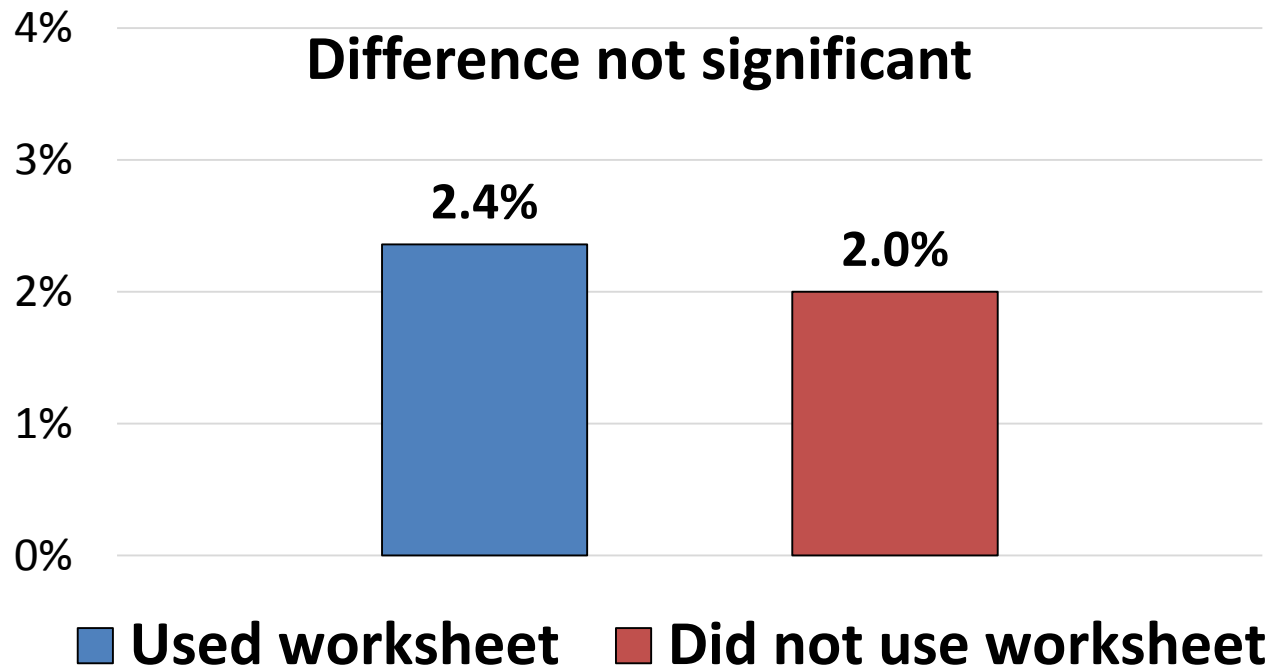
All differences significant at 1% level



Percent of individual records with any income corrections

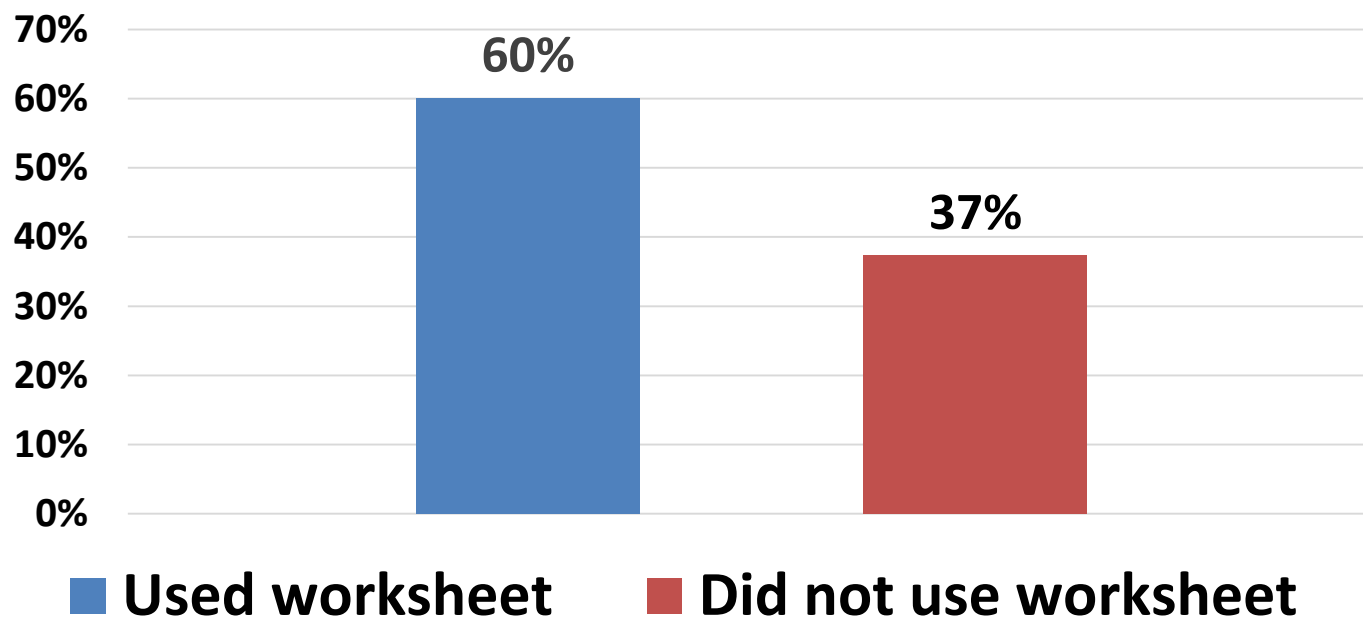


Percent of individual records with any income outliers



Percent of individual records with earnings reported as gross income

Difference is significant



Recap – who used the worksheet?

- Primary respondents who were:
 - Female
 - Married
 - Not African-American
 - Living in a non-metropolitan county
 - Living in 1-3 person households



Recap – how well did it work?

- Primary respondents who used it:
 - Had fewer missing income values
 - Were less likely to find reporting errors during review
 - Were more likely to follow directions and report gross rather than net earnings
- But, cannot imply causality because of endogeneity



Thank you!

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<http://www.ers.usda.gov/data-products/foodaps-national-household-food-acquisition-and-purchase-survey.aspx>



Extra slides, if needed



Definition for Earnings

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