

Knowledge of the Earned Income Tax Credit and Financial Behaviors Among Low- and Moderate-Income Consumers

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Consumers' knowledge of policies and programs can affect their behavior. If consumers are unaware of a program and its benefits, they are less likely to use it (Alhabeeb, Mammen, & Gary, 1997). The Earned Income Tax Credit (EITC) is a prime example of a program where the take-up rate is likely to be affected by consumers' knowledge. While it has enjoyed widespread political and public support since its inception in 1975, approximately one in four eligible taxpayers fail to claim the credit each year (Internal Revenue Service (IRS), 2008). In 2006, only 17% of all taxpayers received the credit, but the low- and moderate-income target population was much larger, reducing the program's ability to alleviate poverty (IRS, 2007, 2008).

Meeting eligibility requirements does not automatically result in EITC receipt. To receive the EITC refund, an eligible consumer must claim the credit on their federal income tax return. However, many consumers are unaware of this. Increasing consumers' knowledge about EITC eligibility requirements and how to apply for the credit can lead to increased participation in the program (Phillips, 2001). Besides increasing EITC participation, knowledge about the EITC can have other benefits. For example, it can encourage work effort among consumers with low- and moderate-incomes by lowering their Social Security tax burden (Eissa & Liebman, 1996; Meyer & Rosenbaum, 2001).

The primary purpose of this study is to investigate the relationship between levels of EITC knowledge and financial behaviors among low- and moderate-income consumers. Previous research (e.g., Phillips, 2001; Smeeding, Phillips, & O'Connor, 2000) has measured EITC knowledge in terms of whether individuals have heard of the EITC. This paper adds to the

literature by comparing three consumer groups – (1) those who understand how the tax credit operates; (2) those who possess simple name recognition knowledge of the EITC; and (3) those who have not heard of the EITC. The group with operational knowledge of the EITC is aware of at least one of the following factors that determine the actual EITC refund amount – total earned income (or adjusted gross income), number of qualifying children, and tax filing status (single, married filing jointly, married filing separately, head of household, or qualifying widow). It is hypothesized that consumers with operational knowledge of the EITC (compared to those with only name recognition knowledge or no knowledge of the EITC) will be more likely to have previously: 1) filed federal taxes, 2) received services at a Volunteer Income Tax Assistance (VITA) site, and 3) used mainstream financial services such as checking accounts and direct deposit of their federal tax refund. It is further hypothesized that they will be less likely to have used alternative financial services such as payday loans.

Methodology

As previously mentioned, the goal of this study is to examine the association between consumers' knowledge of the EITC and selected financial behaviors. The sample for this study consists of consumers who were assisted at Temporary Assistance for Needy Families (TANF)-funded VITA sites in Louisiana for the tax year 2007 (calendar year 2008). Data were taken from two sources – Louisiana Department of Social Services (DSS) Declaration Forms and a telephone survey. DSS collected Declaration Forms to document that VITA operations primarily assisted “needy families,” identified as tax filers with children. These Declaration Forms included the adjusted gross income (AGI) and number of eligible dependent children for each tax filing unit. They also provided the phone numbers used in the telephone survey.

The survey was conducted from October 1, 2008 through December 17, 2008. Participation in the survey was voluntary and

confidential, and the response rate was 66% (N=384). Low- and moderate-income consumers in the sample were assisted at 31 VITA sites, representing 7 regions in the state of Louisiana. Information collected included consumers' EITC knowledge, financial behaviors, and demographic characteristics.

Chi-square tests of independence were employed to assess how consumers' behaviors, as related to EITC receipt, tax filing experience, and use of mainstream and alternative financial services, differed depending on their level of EITC knowledge. Chi-square tests of independence for 3 x 2 contingency tables were used since the consumer behavior variables were binary and EITC knowledge had three levels. This analysis required several steps after completing the commonly used Chi-square test of independence. First, the Chi-square test of independence statistic was computed. If this test was statistically significant, then post hoc tests were performed to determine which cells had statistically significant standardized residuals. The value of the standardized residuals for the statistically significant cells was then assessed using the critical value of 1.96. Positive standardized residuals indicated cell frequencies were higher than expected, whereas negative standardized residuals indicated cell frequencies were lower than expected.

Results

Table 1 presents demographic characteristics for the sample, including age, gender, race/ethnicity, education, marital status, employment, and income. The average age of consumers in the sample was 39. The sample was predominantly female (86.2%) and Non-Hispanic Black/African American (84.9%). Seventeen percent had less than a high school education. The majority were single (82.3%) and most (83.6%) had children under the age of 18 living in the household. Nearly 90% reported working in 2007, with 23.8% working part-time and 65% working full-time. The 2007 median household adjusted gross income (AGI) was \$14,698, which was less than the 100% federal poverty threshold

of \$16,705 for a family of three in 2007 with a single parent and two children under the age of 18 (U.S. Census Bureau, 2009). More than half of the sample (56.5%) had AGIs below this threshold and 92.5% had AGIs below the 200% federal poverty threshold (2 X \$16,705 = \$33,410).¹ Thus, the sample was primarily comprised of low- and moderate-income consumers.

Table 1
Mean Characteristics of Survey Sample (N=384)

Characteristics	n	Mean
Average age	384	39 years
Female	331	86.2%
Non-Hispanic Black/African American	320	84.9%
Non-Hispanic White Caucasian	48	12.7%
Other (Hispanic, Asian/Pacific Islander, Native American, etc.)	9	2.4%
Less than a high school education	65	17.0%
High school or GED	147	38.4%
More than a high school education	171	44.6%
Married or cohabitating	67	17.7%
Single (widowed, divorced, separated, never married)	312	82.3%
Children in household in 2007	312	83.6%
No children in household in 2007	63	16.4%
Not working in 2007	40	11.2%
Worked part-time in 2007	85	23.8%
Worked full-time in 2007	232	65.0%
Median Adjusted Gross Income (2007 dollars)	384	\$14,698
Below the 100% poverty thresholds	203	56.5%
Below the 200% poverty thresholds	332	92.5%

Note: A small number of individuals did not respond to some survey questions. For example, out of 384 total respondents, race has 377 valid cases; education has 383 valid cases; marital status has 379 valid cases; number of children has 375; and work status has 357 valid cases.

¹ The federal poverty thresholds are commonly used to characterize the level of deprivation experienced. However, these thresholds are limited since they measure the estimated costs of minimally adequate food budgets for families in 1955 and do not accurately reflect expenses and resources of families today (e.g., Blank, 2008).

Characteristics of the sample resemble those found in previous EITC studies using nationally representative data sets with regard to age, educational attainment, and presence of qualifying children. However, the study sample had a higher proportion of black, unmarried, and poor respondents than national data samples (Hoffman & Seidman, 2003; Meyer, 2008). Sample differences appear to reflect geographical differences between the American South and non-South (Lopoo, 2007).

Table 2 separates the 384 consumers assisted at VITA sites into three groups. The first group ($n=152$, 39.6%) had heard about the EITC and correctly identified one or two of the three determinants of the refund amount (AGI, number of eligible children, and tax filing status). The second group had heard of the EITC but did not identify any of the correct determinants ($n=113$, 29.4%), and the third group had not heard of the EITC ($n=119$, 31%). The proportion of the sample in this study that possessed any knowledge of the EITC (69%) falls within the range found by other researchers (e.g., 73% for Smeeding, Phillips, and O'Connor (2000) and 66% for Phillips (2001)).

These three consumer groups were compared according to: 1) whether they received an EITC credit in tax year 2007 (TY 2007), 2) their previous tax filing experience, 3) prior use of VITA services, and 4) usage of mainstream and alternative financial services. The percentage of each consumer group responding to each tax filing and financial practice attribute are presented in Table 2. Asterisks indicate that statistically significant cell differences were identified by the post hoc tests from the Chi-square test of independence. Single asterisks are used to identify statistical differences at the 0.05 level while double asterisks are used to identify statistical differences at the 0.01 level. The values of the standardized residuals are reported in parentheses for those results where the post hoc test results were significant.

Several findings in Table 2 are worth noting. The first key finding is that differences in degree of EITC knowledge and uncertainty about EITC receipt were statistically significant ($\chi^2 = 15.49$, $df = 2$). Among consumers with operational knowledge of

the EITC, fewer than expected (3.3%) were unsure about their receipt of the tax credit in tax year 2007. On the other hand, among consumers who only had recognition knowledge of the EITC, more than expected (8.4%) were unsure about their receipt of the tax credit in tax year 2007. Differences in degree of EITC knowledge and EITC receipt were not statistically significant. Note that the EITC receipt question was only asked of consumers who had heard of the EITC ($n=265$).

A second key finding is that differences in degree of EITC knowledge and years of federal income tax filing experience were statistically significant ($\chi^2 = 12.49$, $df = 2$). Among consumers with no knowledge of the EITC, more than expected had less than five years of federal income tax filing experience (42.0% compared to 22.4% for consumers with operational knowledge and 28.3% for those with recognition knowledge). Differences in degree of EITC knowledge and having filed federal income tax for tax year 2006 were not statistically significant.

A third key finding is that differences in degree of EITC knowledge and prior VITA use were statistically significant ($\chi^2 = 12.73$, $df = 2$). Among consumers with no knowledge of the EITC, more than expected had not used a VITA site prior to tax year 2007 (35.9% compared to 19.1% for consumers with operational knowledge and 18.8% with recognition knowledge). Differences in degree of EITC knowledge and prior commercial tax preparer use were not statistically significant.

Other key findings pertain to the relationship between consumers' degree of EITC knowledge and their use of mainstream and alternative financial services, including whether they had a checking account and whether they had ever used a payday loan. Table 2 shows that differences in degree of EITC knowledge and possession of a checking account were not statistically significant. Similarly, differences in degree of EITC knowledge and payday loan use were not statistically significant.

Consumers were also asked whether they had received a refund check based on their 2007 federal income tax return. Those who reported receiving a refund ($n=303$) were

Table 2
Percent of Consumers with Different Levels of EITC Knowledge and Their Various Financial Behaviors (N=384)

	Heard of EITC and correct determinants ^a	Heard of EITC but no correct determinants	Never heard of EITC
<i>EITC receipt^b</i>			
Received EITC in tax year (TY) 2007	82.2%	63.7%	-
Did not receive EITC in TY 2007	14.5%	21.2%	-
Not sure	3.3% ** (-2.1)	8.4% ** (2.5)	-
<i>Federal income tax filing</i>			
Filed taxes in TY 2006	91.4%	90.3%	83.2%
Did not file taxes in TY 2006	8.6%	9.7%	16.8%
< 5 years of filing experience	22.4%	28.3%	42.0% * (2.3)
≥ 5 years of filing experience	77.6%	71.7%	58.0%
<i>Previous tax filing method</i>			
Prior VITA use	80.9%	81.3%	64.1%
No prior VITA use	19.1%	18.8%	35.9% ** (2.6)
Prior commercial tax preparer use	13.1%	11.2%	20.0%
No prior commercial tax preparer use	86.9%	88.8%	80.0%
<i>Use of Mainstream and Alternative Financial Services (AFS)</i>			
Checking account	78.3%	65.7%	67.3%
No checking account	21.7%	34.3%	32.7%
Payday loan use	13.8%	19.6%	21.8%
No payday loan use	86.2%	80.4%	78.2%
Direct deposit ^c	78.8%	58.0%	57.8%
No direct deposit	21.2% ** (-2.4)	42.0%	42.2%
Sample size (n)	152 (39.6%)	113 (29.4%)	119 (31.0%)

Note: Asterisks represent significance level of Chi-Square Test of Independence: Post Hoc Tests. * Significantly different from comparison groups at the 0.05 level (the critical value for a standardized residual was -1.96 or +1.96). ** Significantly different from comparison groups at the 0.01 level (the critical value for a standardized residual was -2.58 or +2.58). Numbers in parenthesis next to the asterisks are the standardized residuals which are interpreted in the Results section.

^a Determinants of the EITC refund amount include total earned income (or AGI), number of eligible children, and tax filing status.

^b The EITC receipt question was only asked to those who had heard of the EITC (n=265).

^c The direct deposit question was only asked to those who had received a refund check based on their 2007 federal income tax return. Those who reported receiving a refund (n=303) were then asked whether the check had been directly deposited into a bank account.

then asked whether the check had been directly deposited into a bank account. Differences in degree of EITC knowledge and

receiving federal income tax refunds via direct deposit were statistically significant ($\chi^2 = 14.71$, $df = 2$). Those with operational knowledge of the EITC were less likely to receive their 2007 federal income tax refund through means other than direct deposit (21.2% compared to 42% for consumers with recognition knowledge and 42.2% for those who never heard of EITC). In other words, those with operational knowledge of the EITC were more likely to have used direct deposit.

Discussion and Implications

Overall, this study revealed several important findings regarding the relationship between the degree of consumers' knowledge of the EITC and their financial behaviors. First, consumers with operational knowledge of the EITC were less likely to be uncertain about their EITC receipt, whereas consumers with only recognition knowledge of the EITC were more likely to be unsure about their receipt of the EITC. Certainty about whether or not one received the EITC is important for two reasons. If consumers are unaware of whether they received the credit, it is possible that some eligible credits are not being claimed. Unclaimed refunds undermine the purchasing power of eligible consumers and reduce the poverty-alleviation potential of the program.

Second, consumers with no knowledge of the EITC were less likely to have tax filing experience or to have used a VITA site prior to tax year 2007. Conversely, consumers with any EITC knowledge may have been better able to take advantage of the EITC and VITA sites to receive help in getting the largest possible tax refund. Or, since the direction of causality cannot be established, paid work experience and VITA use may have informed consumers about the EITC.

Third, consumers with operational knowledge of the EITC were more likely to have had their tax refund check directly deposited into a bank account and less likely to have cashed it via another means. Direct deposit is the only way to ensure that

consumers receive 100% of their tax refund. Those who receive their refund via check may use check cashing stores. Fees paid at these stores reduce the amount of their refund. By disseminating EITC materials with information on direct deposit and the true costs of check cashing, it is possible to promote greater usage of direct deposit among EITC recipients. Direct deposit, in turn, may promote better money management by delaying consumers' immediate spending desires (Beverly, Tescher, & Romich, 2004). A Direct Express Card, which is a type of debit card currently offered to Social Security and Supplemental Security Income (SSI) beneficiaries, can be an alternative for consumers without a bank account (Holt, 2009).

The discussion and implications of these research findings should be viewed in the context of the study's limitations. This study collected data from a very small and limited sample. Ideally, a representative sample would have been drawn from all VITA sites across the United States, or at least from all Louisiana VITA sites so that the findings could be generalized to Louisiana VITA site users. Also, it is important to acknowledge a number of potential biases. First, self-selection may be a concern since those who chose to use a VITA site may be more or less likely to engage in certain financial behaviors than those who chose not to use a VITA site. Second, a social desirability bias may have resulted in participants over-reporting their use of checking accounts and under-reporting their use of payday loans. They may have also under-reported commercial tax preparation service use since the research was being conducted by funders of free income tax assistance services. Finally, since this is a correlational study, no causal relationships can be determined.

Despite these and other limitations, this study offers insight into the EITC knowledge of low- and moderate-income consumers and their financial behaviors. These insights have some useful implications for consumer educators. Because the possession of operational EITC knowledge was associated with certainty about EITC receipt and higher incidences of receiving income tax refund via direct deposit (and conversely, fewer

incidences of having to pay for refund check cashing), increasing consumers' operational EITC knowledge may help to better ensure that tax filers monitor the accuracy of their refunds and increase their usage of direct deposit. Similarly, since having no EITC knowledge was associated with a shorter history of tax filing (less than 5 years) and no prior use of VITA, EITC educational outreach efforts may want to target newer tax filers and those who have not yet used VITA services. The focus of this information might be on informing low- and moderate-income consumers about what actually determines the EITC refund amount (operational knowledge) as well as EITC availability. Promoting the use of VITA services during EITC educational outreach campaigns could also help increase knowledge of the EITC because the nature of the VITA relationship may necessitate learning about the EITC.

To these ends, there should be more concerted efforts on the part of policymakers, consumer educators, human service administrators, and community partners to design creative interventions that increase knowledge of the EITC and VITA among low- and moderate-income consumers. As a result, these consumers will possess increased EITC and VITA knowledge along with knowledge of the true cost of not claiming the EITC and not utilizing VITA sites. Since there is an association between increases in financial knowledge and improvements in financial practices (e.g., Hilgert, Hogarth, & Beverly, 2003; Lyons, Chang, & Scherpf, 2006), increased EITC and VITA knowledge may, in turn, promote financial practices that help consumers keep the largest possible portion of their tax refund. These interventions are particularly timely, as a greater segment of consumers have become eligible for the EITC due to the current economic downturn.

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