

The Long-Term Impact of ABS Program Participation on Voting

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Research Brief: The Long-Term Impact of ABS Program Participation on Voting

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About the Author

Dr. Reder earned his PhD from Rockefeller University in 1977, and for the next nearly twenty years he conducted research in West Africa, Alaska, and the Northwest Regional Educational Laboratory. He joined the faculty of Portland State University (PSU) in 1995. His many interests include how adults learn language, literacy skills, language education, and the role of language, literacy, and technology in everyday life. He is an active member of the Literacy, Language, and Technology Research Group (LLTR) at PSU.

As part of his research activities, Professor Reder presents and publishes regularly. He co-edited a book, *Tracking Adult Literacy and Numeracy Skills: Findings from Longitudinal Research*, that was published by Routledge in 2009. His book *The State of Literacy in America* was published by the National Institute for Literacy in 1998. In that year he also co-edited *Learning Disabilities, Literacy, and Adult Education*, published by P. H. Brookes. Dr. Reder has also authored many journal articles and book chapters.

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Introduction

National and international studies such as the recent Survey of Adult Skills¹ provide strong evidence of the need for and economic value of adult basic skills (ABS). A growing body of research indicates that there is a strong economic return on basic skills at given levels of education.² Estimates have been made of the potential economic benefits that would accrue from increased educational attainment and levels of basic skills.³ There is little rigorous research, however, showing that participation in basic skills programs directly impacts the skill levels, educational attainment, or social and economic well-being of adults with low levels of education. Most research on adult literacy development looks only at short-term changes as students pass through single ABS programs. Most studies use short follow-up intervals and consider only program participants, making it difficult to see longer-term patterns of program participation and persistence and assess long-term impact of ABS program participation.⁴

Although ABS program evaluation and accountability reports typically show small gains for program participants in test scores and other outcomes, these studies rarely include comparison groups of nonparticipants, and most studies that do include such controls have not found statistically significant ABS program impact.⁵ Research is needed that compares adult literacy development among program participants and nonparticipants across multiple contexts and over significant periods of time to provide a life-wide and lifelong perspective on adult literacy development and a better assessment of program impact on a range of outcome measures.

The Longitudinal Study of Adult Learning (LSAL) is one such lifelong and life-wide study. LSAL randomly sampled about 1,000 high school dropouts and followed them for nearly a decade from 1998–2007. LSAL followed both participants and nonparticipants in adult literacy programs, assessing their literacy skills and uses of skills over long periods of time, along with changes in their social, educational, and economic status, offering a rich picture of adult literacy development.

This is the fifth of a series of Research Briefs that utilize LSAL data to examine long-term impacts of ABS program participation on a range of outcome measures. Each Brief looks at a different outcome. The first, second, third, and fourth Briefs consider the long-term impact of participation on individuals' (1) earnings, (2) literacy proficiency, (3) General Educational Development (GED) credential attainment, and (4) postsecondary engagement, respectively.

This fifth Brief examines the impact of participation on voting in general elections, a measure of civic engagement.

This Research Brief addresses the following research question: **What is the impact of participating in an ABS program on subsequent voting behavior?**

LSAL Design and Methodology

The overall design, methodology, population, and instrumentation of LSAL are described in detail elsewhere,⁶ and only essential details are summarized here.

Population and Sample

The LSAL study population was defined as adults who at the start of the study in 1998: lived in the Portland (Oregon) metropolitan area; were ages 18–44; had not completed high school nor were enrolled in high school or college; and were proficient but not necessarily native speakers of English. This defined population is a major segment of the target population of ABS programs operated by community colleges and other organizations in Oregon and across the country. The sample was drawn through random digit dialing, with oversampling of current participants in ABS programs to ensure adequate numbers of both program participants and nonparticipants in the sampled “panel” of 934 adults who then were followed from 1998–2007.⁷ At study onset, the LSAL population had an average age of 28 and was evenly divided among males and females, with one-third from minority groups and one-tenth from immigrant populations. Nearly one in three reported having a learning disability.

Some of these defining characteristics of LSAL's population changed over time. Everyone's age increased, of course, while some adults received GEDs and college degrees, experienced changes in their employment and family situations, or moved away from the Portland area. LSAL followed its panel members regardless of these and other changes, with about 90 percent of the original panel retained in the study until data collection ended in 2007.⁸

Voting-Eligible Subpopulation

A subpopulation of LSAL was used for analyses in this Brief. Two variables were used to identify a subpopulation that was eligible to vote in the 1996 and 2004 general elections: age and birthplace. Individuals who were old enough to vote in the 1996 general election and who were born in the United States were identified as eligible to vote.⁹

Interviews and Assessments

LSAL conducted a series of six periodic interviews and skills assessments in respondents' homes:¹⁰

Wave 1: 1998–1999

Wave 2: 1999–2000

Wave 3: 2000–2001

Wave 4: 2002–2003

Wave 5: 2004–2005

Wave 6: 2006–2007

Note that the spacing of successive interviews was one year between Waves 1, 2, and 3 and two years between Waves 3, 4, 5, and 6.¹¹

Interview Content

The initial interview gathered background information (e.g., demographics, family-of-origin characteristics, K–12 school history). The initial and each successive interview collected information about recent social, economic, and educational activities (e.g., participation in basic skills programs; postsecondary education and training; employment, job characteristics, and earnings; household and family composition; life goals and aspirations).¹²

Voting

Individuals were asked if they had voted in the 1996 presidential election (in the Wave 1 interview), the 2000 presidential election (in the Wave 3 interview), and the 2004 presidential election (in the Wave 5 interview). Data about voting in the 1996 and 2004 general elections are considered in this Brief. Caution is appropriate in interpreting such self-reported voting, which is often subject to social desirability influences.¹³ It is noted here that the analyses below focus on change in self-reported voting between 1996 and 2004. The Discussion section of this Brief further addresses methodological issues involved in interpreting self-reported voting measures.

Participation in Adult Basic Skills Programs

In each interview, individuals were asked if they currently were participating in adult basic skills programs to improve their reading, writing, or math skills or prepare for the GED Tests, or had done so within the preceding 12 months (asked in Wave 1) or since the time of the preceding interview (asked in Waves 2–6). Those who reported such participation were asked follow-up questions about the timing, intensity, and

duration of their participation. In the Wave 1 interview, they also were asked about their participation in such programs prior to 12 months before the first interview (back to the time they had dropped out of high school).

Key Findings

Findings in this Brief consider only ABS program participation that occurred between the 1996 and 2004 general elections in assessing the impact of participation on changes in voting behavior between the elections. Some LSAL respondents reported participation that may well have occurred before the 1996 general election whereas others reported no participation until after the 2004 general election. Respondents' reports of participation that occurred more than 12 months before the Wave 1 interview did not include sufficient information to determine when such participation in fact occurred and, thus, it may have occurred before or after the 1996 general election. Individuals reporting such early participation were, therefore, excluded from the analyses reported below. Participation occurring after the 2004 general election was not considered in the analyses reported below; individuals who did not participate in ABS programs until after the 2004 general election were included in the analyses as *nonparticipants*.

Excluding respondents with early ABS program participation as well as those ineligible to vote in 1996 substantially reduced the LSAL subsample size available for analyses. Only 284 respondents: (1) answered the Wave 1 and Wave 5 questions about voting, (2) had not participated in ABS programs more than 12 months prior to the Wave 1 interview, and (3) were eligible to vote in the 1996 general election. This substantial reduction in sample size limits the statistical power available for analyses presented below. This methodological limitation is considered again in the Discussion section of this Brief. All findings presented below are based on this small analytical subsample of LSAL respondents.

Participation in ABS Programs

About one in three (34%) adults in the analytical subpopulation participated in an ABS program between the general elections of 1996 and 2004. Participation patterns in LSAL were often complex and fragmented, with many adults having multiple episodes of participation at different times and in different programs across the years of the study.¹⁴ On average, individuals attended ABS classes a total of 49 hours (total averages 148 hours for those with *some* attendance). Fewer than one in six (16%) participated 100 or more hours between the elections.

Voting

Less than half (43.5%) of the analytical LSAL population reported voting in the 1996 presidential election. Over half (58.2%) reported voting in the 2004 presidential election. The higher reported voting rate in 2004 may be due in part to the population being eight years older than it was in 1996. Other factors may be involved as well, including ABS program participation that may have occurred between the two elections.

Impact of ABS Program Participation on Voting

The potential impact of ABS program participation on voting behavior should be evident as a change in voting rates between the 1996 and 2004 presidential elections that is associated with ABS program participation between the elections. **Table 1** shows the voting rates in 1996 and 2004 according to whether individuals participated in ABS

Table 1. Percentage Voting in Presidential Elections by ABS Program Participation

Presidential Election	No Participation in ABS Program Between Elections	Participation in ABS Program Between Elections
1996	41.7	46.9
2004	54.5	65.2

programs between the two elections.¹⁵ Glancing at the table, it appears that overall voting rates were higher in 2004 than in 1996 and that larger percentages of ABS participants than nonparticipants voted in each election. It also appears that ABS participants showed a larger increase in voting between 1996 and 2004 (a gain of 18.3 percentage points) than did nonparticipants (whose voting rate increased 12.8 percentage points). Rather than statistically testing these apparent differences at this point, propensity score matching methods described below were used to examine the impact of program participation on voting behavior.

Care must be taken in evaluating and interpreting such differences in voting behavior between ABS participants

and nonparticipants. Individuals self-selected in terms of participating in ABS programs, and there may be other important differences between the two groups as well. The effects of those other differences may be confounded with the effects of participation; this often is termed *selection bias* in program evaluation literature.¹⁶ Some selection bias in LSAL could be due to differences in observable characteristics of participants and nonparticipants such as age, amount of education, race/ethnicity, immigration status, and so on. *Propensity score matching* methods are used to control for selection bias attributable to these observable individual characteristics. A propensity score in this context can be thought of as an estimated probability that an individual is a participant (received the “treatment” of ABS programs) versus a nonparticipant (did not receive “treatment” and, therefore, can be thought of as a member of a “control” group).

Propensity scores were calculated for predicting participation in ABS programs using individuals’ age, gender, race/ethnicity, age at school dropout, years of schooling completed (before dropping out), presence of learning disabilities, enrollment in special education classes in school, immigration status, and level of parental education. These propensity scores were matched¹⁷ to identify groups of participants and nonparticipants (which aside from their participation status were statistically alike).

Difference-In-Differences

The *difference-in-differences (DID)* model compares voting rates of propensity score-matched groups of participants and nonparticipants, looking at their preparticipation (1996) and postparticipation (2004) voting behaviors. The DID calculates the differences in voting rates between matched participants and nonparticipants in 1996 and in 2004, and then examines the difference in these two differences (i.e., the DID). Subject to the limitations of propensity score matching, a significant DID provides evidence of the effect of participation on changes in reported voting behavior.

Table 2 shows the estimated proportions of those who voted among propensity score-matched participants and

Table 2. Difference-In-Differences Estimation for Voting in 1996 and 2004 by Propensity Score-Matched ABS Program Participants and Nonparticipants

Estimate	1996			2004			Difference-in-Differences
	Nonparticipants	Participants	Difference	Nonparticipants	Participants	Difference	
Voted	0.417	0.475	0.057	0.545	0.661	0.115	0.058
Std. Error	0.057	0.090	0.107	0.060	0.090	0.108	0.152
<i>t</i>	7.32	5.28	0.53	9.08	6.78	1.06	0.38
<i>P > t</i>	0.000	0.000	0.593	0.000	0.000	0.284	0.702

nonparticipants in 1996 and in 2004. In 1996, prior to any ABS participation, there was a very small difference in voting rates between the two groups. Eight years later in 2004, after ABS participation in one of the two propensity score-matched groups, the difference between the groups' voting rates is 0.115, which is not statistically significant ($t=1.06$, $p=0.28$). The difference-in-differences is not statistically significant ($DID=0.058$, $t=0.38$, $p=0.70$). Thus, these results provide little evidence of an impact of ABS program participation on voting behavior.

Discussion

Previous Research Briefs in this series demonstrated statistically significant impacts of ABS program participation on a range of outcome measures. The results examined in this Brief regarding the outcome of self-reported voting, however, provide little evidence of an impact of ABS program participation on voting. Although the difference-in-differences analysis shows a larger increase in voting rates over time for program participants, the DID does not approach statistical significance. In this regard, it is worth recalling the relatively small subsample size that was available for analysis of the voting data. The corresponding loss of statistical power increases the likelihood of failing to detect an actual impact of participation on voting behavior.

Another methodological limitation is the nature of the outcome variable used—self-reported voting. In validation studies of self-reported voting, individuals tend to overreport voting when it is seen as socially desirable.¹⁸ LSAL did not have the ability to validate self-reported voting against administrative records as was done with self-reported GED attainment and postsecondary engagement. Although one might expect social desirability and other response biases to influence LSAL respondents' self-reports of voting, it is unknown whether ABS program participation would increase future overreporting compared with the future self-reporting of nonparticipants. Further research is needed to explore these issues in examining the impact of program participation on voting behavior and other measures of civic participation.

Notes and References

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- 6 Reder, S. (2013). Lifelong and life-wide adult literacy development. *Perspectives on Language and Literacy*, 39 (2), 18-21.
- 7 Sampling weights calculated for each panel member were used to make estimates for the defined target population from the sampled panel data.
- 8 Analysis of missing interviews indicates that they were *missing at random* (MAR) with respect to the variables examined.
- 9 Individuals were not asked whether they were registered to vote or, if foreign born, whether they were legal residents.
- 10 Respondents were paid for each of these sessions.
- 11 Individuals were interviewed at about the same time in each wave so that there was approximately constant spacing among individuals' successive interviews and assessments (e.g., a respondent interviewed in February 1999 in Wave 1 was interviewed during February 2000 for Wave 2, February 2001 for Wave 3, etc.).
- 12 The interview instruments are available at www.lsal.pdx.edu/instruments.html.
- 13 Katosh, M. P., & Traugott, M. W. (1981). The consequences of validated and self-reported voting measures. *Public Opinion Quarterly*, 45 (4), 519-535; Ansolabehere, S., & Hersh, E. (2012). Validation: What big data reveal about survey misreporting and the real electorate. *Political Analysis*, 20 (4), 437-459.
- 14 More detailed discussion is given in Reder, S., & Strawn, C. (2001). Program participation and self-directed learning to improve basic skills. *Focus on Basics*, 4 (D), 14-17.
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