

ASSET BUILDING AMONG NATIVE HAWAIIANS: LESSONS FROM THE KAHIKŪ INDIVIDUAL DEVELOPMENT ACCOUNT PROGRAM

David W. Rothwell

Individual Development Accounts (IDAs) are matched savings accounts that encourage asset development for individuals and families with low incomes. Unique data from an IDA program serving 758 Native Hawaiians were used to model the probability of participating in and graduating from the program. Multivariate logistic regression models show that the presence of children in the household, lack of vehicle ownership, and savings goal (education) were positively associated with program participation. Participants with assets to start in the form of homes and relatively high savings balances were more likely to graduate from the program. Additionally, Maui participants were 3 times more likely than O‘ahu participants to graduate. Recommendations for IDA policies and future research are discussed.

CORRESPONDENCE MAY BE SENT TO:

David W. Rothwell, School of Social Work, McGill University
3506 University Street Suite 300, Montreal, Quebec H3A 2A7
Email: david.rothwell@mcgill.ca

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Amid statistics that highlight disproportionately high poverty among Native Hawaiians, the potential to better understand asset-building policy and behavior has important implications for the well-being of Native Hawaiians. The recent global economic downturn aggravates the situation, with many Native Hawaiians finding themselves disenfranchised in their own homeland.

The 1998 Assets for Independence Act (AFIA) has channeled over \$100 million to operate hundreds of Individual Development Account (IDA) programs nationwide (Report to Congress, 2006). IDA programs funded by AFIA provide participants with financial literacy training, individualized case management, and a matched savings mechanism. The purpose of IDAs is to encourage savings and asset development among people with low incomes.

Nationwide research has shown that the poor can and do save in IDAs (Schreiner & Sherraden, 2007). To date, however, there has been no research to examine participation trends among ethnic groups not represented in the national demonstration projects. This study addresses that gap by analyzing unique data on the IDA enrollment and graduation processes among a sample of Native Hawaiians. Findings indicate that the relatively advantaged are more likely to enroll in IDAs and also more likely to succeed. To reduce inequality, future IDA programs will need to carefully assess program recruitment and administration.

I begin this article with a review of the historical and contemporary economic and social challenges confronting Native Hawaiians to lay the context for asset-building policy. I then present the theoretical background and key findings from other IDA studies, followed by this study's methods and findings. In conclusion, I discuss the implications of the study for the future well-being of Native Hawaiians.

NATIVE HAWAIIAN POVERTY

Native Hawaiians are defined as persons with family lineage traceable to the Hawaiian Islands prior to Western contact in 1778. The contemporary social problems facing Native Hawaiians are intricately rooted in the colonization process, such as the political overthrow of the Hawaiian monarchy and a precipitous population decline (Mokuau & Matsuoka, 1995). As recently as 2005, the rate of poverty among Native Hawaiian families was more than double the

state's average, 15.0% compared with 7.1% (Naya, 2007). Thus, Native Hawaiians are disproportionately represented among the poor in Hawai'i, with over one in four individuals living in poverty. In the only known study of asset inequality in the state, homeownership values of Hawai'i-born Native Hawaiians were only two-thirds as much as those of Hawai'i born, non-Native Hawaiians (Ong, 2006).

Low wages, disproportionately high poverty, and low levels of wealth accumulation are correlated with social development. In Hawai'i, the life expectancy of Native Hawaiians was 5% less than the state average of 78.85 years during the 1980s (Gardner, 1996). Furthermore, Native Hawaiians have disproportionately low levels of human capital. For example, the Native Hawaiian functional illiteracy rate (30%) was much higher than the state average (19%; Kamehameha Schools, 1999), and test scores revealed an approximate achievement gap of 10 percentile points in reading and math for Native Hawaiian students compared with state averages (Kana'iaupuni, Malone, & Ishibashi, 2005).

ASSET POLICY IN HAWAI'I

The distribution of wealth in the Hawaiian Islands has been powerfully shaped by social policy. In the most often cited example of asset allocation, King Kamehameha III implemented the Great Mahele of 1848 that designated land for government and Crown Lands, while providing the opportunity for chiefs and native tenants to claim private ownership (Chinen, 1958). Although this was signed into law by the monarch, foreigners familiar with private land ownership and capitalism—sailors, traders, merchants, and missionaries—were the ones who lobbied persuasively for the policy (Chinen, 1958; Kame'eleihiwa, 1992). By codifying private land ownership among a few privileged elite, the Great Mahele laid the foundation for asset inequality in the Hawaiian Archipelago.

Another social policy, the Hawaiian Homes Commission Act (HHCA), passed in 1920, continued to shape the distribution of assets in Hawai'i. The HHCA allocated approximately 200,000 acres of land to provide 99-year homestead leases to Native Hawaiians for residential, agricultural, or pastoral purposes (Laws/Rules Hawaiian Homes Commission Act, 2007). The land was exclusively designated for persons with Native Hawaiian blood quantum levels equal to or greater than 50%.

The Department of Hawaiian Homelands (DHHL) now administers lands for homesteaders who pay \$1 annually in rent for the lease of the land. One of the primary limitations is the policy's reach; for example, the waiting list to become eligible for DHHL land was recently over 19,000 (Pang, 2007).

The introduction of private land ownership, in addition to numerous other policies not mentioned here, has contributed to a large and growing wealth gap in Hawai'i, where Native Hawaiians find themselves particularly disadvantaged. In the context of these challenges, researchers have called for increased study of interventions to improve the welfare of Native Hawaiians and other Pacific Islanders (Mokuau, Garlock-Tuiali'i, & Lee, 2008).

POVERTY AND ASSET OWNERSHIP

Assets Defined

In their most basic form, assets are *real* or *financial* stocks of wealth. Real assets (also called tangible assets) include land, buildings (including homes), and tools; financial assets (also called intangible assets) include money, bonds, equities, interpersonal skills, and social networks (Midgley, 2005). Other intangibles may be considered assets, such as human capital (Becker, 1983) or social capital (Coleman, 1988; Putnam, 2000); however, this study focuses exclusively on real and financial assets.

Assets when compared with income have numerous features that make them independently meaningful to individual and social well-being. First, assets are more permanent. As a result, assets strengthen a household's ability to weather unexpected financial burdens. Second, assets are more likely than income to be transferred to future generations. Third, assets allow energy to be directed differently because they provide options (Sherraden, 1991). For example, consider two people who are seeking employment. The person without assets may accept a suboptimal job offer because he or she must have income to meet basic human needs. The person with assets, by contrast, may be more fastidious in the employment choice. Therefore, assets enable people to think and behave in developmental ways that people without assets cannot. This developmental thinking and

behaving builds a set of capabilities and may ultimately lead to a sense of freedom (Sen, 1999). Fourth, assets facilitate the development of a future orientation because they promote long-term planning (Shobe & Page-Adams, 2001). Last, asset ownership has the potential to generate more assets and income in the future (Midgley, 2005). Together, these features coalesce to form what Sherraden (1991) called the virtuous social welfare cycle.

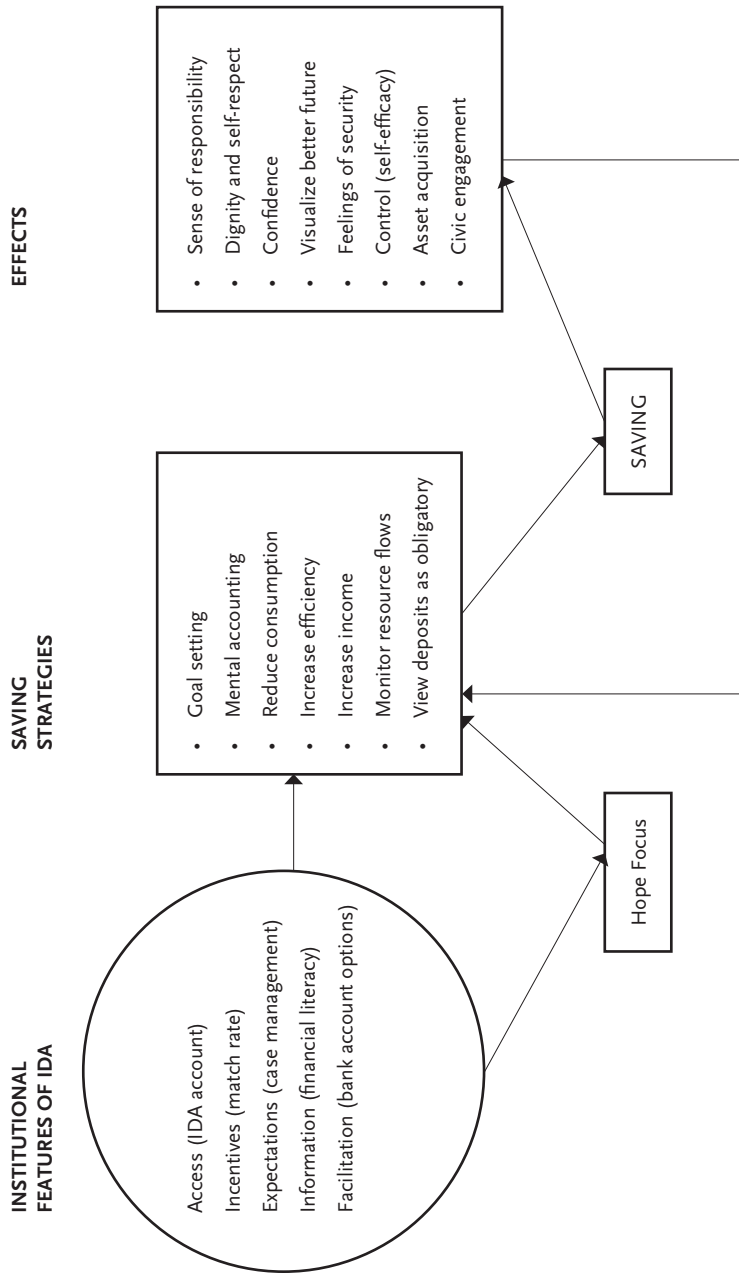
Individual Development Accounts

The IDA was devised to promote asset building among the poor and conceived as a complement to income maintenance policies (e.g., Temporary Aid for Needy Families [TANF]). IDAs function as a matched savings account for the poor, much like Individual Retirement Accounts function as retirement savings for the middle and upper classes. In 1998 AFIA established funds for IDA programs nationwide. From fiscal year 1999–2006, AFIA awarded \$120.8 million to 368 programs that opened 43,934 IDAs (Report to Congress, 2006).

Although rules vary by program, IDA participants generally work with case managers to identify a savings goal (i.e., savings amount), attend financial literacy training, and save regularly toward the purchase of an asset goal. The asset goals supported by AFIA are home ownership, postsecondary education tuition and fees, microenterprise costs, and home repair. Upon achieving the saving goal and assuming compliance with program guidelines, the participant withdraws accrued funds from the IDA plus the IDA subsidy (match). Together these funds are applied toward the purchase of their asset goal. AFIA's match rates vary, usually between 2:1 and 4:1.

IDAs help low-income people build assets in two ways. First, IDAs provide institutional structures that encourage saving. Month by month, participants save into the IDA and build assets incrementally. Second, the match subsidy (a) attracts people to IDAs, (b) increases the return on saving, and (c) promotes transformative asset growth by making a new home, postsecondary education, or business possible (Schreiner & Sherraden, 2007). Figure 1 outlines the institutional features, saving strategies, and effects of IDAs.

FIGURE 1 Logic model describing institutional features, saving strategies, and effects of Individual Development Accounts (IDAs)



Source: Adapted with permission from *Saving in Low Income Households: Evidence From Interviews With Participants in the American Dream Demonstration*, by M. Sherraden, A. Moore-McBride, E. Johnson, S. Hanson, F. Ssewamala, & T. Shanks, 2005. St. Louis, MO: Washington University.

IDA Research

The outcomes of IDA programs have been extensively researched. Overall, the primary finding is clear: The poor can and do save when given appropriate institutional structures. A national study showed that, including a match rate of 1.88, the average IDA participant gained \$1,609 over the course of program participation (Schreiner & Sherraden, 2007). IDA participation was also positively related to homeownership (Grinstein-Weiss et al., 2008; Mills, Gale, et al., 2008). Compared with nonparticipants, IDA participants reported more confidence in the future, economic security, and control (Moore et al., 2001) and had lower self-reported feelings of economic strain (Shobe & Boyd, 2005).

Individual and Family Characteristics and IDAs

IDA savers (defined as a participant who saved a total of \$100 or more in the IDA) were more likely to be older, married, educated, and without substantial debts (Schreiner & Sherraden, 2007; Zhan, 2006). Variables that were significantly and negatively associated with average monthly deposit were ages 14–20 years, African American and Native American ethnicity, and widowed marital status; college degree of at least 2 years was positively associated (Schreiner & Sherraden, 2007). One study highlighted a number of factors associated with dropout from the IDA program, defined as net savings less than \$100 (Schreiner & Sherraden, 2005). Dropout was less likely for those who were older, married, and female and who had relatively higher levels of human capital. Importantly, asset holders were less likely to drop out (Schreiner & Sherraden, 2005). Income, employment status, household size, receipt of public assistance, and health insurance ownership were not associated with average monthly savings or dropout (Schreiner & Sherraden, 2005, 2007).

Only one study analyzed matched withdrawals from the IDA. Findings revealed that females (compared with males), African Americans, and households with children were all less likely to make matched withdrawals (Mills, Gale, Patterson, & Apostolov, 2006). Additionally, education and assets were related to savings performance for households with children (Grinstein-Weiss, Wagner, & Ssewamala, 2006). More knowledge about the matched withdrawal process is needed because only 31% of the 2,350 participants (21% homeownership, 21% postsecondary education, 26% business, 22% home repair) in the national demonstration study made a matched withdrawal (Schreiner & Sherraden, 2007). Failure to make a matched withdrawal could result from numerous scenarios,

such as failure to comply with program requirements. However, failure to make a matched withdrawal does not necessarily indicate a savings failure. It is plausible that participants completed financial education and fulfilled the monthly savings requirements but for various reasons did not execute the matched withdrawal. Potential reasons for non-withdrawal include stressful family life events such as death, marriage, or health crisis or difficulty finding the right home or asset.

Asset Ownership and IDAs

Asset ownership is hypothesized to positively influence additional asset development (Sherraden, 1991). Evidence from a 13-site national study called the American Dream Demonstration (ADD) supported this proposition as the unbanked participants (those with no savings or checking account) and those with savings account only were less likely to be savers compared with participants with both types of accounts (Schreiner & Sherraden, 2007). Furthermore, homeowners were much more likely to be savers compared with nonhomeowners in the entire ADD and an experimental ADD study site in Tulsa (Mills et al., 2006; Mills, Lam, DeMarco, Rodger, & Kaul, 2008; Schreiner & Sherraden, 2007). Bank account and homeownership were positively related to making a matched withdrawal, whereas car ownership was not (Mills et al., 2006).

Study Rationale

There is a need to understand the characteristics associated with IDA program enrollment and IDA graduation among populations not included in the national demonstration projects (i.e., Native Hawaiians) that took place on the mainland United States. This study adds to the literature by examining three important questions.

1. What individual and household characteristics were associated with IDA program uptake in a large IDA program serving Native Hawaiians?
2. Once enrolled, what characteristics were associated with making a matched withdrawal?
3. To what extent did pre-existing asset ownership affect the matched withdrawal process?

Findings will generate relevant knowledge for the community of social service providers and policymakers interested in promoting greater access to wealth-building mechanisms such as IDAs.

METHOD

The Intervention

In the late 1990s the nonprofit organization ALU LIKE formed an IDA partnership. Since incorporation in 1975, ALU LIKE has worked statewide to help Native Hawaiians achieve their potential. The IDA partnership was one of five indigenous IDA programs nationwide at the time (Morris, 2007) and was funded by the AFIA, Office of Hawaiian Affairs (OHA), Bank of America via OHA, DHHL, and Queen Lili'uokalani's Children's Center from 1999 to 2004. The ALU LIKE program was called Kahikū (meaning to “lift up”). With 550 IDAs opened, Kahikū was one of the largest IDA programs in the country, much larger than the AFIA average of 90 accounts (Report to Congress, 2006).

Participants were recruited to Kahikū from the islands of Hawai'i, Kaua'i, Moloka'i, Maui, and O'ahu through public advertisement, word of mouth, and referral by area social service providers. To be eligible, participants were required to have earned household incomes less than 200% of the federal poverty guidelines and owned assets with an estimated value worth less than \$10,000 (excluding the value of the primary residence and one vehicle). Kahikū served exclusively persons with Native Hawaiian ancestry, evidenced by a birth certificate.

Following enrollment, participants identified an asset goal, declared a monthly savings target, and opened an account at one of two financial institutions. Each participant was provided generalized case management by ALU LIKE. To be eligible for a matched withdrawal, participants were required to attend general and asset-specific financial literacy classes.

A minimum monthly deposit of \$10 was required to remain active in the program. Participants were allowed three missed deposits per calendar year without penalty. If a participant missed more than three monthly deposits, they were subject to termination from the program. Unauthorized withdrawal from the account required the case manager's consent.

The match rates were 3:1 for homeownership and 2:1 for education, business, and home repair. A match cap was set at \$500 per 12 months. The account term was 24 months. In other words, a participant saving toward homeownership could have saved up to \$1,000 over 2 years and, upon meeting other program requirements, received a match of up to \$3,000 for a total matched withdrawal of \$4,000. A total of 184 participants made matched withdrawals from their Kahikū IDAs. This matched withdrawal rate ($184/550 = 33\%$) was comparable with the national average of IDA graduation (Schreiner & Sherraden, 2007).

Data

Most of the data used in this study were reported by participants during application to Kahikū. The dataset is unique because it includes information on three categories of individuals: (a) those who were eligible and applied to the program but did not enroll (nonenrollees), (b) those who enrolled in the program and made a matched withdrawal (graduates), and (c) those who enrolled in the program and did not make a matched withdrawal (nongraduates). All hard-copy records were transferred from files into an electronic database. The only postenrollment data used in the study were whether a matched withdrawal was made from the IDA (i.e., IDA graduation). Data on hours of case management, hours of financial literacy classes, deposit amounts, and deposit frequencies were not available.

A number of demographic variables were included: gender (male as reference), age, married (nonmarried as reference), presence of children in the household (no children as reference), college degree holder (non-college degree as reference), full-time employment (less than full-time employment as reference), receipt of TANF (nonreceipt of TANF as reference), the ratio of household income to family-size-adjusted poverty guidelines (known as the income-to-needs ratio), and total sum of consumer debt (self-reported vehicle loans and credit card balances). The savings goals—education and business (homeowner and home repair savers as reference)—were included. Island of residence and nine asset variables were incorporated: net worth (total assets minus total liabilities), vehicle ownership free

and clear, vehicle ownership with loan (no vehicle as reference), homeownership (nonhomeowner as reference), business ownership (nonownership as reference), stock ownership (nonownership as reference), savings and checking accounts (dummy-coded for high checking balance of \$1,000 or more and high savings balance of \$400 or more), and nonownership of savings or checking (reference categories were thus low balance for checking and savings balances).

Data Analysis

Missing item-level data for explanatory variables were addressed using multiple imputation (MI) with SAS. The MI technique is the preferred method to handle missing item-level data and performs well in small samples (Graham & Schafer, 1999; Little & Rubin, 2002). A total of 74 combinations of missing values for 28 variables were imputed, and five new data sets were generated with the Markov Chain Monte Carlo method.

The first step in the analysis following MI involved producing descriptive statistics and tests of the bivariate relationships. Chi-square tests and one-way analyses of variance were used to examine differences among nonenrollees, IDA graduates, and IDA nongraduates for categorical and continuous variables.

Logistic regressions were used to address the research questions. Research Question 1 uses data from those who applied but did not enroll and those who applied but did enroll ($n = 520$) to understand characteristics associated with Kahikū program uptake. A five-step iterative logistic regression model building and evaluation process was followed (Hosmer & Lemeshow, 2000). Parameter estimates were generated through maximum likelihood estimation.

Research Questions 2 and 3 focus on the matched withdrawal process (i.e., graduation from the Kahikū IDA). A binary logistic regression was again used to model the probability of being an IDA graduate ($n = 184$) compared with nongraduate ($n = 366$). Hierarchical regression was used to incrementally assess the influence of asset ownership variables on IDA graduation. A chi-square test was used to determine whether the addition of the asset variables significantly adds to prediction of IDA graduation beyond the individual and demographic variables already entered in the previous step.

RESULTS

The descriptive analyses showed large discrepancies between measured characteristics and the three groups (see Table 1). The largest differences among the groups were savings goals, high savings account balance, and homeownership. The percentage of education savers among the nonenrollees (42) was proportionately 68% higher than for the IDA graduates or nongraduates (25 for each). The percentage with high savings in the IDA graduate group (30) was considerably more than the percentages in the nonenrollee and nongraduate groups (15 and 19, respectively). The percentage of homeowners in the IDA graduate group (22) was over double the percentages of homeowners in the nonenrollees and nongraduate groups (7 and 12, respectively). There were no statistically significant differences by group for gender, age, marital status, college degree, income-to-needs ratio, consumer debt, vehicle loan, business ownership, and stock ownership. The group differences by island were not calculated because there were zero persons from Maui in the nonenrollee group.

Research Question 1: What individual and household characteristics were associated with IDA program uptake in a large IDA program serving Native Hawaiians?

The first logistic model was significant, $\chi^2(20, N = 758) = 70.03, p < .01$; max-rescaled $r^2 = .13$. Results from the binary logistic regression model are presented in Table 2. A number of characteristics were associated with the Kahikū IDA program uptake. First, persons with children in the household were over 50% less likely than persons without children to participate (odds ratio [OR] = 0.49) in the program, $\chi^2(1, N = 758) = -2.56, p < .05$. Similarly, those who intended to save for education were much less likely (OR = 0.45) to participate in the Kahikū IDA, $\chi^2(1, N = 758) = -3.56, p < .01$. Several asset variables were associated with program participation. Vehicle ownership, regardless of whether the vehicle was owned free and clear, $\chi^2(1, N = 758) = 3.11, p < .01$, or with a loan, $\chi^2(1, N = 758) = 2.18, p < .05$, was positively associated with program participation. Net worth, $\chi^2(1, N = 758) = 1.68, p < .10$, and homeownership, $\chi^2(1, N = 758) = 2.33, p < .05$, were positively related to program uptake, whereas the unbanked were less likely to enroll, $\chi^2(1, N = 758) = -1.66, p < .10$.

TABLE 1 Bivariate characteristics of nonenrollees, graduates, and nongraduates groups

Variable	Nonenrollees (<i>n</i> = 208)		Graduates (<i>n</i> = 184)		Nongraduates (<i>n</i> = 366)		Test stat. ^a
	%	<i>M</i> (<i>SD</i>)	%	<i>M</i> (<i>SD</i>)	%	<i>M</i> (<i>SD</i>)	
Female	71		67		70		1.01
Age enrollment		33.78 (10.11)		34.38 (11.67)		34.14 (10.77)	0.15
Married	37		46		39		3.39
Children in the household	89		87		81		7.17**
College	15		19		19		1.33
Full-time employment	40		51		51		6.89**
TANF receipt	25		13		22		9.69***
Income to needs		1.19 (0.72)		1.31 (0.64)		1.17 (0.66)	2.15
Consumer debt ^b		5,389 (8,209)		6,369 (9,860)		5,397 (8,956)	0.78
<i>Savings goal</i>							
Home	41		57		54		26.42***
Education	42		25		25		
Business	16		19		21		
<i>Assets and liabilities</i>							
Net worth ^b		-978 (16,218)		10,204 (48,092)		4,684 (28,542)	5.93***
Vehicle free and clear	35		43		46		6.79**
Vehicle with loan	26		35		28		4.41
Home	7		22		12		19.31***
Business	13		14		13		0.23
Stocks investments	25		23		24		0.09
Checking (≥\$1,000)	6		12		7		5.14*
Savings (≥\$400)	15		30		19		14.59***
No bank	12		5		6		9.78***
<i>Island</i>							
Hawai'i	1		27		27		NA
Kaua'i	2		16		11		
Maui	0		8		18		
Moloka'i	<1		4		7		
O'ahu	96		45		38		

Note: TANF = Temporary Aid for Needy Families; NA = not available.

^a Chi-square tests and one-way analyses of variance were used to examine differences among the three groups.

^b Raw values presented in table, natural log values used in analyses of variance.

* $p < .10$. ** $p < .05$. *** $p < .01$.

TABLE 2 Logistic regression predicting Individual Development Account participation

Variable	Estimate (SE)	OR
Intercept	5.27 (4.40)	0.01
Female	0.08 (0.20)	1.08
Age enrollment	0.01 (0.01)	0.99
Married	0.00 (0.19)	1.00
Children in the household	0.72 (0.28)	0.49**
College	0.21 (0.24)	1.23
Full-time employment	0.25 (0.20)	1.28
TANF receipt	0.12 (0.23)	0.89
Income to needs	0.27 (0.16)	0.77*
Consumer debt ^a	0.28 (0.27)	0.95
<i>Savings goal</i>		
(Home as ref.)		
Business	0.80 (0.22)	0.76
Education	0.05 (0.07)	0.45***
<i>Assets and liabilities</i>		
Net worth ^a	1.50 (0.89)	4.47*
Vehicle free and clear	0.71 (0.23)	2.04***
Vehicle with loan	0.65 (0.30)	1.92**
Home	0.81 (0.35)	2.24**
Business	0.15 (0.27)	0.86
Stocks investments	0.27 (0.22)	0.77
Checking (\$1,000)	0.06 (0.35)	1.06
Savings (\$400)	0.36 (0.28)	1.43
Unbanked	0.52 (0.31)	0.59*
Likelihood χ^2	70.03***	
Max-rescaled r^2	.13	

Note: N = 758. OR = odds ratio; TANF = Temporary Aid for Needy Families.

^a Natural log.

* $p < .10$. ** $p < .05$. *** $p < .01$.

Research Question 2: Once enrolled, what characteristics were associated with making a matched withdrawal?

The 11 covariates from the previous model plus the island variables (O'ahu as reference) were used in this analysis (see Table 3). Overall, the model predicting IDA graduation was significant, $\chi^2(15, N = 550) = 36.22, p < .01$. TANF receipt was negatively associated, $\chi^2(15, N = 550) = -1.84, p < .10$, and consumer debt, $\chi^2(1, N = 550) = 2.01, p < .05$, was positively associated with IDA graduation when other characteristics were controlled. The results also show that living on Maui was positively associated with being a Kahikū IDA graduate, $\chi^2(1, N = 550) = 3.61, p < .01$.

Research Question 3: To what extent did pre-existing asset ownership affect the matched withdrawal process?

The nine asset variables were then added in hierarchical fashion. The final model was significant, $\chi^2(24, N = 550) = 52.40, p < .01$. The relationship between TANF and consumer debt faded when the asset variables were entered into the model. Maui participants in this final model maintained a significantly higher probability of being an IDA graduate, $\chi^2(1, N = 550) = 3.79, p < .01$. Moloka'i residents in this model were also more likely to be IDA graduates, $\chi^2(1, N = 550) = 1.87, p < .10$.

Two types of asset holding were positively associated with IDA graduation. Homeowners were nearly twice as likely (OR = 1.83) as nonhomeowners to graduate, $\chi^2(1, N = 550) = 1.93, p < .10$; high savers were 1.75 times more likely than low savers to graduate, $\chi^2(1, N = 550) = 2.28, p < .05$. Adding the asset variables to the model only modestly increased the chi-square test, $\chi^2(9, N = 520) = 16.19, p < .10$.

TABLE 3 Hierarchical logistic regression results predicting Individual Development Account graduation

Variable	Model 1		Model 2	
	Estimate (SE)	OR	Estimate (SE)	OR
Intercept	−1.70 (0.51)	0.18	−3.17 (4.39)	0.04
Female	−0.28 (0.21)	0.75	−0.29 (0.22)	0.75
Age enrollment	0.00 (0.01)	0.99	0.00 (0.01)	1.00
Married	0.14 (0.21)	1.15	0.12 (0.21)	1.13
Children in the household	0.45 (0.28)	1.57	0.48 (0.28)	1.62*
College	−0.05 (0.24)	0.95	−0.05 (0.25)	0.96
Full-time employment	−0.28 (0.22)	0.76	−0.28 (0.23)	0.76
TANF receipt	−0.52 (0.28)	0.59*	−0.47 (0.29)	0.62
Income to needs	0.24 (0.16)	1.28	0.12 (0.17)	1.12
Consumer debt ^a	0.12 (0.06)	1.13**	0.10 (0.08)	1.10
<i>Savings goal</i>				
(Home as ref.)				
Business	0.40 (0.27)	1.49	0.35 (0.29)	1.42
Education	0.40 (0.26)	1.49	0.35 (0.27)	1.42
<i>Island</i>				
(O'ahu as ref.)				
Hawai'i	0.40 (0.24)	1.49*	0.38 (0.26)	1.46
Kaua'i	−0.12 (0.32)	0.88	−0.17 (0.33)	0.85
Maui	1.13 (0.31)	3.11***	1.23 (0.32)	3.41***
Moloka'i	0.70 (0.45)	2.01	0.91 (0.48)	2.47*
<i>Assets and liabilities</i>				
Net worth ^a			0.31 (0.88)	1.37
Vehicle free and clear			−0.16 (0.27)	0.85
Vehicle with loan			0.00 (0.33)	1.00
Home			0.60 (0.31)	1.83*
Business			−0.19 (0.32)	0.83
Stocks investments			−0.16 (0.26)	0.86
Checking (\$1,000)			0.46 (0.33)	1.58
Savings (\$400)			0.56 (0.25)	1.75**
Unbanked			0.15 (0.44)	1.16
Likelihood χ^2	36.22**		52.40***	
Increase in χ^2			16.19*	
Max-rescaled r^2	.09		.13	

Note: N = 550. OR = odds ratio; TANF = Temporary Aid for Needy Families.

^a Natural log.

* $p < .10$. ** $p < .05$. *** $p < .01$.

DISCUSSION

Asset-building policies, with IDAs as the hallmark intervention for low-income people, have demonstrated effectiveness in nationwide studies. This study presents analysis of the Kahikū IDA program that operated in Hawai‘i from 1999 to 2004. Research questions examined how individual, family, island, and asset ownership variables affect two important dimensions of IDAs: program uptake and program graduation. Findings can be used to promote greater success in IDAs with the purpose of reducing a wealth gap while ultimately enhancing Native Hawaiian well-being.

One of the key findings is that the relatively more disadvantaged are less likely to enroll in the program. While income was not associated with program uptake, children in the household, lack of vehicle ownership, and to lesser extents lack of homes and low net worth were barriers. The importance of vehicle ownership suggests that lack of reliable transportation may limit the participation for low-income families, especially among some of Hawai‘i’s rural and geographically isolated communities.

The presence of children in the family was negatively related to IDA uptake but positively related to IDA graduation. This finding is of particular interest because of strong ‘ohana (family) and social connectedness norms experienced by many Native Hawaiian families (DeBaryshe, Yuen, Nakamura, & Stern, 2006; Kana‘iaupuni, 2004). The negative relationship between children in the household and Kahikū uptake supports previous research that identified a negative relationship between matched withdrawals and presence of children (Mills et al., 2006) and that childless families were wealthier than families with children (Grinstein-Weiss et al., 2006). The presence of children in the family may place financial burdens on families that lead to second thoughts about participation in the IDA program. However, once enrolled, it is possible that participants with children plan more for the future than do their childless counterparts and have more incentive to take advantage of the matching subsidy.

A third key finding in this study is that asset holding matters for IDA graduation. Homeownership and high savings balances were both related to an increased probability of graduating from the IDA. Both variables (homeownership and high savings) may be proxy indicators of other characteristics important to succeeding in IDA programs. For example, homeowners may have more experience saving

and planning for future financial goals. This finding is supported by theory that suggests asset holding begets future asset development (Sherraden, 1991) and research showing that pre-existing asset ownership increased chances of IDA graduation (Mills, Gale, et al., 2008) and reduces chances of dropping out (Schreiner & Sherraden, 2005).

From 1999 to 2004 something positive happened in the Maui IDA program. Maui participants were much more likely to make a matched withdrawal compared with their O'ahu counterparts ($OR = 3.42$). At least three reasons may explain this phenomenon. The first reason is contextual; the relatively higher supply of DHHL homelands on Maui made it possible for many participants to pursue homeownership. The second reason is institutional. Program staff revealed anecdotally that the Maui Kahikū site oriented the program toward homeownership. This is reflected in the savings goals of participants (94% for homes, 6% for business, and zero for postsecondary education). The Maui site's emphasis on homeownership saving confounds the strong relationship between education savings goal and group membership reported in Table 2. The third possible reason is personnel related. The Maui site coordinator has had a long history of working for the organization, has a charismatic and powerful personality, and has built strong relationships with individuals and organizations in the community that may have facilitated IDA graduation. Understanding interprogram site differences is challenging because of the flexibility allowed between IDA programs (Schreiner & Sherraden, 2007).

A final contribution made by this study is that several variables were not related to program uptake or graduation. Household income and employment status—usually negatively related to positive outcomes in welfare studies—had no relationship to IDA uptake or graduation. Furthermore, education also lacked any statistically meaningful relationship with uptake of or graduation from the Kahikū IDA, which contradicts the role of human capital in other research (Mills et al., 2006; Schreiner & Sherraden, 2007). Marital status was not a meaningful predictor in this study, but Mills et al. (2006) reported that divorced participants were more likely to make a matched withdrawal. The interaction between marriage and children in the home (i.e., single parents) was tested with no significant relationship observed (results not shown). That household income, employment status, education levels, and marital status fail to explain asset accumulation in this study builds a convincing argument that other factors matter for asset accumulation in low-income Native Hawaiian households. Other research emphasizes that institutional features are important to explain savings and dropout in IDAs (Grinstein-Weiss, Curley, & Charles, 2007; Schreiner & Sherraden, 2005).

Limitations

Findings should be interpreted carefully because of several study limitations. First, the sample was not randomly selected from the population of low-income Native Hawaiians. It was assumed that persons in this sample had unobserved characteristics (e.g., motivation, interest in saving, and financial knowledge) that differentiate them from the general population of low-income Native Hawaiians. The second limitation is the data. Although significantly different from zero, the multivariate logistic models failed to explain at least 85% of the variance in group membership and IDA graduation. In other words, the individual, family, island, and asset ownership variables were not able to explain much of the phenomena of interest. To better explain program enrollment and graduation, there is a need for better program data on case management, financial education, deposit frequency, deposit amounts, and so forth.

Implications for Policy

The study has specific implications for policymakers targeting Native Hawaiian well-being in Hawai'i. First, the research demonstrates that the Kahikū program produced positive outcomes for Native Hawaiians that are comparable with other first-generation IDA programs nationwide. Furthermore, the findings suggest that under certain circumstances IDAs may promote social and economic development for some low-income Native Hawaiians. Importantly, this study belies assumptions that low-income Native Hawaiians cannot accumulate assets. The program may be considered a model IDA program in Hawai'i with considerable institutional knowledge that can inform current and future IDA programs. Several organizations are currently operating IDAs at varying scales in the state: ALU LIKE, Helping Hands, Hawaiian Community Assets, Hawaii First Federal Credit Union, MA'O Organic Farms, Kula no na Po'e Hawai'i, Kualoa-He'eia Ecumenical Youth Project, Maku'u Farmers Association & Miloli'i Community, Parents and Children Together, and the Pacific Gateway Center. Furthermore, based on the Kahikū evidence, there is great opportunity for OHA and DHHL to incorporate asset-based mechanisms into their ongoing efforts. Assets should be considered during program eligibility, and savings mechanisms can be encouraged or built in to other programs (see Beverly et al., 2008, for examples of recommended institutional policies).

Findings also inform statewide asset-based policies that are continually under consideration. IDA legislation was introduced to the Hawai'i State Legislature during each session from 2005 to 2009 but has not passed. It is hoped the evidence presented above (i.e., that low-income persons, Native Hawaiians included, can save and develop assets when provided institutional opportunities) will be considered in future deliberations on the merits of state-sponsored IDAs. One product of the 2008 legislative session was the passage of SCR92 Hawai'i Statewide Task Force on Public Financial Education and Asset Building. The task force is currently considering how to implement financial education, propose statewide universal savings accounts for newborns, and revise existing asset limits for welfare recipients. Hawai'i is one of the first states to consider universal savings accounts for newborns, a policy that is closely aligned with Sherraden's (1991) original proposal for universal and lifelong savings accounts for all. One coalition, called Ho'owaiwai, organized by the Hawai'i Alliance for Community-Based Economic Development, is leading the advocacy effort to expand asset policy in the state by regularly convening community leaders, policymakers, and advocates. In addition to their advocacy and organizing, the organization has also produced a number of policy briefs and research reports examining asset policy possibilities in Hawai'i (see <http://www.hacbed.org/advocacy/2009resources.html>).

The finding that the relatively better off are self-selecting into IDA programs means that, as an intervention, IDAs may not be reducing poverty and addressing asset inequality as much as they could. This implies there is a need to identify persons at risk for selecting out of the program. A scorecard based on characteristics of savers in the national demonstration program was developed to track participants at the time of entry (Schreiner & Sherraden, 2007). A similar scorecard related to the likelihood of making a matched withdrawal could be useful to identify participants at risk for not taking advantage of the subsidy.

Implications for Future Research

While this research study may be an important contribution to the understanding of IDAs generally and among Native Hawaiians specifically, many questions remain unanswered. Understanding the long-term impacts of IDAs has been cited as a key gap in the knowledge base (Sherraden, 2008). A longitudinal survey of Kahikū sponsored by ALU LIKE, the Hawai'i Community Foundation, American Savings Bank, and Bank of Hawai'i was conducted in 2008 to evaluate the long-term

impacts of IDA participation. Early analysis revealed positive effects of IDAs: At follow-up, IDA graduates were more than twice as likely as nongraduates to own homes, and IDA graduation was positively related to vehicle ownership and vehicle value (Rothwell, 2008). Ongoing research using this dataset is under way to understand how other variables—stressful family events, financial practices, and sense of mastery—relate to IDA participation and well-being.

Of critical importance for future research is the need to understand processes that went unobserved in this study. For example, unobserved institutional variation in IDA program structure is critical to maximize outcomes. There is a growing consensus about which institutional features will maximize saving in IDAs (see Schreiner & Sherraden, 2007, for a full account). Future research among Native Hawaiians and other less visible minority groups should explore the influence of institutional features such as hours of financial education (information) and higher match rates (incentives). Other unobserved characteristics such as psychological, cultural, and environmental factors may also explain IDA performances.

The issue of cultural fit is frequently raised in discussions about asset accumulation among Native peoples. Is it a worthy policy objective to encourage Native Hawaiians, with communal norms and values, to accumulate wealth? Is it reasonable to expect Native Hawaiians to save in *Individual Development Accounts*? An affirmative response was offered by Danner (2004), who rationalized that economic development can be harnessed by Native Hawaiians:

To spend it on and to invest it in native goals, to achieve language revitalization, to attract our native youths and immerse them in native cultural values that will serve them to be economically self-sufficient, and to set a foundation for Native Hawaiian well-being. (p. 1)

More diverse research methodologies would greatly inform the collective understanding and debate about the extent to which assets are important for Native Hawaiians. Moving forward, there is a need to determine the extent to which assets are meaningful to Native Hawaiians and how policies can be designed to optimize asset accumulation among Native Hawaiians. Ongoing work to understand the cultural fit between assets and indigenous peoples may be particularly instructive (Finsel, 2008; Rothwell, in press).

CONCLUSION

There are large asset and income disparities between Native Hawaiians and non-Hawaiians in Hawai'i. Low-income people on the continental United States have demonstrated they can save and accumulate assets in IDA programs. This first study of IDAs among Native Hawaiians demonstrates that low-income Native Hawaiians can also save in IDAs, as graduation rates in the largest Hawai'i program are comparable with nationwide rates. Furthermore, asset ownership increases the chances of joining an IDA program and succeeding once enrolled. However, families with children and those without vehicles are less likely to enroll in the program. It is suspected that institutional features of the program also matter greatly, although they were not tested in this study. The findings substantiate the need to further investigate how IDA participation and asset holding affect Native Hawaiian well-being.

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ABOUT THE AUTHOR

David W. Rothwell is an assistant professor at the McGill University School of Social Work. He completed his doctoral dissertation on asset ownership, Individual Development Account participation, and economic mobility among Native Hawaiians at the Myron B. Thompson School of Social Work at the University of Hawai'i–Mānoa.