

# An Assessment of Wealth Accumulation Tasks and Behaviors

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## ABSTRACT

The publication of *The Millionaire Next Door* in 1996 by Thomas J. Stanley and William D. Danko had a dramatic influence on the way the media and some in the financial services community came to view wealth accumulation over the life cycle. An important aspect of the book was the documentation of certain tasks and behaviors that wealth accumulators—as defined by Stanley and Danko—engage in on a frequent basis. Many of these activities have morphed into generally accepted standards for wealth accumulation, but few have been tested empirically. Using data from a sample designed to overrepresent high-net-worth households ( $n = 271$ ), this study tested over 250 household financial management tasks and behaviors culled from *The Millionaire Next Door* and other related sources to determine which are effective in differentiating between those who are and are not wealth accumulators. Findings suggest that there does appear to be a core set of tasks and behaviors that helps shape wealth accumulation. Wealth accumulators tend to more frequently develop and adhere to a budget, they tend to save money on a regular basis, and they report being more likely to create plans for the future.

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## Introduction

It has been two decades since Thomas J. Stanley and William D. Danko published their book *The Millionaire Next Door* (MND).<sup>1</sup> Since its debut, MND has had a profound impact on the way financial products and services have been developed, delivered, and managed in the United States. It is hardly an overstatement to conclude that MND helped shape the modern financial services landscape. Searching the Internet via Google using the phrase “impact of the millionaire next door” results in well over 400,000 possibilities. Most of the sites that mention the publication are nonacademic in nature. Titles like “Nine Lessons in Wealth-Building” and “Lessons from The Millionaire Next Door” pepper the list. Within the search results are traditional media and academic sources as well.

What is most telling is that MND has continued to be widely quoted and referenced in the media more than 20 years after its original publication. Faulkner reported that MND is one of the 12 most influential personal finance books written in the last century.<sup>2</sup> She recommended that libraries nationwide have a copy available for patron use because the impact of MND continues to be felt today. Consider a recent *Kiplinger* Web site posting, which is representative of how MND is used in the press.<sup>3</sup> The editors at *Kiplinger* noted the following wealth-building secrets of millionaire-next-door types: (a) they don't spend

beyond their means, (b) they educate themselves, (c) they pick the right job, (d) they save and invest regularly, (e) they do not take excessive risk, (f) they are well insured, (g) they are prudent with financial windfalls, (h) they hang onto their cars, and (i) they avoid debt. Each of these tasks and behaviors mirrors the original findings outlined in MND.

It is important to note that prior to the publication of MND, it was common for financial pundits to recommend tasks and behaviors that were thought to increase a household's well-being. Stanley and Danko added to this discussion by documenting specific behaviors that self-made millionaires perform on a frequent basis.<sup>4</sup> Specifically, Stanley and Danko demonstrated behaviors that differentiate those who were able to build wealth effectively, given their age and income, versus those who were not able to build wealth despite a high level of income. That is, Stanley and Danko moved the point of reference from the personal opinion of a financial commentator to documentation of task engagement based on observations and interviews. Nearly all of their insights continue to form the basis of recommendations and suggestions within the financial services community. AARP, for example, recently published a personal finance refresher for its millions of 50-plus years-of-age members.<sup>5</sup> AARP's approach was similar to what continues to emerge from readings of MND. Although MND was not directly quoted, the characteristic statements were almost identical to what Stanley and Danko presented two decades earlier. Specifically, the AARP article reported that those who are financially secure and happy tend to (a) be optimistic, (b) avoid spending money on the latest gadgets (i.e., they are frugal), (c) be active in managing their resources, (d) be thoughtful when making decisions, (e) seek confirmation before investing, (f) be less greedy, and (g) maintain order in their personal and financial lives.

Given the impact MND has had, and continues to generate, in shaping financial advice, it is important to test the validity of the myriad task and behavioral recommendations that are made in the name of

MND. The purpose of this study was to revisit the core task and behavioral propositions from MND to determine whether MND-recommended tasks and behaviors continue to be relevant today. Specifically, this study categorized survey respondents into one of three groups: under-, average, and prodigious accumulators of wealth. These classifications were based on a definitional framework provided by Stanley and Danko.<sup>6</sup> Next, the study focused on examining how frequently individuals in each wealth accumulation category engaged in nearly 250 household financial management tasks and behaviors. These tasks and behaviors were culled from MND, as well as from other sources. Finally, the study tested the most significant task and behavior statements to determine which were most effective in differentiating between those who currently fit the profile of a wealth accumulator and those who do not. The next section of this paper provides more context regarding MND and the development and use of task statements.

## Review of Literature

When commenting on MND it is important to note that although the book made a significant impact in the popular press and among personal finance educators and financial service practitioners, MND has been less influential in the academic literature. To date, there has been just a handful of papers focused on testing MND concepts. One study, for example, used data from the National Longitudinal Survey of Youth to determine that a significant association exists between intelligence and income, but no relationship exists between intelligence and net worth.<sup>7</sup> Zagorsky concluded that attitudinal and behavioral factors, such as risk tolerance, ability to reject social pressure, and desire for immediate satisfaction, likely play a more important role in shaping wealth accumulation over the life cycle. In many ways, Zagorsky's findings mirrored those of Stanley and Danko.

Others have argued that accumulating wealth is only marginally related to financial behavior. In the original version of MND, Stanley and Danko intro-

## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

duced the concept of prodigious wealth accumulation.<sup>8</sup> A prodigious accumulator of wealth is someone whose net worth is equal to or greater than 10 percent of their age multiplied by their income. Shortly after the publication of MND, Sun and Hanna found that only about 20 percent of American households, at that time, met or exceeded the MND wealth accumulation target.<sup>9</sup> When Furnham adjusted the prodigious wealth accumulation formula by taking out inherited wealth, he concluded that many households meet the formula guideline.<sup>10</sup> He ended his review of MND concepts by concluding that the tasks and behaviors highlighted by Stanley and Danko were little more than commonsense activities, but that the average reader would be foolish to believe that they could realistically become a millionaire by engaging in these tasks and behaviors.<sup>11</sup>

Others have taken a different view regarding the usefulness of understanding the behaviors of those fitting the definition of a wealth accumulator. Mankiw argued that frequency of engagement in some household financial management tasks and behaviors likely influences intergenerational asset transfer strategies.<sup>12</sup> Rather than view wealth accumulation over the life cycle as being based on luck or the rigidity of the macroeconomic system, Mankiw recommended that households adopt prudent financial management strategies as a way to increase economic mobility. Rum and Wright, as an element of their study, provided physicians who participated in a randomized study with a copy of MND.<sup>13</sup> The book was used as a tool to help each participant better understand the research on affluent Americans as a way to create a benchmark level of understanding of the role behaviors play in shaping wealth outcomes. When combined with direct coaching, the application of MND concepts was shown to help increase the number and size of donations to nonprofit hospitals.

Others have argued that MND concepts can be used as teaching or intervention tools for personal finance educators and counselors. Statman noted that some people, particularly older adults, become too

good at self-control, which is a skill that is sometimes associated with wealth accumulation.<sup>14</sup> Statman argued that, “Advisors must remind investors gently that life does not go on forever and help them give up some control—whether giving control of the family business to the next generation, giving money to charity, or learning to spend money on themselves.”<sup>15</sup> By extension, it may help to know what wealth accumulators do more frequently either as a way to induce others to engage in similar behaviors or as a mechanism to help people avoid becoming too compulsive in one or more areas of their financial life.

It is worth noting that the wealth accumulation formula presented in MND has come under criticism, particularly among household finance academicians. Some have noted, for example, that the measure seems somewhat arbitrary and not linked to normative models of saving and expenditures. These are fair critiques. On the other hand, it is equally important to note that the wealth accumulation formula is widely used in practice. Smith, for example, provided a rather detailed analysis of the measure as a benchmark to be used by individual investors.<sup>16</sup> Some media personalities also recommend that their followers use the formula to benchmark household financial performance.<sup>17</sup> If for no other reason than to validate the advice provided to consumers on a daily basis, it is useful to understand what tasks and behaviors—as possible recommendations—are associated with meeting the MND wealth accumulation target. Until another tool takes the place of the measure in the popular culture, it is worthwhile to provide users with empirical evidence regarding the tool.

As this review of the literature shows, there is still active interest and debate among those in the academic community, financial advisors, and consumers regarding the validity of the assertions arising from MND, primarily related to financially related tasks and behaviors. While the popular press, media, and financial services community have tended to adopt significant elements of MND, it is important to note that there have been relatively few studies devoted to testing

which tasks and behaviors—particularly the frequency of engagement in tasks and behaviors—work in differentiating those who are more or less likely to be wealth accumulators. One expected outcome associated with this study was to fill this gap in the literature.

## Methodology

### Data

Data were obtained from two proprietarily designed and delivered online surveys. The first survey was undertaken in 2013. The sample frame was designed to overrepresent high-net-worth households. The second survey was completed in 2014. The sample for this survey was intentionally more diverse, in terms of wealth and income, compared with the first sample. Combined, a total of 271 respondents were included in this analysis. On average, respondents were 40.19 years of age (median = 38.00 years; standard deviation = 11.26 years), with ages ranging from 25 to 77. The majority of respondents (62 percent) were male ( $n = 168$ ). The average household income of respondents was \$145,975 (median = \$87,499; standard deviation = \$137,491). The mean reported household net worth was \$577,060 (median = \$1,500,000; standard deviation = \$1,599,989). Nearly 70 percent of respondents reported currently owning investments.

The primary purpose of the two surveys was to collect household financial management task and behavior frequency data. Overall, respondents were asked to report how frequently they engaged in 259 tasks and behaviors. The task statements were generated from interview data from Stanley and Danko's original conversations with millionaires, as well as from other subject-matter expert sources using a job analysis methodology.<sup>18</sup> An ordinal measure was used to record responses: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often/always. The following are examples of task statements included in the questionnaire: (a) operate household using a budget, (b) look for ways to generate income outside of primary job, (c) pay for large purchases with cash,

and (d) outsource lawn care to lawn maintenance company or contractor.

### Wealth Accumulation Estimate Variables

A wealth accumulation estimate (WAE) was made for each respondent's household. The estimate was based on the following formula from Stanley and Danko:

$$WAE = [(age \times income) \times .10]$$

where WAE = wealth accumulation estimate, age was the respondent's age in years, and income was reported total income.<sup>19</sup> An income estimation was made in order to perform the calculation. Respondents were asked to report their income using one of 53 income categories. The range of categories started at under \$2,500 and increased incrementally to \$700,000 or more. Each income category was converted to a dollar estimate. For example, in the original survey someone whose total income was \$48,000 was coded 20, which corresponded to a category range of \$47,500 to \$49,999. For this analysis, the category was converted to a dollar estimate. Specifically, the high end of each category was used as the income input. In effect, this imputation resulted in a conservative WAE. In this example, someone in the income 20 category was coded as having \$49,999 in income. The mean, median, and standard deviation of the recoded income variable were \$145,975; \$87,499; and \$137,491, respectively. The mean WAE was \$597,308 (median = \$328,495; standard deviation = \$591,414).

Additional steps were taken to derive estimates of underaccumulation and average and prodigious wealth accumulation. Each respondent's WAE was subtracted from his or her net worth. The average net worth was \$577,060 (median = \$150,000; standard deviation = \$1,599,989). When calculated, the wealth accumulation mean was -\$22,343 (median = -\$175,497; standard deviation = \$1,379,214). The following rules, as described by Stanley and Danko, were used to categorize respondents into a wealth accumulation group:<sup>20</sup>

1. Underaccumulation of Wealth:

$$Net\ Worth \leq (WAE \times .50)$$

2. Average Accumulation of Wealth:  
 $(WAE \times .50) < Net\ Worth < (WAE \times 2)$
3. Prodigious Accumulation of Wealth:  
 $Net\ Worth \geq (WAE \times 2)$

Approximately 56 percent of respondents were classified as underaccumulators of wealth and 36 percent were grouped as average accumulators of wealth, while 8 percent were categorized as prodigious accumulators of wealth.

### Data Analysis

Given the sample size, the number of tasks and behaviors involved in the analysis, and the limitations resulting from sample size variations among questions, a nonparametric median test was used to identify which household financial management tasks and behaviors differed among under-, average, and prodigious wealth accumulators. Once the statistically significant tasks and behaviors were identified, an exhaustive chi-squared automatic interaction detection (CHAID) classification procedure was used to choose the tasks and behaviors that had the strongest interaction with predicting which wealth accumulation group someone would belong to. The CHAID procedure was comprehensive in that it accounted for all possible splits within a decision tree framework for each predictor variable (i.e., task and/or behavior in this study). The result of the CHAID analysis was a classification and decision tree. A tree highlights the tasks and behaviors that are most dominant in explaining wealth accumulation. In order to account for possible age effects in the data (i.e., older individuals may have been in a better position to save money or to have already received an inheritance), the sample was split into two groups: those equal to or under age 40 and those older than age 40. Additional exhaustive CHAID models were created for these two groups to determine what similarities or differences might be present in the data. Finally, a logistic regression model was developed to test the full sample CHAID results, controlling for gender, age, and race/ethnic background. In the regression, gender was coded

1 = female and 2 = male. Age was estimated based on each respondent's birth date. Race was dummy-coded such that white = 1, and other entries = 0.

### Results

Results from the median tests are shown in Table 1. All 259 task statements were evaluated. Of the tasks and behaviors examined, 43 were found to be statistically significantly associated with wealth accumulation group membership. Data in Table 1 show the significant results by the number of respondents for each group (i.e., under, average, and prodigious), the median score on each item by group, the range of scores within each group, the chi-square median test and significance level, and a post-hoc pairwise comparison.

Consider the first statement in Table 1: "Fund retirement accounts before funding other specific savings accounts." The median score among the 130 wealth underaccumulators was 4, whereas the median score for the 79 average wealth accumulators was 5. The median score for the 19 prodigious wealth accumulators was 4. The median test indicated that there was a difference among the three groups ( $\chi^2 = 9.63, p < .01$ ). The post-hoc test column shows where the difference was. In this case, the median score for those in the wealth underaccumulation category was lower than the score of those in the average wealth accumulation group. It is important to note that while the prodigious wealth accumulation median matched that of the underaccumulation group, the range of scores was different, which resulted in a nonsignificant post-hoc test result.

In general, median scores for those in the wealth underaccumulation group were significantly different from the average group. Those in the average group were more likely to report engaging in positive household financial management tasks and behaviors more frequently, while taking part in negative tasks and behaviors less frequently. It is important to note that the average and prodigious wealth accumulators in this study exhibited essentially the same task frequencies. This led to the conclusion that, at least in

# An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

**TABLE 1**  
Median Test Analyses of Task Frequencies by Wealth Accumulation Category

Task	Group	n	Median	Range	Median Test		Post-Hoc Tests Group
					$\chi^2$	p	
Fund retirement accounts before funding other specific savings accounts.	Under	130	4	1-5	9.63	.01	$Mdn_U < Mdn_A$
	Average	79	5	3-5			
	Prodigious	19	4	2-5			
Subscribe to fee-based resources for investment advice and information.	Under	83	1	1-2	17.49	.01	$Mdn_U < Mdn_{A,P}$
	Average	70	1	1-5			
	Prodigious	19	2	2-5			
Review statements from any investments owned to review returns/performance of such investments.	Under	83	4	1-5	6.38	.04	$Mdn_U < Mdn_A$
	Average	70	5	3-5			
	Prodigious	19	4	2-5			
Purchase and manage rental and/or vacation homes or condominiums to generate income.	Under	128	1	1-1	15.61	.01	$Mdn_U < Mdn_{A,P}$
	Average	79	1	1-5			
	Prodigious	20	1.5	1-3			
Harvest investment losses where available to minimize taxes.	Under	84	2	1-5	6.65	.04	$Mdn_U < Mdn_A$
	Average	69	3	1-4			
	Prodigious	19	2	1-5			
Make the most efficient allocation of own assets to minimize tax effects.	Under	128	3	1-5	9.64	.01	$Mdn_U < Mdn_A$
	Average	78	4	2-5			
	Prodigious	19	3	1-5			
Examine the balance sheet of a company before investing in the company.	Under	83	3	1-5	9.46	.01	$Mdn_U < Mdn_A$
	Average	69	4	1-5			
	Prodigious	18	3	1-5			
Purchase and hold real estate (land, homes, or other properties) as part of an overall investment strategy.	Under	84	1	1-5	14.45	.01	$Mdn_U < Mdn_{A,P}$
	Average	69	3	1-5			
	Prodigious	19	3	2-3			
Create plans to minimize tax impact on investment income (e.g., holding fixed-income investments in tax-advantaged accounts.)	Under	84	3	2-5	12.16	.01	$Mdn_U < Mdn_A$
	Average	69	4	2-5			
	Prodigious	18	4	2-5			
Seek out financial advice via well-respected financial publications.	Under	129	3	1-4	12.15	.01	$Mdn_U < Mdn_A$
	Average	78	3	2-5			
	Prodigious	20	3	1-5			
Read financial magazines, newspapers, blogs, and other publications for advice on managing finances.	Under	129	3	1-5	8.03	.02	$Mdn_U < Mdn_A$
	Average	78	4	2-5			
	Prodigious	20	3	1-5			

## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

**TABLE 1 (cont'd)**

Median Test Analyses of Task Frequencies by Wealth Accumulation Category

Task	Group	n	Median	Range	Median Test		Post-Hoc Tests Group
					$\chi^2$	p	
Actively seek ways to secure gifts from extended family members by ingratiating self.	Under	129	1	1-3	8.52	.01	$Mdn_U < Mdn_A$
	Average	79	1	1-1			
	Prodigious	20	1	1-1			
Work with attorney and/or estate planning professional to create wills.	Under	129	1	1-5	18.64	.01	$Mdn_U < Mdn_{A,P}$
	Average	79	3	1-5			
	Prodigious	20	3	1-5			
Create will to distribute wealth and/or material goods in the event of a catastrophe (either on own or with an attorney).	Under	128	2	1-5	10.55	.01	$Mdn_U < Mdn_{A,P}$
	Average	79	3	1-5			
	Prodigious	19	4	1-5			
Determine net worth of household.	Under	128	3	1-5	27.34	.01	$Mdn_U < Mdn_A$
	Average	79	4	2-5			
	Prodigious	20	4	2-5			
Negotiate purchase and/or lease price of cars.	Under	104	4	1-5	7.49	.02	$Mdn_U < Mdn_{A,P}$
	Average	74	4	1-5			
	Prodigious	16	5	3-5			
Take out loans to pay for personal vehicles.	Under	113	3	1-5	16.63	.01	$Mdn_U > Mdn_A$
	Average	75	1	1-5			
	Prodigious	16	1	1-3			
Pay entire balance of credit card each month.	Under	108	4	1-5	19.70	.01	$Mdn_U < Mdn_{A,P}$
	Average	62	5	3-5			
	Prodigious	18	5	3-5			
Use only one rewards credit card in order to accumulate substantive rewards.	Under	108	3	1-5	12.62	.01	$Mdn_U < Mdn_{A,P}$
	Average	62	3.5	1-5			
	Prodigious	18	4	1-5			
Carry balance on one or more credit cards.	Under	108	3	1-5	27.25	.01	$Mdn_U > Mdn_{A,P}$
	Average	52	1	1-3			
	Prodigious	18	1	1-3			
Allocate time, energy, and money efficiently in ways that lead to building wealth.	Under	128	4	2-5	6.03	.05	$Mdn_U < Mdn_A$
	Average	77	4	1-5			
	Prodigious	18	4	3-5			
Exceed budgeted amount for spending when shopping.	Under	126	3	1-4	18.82	.01	$Mdn_U > Mdn_A$
	Average	76	2	2-3			
	Prodigious	18	2	1-4			

## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

**TABLE 1 (cont'd)**

Median Test Analyses of Task Frequencies by Wealth Accumulation Category

Task	Group	n	Median	Range	Median Test		Post-Hoc Tests Group
					$\chi^2$	p	
Participate in investing clubs, groups, or workshops.	Under	127	1	1-3	7.01	.03	$Mdn_U < Mdn_A$
	Average	76	2	1-3			
	Prodigious	18	1	1-3			
Buy clothing, food, and other commonly used items using coupons and/or other discounts.	Under	126	4	1-5	7.69	.02	$Mdn_U < Mdn_A$
	Average	76	4	2-5			
	Prodigious	18	4	2-5			
Purchase quality clothing that will last for several seasons of wear.	Under	126	4	2-5	5.99	.05	$Mdn_U < Mdn_A$
	Average	73	4	2-5			
	Prodigious	18	4	2-5			
Pay for large purchases with cash.	Under	127	3	1-5	16.69	.01	$Mdn_U < Mdn_{A,P}$
	Average	74	4	1-5			
	Prodigious	18	4	2-5			
Continue to save at same rate despite changes in household income.	Under	126	3	1-5	8.23	.02	$Mdn_U < Mdn_P$
	Average	74	3	1-5			
	Prodigious	17	4	2-5			
Pay off home mortgage early to reduce interest costs.	Under	87	3	1-5	11.11	.01	$Mdn_U < Mdn_A$
	Average	70	5	3-5			
	Prodigious	18	3.5	1-5			
Increase mortgage payments to decrease time of loan and overall interest payments.	Under	87	3	1-5	14.13	.01	$Mdn_U < Mdn_A$
	Average	69	4	1-5			
	Prodigious	18	3	1-5			
Meet or exceed expectations and goals in current job.	Under	127	4	1-5	9.06	.01	$Mdn_U < Mdn_A$
	Average	75	4	3-5			
	Prodigious	17	5	3-5			
Work for multiple companies simultaneously (outside of consulting or contracting).	Under	117	3	1-5	9.34	.01	$Mdn_U > Mdn_P$
	Average	70	2	1-5			
	Prodigious	15	2	1-3			
Require children to pay for/fund part or all of transportation expenses (e.g., car).	Under	61	2	1-5	6.33	.04	$Mdn_U < Mdn_A$
	Average	31	4	1-5			
	Prodigious	6	2	1-4			
Create and work for own business to generate income.	Under	116	3	1-5	6.51	.04	$Mdn_U < Mdn_P$
	Average	67	3	1-5			
	Prodigious	17	4	1-5			



## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

**TABLE 1 (cont'd)**

Median Test Analyses of Task Frequencies by Wealth Accumulation Category

Task	Group	n	Median	Range	Median Test		Post-Hoc Tests Group
					$\chi^2$	p	
Decline requests from adult children to subsidize/support adult children's lifestyle.	Under	23	3	1-5	8.12	.02	$Mdn_U < Mdn_A$
	Average	15	4	2-5			
	Prodigious	5	3	2-3			
Create savings goals for college savings accounts.	Under	66	3	1-5	9.68	.01	$Mdn_U < Mdn_A$
	Average	42	4	1-5			
	Prodigious	9	4	2-5			
Require children to pay for nonholiday or nongift items (i.e., outside of holidays and birthdays).	Under	61	3	1-5	15.90	.01	$Mdn_U < Mdn_A$
	Average	37	4	2-5			
	Prodigious	8	2.5	1-3			
Spend less on expenses than household's total income in a given time period.	Under	121	4	1-5	9.88	.01	$Mdn_U < Mdn_A$
	Average	69	5	3-5			
	Prodigious	18	5	3-5			
Review information regarding charitable organizations before donating cash or items to them.	Under	119	4	2-5	9.45	.01	$Mdn_U < Mdn_A$
	Average	70	4	1-5			
	Prodigious	18	4	3-5			
Live (spend) below means (income/net worth).	Under	120	4	1-5	11.48	.01	$Mdn_U < Mdn_A$
	Average	68	5	3-5			
	Prodigious	18	4.5	3-5			
Create an emergency fund in budget.	Under	118	3.5	1-5	10.98	.01	$Mdn_U < Mdn_A$
	Average	69	5	3-5			
	Prodigious	18	5	3-5			
Maintain accurate records of income and spending.	Under	120	4	1-5	9.62	.01	$Mdn_U < Mdn_A$
	Average	70	5	3-5			
	Prodigious	18	5	2-5			
Work to improve status among friends/neighbors in terms of the types of material goods owned (e.g., cars, electronic equipment, clothing, and accessories).	Under	119	2	1-5	6.20	.05	$Mdn_U < Mdn_A$
	Average	69	2	1-3			
	Prodigious	18	2	1-3			
Discuss negative aspects of marriage/relationship with those outside the marriage/relationship.	Under	79	3	1-5	19.10	.01	$Mdn_U > Mdn_A$
	Average	47	2	1-3			
	Prodigious	14	2	1-3			

Note: A median test may indicate a significant difference even when the reported medians are the same. Because the test is based on a chi-square analysis, this can occur when the observed frequencies differ from expected frequencies.

# An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

the context of this study, these two groups could be considered one rather than two separate categories.

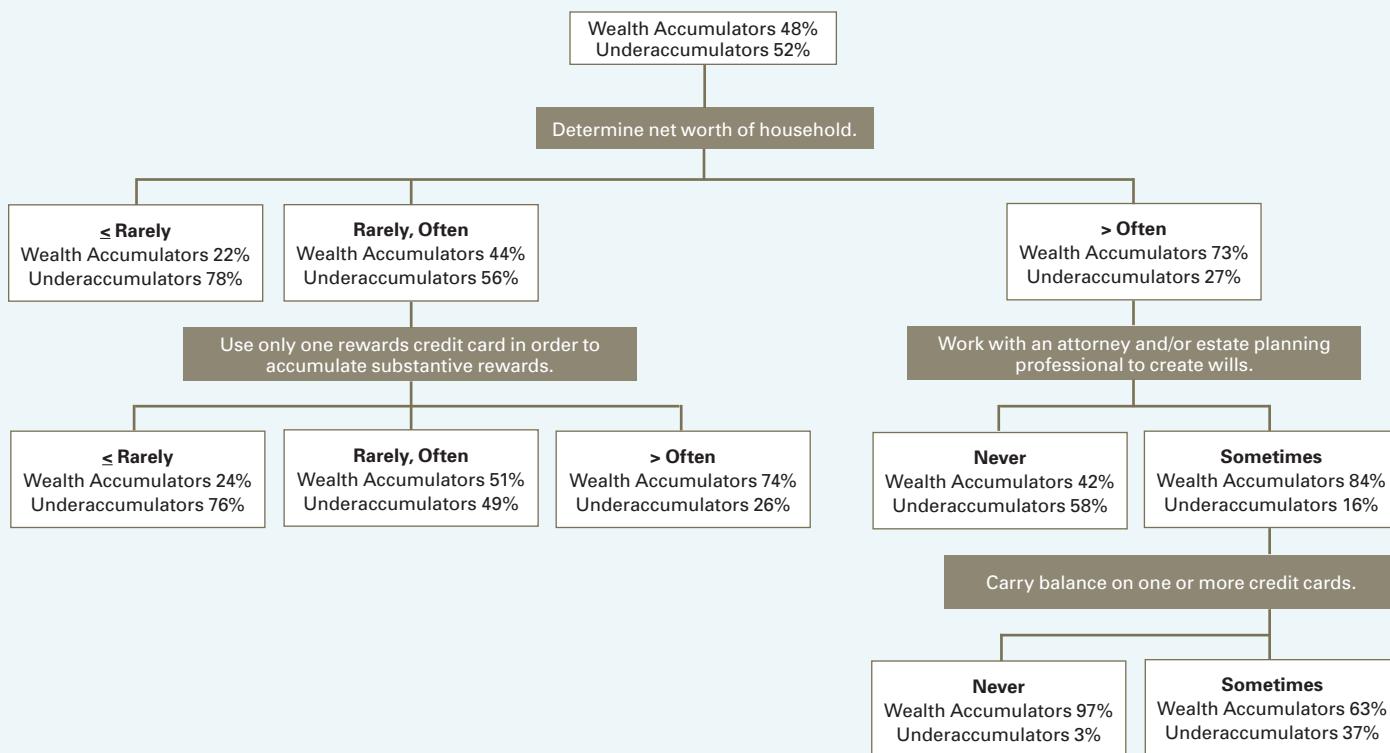
Given the median test results, the average and prodigious wealth accumulation categories were combined in each of the following analyses. The resulting sample was split nearly equally, with 139 respondents (51 percent) being categorized as underaccumulators and 132 (49 percent) being classified as average/prodigious accumulators of wealth (also referred to herein as “wealth accumulators”).

The 43 statistically significant tasks and behaviors were then used in three exhaustive CHAID classification analyses. Figure 1 shows the results when all of the items were used with the full sample. As illustrated, four statements emerged as important in

differentiating between those in the wealth underaccumulation category and those in the average/prodigious wealth accumulation category: (a) determine net worth of household, (b) use only one rewards credit card in order to accumulate substantive rewards, (c) work with attorney and/or estate planning professional to create wills, and (d) carry balance on one or more credit cards. In general, underaccumulators were less likely to determine household net worth, use one rewards credit card, or work with an attorney. They were, however, somewhat more prone to carry a balance on one or more credit cards.

One limitation associated with this analysis is that only frequency of engagement in specific household financial management tasks and behaviors was used

**FIGURE 1**  
Exhaustive CHAID Classification Tree for Full Sample



## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

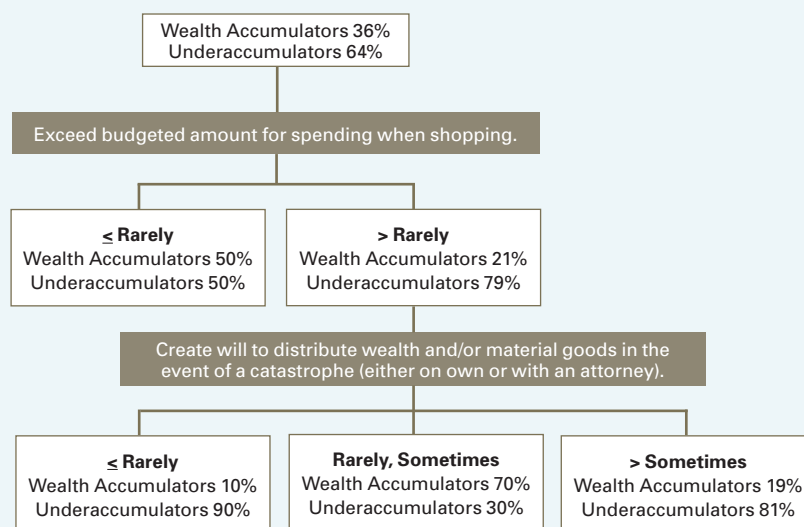
in the classification procedure. While the classification rate of the model shown in Figure 1 was 70 percent for the sample and for those in the underaccumulation group—a significant improvement over random assignment of respondents into one of the two wealth accumulation groups—other factors, of course, likely influence someone’s wealth accumulation status. It is possible that age has a role to play in shaping someone’s categorization. For example, households with a younger household head may be burdened with education and mortgage debt that older households have managed to eliminate. This might account for the tendency of some households to be less than systematic in tracking net worth and credit card expenditures. It is also possible that households with an older head of household may have already received an inheritance. The receipt of assets from a third party could serendipitously move someone with otherwise problematic household financial management behavior into the average/prodigious wealth accumulation category.

The sample was split into two age categories in

order to test this possibility. Figure 2 shows the classification procedure using only those respondents who were aged 40 or younger. The overall model’s prediction accuracy was about the same as the first model; however, the level of accuracy in identifying those in the underaccumulation category was very strong (97 percent). Younger underaccumulators of wealth were found to be more likely to exceed their budgeted amount when shopping and to be less likely to create a will to distribute their wealth and/or material goods. It is important to note, however, that this last task did not explain much variation in the model; approximately 81 percent of underaccumulators indicated at least sometimes (or failed to indicate a frequency) creating a will.

Figure 3 shows the classification results for those over age 40. As was the case with the model shown in Figure 2, all of the statistically significant tasks and behaviors from Table 1 were included in the analysis. The classification accuracy of this model among these older respondents was closest to that of the larg-

**FIGURE 2**  
Exhaustive CHAID Classification Tree for Those Equal to or Younger than Age 40



## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

er sample (77 percent overall and 60 percent for those in the underaccumulation group). Underaccumulators of wealth were much less likely to report purchasing and holding real estate as part of their overall investment strategy. For those who did indicate owning some investment real estate, underaccumulators were less likely to pay off their home mortgage early to reduce interest costs. This particular model provided an almost 90 percent accurate prediction of those in the wealth accumulation group.

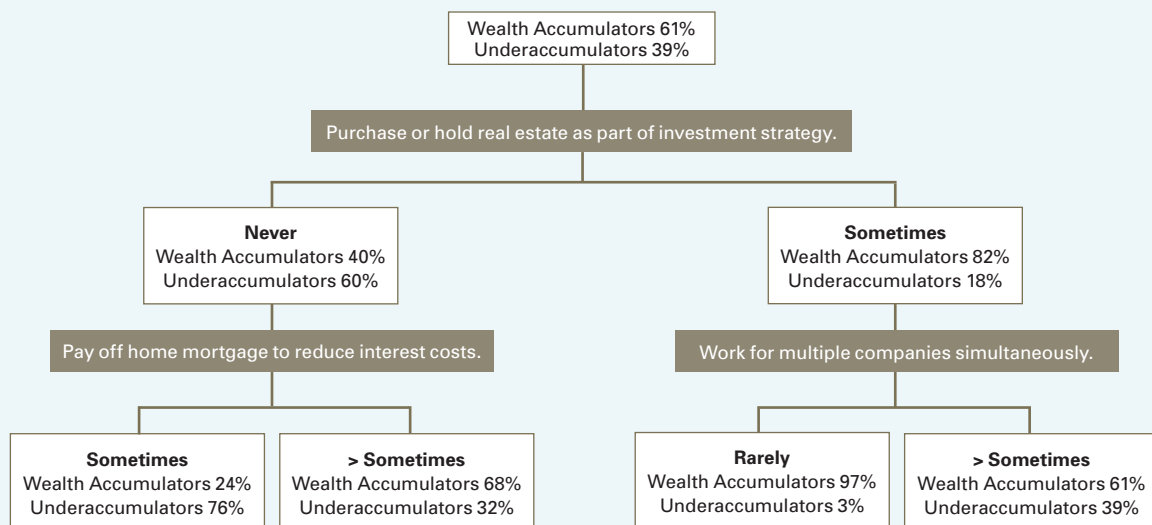
When viewing the three models together, it is interesting to note that the tasks and behaviors were exclusive to each model. That is, each model was driven by a unique set of task and behavior statements. An important takeaway from these analyses is that it does not take hundreds, or even dozens, of task assessments to describe who is more or less likely to be an accumulator of wealth, as defined in MND. When viewed across the life cycle, those who avoid calculating their own net worth or planning for the future, and those who engage in somewhat problem-

atic credit management behavior more frequently, are likely to be underaccumulators of wealth. This does not mean that these tasks and behaviors are necessarily predictors of wealth accumulation. Instead, results suggest that there appear to be commonalities among wealth accumulation groups in certain tasks and behaviors.

Table 2 shows the results from the logistic regression that was used to confirm the findings from the full sample classification process (Figure 1). In addition to using the four identified tasks and behaviors from the first model, this analysis incorporated the gender, age, and race/ethnicity of each respondent as control variables. The dependent variable was the dummy-coded wealth accumulation category variable: 1 = underaccumulation of wealth and 0 = accumulation of wealth.

The model explained approximately 36 percent of the variance in wealth accumulation category membership. While this is noteworthy given the limited number of task and control variables,

**FIGURE 3**  
Exhaustive CHAID Classification Tree for Those over Age 40



## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

the results suggest that other factors also play a role in shaping who is labeled an underaccumulator of wealth. Future studies ought to include assessments of the receipt and value of inheritances, the duration of task engagement, and geographic controls that can account for the value of home equity by region. Regardless, the findings are noteworthy in generally confirming the classification results. Three of the four task statements were found to be statistically significant when controlling for gender, age, and race/ethnicity. Those who reported more frequently determining household net worth were 40 percent less likely to be classified as underaccumulators of wealth. Similarly, respondents who more frequently used only one rewards credit card were 30 percent less likely to be classified as underaccumulators of wealth. On the other hand, respondents who carried a balance on one or more credit cards

were 1.44 times more likely to be classified as underaccumulators of wealth. The task that identified working with an attorney and/or estate planning professional to create wills was not significant at the  $p < .05$  level; however, it was significant at the  $p < .10$  level. Of the demographic control variables, only age was found to be significant. Given that age was measured as date of birth and the coefficient was negative, older respondents were found to be 5 percent less likely to be categorized as underaccumulators of wealth.

### Discussion

The media and many in the financial services community have come to believe that engagement in certain household financial management tasks and behaviors helps differentiate people in terms of wealth accumulation. Findings from this study generally support this conclusion. Those who fit the profile of an

**TABLE 2**

Logistic Regression Results Showing Relationship of Task Statements to Wealth Accumulation Classification

Variable	B	SE	Wald	Sig.	Exp(B)
Gender (1 = female; 2 = male)	.22	.37	.34	.56	1.24
Age	-.05	.02	8.52	.01	.95
Race/ethnicity (white = 1)	.44	.47	.88	.35	1.56
Work with attorney and/or estate planning professional to create wills.	-.21	.13	2.80	.09	.81
Determine net worth of household.	-.51	.17	8.94	.01	.60
Use only one rewards credit card in order to accumulate substantive rewards.	-.36	.13	7.96	.01	.70
Carry balance on one or more credit cards.	.37	.13	8.38	.01	1.44
Constant	3.90	1.21	10.45	.01	49.52

Note:  $\chi^2(7) = 60.09$ ,  $p < .001$ , Nagelkerke  $R^2 = .36$

B = log-odds units; SE = standard error; Wald = Wald chi-square statistic; Sig. =  $p$ -value associated with coefficient; Exp(B) = odds ratio for the coefficient (exponentiation of the coefficients)

## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

underaccumulator of wealth exhibited behaviors that were different from those who were either average or prodigious wealth accumulators. Wealth accumulators reported frequently spending less than they earned. They also report having a longer-term outlook when thinking about their future. Wealth accumulators tended to be more conscientious in creating a plan, adhering to a plan, and allocating their human capital and financial resources more productively. Maintaining accurate records of income and spending, continuing to save regardless of income, rarely carrying a credit card balance, and staying engaged with market news by reading and researching investment-related publications were tasks and behaviors that described wealth accumulators.

On the other hand, underaccumulators of wealth tended to engage in more problematic household financial management tasks and behaviors on a more frequent basis. They were much more likely to take out loans to pay for cars, carry a revolving balance on credit cards, exceed their budget when shopping, and discuss their personal relationship issues with others. They were also less likely to negotiate the price of a new vehicle. In other words, those who fit the profile of an underaccumulator of wealth appeared to be more myopic in their planning horizon and less attentive to creating and sticking to a plan.

Results from this study suggest that while there were differences among under-, average, and prodigious accumulators of wealth, the difference between average and prodigious accumulators of wealth was not substantial. Those in these two groups tended to engage in similar tasks and behaviors with a similar degree of frequency. When comparing wealth accumulators to underaccumulators of wealth, four tasks and behaviors stood out as useful classification activities: (a) determine net worth of household, (b) use only one rewards credit card in order to accumulate substantive rewards, (c) work with attorney or estate planning professional to create wills, and (d) carry balance on one or more credit cards. Across the life cycle, underaccumulators of wealth were less likely

to calculate their net worth. They infrequently used only one rewards credit card. They seldom engaged in estate planning, and they were less likely to pay off their credit card on a monthly basis.

It was hypothesized that classifications of wealth accumulators might have been influenced by the age of the household head. When this possibility was tested the number of tasks and behaviors needed to classify wealth accumulators under the age of 40 came down to two activities: (a) exceeding budgeted amount for spending when shopping and (b) creating a will to distribute wealth. Essentially, younger underaccumulators of wealth seemed to have a hard time creating and sticking to a budget. Not engaging in estate planning was determined to be a better proxy for the lack of long-term planning that nearly all underaccumulators of wealth exhibited in this study.

Three tasks and behaviors emerged as effective classification activities for those over the age of 40: (a) purchase and hold real estate as part of an overall investment strategy, (b) pay off home mortgage early to reduce interest costs, and (c) work for multiple companies simultaneously. Those in the underaccumulation of wealth category almost never reported owning investment real estate. They rarely indicated paying their mortgage off early, but they did work more jobs than wealth accumulators. This last behavior may be attributable to needing to work to balance the household budget or deciding to work to improve the household financial situation as a retirement planning strategy.

It is worth noting that there may be life cycle effects at play while households develop their wealth accumulation status. Households with a younger household head may need to exceed their allocated budget on occasion because of nonfrivolous expenses that older head of household families may not encounter. For example, a young couple may have unexpected bills associated with raising children, paying student loan expenses, or supporting extended family members. An older couple, without children in the household, likely will have more resources to devote

## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

to saving and to paying down a mortgage, vehicle, and other debts. Dew and Xiao concluded, after their examination of financial management tasks as part of a scale development project, that some financial tasks may be more appropriate for those at higher socioeconomic status (SES) levels than for others.<sup>21</sup> This means that specific tasks and behaviors may change over the life cycle or by SES. What does appear to be consistent, however, is the general theme of the tasks and behaviors. As stated previously, wealth accumulators tended to be, in this study, better at budgeting, saving, and planning for the future.

While the findings from this study are noteworthy, it is important to contextualize the results in light of certain limitations. For example, although the sample was unique in having an overrepresentation of wealthy respondents, the sample was limited in size. This hindered the use of some parametric statistical techniques that might have provided more detailed information about similarities and differences among the wealth accumulation groups. Additionally, the way in which data were collected meant that the number of demographic questions that could be asked was limited. Future studies should extend this research to determine whether other demographic and socioeconomic factors increase the amount of explained variance in the classification models. Future studies should also explicitly evaluate the amount in inheritances and other financial windfalls obtained by a household. It is possible that some households that were classified as wealth accumulators were only accumulators in the sense of receiving a large inheritance. Finally, it is important to keep in mind that the results from this study should not be used to infer causality. Other studies are needed to track households over time to determine the frequency and stability of task and behavior engagement. It is this type of study that can be used to draw causal inferences. ■

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## An Assessment of Wealth Accumulation Tasks and Behaviors

John E. Grable et al.

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