

# **New Ways to Make People Save: A Social Marketing Approach<sup>1</sup>**

Annamaria Lusardi  
(Dartmouth College and NBER)

Punam Anand Keller  
(Tuck School of Business, Dartmouth College)

and

Adam M. Keller  
(Dartmouth College)

March 2008

## Abstract

In this study, we use a social marketing approach to develop a planning aid to help new employees at a not-for-profit institution contribute to supplementary pensions. We employed different methods, such as surveys, focus groups and in-depth interviews, to “listen” to employees’ needs and difficulties with saving. Moreover, we targeted specific groups that were less likely to save and contribute to supplementary pensions. The program we developed is not only effective but also inexpensive. While this program was implemented at a single institution, it is suitable to be applied to a variety of employers and demographic groups.

---

<sup>1</sup> This paper was written for the book “Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs” edited by Annamaria Lusardi and forthcoming at the University of Chicago Press. We would like to thank Nava Ashraf, Robert Cialdini, Petia Petrova, and participants of the conference “Improving the Effectiveness of Financial Education and Saving Programs,” Cambridge, MA, and the “Transformative Consumer Research Conference,” Tuck School of Business, Hanover, NH, for suggestions and comments. We would also like to thank the staff of the human resources office of the not-for-profit institution we worked with for their help and support. Anna Dev provided able research assistance.

## **1. Introduction**

There exists a voluminous literature on saving. However, while several studies have examined barriers to saving, few studies have focused on helping people who want to save but don't know how. In this study, we use a social marketing approach to develop a planning aid to help new employees at a not-for-profit institution to open and contribute to supplementary retirement pensions. To inform development of the planning aid, we employed different methods—from survey methods to focus groups and in-depth interviews—to “listen” to employees' needs and understand their barriers to saving. Moreover, we targeted specific groups that were less likely to save and contribute to supplementary pensions. Most importantly, we devised a cost-effective program to facilitate saving and contributions to supplementary pensions. We observed a sharp increase in supplementary retirement accounts after the implementation of our program: the election rate more than tripled in a 30-day period and doubled in a 60-day period. While this program was implemented at a single institution, it is suitable for application to a variety of employers and demographic groups.

## **2. Literature Review**

The literature indicates that several individual characteristics are responsible for saving deficits. Households reporting low saving are disproportionately those with low income and low education.<sup>2</sup> The Retirement Confidence Survey, which covers a representative sample of U.S. workers, indicates that, excluding the value of any defined benefit plans and a primary home, 49 percent of all workers (and 68 percent of workers under age 35) had savings under \$25,000, while only 14 percent of all workers had savings above \$250,000. The reason many households have little private wealth is not because they have large employer pensions. In fact, many

---

<sup>2</sup> See, among others, Hubbard, Skinner, and Zeldes (1995).

households, and particularly those with low income, have low amounts of private wealth and also have no pensions at all.<sup>3</sup> There are very wide differences in pension wealth and, again, many households get close to retirement with very low levels of pension wealth. Women are a particularly vulnerable group. According to the estimates of Weir and Willis (2000), the death of a husband often precipitates his widow's entry into poverty.

When examining the reasons why so many households do not save, Lusardi (2005) found that a high proportion of older respondents had not even thought about retirement. This finding is confirmed in another study by Lusardi and Mitchell (2006) that shows that only one-third of older respondents have ever tried to calculate how much they need to save for their retirement. Widespread lack of planning is also evident in studies about workers' knowledge of Social Security and pensions, two of the most important components of retirement wealth. As many as half of older workers do not know or are wrong about the type of pensions they have (whether defined benefit, defined contribution, or a combination of the two) and even fewer know how much money they have in their pensions.<sup>4</sup> Only a small fraction of workers know about the rules governing their Social Security benefits. As noted in the Employee Benefit Research Institute report on the 2007 annual Retirement Confidence Survey, even though it has been twenty-four years since legislation was passed that increased in increments the normal retirement age for Social Security, and despite eight years of annual mailings of individual benefit statements from the Social Security Administration, only 18 percent of workers know the age at which they will be entitled to full Social Security benefits.

Lack of information and knowledge is also present in other important aspects of household financial decision-making. For example, according to Campbell (2006) and Bucks and

---

<sup>3</sup> See Gustman and Steinmeier (1999).

<sup>4</sup> See Gustman and Steinmeier (2004) and Gustman, Steinmeier, and Tabatabai (2007).

Pence (2006) many mortgage borrowers are confused about the terms of their mortgages. Borrowers with adjustable rate mortgages, in particular, did not know or were incorrect about the amount by which their interest rate could change. Low-income and low-education households were disproportionately more likely to be incorrect about their mortgages and much less likely to refinance their mortgages during a period of falling interest rates (Campbell 2006).

Lusardi and Mitchell (2006, 2007a) have traced lack of planning and low wealth holdings to lack of financial literacy. Many of the respondents to the module on planning and financial literacy they designed for the Health and Retirement Study (HRS) did not have a grasp of the effects of inflation and the workings of risk diversification. Not only older but also middle-age respondents (51–56 years old) lack an understanding of basic financial concepts, such as interest compounding, and often failed to succeed in very simple numeric calculations. The paper by Mandell also shows that financial literacy is deficient among high school students, and Agarwal et al. (2007) show that financial mistakes seem to be concentrated among the young and old, which are the groups that display the lowest amount of financial literacy.<sup>5</sup>

Given these challenges, employers have resorted to new programs to foster saving and participation in pension plans. Increasingly, employers have relied on automatic enrollment of employees in pension plans. With automatic enrollment, employees have to decide whether or not to *opt out* of pensions rather than decide whether or not to *opt in* to a plan. Moreover, the employer sets a default contribution rate and an asset allocation for every employee. This simple but ingenious scheme has been very successful in achieving very high participation rates.<sup>6</sup> However, automatic enrollment of employees into pensions is not without shortcomings. First, the contribution rate is the same for every type of employee, irrespective of the many differences

---

<sup>5</sup> For a review of the evidence on financial illiteracy, see Lusardi and Mitchell (2007b) and Hogarth (2006).

<sup>6</sup> See Madrian and Shea (2001) and Choi et al. (2004, 2006).

in needs and economic circumstances we observe among individuals. Second, the contribution rate is often set very low, such as 2 or 3 percent, and asset allocation refers to conservative assets, such as money market mutual funds or stable value funds.<sup>7</sup> It is not clear that these contributions and asset allocation rules help employees save adequately for their retirement. Moreover, because employees may passively accept this decision, they may not learn how to plan and save for other reasons, such as for their children's education or to support their aging parents.

Most of the surveys covering whole or large sections of the U.S. population result in limited information about the many difficulties households may face in their financial decision-making and their impediments to saving and contributing to pensions. Few surveys go beyond information about demographic and economic characteristics. Moreover, differences in saving behavior are so large that it may be preferable to focus on specific groups of the population and study them in detail.

### **3. A Social Marketing Approach**

In this paper we deviate from previous work on saving and undertake a new approach that combines methods from both economics and social marketing. A social marketing approach requires several steps: (1) identify the target population, (2) "listen" to that population via multiple data-collection methods to discern barriers to saving, (3) design an offering (planning aid) that overcomes identified barriers, (4) pretest the planning aid within a subset of the target population, (5) modify the planning aid to maximize effectiveness for the target population, and

---

<sup>7</sup> For example, a survey by the Profit Sharing/401(k) Council of America in 2001 reports that 76 percent of automatic enrollment companies have either a 2 percent or 3 percent default contribution rate and 66 percent of automatic enrollment companies have a stable value or money market default fund. See Choi et al. (2004) for a discussion of these findings.

(6) design a customized offering for other segments of the population (Exhibit.1). We describe these steps in the next sections.

[Insert Exhibit 1 here]

### **3.1. Target Population**

Our first step toward identifying an employee segment at risk due to inadequate saving was to meet with the top administrators and the head of the human resources (HR) department at the institution where we conducted the study. The institution had been discussing changes to the benefit packages offered to employees that would require heightened individual responsibility, particularly concerning health benefits after retirement, and was eager to investigate new programs for their employees. Note that all employees at this institution are covered by a pension. The large majority of employees have a defined contribution pension, but all can contribute to a supplementary pension.

All administrators voiced difficulties about how to best serve the needs of the employees. For example, while the institution hosts financial education and information sessions supplied by three pension providers, including one-to-one counseling, only a handful of employees attend these sessions and take advantage of individual counseling. The administrators identified three groups in the employee population that are disproportionately less likely to contribute to the supplementary pensions: employees with low income (less than \$35,000), young employees, and employees with short tenures. As in data sets covering other institutions or more representative samples of the U.S. population, these characteristics (income, age, and tenure) are clearly correlated with saving and contributions to pensions (Madrian and Shea 2001).

We selected new employees as our target market. New employees who attend the orientation meeting that describe their medical and pension benefits were viewed as being in a preparation stage because they have to review their employer benefit plan options. Both medical and retirement benefits require action on the part of new employees; they have to select the level of medical benefits desired as well as decide on a financial carrier and how they want to allocate their retirement assets. Thus, new employees were viewed as more motivated to contribute to a pension via a supplementary retirement account than existing employees.

### **3.2. Listening**

We used several methods to understand the barriers that prevent employees from opening supplementary retirement accounts (SRAs). As mentioned before, few existing surveys offer detailed information about the many barriers to saving, particularly among specific segments of the population. We overcame this limitation by devising our own survey and collecting information on employee characteristics and barriers to saving. Because short tenures are identified as an important determinant of participation in supplementary pensions, we chose to administer our survey during the orientation program that the institution organizes for new employees. This test site also increased our access to the female employee population since they are more likely to attend the orientation seminar than male employees.

During orientation, employees are asked to attend sessions at the HR office, where they hear explanations of the benefits (health, pension, supplemental pensions, and other) that the institution offers. Asking questions during orientation provided us with an opportunity to listen to employees' needs. Moreover, and in general, orientations are a time when the attention and

interest of employees is high and can provide “teachable moments,” making them an ideal time to administer intervention.

In addition to administering the survey, we conducted focus groups, in-depth interviews, and ethnographic studies to gain additional insights into barriers to saving and to better target the groups of employees at this institution least likely to contribute to supplementary pensions.

As expected, the surveyed employees had a disproportionate representation of low-income individuals. The size of the lower-income groups (annual salary of less than \$35,000) was 48.5 percent and was significantly higher than other income groups. Furthermore, new employees were more likely to be young: 53.9 percent were 35 years old or younger and, again, these age differences are statistically significant. Finally, our sample consisted of a high proportion of women, 57.8 percent. Thus, we present the results for the overall sample, as well as for these different income, age, and gender segments.

The survey questions we focus on here were part of a large set of questions designed to understand the beliefs, attitudes, and saving behavior of participating employees. One hundred sixty-seven surveyed employees were asked to identify the most difficult barriers to their saving decisions. They were presented with seven options: (1) I don’t have enough information, (2) There is too much information to process, (3) I don’t have enough knowledge about finance/investing, (4) I don’t know where to start, (5) I don’t have enough income, (6) It is hard to think far away into the future, (7) Other reasons. Respondents were allowed to select multiple barriers.<sup>8</sup>

The percentages that listed each barrier are shown in Table 1. A sizable portion of respondents indicate a lack of adequate information as a barrier to saving. The fraction of

---

<sup>8</sup> See the Sample Survey in the Appendix.

respondents pointing to lack of information increases when looking at sub-groups of employees, such as those with low income and the young. Close to a quarter of low-income and young employees cite lack of information, and differences between groups are statistically significant.

Lack of adequate information can have many meanings. In fact, a third of those who chose this response also indicated that, when considering their saving decision, they do not know where to start. Close to 18 percent of the total sample indicated they do not know where to start, and this proportion increases to more than 22 percent when we consider young respondents and those with low income (Table 1). Differences between groups are statistically significant at the 5 percent level of significance.

[Insert Table 1 about here]

Not enough income is the reason cited most often by the employees (43.5 percent) as a barrier to saving. Note that this fraction is high not only among the total sample of new employees, but also in all subgroups. However, differences are not statistically significant: both men and women, young and old state that lack of income is what makes saving difficult. Even among higher-income groups, the proportion of employees that cite lack of income as a difficulty remains high and differences are only statistically significant for those in the two highest income groups (correspondent to a salary greater than \$75,000).

Lack of knowledge about finance and investing is another response chosen most often by employees (38 percent). As for income, the fraction of those who feel they do not have knowledge of saving and investing remain high when we consider sub-groups of the population but differences are not statistically significant.

The “barriers to saving” questions were followed by brief descriptions of hypothetical plans to assess which of the two plan characteristics would prompt employees to take immediate

saving action or to delay the decision to save. In particular we tested whether employees were willing to take immediate action to open a new saving account or whether they prefer to wait for one year. In addition, we varied whether they were required to rely on self-control to save or relinquish control by committing to a plan, such as to walk to central administration at a specific day of every month to make a personal deposit.<sup>9</sup> These data were used to determine the effect of planning on timing of saving and to determine the optimal amount of plan flexibility.

The key barriers gleaned from the survey were further investigated in separate focus groups of men and women in different age cohorts. The appendix contains sample focus group prompts. As we had difficulty getting low-income employees to participate in the focus groups, we relied on several in-depth interviews to understand their barriers to saving and opening an SRA. The appendix contains sample in-depth interview questions.

#### **4. Designing the Planning Aid**

The barriers identified in the listening stage were used to develop a planning aid for new employees. Research by Gollwitzer and others (Gollwitzer 1999; Gollwitzer and Brandstatter 1997) identified lack of planning as the main reason that individuals do not implement their goals. We identified three key saving barriers from our survey data that we could work with in devising a planning aid: (1) not having enough information and not knowing where to start, (2) not having enough income, and (3) not having enough self-control.<sup>10</sup> The results from the survey are followed by sample anecdotes from the focus groups and in-depth interviews. Implications of

---

<sup>9</sup> See Ashraf, Karlan, and Yi (2006) and Fujita et al. (2006).

<sup>10</sup> Many employees have indicated they lack knowledge in saving and investment. We face many limitations in considering this barrier in our intervention because of regulatory constraints. While the Pension Act of 2006 has relaxed some of these constraints, an intervention in this field requires some coordination with the pension providers. We plan to pursue this venue in future work.

the data for the planning aid are discussed after the results for each barrier are identified and illustrated.

#### **4.1 The role of information and knowing where to start**

The first key saving barrier identified was lack of sufficient information on how to save. Surveyed employees reported that they could not save because there was not enough information. Moreover, several employees indicated that they did not know where to start. There were significant differences among employees according to age and income level. While we did not find major differences between men and women, we found a significant interaction between gender and age: women younger than 35 years were significantly more likely than men in the same age range to state they did not have enough information (28.3 percent of women versus 14.3 percent of men). By contrast, older men (older than 35) were more likely than older women to state they did not have enough information (11.4 percent of men versus 5 percent of women) and again differences are statistically significant (see Table 2). We believe this pattern occurred because older women may give some thought to their retirement before men of a similar age. By contrast, as men age, they realize they don't have the information or ability to start saving. Our focus group results support this premise.<sup>11</sup>

[Insert Table 2 about here]

I retired a little earlier than 63 because my husband was retiring and it was a happy decision because after six years, he had a stroke which stopped us from doing any travel after that, but we had those six years to do some traveling. We spent some time in Greece. We also traveled in this country to see Alaska, Hawaii, and then I got very involved in volunteer work at the Hitchcock as a patient resource volunteer ...also at the Hopkins Center, St. Thomas Church ... I have always felt the need to give back to the community where I have lived and at times haven't been able to do community work. I am active; I still play tennis

---

<sup>11</sup> In order to hear from many different age groups and to obtain insights from those who are facing retirement, we also invited a group of retired employees from the institution to attend one focus group.

three times a week. I do gardening ... I am very active in taking care of the house and the yard ...we downsized the house after retiring. So basically they have been good years. [Focus group: retired female employee]

I guess so. I have always been aware that I have to prepare for something. ... My sources of income now that I am retired come from several different sources—one thing goes in jeopardy it isn't all in one basket ...so it's a combination of little bit here and little bit there—from this employer, then Social Security, and then I had arranged to have a new lease ...everything together, then I had investments and then I had put some of it into the new lease ...so a combination of things worked out for me. I have always disliked being in debt.... I never buy anything that I don't have money in the bank for—I avoid running up any credit card debts. One time my husband and I did get into a little difficulty that way but we paid it off as quickly as we could. I don't know if that's a generation thing because it seems now everyone is in debt! [Focus group: retired female employee]

I did feel I had information. Here again, I was always a little bit interested in finance. I was a little interested in the stock market—how it worked and we always bought a few stocks to see how it would come out. We didn't depend on them exactly...so my interest was always there. I selected the stocks myself. It was a secure thing for me to get a steady income. By reading and I think the (employer) seminars were good as far as I am concerned. I also thought the information they sent out from time to time was also very good. I have someone who I speak to occasionally but it's not like a professional as such. I was a Rotarian and still am—in that group there is a CPA—I have talked with him a couple of times but not specifically ... just about some general information. [Focus group: elderly female]

These people think I am crazy...if you don't want to retire and want to keep working, it's a choice some people make—I don't know why if it occurred by accident, there's no point telling someone what they should have done—it's all done now. Some choices pan out better than others, if the whole investment system crashed, we would be without any money. [Focus group: elderly male]

Being not quite 50 yet, it still seems a long way away and so I still have in my mind a sort of model ...age 65 and for some people a little earlier...somewhere in your 60s you stop working and you have confidence that you have income to make choices. If you choose to continue working, it's either because it interests you or just to keep yourself in the mainstream but then it's not primarily to earn money—that's the model. You are active but you are not feeling under the gun—you have more or less got your base income settled for the duration. And the duration seems to get longer as people live longer so imagine for 20 years you are going to have a somewhat active, somewhat secure life in this last quarter of your living. [Focus group: elderly male]

Focus groups and in-depth interviews also support the fact that lack of information is an important barrier to saving, particularly among those with low income and the young.

Having more available opportunities to speak to somebody would help.  
[In-depth interview: low-income male]

I don't have a structured plan at this time. I don't take time out to use the tools I have at my hand. Eric W... has done different presentations on planning. I can't say I go to those. I don't have time to use the tools. [In-depth interview: low-income female]

This phone call is useful because it reminds me that I should be thinking about the future and saving for retirement. Really, anything that brings it to people's attention. [In-depth interview: young, low-income male]

I don't really know how to budget all that well so I would love to have information that would tell me how to do so. [In-depth interview: low-income female]

In order to overcome lack of information and not knowing where to start as barriers to saving, we relied on established tactics to reduce task complexity and procrastination (Malcov, Zauberman, and Bettman 2007; Trope and Liberman 2003). Overall our goal was to simplify the SRA election process by making the planning steps easier and more concrete. Note that the retirement saving information received by employees is provided in the same packet as the health information. Moreover, employees are asked to elect supplementary retirement saving before receiving their first paycheck. It is not clear that many employees know their net salary (net of taxes and all other contributions) prior to receiving their first check. The process for enrolling in the supplemental pension presents several additional complexities: employees have to access a provider website(s) to make their investment allocation, *and* they have to be able to complete the enrollment process in twenty minutes. For security reasons, the enrollment process automatically restarts if more than twenty minutes elapse. To be able to complete the enrollment in the allocated time, employees need to have prepared in advance. In developing our planning aid, we focused on providing information on how to enroll and ways to simplify enrollment by dividing the task into small, manageable steps.

## **4.2 The role of income**

Income was reported as a key reason for not saving (see Table 1). While women are more likely to be low-income employees (in our sample 57 percent of female versus 37 percent of male employees earn less than \$35,000), both women and men state that lack of income is a major barrier to saving. Note again that even higher-income respondents have indicated lack of income as a major barrier. Our focus groups and in-depth interviews also show that employees feel they cannot save because they do not have enough income.<sup>12</sup>

If I made enough money, I would set some aside. But there were times in my life when I didn't have enough money and sometimes no money...so I think the biggest one is the perception that I don't make enough money, which might not be true because I think you can always set something aside every week. But I think that's an obstacle because it's a perception. [Focus group: female employee]

We still made money, we were not poor but we were never going to be filthy rich like our college classmates. We planned our lives to live fairly modestly yet we discovered that you could make a heck of a lot of money in stocks than being a professor. Not maybe a fortune but it was better—I guess it might boil down to what you are targeting but if a person can't really afford to save any money, there is no program that will convince them to do that. This is a general problem but if you can save some money...it just happens sometimes. [Focus group: female employee]

I think my parents were a very happy couple ... as a family my brother and I, they were very interested in us, they were very happy and we did a lot of fun things together especially in the summer time. My father built a trailer ...a smaller one so we traveled all around the country on summer vacations as a family and we always had such a good time as a family. And money was not ...he wasn't trying to buy things to make us happy...it was doing a lot of things together and being together that made us happy. [Focus group: male employee]

Regardless of whether you have a lot of proceeds or assets or earnings, the time factor to me is the most important. If you are relatively less wealthy than your neighbor, but if you have time, you are much better off. So, even buying that Roth IRA when you are 20 is a brilliant thing to do. There are so many more vehicles to implement simple strategies and to get time on your side and so putting aside \$2000 when you are 25 and doing that once a year or something like a Roth IRA—it's huge. So, that to me is the key feature I would like to communicate to someone in their 20s or 30s—its just not a good habit to get into, but it's a huge lever, a mechanical advantage of that is immense. [Focus group: male employee]

---

<sup>12</sup> More anecdotal evidence of the importance of income was provided by one of the administrative support staff members who volunteered to explain that her family does not save because the combined income of her household is only enough to cover all monthly expenses. Such views about saving were also voiced in the in-depth interviews.

We do not have any real savings other than what we have invested or in retirement funds. We are luckily able to make enough to cover the expenses, if the dishwasher breaks and replace it. [In-depth interview: low-income female]

We do not save as much as we should. Expenses are so that by the time we pay for all the things we need, there isn't much left to save. I guess you could say that our monthly expenses hinder our saving yes. [In-depth interview: low-income female]

No we do not save. We are a typical family and spend within our means but don't really keep money aside since we use all our income for daily/weekly expenses. [In-depth interview: low-income male]

In order to overcome the income barrier, we investigated ways to provide information on the minimum and maximum amounts one can put into a supplementary retirement account. Note that the minimum is very low: \$16 per month, which is roughly the cost of one dinner out in the restaurants surrounding the institution. We also specified the maximum because, as the research we reviewed at the beginning of the paper and our discussion with the HR office confirmed, many employees are rather uninformed of the rules governing pensions. The income issue also determined when we could test the effectiveness of the planning aid. Specifically, we had to wait until the second paycheck (after the medical expense and other costs were deducted) in order for employees to have adequate information about their income to make saving decisions. For this reason we examine the number who elected to enroll in a supplemental pension 30 days after attending the orientation, which is also the time when employees have to elect health benefits, and the number who enroll after 60 days, to allow for the fact that employees had to know their net income to determine how much they could afford to contribute.

#### **4.3 The role of self-control**

Another key barrier to saving is low self-control. Several studies had pointed to lack of self-control as a critical determinant of saving.<sup>13</sup> Moreover, several recent programs on how to

---

<sup>13</sup> See, in particular, Laibson (1997).

stimulate savings relied on methods that overcome the self-control problem.<sup>14</sup> Rather than asking employees about their self-control, we devised a series of hypothetical scenarios with different saving plans. A sample plan was as follows:

We would like you to imagine that you are interested in increasing your personal wealth. Your employer tells you about a *hypothetical* program that recommends you contribute \$20/month. You will need to put your money in an envelope with your name and deposit it in the central administration office once a month on any day of the month.

You have the choice of contributing immediately or after one year. Which would you prefer?

\_\_\_\_\_ Now                      \_\_\_\_\_ One year later

Several different variations of this scenario, including reducing flexibility and temptations, were tested to examine how lack of self-control may be responsible for decisions to delay saving. The evidence shows that employees are less likely to procrastinate if they are given a plan rather than left to their own devices.<sup>15</sup>

We used the spirit of this approach to design a planning tool that would not be too reliant on self-control. Our planning aid is a simple step-by-step guideline for how to open an SRA (see Exhibit 7.2). Several features of this aid are worth noting. First, we provide general information on what needs to be done to open an account. Second, we make a fuzzy, abstract goal, such as “I don’t want to depend on my kids when I am older,” which was voiced by many employees, more specific and concrete.<sup>16</sup> Third, our aid offers details about time commitment, homework, locations, and other information needed in order to open the retirement account. Our findings show that these features increase the likelihood of employees following through on intentions to open an account. Furthermore, our planning aid can be effective because proximal goals are

---

<sup>14</sup> See Thaler and Benartzi (2004) and Ashraf, Karlan, and Yi (2006).

<sup>15</sup> For more detail, see Keller and Lusardi (2007).

<sup>16</sup> See Locke and Latham (1990).

better than distant goals.<sup>17</sup> Finally, we focus on the effect of saving rather than recommending not spending.

[Insert Exhibit 2 about here]

## **5. Pretest the Planning Aid**

We examined the effectiveness of the eight-step plan by comparing the group that received this plan to a control group of new employees who attended employee orientation and received the standard packet but not the eight-step plan. The control period was selected from January 1, 2006, to July 30, 2006.<sup>18</sup> One hundred eighty-three new employees were eligible for the control condition. We compare the SRA election within 30 and 60 days between the control and the treatment group. The two groups have comparable demographic characteristics. For example, the average age in the control group is 37.4 (standard deviation, 10.5), the proportion of low-income employees is 0.428 (standard deviation, 0.49), and the proportion of women is 0.427 (standard deviation, 0.49). The corresponding figures in the treatment groups are 36.42 (standard deviation, 11.0), 0.48 (standard deviation, 0.50) and 0.57 (standard deviation, 0.49).

Table 4 contains the effect of the modified planning aid on enrollment at 30 days and 60 days. With respect to the control group, in which 7.3 percent of employees enrolled in an SRA after 30 days, the percentage of employees who opened an SRA in 30 days tripled (21.7 percent) after being exposed to our intervention. A much higher fraction, 44.7 percent, opened an SRA in 60 days, versus an enrollment of 28.9 percent in the control group after 60 days. Thus, this simple planning aid was rather effective in inducing employees to enroll into SRAs.

---

<sup>17</sup> See Bandura and Schunk (1981).

<sup>18</sup> Because on-line registration started for the first time in the Fall 2005, we chose the period January until June to allow for some adjustment to a new system.

[Insert Table 4 here]

## **6. Modify the Planning Aid**

Our next step was to redesign the planning aid based on employee feedback. Specifically, we simplified the aid by adding pictures depicting each step. We also changed the format, switching from a flat, single sheet to a folded brochure that was more convenient to carry (especially for women, who could put it in their purses). To prevent the online registration from “blowing up” because the registration was not completed within the allotted twenty-minute time frame, we provided more specific time guidelines for each step. Moreover, we simplify further the descriptions of the steps, and we reduce the steps from eight to seven. Finally, we added a picture of an elderly man and a younger woman exchanging gifts with their family. The picture choice was motivated by the saving challenges faced by these two sub-segments of the target population. Exhibit 3 contains the revised plan.

[Insert Exhibit 3 about here]

Table 5 provides a summary of the employees electing SRAs under the control condition, with the eight-step planning aid, and with the redesigned planning aid (in brochure format) for enrollment at 30 and 60 days. There was an increase in participation following the addition of the picture to the brochure (27.6 percent versus 21.7 percent) but, as expected, the picture was helpful in grabbing attention in the immediate run (30 days) but not for the 60-day period. Thus, providing employees with a plan for how to enroll in pensions was a powerful way to induce employees to make decisions about their pensions.

[Insert Table 5 about here]

## **7. Discussion**

A cost-effective planning tool significantly motivated employees to take immediate action to save in a supplementary retirement account. We observed a sharp increase in SRA election for the first intervention compared to a control condition: the election rate more than tripled in the 30-day period and doubled in the 60-day period. The second intervention further improved SRA election (from 21.7 percent to 27.6 percent) in the 30-day period and sustained the lift obtained with the first intervention in the 60-day period.

Our research provides valuable insights into designing saving programs. The social marketing approach we employ is atypical for designing saving programs, but it is well-suited to deal with the many differences in saving behavior that we observe among individuals. The program relies on motivating employees to overcome barriers to saving. Similar processes can be undertaken to identify barriers and customize programs for different target audiences.

Even though the sample is small and not representative of the population of employees, our eight-step program was effective in changing behavior relating to saving and pensions. Our pretests indicate that addressing the three key barriers related to (1) insufficient information on how to save, (2) the amount of income needed to open a saving account, and (3) control of employees in planning for retirement were effective in significantly increasing savings.

We used a variety of data collection methods to identify saving barriers and to guide development of our planning aid. The survey highlighted the three key barriers and also alerted us as to how these barriers posed greater saving difficulties for young female and older male employees. We also realized the role of insufficient income. Our planning aid highlighted the point that very low amounts are needed to get started and open an account. This can be useful information because many employees, particularly the young, state they do not know where to

start. The survey also provided insights into the importance of self-control. Accordingly, our plan sought to confer control to the employee by giving them the planning aid. We use this cost-effective planning aid to remove these key barriers to saving.

Our approach to the problem of self-control is a significant departure from other initiatives that have been undertaken to promote savings and contributions to pension plans. Most of these initiatives rely on automatic enrollment in pension plans.<sup>19</sup> However, contribution rates and asset allocations set by employers hardly match employees' needs. Rather than taking away control, in our approach we conferred control to employees with the help of an implementation plan. We relied on the psychology literature for guidelines on substitutes for low self-control. Gollwitzer (1996, 1999) suggests that specifying ways to implement plans make individuals more likely to follow through their intentions. More generally, actions that are integrated into an established routine tend to be performed efficiently.

The planning aid is not a substitute for automatic enrollment. In fact, with small modification, our aid can complement automatic enrollment programs very well. For example, it can keep employees motivated to stay in pension plans, as well as modify their contribution rate and asset allocation to best fit employees' specific needs. We plan to continue working in this direction and to motivate employees to make plans for their retirement.

---

<sup>19</sup> See the review in Benartzi and Thaler (2007).

## Appendix

### Sample Survey

This survey aims to collect information about saving and investment decisions of employees.

1) Have you ever been to benefits orientations at this or other Institutions?

- Yes                       No

2) Were you previously contributing to a SRA/403(b) plan?

- Yes                       No                       I do not know

3) What represents the MOST difficult part of your saving decision? Please pick ONE below. If the list does not mention it, please explain in the last line.

- a) I feel I do not have enough information
- b) I feel there is too much information to process
- c) I do not have enough knowledge about finance/investing
- d) I do not know where to start
- e) I do not have enough income
- f) It is hard to think far away into the future
- g) Other, please explain \_\_\_\_\_

4) Which source of information do you use the MOST when making saving or investment decisions? Pick the most relevant ONE below or explain in the last line.

- a) family and relatives
- b) colleagues and friends
- c) magazines and newspapers
- d) internet
- e) financial advisor/banker/CPA/other professional help
- f) planning books
- g) I do not need to collect information to make saving and investment decisions
- h) Other, please explain \_\_\_\_\_

5) How would you classify yourself, which type of investor are you?

- a) Sophisticated investor, I know a lot about bonds and stocks
- b) Average investor, I know about bonds and stocks
- c) Simple investor, I know a little about bonds and stocks
- d) I know very little or nothing about bonds and stocks
- e) Other, please explain \_\_\_\_\_

6) What kind of saver do you perceive yourself to be?

- Low Saver                       Average saver                       High saver

7. How important are the following features of your retirement saving plan:

	Not at all			Extremely	
	1	2	3	4	5
1. Flexibility (e.g., can withdraw money)	1	2	3	4	5
2. Structure (e.g., same amount/same time)	1	2	3	4	5
3. Guidance (e.g. how to invest)	1	2	3	4	5
4. Commitment (e.g., a contract to invest)	1	2	3	4	5
5. Control (e.g., choice on whether to save or not)	1	2	3	4	5

6. Certainty (e.g., value of future savings) 1 2 3 4 5  
 7. Ease of Implementation (e.g., scheduled payments) 1 2 3 4 5  
 Some information about you:

1. How old are you?  
 20-29     30-39     40-49     50-59     60-69  
 Older than 69
2. What sex are you?  
 Male     Female
3. Marital Status?  
 Single     Married/No Children     Married/Children < 21  
 Married/Children > 21     Divorced/No Children  
 Divorced/Children < 21     Divorced/Children > 21
4. Are you:     Level I     Level II     Other (please explain)
5. How many years have you had full-time employment?  
 < 1 yr.     1-3 yrs.     3-6 yrs.     6-10 yrs.     > 10 yrs.
6. Are you a returning employee?  
 Yes     No
7. Are you a part-time or full-time employee?  
 Full-time     Part-time

We would like you to imagine that you are interested in increasing your personal wealth. Your employer tells you about a hypothetical program that recommends you contribute \$20/month. You will need to put your money in an envelope with your name and deposit it in the central administration office once a month on any day of the month.

You have the choice of contributing immediately or after one year. Which would you prefer?  
 Now     One year later

How do you feel about your choice:

	Disagree					Agree	
	1	2	3	4	5	6	7
1. I feel confident	1	2	3	4	5	6	7
2. I feel committed	1	2	3	4	5	6	7
3. I will need to plan	1	2	3	4	5	6	7
4. I will lose the opportunity to increase my wealth	1	2	3	4	5	6	7
5. I don't want to waste time	1	2	3	4	5	6	7
6. I like this program	1	2	3	4	5	6	7
7. This program is important	1	2	3	4	5	6	7
8. The program design is simple	1	2	3	4	5	6	7
9. I want to get this decision over with	1	2	3	4	5	6	7
10. I will need self-control to implement this	1	2	3	4	5	6	7

Thank you.

## Focus Group Questions

1. What would you like to do after you retire?
2. Do you think you should plan for the future (in general) or accept things as they happen?
3. What kind of things should you plan for? Why?
4. What kind of things are difficult to plan for? Why?
5. Do you think you should plan for retirement saving or accept things as they happen?
6. What obstacles prevent you from planning for retirement?
7. What do you do if you don't know how to plan for retirement?
8. Having a plan does not mean one sticks to it. What type of things make you stick to the plan or not?
9. Where do you get information to help you with retirement saving planning?
10. Does knowledge about investing play a role in your retirement planning decision?
11. How much control over retirement saving do you feel you have?
12. When you think about your retirement savings, how do you feel?
13. Do you think your savings will determine when you retire?
14. Does anyone have a story about someone who did a good job in planning for their retirement? Bad job?
15. If you were interested in designing communications to help people to save for retirement, who else would you speak to?
16. Are there any questions we should have asked, but did not?

Thank you

## **In-depth Interviews**

1. What would you like to do after you retire?
2. Do you like to think about retirement?
3. Tell me about your parents. Are your father and mother retired? (If both dead, then ask if they retired before dying.)
4. Let's discuss retirement planning.

Which of the following apply to you? Please listen to all four:

- a) I am not doing any planning for retirement
  - b) I have thought about it but I have not done anything yet
  - c) I have taken some initial steps
  - d) I have been doing retirement planning for the last couple of years or longer
- 
5. Do you know anyone who has done a really good job or a really bad job in planning for retirement? Can you describe his/her/their story to me?
  6. Have you thought at all about medical expenses after retirement?
  7. Which sources of information do you use in making your financial decisions?
  8. Let's turn now to saving. Does your household save/ put money aside?
  9. Have you ever tried to change your saving behavior, i.e. How much you save?
  10. Let's talk about your family situation
    - a) Are you married, what is your current marital status?
    - b) Do you have children (and yes, how many and of which age)
    - c) Do you have aging parents/parents-in-law you have to take care of?
    - d) How much control do you feel you have in your family spending patterns?
    - e) Would you like to have information say on things like how to budget, how to speak to kids about expenses, how to be a role model?
  11. If you could pick two things that can help you in your financial decision-making, what would you say?

## References

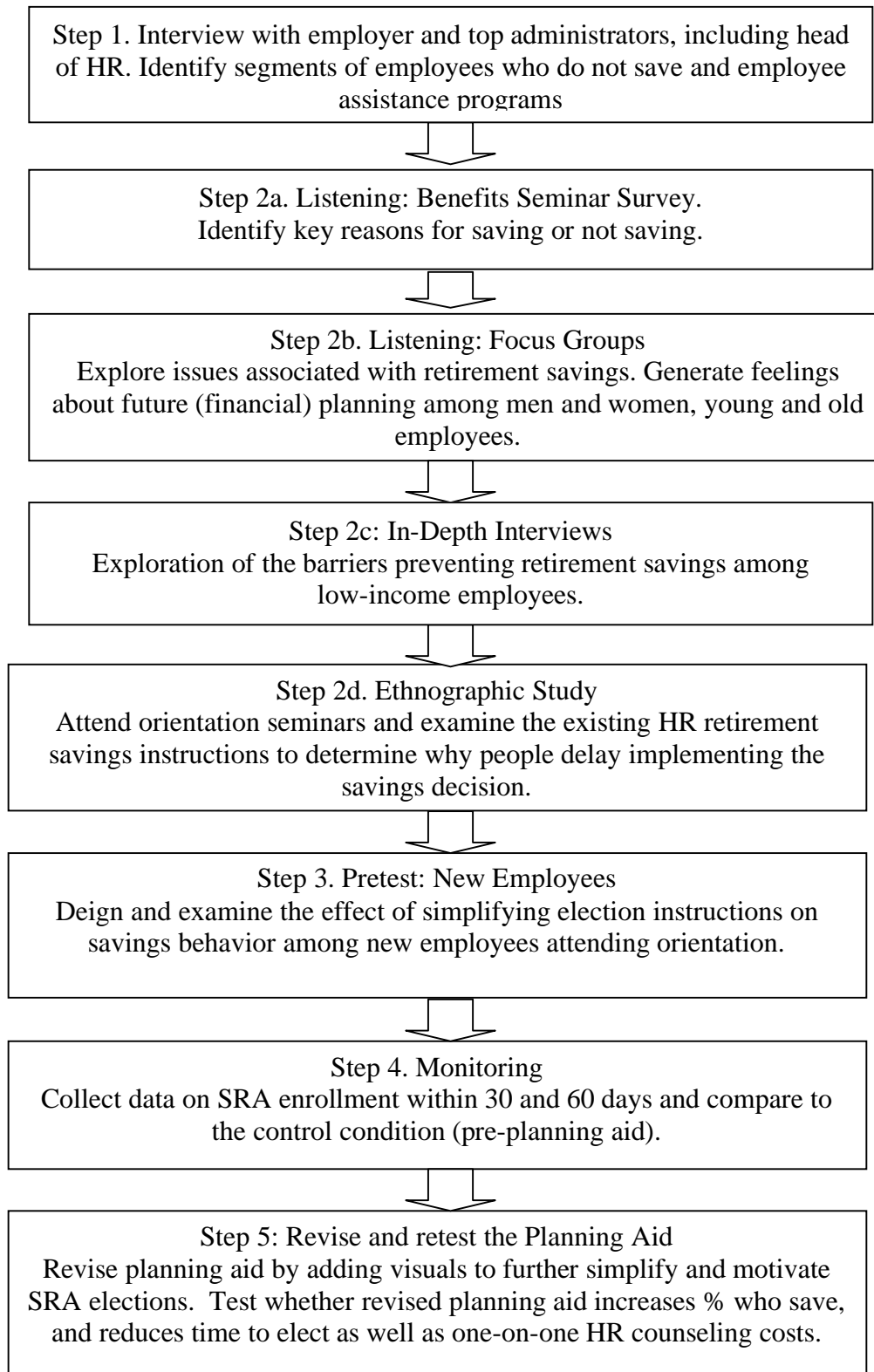
- Agarwal, S., J. Driscoll, X. Gabaix, and D. Laibson. 2007. "The Age of Reason: Financial Decisions over the Lifecycle," mimeo, Harvard University.
- Ashraf, N., D. Karlan and W. Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Phillipines," *Quarterly Journal of Economics* 121: 635-672.
- Bandura, A., and D.H. Schunk. 1981. "Cultivating Competence, Self-Efficacy, and Intrinsic Interest Through Proximal Self-Motivation," *Journal of Personality and Social Psychology* 41: 586-598.
- Benartzi, S. and R. Thaler. 2007. "Heuristics and Biases in Retirement Savings Behavior," *Journal of Economic Perspective* 21(3): 81-104.
- Block, L.G, and P. Keller. 1998. "Beyond Protection Motivation: An Integrative Theory of Health Appeals," *Journal of Applied Social Psychology* 28(17): 1584-1606.
- Bucks, B. and K. Pence. 2006. "Do Homeowners Know Their House Values and Mortgage Terms?" Working Paper, Federal Reserve Board of Governors
- Campbell, J. Y. 2006. "Household Finance," *Journal of Finance* 61:1553-1604.
- Choi, J., D.Laibson, B. Madrian and A. Metrick. 2004. "For Better or For Worse Default Effects and 401(k) Savings Behavior," in D. Wise (ed.) *Perspective in the Economics of Aging* 81-121. Chicago: Chicago University Press.
- , 2006. "Saving for Retirement on the Path of Least Resistance," in E. McCaffrey and J. Slemrod (eds), *Behavioral Public Finance: Toward a New Agenda*, 304-351. New York: Russell Sage Foundation.

- Employee Benefits Research Institute (EBRI). 2007. Retirement Confidence Survey.  
Washington, DC: EBRI.
- Fujita K., Y. Trope, N. Liberman, and M. Levin-Sagi. 2006. "Construal Levels and Self-Control,"  
*Journal of Personality and Social Psychology* 90(3): 351-367.
- Gollwitzer, P. 1996. The volitional benefits of planning, in: J. Bargh and P. Gollwitzer, eds., *The Psychology of Action* (Guilford, New York), pp. 287-312.
- , 1999. Implementation intentions: Strong effects of simple plans, *American Psychologist*  
54: 493-503.
- Gollwitzer, P and Veronika Brandstatter. 1997. "Implementation Intentions and Effective  
Goal Pursuit," *Journal of Personality and Social Psychology* 73: 186-199.
- Gustman, A. and T. Steinmeier. 1999. Effects of Pensions on Savings: Analysis with Data from  
the Health and Retirement Study, *Carnegie-Rochester Conference Series on Public  
Policy* 50: 271-324.
- , 2004. "What People Don't Know about their Pensions and Social Security," in W. Gale, J.  
Shoven and M. Warshawsky (eds.), *Private Pensions and Public Policies*, 57-125.  
Washington, DC: Brookings Institution.
- Gustman, A. and T. Steinmeier, and N. Tabatabai. 2007. "Do Workers Know about  
Their Pensions? Comparing Workers' and Employers' Pension Information," written for  
the book edited by A. Lusardi (ed.), *Overcoming the saving slump: How to increase the  
effectiveness of financial education and saving programs*.
- Hogarth, J. 2006. "Financial Education and Economic Development." Paper presented at  
Improving Financial Literacy, International conference hosted by the Russian G8  
presidency in cooperation with the OECD, November 29-30.

- Hubbard, G., J. Skinner and S. Zeldes. 1995. "Precautionary Saving and Social Insurance," *Journal of Political Economy* 103: 360-399.
- Laibson, D. 1997. "Golden Eggs and Hyperbolic Discounting." *Quarterly Journal of Economics* 112: 443-478.
- Locke, E.A., and G.P. Latham. 1990. "Work Motivation and Satisfaction: Light at the End of the Tunnel," *Psychological Science* 1: 240-246.
- Lusardi, A. 2005. "Planning and Savings for Retirement," Working Paper, Dartmouth College.
- Lusardi, A. and P. Keller. 2006. "Message Design to Change Behavior," Working Paper, Dartmouth College.
- . 2007, "Not Now, It Is Too Easy," Mimeo, Dartmouth College.
- Lusardi, A., and O. S. Mitchell. 2006., "Financial Literacy and Planning: Implications for Retirement Wellbeing," Working Paper, Pension Research Council, Wharton School, University of Pennsylvania.
- . 2007a. "Baby Boomer Retirement Security: The Role of Planning, Financial Literacy, and Housing Wealth," *Journal of Monetary Economics* 54: 205-224.
- . 2007b. "Financial Literacy and Retirement Preparedness. Evidence and Implications for Financial Education," *Business Economics*: 35-44.
- Madrian, B., and D. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics* 116: 1149-1525.
- Malcov, S., G. Zauberman, and J.R. Bettman. 2007. "Its in the Mindset! The Effect of Processing Specificity on Consumer Impatience," mimeo, University of Pennsylvania.

- Mandell, L. 2007. "Financial Education in High School," written for the book edited by A. Lusardi (ed.), *Overcoming the saving slump: How to increase the effectiveness of financial education and saving programs*.
- Prochaska, J. O., and C.C. DiClemente. 1983. "Stages and Processes of Self-Change of Smoking: Toward an Integrative Model of Change," *Journal of Consulting and Clinical Psychology* 51: 390-395.
- Prochaska, J.O., J. C. Norcross, and C. C. DiClemente. 1994. "Changing for Good," New York, NY: William Morrow.
- Thaler R. and S. Benartzi (2004): "Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving," *Journal of Political Economy* 112: 164-187.
- Trope Y., and N. Liberman. 2003. "Temporal Construal," *Psychological Review* 110: 403-421
- Weir, D., and R. Willis. 2000. "Prospect for Widow Poverty" in O. Mitchell, P. Hammond and A. Rappaport, eds., *Forecasting Retirement Needs and Retirement Wealth*, 208-234. Philadelphia: University of Pennsylvania Press.

Exhibit 1. Sources of data and social marketing process



## Exhibit 2. Eight-step planning tool

### My Retirement Savings Account

Most people plan on filling out their supplemental retirement form, but feel they don't have the time or information right now. We have outlined **8** simple steps to help you complete the application. It will take between 15 – 30 minutes, from start to finish. It will take less time for you to start to insure your future than it takes you to unload your dishwasher!

1. Select a 30 minute time slot right now to complete the online contribution to your Supplemental Retirement Account (SRA) during the next week. Write down the reserved time slot in your date book or monthly planner.
2. 3 minutes. Check to see if you have the following materials: a) worksheet in your benefits packet ✓, and b) the name and social security number of a beneficiary ✓.
3. Select the amount you want to invest for 2006 (minimum: \$16/month, maximum: \$1,666.67/month), even if you don't know your take-home pay in your first month. The minimum investment is low (price of one dinner out per month) and within the reach of most employees. If you want, you can change this amount at a later date. This voluntary contribution is tax-deferred, you will not pay taxes on it until you withdraw the funds.
4. 5 minutes. Select a carrier. You have 3 options: a) TIAA-CREF, Fidelity, and Calvert. All three offer a variety of funds (stocks, bonds, short-term investments); if you are interested you can get more information on their websites. FYI, if you do not select a carrier, the employer will invest the non-voluntary portion of your funds in a Fidelity Freedom Fund, a fund that automatically changes asset allocation as people age.
5. 5 minutes. Now you are ready to complete your worksheet. Select an uncluttered place with few distractions like the dining table at home or your desk at work. Complete the worksheet even though you may be unsure of some options. You can change the options in the future.
6. Take your completed worksheet to a computer that is available for 20 minutes. If you like, you can use the one in the Human Resources office (address: XXX).
7. 15-20 minutes. Log on to Flex Online and complete your online SRA registration within the 20 assigned minutes. Be sure to click on the investment company (TIAA-CREF, Fidelity, or Calvert) to complete the application. You need to set up your account – otherwise your savings will not reach the carrier.
8. Don't give up! Contact the Benefits Office (tel: XXX) if for any reason you could not complete the online application.

Exhibit 3. Brochure

Don't give up! Contact the Benefits Office (X-XXXX) if for any reason you could not complete the online application

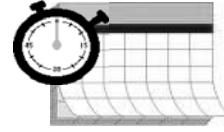


It takes no time to prepare for your lifetime!

Most people plan on electing a supplemental retirement account, but feel they don't have the time or information right now. We have outlined 7 simple steps to help you complete the election process. It will take between 15 – 30 minutes, from start to finish. It will take less time for you to start to insure your future than it takes you to unload your dishwasher

## We have outlined 7 simple steps to help you complete the application.

1. **Select a 30 minute time slot** right now to complete the online contribution to your Supplemental Retirement Account (SRA) during the next week.



2. **3 minutes. Check to see if you have the following materials:** a) worksheet in your benefits packet   ✓  , and b) the name and social security number of a beneficiary   ✓  .



3. **Select the amount you want to invest for 2006** (minimum: \$16/month, maximum: \$1,708.33/month), even if you don't know your take-home pay in your first month. If you want, you can change this amount at a later date. This voluntary contribution is tax-deferred, you will not pay taxes on it until you withdraw the funds.



4. **5 minutes. Select a carrier.** If you do not select a carrier, the non-voluntary portion of your funds will be invested in a Fidelity Freedom Fund, a fund that automatically changes asset allocation as people age.



5. **5 minutes.** Now you are **ready to complete your worksheet.** Complete the worksheet even though you may be unsure of some options. You can change the options in the future.



6. **Take your completed worksheet to a computer** that is available for 20 minutes. If you like, you can use the one in the Human Resources office.



7. **15-20 minutes. Log on to Flex Online and complete your online SRA registration** within the 20 assigned minutes. Be sure to click on the investment company (TIAA-CREF, Fidelity, or Calvert) to complete the application. You need to set up your account – otherwise your savings will not reach the carrier.



Table 1. Percentage of employees reporting difficult parts of saving decisions in total sample and across groups

	Total sample	Female	Male	Young	Old	Low Income	High Income
Not enough information	15.9	18.3	12.8	22.7	8.0	22.8	9.5
Too much information	12.3	11.8	12.8	11.3	13.3	10.1	14.2
Not enough knowledge.	38.0	39.8	35.7	37.5	38.7	40.5	35.7
Do not know where to start	17.8	19.3	15.7	22.7	12.0	22.8	13.1
Not enough income	43.5	46.2	40.0	43.2	44.0	45.6	41.7
Hard to think far into the future	3.7	5.4	1.4	6.8	0.0	5.1	2.4
Others	9.2	11.8	5.7	9.1	9.3	6.3	11.9
# observations	163	93	70	88	75	79	84

*Source:* Author's calculations using data from the survey distributed to new hires.

Table 2. Percentage of female and male employees in two age cohorts reporting not having enough information to save

	Younger Employees Age ≤ 35	Older Employees Age > 35
Female	28.3	5.0
Male	14.3	11.4

*Source:* Authors' calculations.

Table 3. Percentage of new employees electing supplementary retirement before and after the initial planning aid

	30 days After Hiring Date	60 Days after Hiring Dates	Number of observations
<b>Control groups: 2006</b>			
January	9.52%	26.19%	42
February	8.33%	30.56%	36
March	4.35%	26.09%	23
April	7.41%	33.33%	27
May	7.69	26.92%	26
June	3.45%	31.03%	29
July	10.7%	28.6%	27
<b>Intervention Period 1: 2006</b>			
August			
8/7 and 8/14	21.8%	43.7%	32
8/21 and 8/28	15.8%	52.6%	19
September			
9/5 and 9/11	20%	46.6%	30
9/18 and 9/25	28.6%	39.3%	28
October			
10/2 and 10/9	28.1%	50%	32
10/16 and 10/23	16%	36%	25

*Source:* Authors' calculations.

Table 4. Percentage of new employees electing supplementary retirement before and after the modified planning aid

	30 days After Hiring Date	60 days After Hiring Date	Number of Observations
<b>Intervention Period 2: 2006-2007</b>			
<b>December and January</b>			
12/8 and 1/22	32.2%	48.4%	31
<b>February</b>			
2/5 and 2/19	15.6%	25%	32
<b>March and April</b>			
3/5 and 4/2	35%	50%	20

Source: Authors' calculations.

Table 5. Percentage employees electing supplementary retirement before and after the original and modified planning aids

	30 days After Hire Date	60 days After Hire Date	Number of observations
Control group	7.3%	28.9%	210
8-step Intervention (1)	21.7%	44.7%	166
7-step/Brochure Intervention (2)	27.6%	41.13%	83

*Source:* Authors' calculations.