Journal of Financial Literacy and Wellbeing (2023), **1**, 154–168
doi:10.1017/flw.2023.1

ARTICLE

Effectiveness of employer-provided financial education programs

Robert L. Clark

Department of Economics, North Carolina State University, Raleigh, NC, USA and Department of Management, Innovation, and Entrepreneurship, North Carolina State University, Raleigh, NC, USA
Email: rclark@ncsu.edu

(Received 10 November 2022; revised 6 February 2023; accepted 14 February 2023; first published online 28 April 2023)

Abstract

While there have been numerous studies illustrating the rather low level of financial knowledge of Americans, there have been only a few efforts to examine the effectiveness of employer-provided programs in enhancing financial literacy and the ability of these programs to modify worker retirement and saving decisions. In this paper, I summarize the findings from a series of studies conducted over the past 20 years. All of the studies were done in conjunction with employers. The primary objectives of this research have been to evaluate the effectiveness of onboarding and retirement planning programs and the financial education provided in these programs. In addition, employer nudges to mid-career employees are examined. I describe the impact of financial planning programs on worker knowledge of key financial concepts and their ability to make better decisions concerning saving decisions and the timing of retirement. I also provide recommendations on how to improve the effectiveness of workplace financial education programs.

Keywords: employer-provided financial education; retirement plans; saving for retirement

JEL Codes: G53; H31; H75

Numerous surveys and research papers have shown that Americans have a rather low level of understanding of financial mathematics, effects of inflation, compound interest, and both longevity and financial market risk. In addition, surveys indicate that workers do not know and understand important aspects of their retirement plans. Obviously, a basic understanding of these concepts and programs is essential to making optimal financial decisions, including the participation in employer-provided saving plans, the timing of retirement, accessing pension wealth, and claiming social security benefits. Too few teenagers and young adults learn these concepts in high school and college. As a result, they enter the labor market unprepared to make the many important decisions necessary to build wealth, save for retirement, understand debt and mortgages, and evaluate the importance of employee benefits.

For many individuals, leaving school and entering the labor market means that their opportunities for formal financial education programs have passed. However, many employers have on-boarding programs that provide basic information about employee benefits and the need to save for retirement. Employers normally offer these programs to attract, retain, motivate, and ultimately retire quality workers. Benefits typically account for 25 to 35% of employee compensation (Bureau of Labor Statistics 2022) and if workers do not adequately value these benefits, turnover, and productivity rates are likely to suffer.

Employers know that it is important for employees to understand the value of benefits included in their compensation packages. For this reason, many offer educational programs to increase worker knowledge and awareness of health and retirement programs. Despite on-boarding programs for newly hired employees, research has shown that employees often know very little about the type of retirement plan that covers them and the value of this benefit (Clark and Mitchell 2023). In most cases, formal on-the-job financial literacy and benefit programs end after the workers have moved past the probationary phase of their careers. Thus, the opportunities for lifelong learning about these important concepts often cease.

As retirement approaches, employers become reengaged in the desire for their employees to better understand the value of their retirement plans and the economic incentives they provide. Employers have a vested interest in orderly and planned retirement patterns of their older workers. As a result, many employers also provide on-the-job retirement planning programs that provide basic financial education along with important information about employer-provided pension plans, retiree health plans, Social Security, and Medicare. Retaining and informing workers is important at any stage of their life cycle, even more so when concerns about health and financial security take a central stage among workers.

This paper reviews a series of studies conducted over the past 20 years that examined the effectiveness of employer-provided financial education programs conducted by large firms, government agencies, and nonprofit organizations. One of the unique features of these studies is the direct collaboration with employers. In general, the on-boarding and retirement planning programs are provided at the workplace, during the workday, and are offered to eligible employees at no out-of-pocket cost. Attendance is usually voluntary; however, since employers bear most of the cost of these programs, attendance among eligible workers is relatively high.

While there have been numerous studies illustrating the lack of financial knowledge of Americans[1], there have been only a few efforts to examine the effectiveness of employer-provided programs in enhancing financial literacy and the ability of these programs to modify worker retirement and saving decisions. The following discussion describes the impact of workplace financial education programs on worker knowledge and their ability to make more appropriate decisions concerning saving for retirement, claiming pension and Social Security benefits, and the timing of retirement.

The paper reviews the impact of four distinct employer-provided programs that seek to increase worker knowledge of benefits and enhance their financial literacy. Section 1 examines the impact of on-boarding programs for newly hired employees on their benefit and saving decisions. Section 2 examines whether mid-career financial education programs can alter worker saving decisions through the use of informational nudges. Section 3 reviews the results of a research project examining the retirement planning programs of large corporations with defined benefit pension plans and retirement saving plans. Section 4 reports the findings from a series of studies associated with retirement planning programs conducted by the Teachers Insurance and Annuity Association of American (TIAA) in association with employers who offered defined contribution retirement plans. The final sections of the paper highlight conclusions and lessons learned from examining employer-provided financial education and benefit programs and directions for future research.

In considering the importance of the findings described below, one should consider several shortcomings of the analysis. First, all of the research projects are considered a

[1] Lusardi and Mitchell (2014) provide a comprehensive review of this literature.

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

small set of employers. While most of the employers including the studies were large national firms, they cannot be considered representative of all American firms and institutions. Second, attendance in most of the programs and seminars examined were voluntary. As a result, results based on only employees who attended the seminars may be biased due to selection issues. The information in these studies is based on surveys conducted before and after company-provided educational events. The evaluations are not normally based on a randomized controlled trial framework. In general, it is difficult to implement such a framework when working with employers, their employees, and the administrative data they provide. However, the findings across all of the studies provide useful insights about the effects of workplace financial education and how such programs increase financial knowledge and modify saving and retirement decisions.

1. Financial literacy and benefit knowledge programs for newly hired workers[2]

When individuals enter the labor force, they must begin to make important choices about their lifetime consumption and saving profiles. Should they participate in retirement saving programs? If so, how much should they contribute? How can they offset the need to save for retirement with the demands of current consumption such as purchasing a home or buying a car? Informed choices on these topics require that individuals understand compounding interest, the effects of inflation, financial market risks, and longevity risks and much more.

Most newly hired employees participate in company orientation or on-boarding programs that include discussions of voluntary retirement savings plans, along with a review of the value of other employee benefits. To examine how these programs affected worker knowledge and their benefit choices, agreements were reached with six large employers who allowed us to monitor the information provided to new hires.[3] All of the firms except one offered a defined benefit pension plan that automatically included all new, full-time hires. In addition, all of the employers in the study offered supplementary 401(k) plans and five provided matching employer contributions. Each employer provided on-boarding programs that discussed the benefits offered by the organization and some important financial concepts.[4]

Each of the employers provided administrative data on all employees hired in 2008 and 2009. These data included information on starting salary, date of employment, gender, and age. Information on contributions to retirement saving plan as of May/June/July (depending on the timing of delivery) 2010 were provided to the research team. Using this information, the investigators were able to calculate the participation rate in the 401(k) plan as well as the proportion of salary contributed to the plan by date of hire for each person first employed during those 2 years. Thus, the authors were able to determine how participation rates change with length of service, whether the plan had an automatic enrollment policy, the date the employee became eligible for employer matches, and information on company benefits provided to workers in the first months of employment.

In addition to the administrative data, the employers allowed us to send a survey to all new hires.[5] Along with questions on worker financial knowledge, respondents were asked

[2] This section draws heavily from Clark and Morrill (2010), Clark et al. (2011), and Clark et al. (2012).

[3] This research was supported by a grant from the Social Security Administration provided through the Financial Literacy Center.

[4] The employer partners included a large financial institution, a major utility company, a soft drink bottling company, a Fortune 500 supplier of aggregates and heavy building materials, a large research university, and a Fortune 500 energy company.

[5] The overall response rate to this survey was 19%. This research is described in more detail in Clark and Morrill (2010), Clark et al. (2011) and (2014).

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

questions on their retirement saving decisions. The survey asked those who had enrolled in the plan what factors had most influenced their decision to enroll in the 401(k) plans. If the individual was not currently participating in the plan, he or she was asked the reasons for nonparticipation.

Most newly hired employees indicated that their employer had provided them with "very comprehensive" information; however, approximately one-quarter of the new hires thought they would have benefited from additional information concerning the benefit plans. In general, the new employees reported that the information provided by their employers influenced their decision to participate in the 401(k) plans. A key finding of the project was that individuals who were contributing to the saving plans had significantly higher financial literacy relative to those who chose not to participate in the 401(k) plans. The evidence is consistent with the hypothesis that those with greater knowledge about their retirement plans and a higher level of financial literacy will be more likely to enroll in retirement saving plans.[6]

The surveys of employees revealed a series of important findings associated with employer-provided programs for new hires.[7] First, analysis indicated that the programs provided employees with detailed information on company benefits during the on-boarding process. However, further efforts to reach workers and provide additional information were mostly ad-hoc and limited. When workers were first employed, the human resource staff of the employer provided them with considerable information about the firm and its employee benefits. These programs usually included specific information on how to enroll in supplement retirement saving plans and the benefits of doing so. After the initial orientation process, most of the employers in this study relied on their 401(k) plan providers to disseminate reminders and information to employees, encouraging them to enroll in the retirement plan and/or to increase their contribution rates. Thus, after the initial formal on-boarding programs provided by the employers, workers often must rely on their own initiative to remain up to date on the program's provisions and value and to improve their financial literacy.

Second, newly hired employees responded to the employer match for contributions to the 401(k) plan. Data from these companies also indicated the significant effect of automatic enrollment. Data from the three firms that had opt-in plans and an employer match show that a very high percentage of newly hired workers who decided to enroll in the plan contributed at least enough to receive the full employer match. Thus, in these firms, the employer match was a strong incentive to contribute at a high level once the decision to enroll in the plan had been made. This suggests that, among these types of firms, it is important to focus on the enrollment decision.

Third, the date when the employer match begins is an important "teachable moment" for employers to reach out to employees.[8] Enrollment and contribution data suggest that a more targeted information plan focused on specific teachable moments can be effective in increasing retirement saving. The value to the employee of contributing to the 401(k) plan spikes upward at the moment the employer match becomes available. Hence it is critical to ensure that the employee realizes the value of contributing to the plan has changed. By

[6] These can be seen as correlations but they are still useful to report.

[7] In addition to these three findings, the research also indicated that (a) auto-enrollment programs increase retirement savings plan participation considerably, (b) there is little decay in participation rates over time for employers using auto-enrollment, (c) there is evidence that persons automatically enrolled in supplemental plans have lower contribution rates that are concentrated at the default level, and (d) for the standard opt-in plans, employers often have lower enrollment rates for lower income, younger workers, and for women, while among the employers currently using an "opt-out" default, there are no significant differences in plan participation for groups with traditionally low participation rates.

[8] Employers often require a waiting period before new employees are eligible for the employer match in 401(k) plans.

emphasizing this change in the value of this benefit, the employer could reenforce the importance of saving for retirement and the power of compounding these contributions over many years.

A follow-up survey of these employees after 1 year revealed that the employer's benefit office was viewed as an important source of information when new hires decide on whether to participate in the company's 401(k) plan. Employer-provided financial education was seen by the respondents as effectively providing relevant information to employees at a relatively low cost to the employers. The project showed the important role that employer-provided financial education can play in the saving decisions of newly hired workers.

In sum, this project examined the on-boarding practices of six diverse employers. The impact of the programs varied by employer, after the on-boarding process was completed, retirement saving as measured by contributions to the 401(k) increased. The size of the employer match and worker knowledge of when they were eligible for the match was an important determinant in whether the new hire enrolled in the plan. New hires for these six companies found the information provided to them to be useful and the program stimulated changes in their retirement saving.

In addition to examining the immediate impact of the on-boarding program, we studied the impact of a simple informational nudge at one of the employers, a large financial institution. The institution was a publicly traded banking, insurance, and investment company. It was one of the 10 largest financial service corporations in the United States. It had more than 30,000 active workers located in 13 states. Newly hired employees were required to participate in a company on-boarding program. The event occurred during the first 2 weeks of employment and included a discussion of the defined benefit and supplementary 401(k) plans and provided information about investing. There was a discussion of the tax advantages of the company-sponsored retirement plan and examples that demonstrated the advantage of pretax retirement savings.[9] The large financial institution provided administrative records on individuals at several points in time that allowed us to observe contributions to the saving plans and how they changed.

The researchers developed an informational nudge that was sent to a random sample of new hires, and there was a control group that did not receive the nudge. The information distributed in the "nudge" was adapted from the materials included in the on-boarding program. All employees hired between 2008 and 2010 but who were not enrolled in the 401(k) plan as of February 2011 were randomly assigned to treatment and control groups. Both groups were sent surveys in April 2011; however, the treatment group also received a flyer that included a brief example of investment growth over time and instructions on how to sign up for the company's 401(k) retirement savings plan. The total sample included almost 3,700 respondents who had not yet begun contributing to the saving plan.

When contributions were reexamined in June, the average participation rate of employees in the treatment group was 6.9% compared to 5.9% for the control group, indicating that respondents who received the nudge rose by 1.0 percentage point (17%) more than the control group. The effectiveness of the informational nudge varied by employee characteristics. Women were far less responsive to the intervention than men. Workers aged 18–44 years in the treatment group were more likely to initiate participation in the 401(k) plans relative to the control group. This study indicates that a low-cost follow-up to the on-boarding programs can increase participation in retirement saving plans, though more should and could be done to increase the overall participation rate.

9 See Clark et al. (2014) for details of this project.

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

2. Financial literacy interventions for mid and late career employees[10]

In a series of papers, we examined the impact of financial literacy interventions for mid-career workers at a large governmental financial institution. The first study showed the impact of an online learning module on contributions to the employer's retirement saving plan (Clark et al. 2017a). The second study addresses how completion of the learning module affected portfolio allocation decisions (Clark et al. 2017b). The third project examined how employees reacted to a shift in the default investment in the plan (Clark and Mitchell 2020). Each of these projects illustrated that employees with greater financial literacy made significantly different choices compared to workers with less financial knowledge.

The first project was a case study of the retirement saving decisions of employees of the large government financial institution. The research examined how completion of an online financial education program affected retirement saving decisions. The first objective of the study was to evaluate the level of knowledgeable financial employees had about personal finance and to explore whether this knowledge is associated with greater retirement saving in the saving plan. Administrative records on over 21,000 employees were provided by the office of employee benefits at the institution and were linked to the results of an online financial literacy intervention made available through the employer's internal system. Participation in the program was voluntary, and the respondents who completed the module differed somewhat from the non-respondent workforce which indicated a degree of self-selection into the program. These differences in the two samples raise the potential for selection bias in the results.

The merged data enabled us to examine the saving and investment patterns of the more financially literate employees compared to those with less financial knowledge. When initially observed, employees who completed the learning module were found to be more financially literate than the US population at large and among individuals who completed the module, financially savvy employees were more likely to participate in the saving plan. Workers with higher levels of financial literacy contributed three percentage points more of their earnings to the DC plan than did the less knowledgeable, and they held more equity in their pension accounts. Individuals who completed the financial module were 6 percentage points more likely than their nonrespondent counterparts to participate in the plan, contributed a percentage point more of their pay, and hold 4 percentage points more equity. People who completed the module and had higher scores on the financial knowledge survey were even more likely to participate in the plan, contribute even more of their salaries, and hold even more equity in their retirement accounts.

The primary objective of this project was to determine how saving behavior changed after the learning module was offered to workers. Examination of the retirement saving records 1 year after the educational module found that employees who completed the module were more likely to have begun contributing and less likely to have stopped contributing to the retirement saving plan. This finding suggests that simple online financial educational interventions can lead employees to reevaluate their retirement saving decisions and increased contributions to employer-provide retirement plans[11]

Working with the same institution, we examined the effects of financial literacy and participation in the learning module on portfolio allocation decisions. Combining the data discussed above with some additional information on investments in the retirement saving plan, Clark et al. (2017b) found that individuals with the highest financial literacy score had significantly higher risk-adjusted annual expected returns of 130 basis points

[10] The discussion in this section is based on Clark et al. (2017a, 2017b), Clark and Mitchell (2020).

[11] This is not a randomized control trial evaluation and other factors could be at play. See Clark et al. (2017a) for a detailed discussion of these findings.

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

compared to the least knowledgeable. This additional finding indicates that higher levels of financial literacy can lead to different portfolio allocations and contribute to higher risk-adjusted returns in 401(k) retirement plans.

Clark and Mitchell (2020) further show that the higher levels of financial literacy, as shown by the learning module, affect portfolio allocation decisions when employees were mapped into the new target date fund. Following a change in the default investment in the plan, employees were mapped into a target date fund. In general, individuals did not alter their holdings after this mapping so that the change resulted in higher equity shares for employees since the target date fund had a higher equity proportion than prior holdings of the employees. The increase in equity investments was greater for women, younger workers, and low-seniority employees. The least risk-tolerant and financially literate employees ended up with 12 percentage points more equity than previously held in the retirement saving plan. Moreover, employees who were defaulted into the target date fund tended to remain in that plan rather than reduce their equity exposure by changing their investment allocations to return to their previous level of equity holdings. This again shows that employers' program can affect savings and investment allocations of employees.

In a different but related project, we collaborated with the North Carolina Retirement System to determine if an informational nudge would increase contributions to the state-managed retirement saving plans (Clark et al. 2019). Working with the retirement system, we created a sample of 14,560 active workers at NC state agencies, ages 50–69 as of November 2014. The sample includes individuals who had never previously retired or claimed long-term disability, who were actively employed through December 31, 2014, and who had an email address available on record. We developed a series of informational flyers that were sent to state employees by the retirement system. Persons covered by the retirement plan were grouped according to pretreatment participation status in a supplement plan. The system selected all workers who had an active account with a balance of more than $1 and year-to-date contributions of less than $10,000 to form a sample of current participants. In addition, a sample of individuals who were not currently contributing to a retirement saving plan was created.[12]

The research team developed several versions of an informative flyer aimed at increasing contributions to the supplemental retirement saving plans. The participant group was randomized into a control group and three treatment groups. The control group did not receive any informational nudge. The baseline group of participants received a flyer with general information about the supplemental saving plans, including a direct link to the plan provider's website to facilitate activity. The baseline flyer also provided information on catch-up provisions, which raise yearly contribution limits for individuals ages 50 and older. The two other groups of participants received different flyers which focused on life expectancy and the need for retirement income and the tax advantages of contributions to the saving plan. The group of employees who were not currently contributing to one of the saving plans were also randomized into a control group and four treatment groups. The control group received no new information while the treatment groups received flyers that emphasized various retirement issues.

Among those already contributing to a saving plan, employees that received one of the informational flyers increased their contributions by one percentage point more than those in the control group. In comparison, there was no effect of receiving an informational flyer among individuals who were not contributing to a saving. It is important to remember that this was a sample of older workers and many had been state employees for many years. Moreover, one should also remember that these employees were covered

[12] The state retirement system manages a 401(k)plan, a 403(b) plan, and a 457 plan.

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

by a defined benefit plan that provided life annuities to retirees and were covered by a retiree health plan.

Together, these research projects show that a learning module provided by the employer can influence retirement saving decisions in three ways. First, increased financial literacy and completion of the learning module led to higher levels of participation in the saving plan and greater contributions. Second, we observed differences in portfolio allocations and higher risk-adjusted returns for those with higher levels of literacy. Third, there were differences observed in how employees responded to a change in the default investment in the saving plan. Finally, information flyers can be a low-cost way to help employees prepare for retirement.

3. Retirement planning programs and their impact of employee decisions[13]

As individuals approach the end of their working careers, many firms and organization offer retirement planning programs that include detailed discussions of company retirement benefits and Social Security provisions along with Medicare coverage and other health programs targeted to older workers. These programs also include basic financial literacy components that help older workers evaluate these company and government benefit programs. In general, these programs do not require registration fees and are conducted during the workday. While such programs are voluntary, employers report that over time, most eligible workers attend one of the events prior to retirement. Retirement plans have economic incentives that encourage retirements at specific ages. For these incentives to be effective in influencing retirement decisions, employees must understand their magnitudes and when they become effective.

To evaluate employer-provided pre-retirement planning programs, we partnered with five large employers who allowed us to attend and monitor their retirement planning seminars. The firms ranged in size from 8000 to 40,000 employees. Four of the firms have sites throughout the United States; their home offices are in New Jersey, North Carolina, Oklahoma, and Washington. Industries represented in this study include the energy sector, medical technology, a large research university, and forest products. Each of the employers offered defined benefit plans (three employers had cash balance plans), each offered health insurance to active and retired workers, and each offered supplemental defined contribution plans (all but one had an employer match). The employee populations of these companies vary by gender, education, earnings, and geographic location. At least one member of our research team attended one of the retirement seminars held by each of the employers.

In addition to observing the programs, we were allowed to survey the participants of the programs to learn about their retirement plans and their saving behaviors. We developed three company-specific surveys to assess worker knowledge of retirement programs, general financial literacy, and retirement plans. Employees were surveyed prior to attending a preretirement seminar (Survey One), immediately after the conclusion of the program (Survey Two), and again 1 year later (Survey Three). The surveys contained information on household wealth, retirement plans, financial literacy, and program evaluation. The programs offered by these employers ranged from one half-day to two-and-a half-day events. All of the programs included sessions on company defined benefit plans, supplemental retirement savings plans, health insurance, Social Security, and Medicare, along with discussions on various financial decisions facing retirees.[14]

[13] This section draws heavily from Clark et al. (2010, 2011, 2012) and Allen et al. (2016).

[14] This project was funded by the FINRA Investor Education Foundation.

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

The objectives of Survey One were to determine employees understanding levels regarding their employer's pension and health benefits, their knowledge of national retirement plans such as Social Security and Medicare, their financial literacy, and their current retirement plans prior to attending the seminar. To assess the current level of knowledge regarding national retirement plans, the survey asked about Social Security early and normal retirement ages as well as early retirement penalties, cost of living increases, and the age of eligibility for Medicare. In addition, participants were asked benefit and eligibility questions concerning their employer defined benefit plans and their own 401(k) or 403(b) accounts. This survey also included several questions related to basic financial literacy.

Survey One also asked participants the age that they expected to retire, when they expected to start Social Security benefits, what the expected level of benefits would be, and what benefits they expected to receive from their employer-provided retirement plans. Questions probed employee intentions concerning annuitization of pension assets and work plans after they retired from their current employers. Finally, Survey One contained a series of economic and demographic questions concerning current income, wealth, age, marital status, and the work, income, and retirement benefits of any spouse or partner.

The primary objectives of Survey Two, which was distributed immediately after the seminar were to determine how participants evaluated the seminar, whether it enhanced their knowledge of retirement programs, and whether the new information changed their retirement plans. To assess the employees' impressions of the seminars, the first section of Survey Two asked respondents if the program provided useful information and if the information was presented at the right level for them. The survey also asked if the presenters were of high caliber, if they felt better able to make retirement decisions after completing the program, and whether they valued the program as an employee benefit. The next two sections of Survey Two repeated many Survey One questions concerning retirement intentions and knowledge. By comparing the answers given across both surveys, we assessed the change in the respondent's knowledge about retirement programs, financial literacy, and whether participants changed their retirement plans.

An interesting finding was that many participants reported that they would like to have had the opportunity to participate in programs like the seminar earlier in their careers, because the information would have helped them better prepare for retirement. Earlier, we discussed on-boarding programs provided by most employers that provide an initial overview of employee benefits. The time lag between these programs and subsequent retirement planning seminars is often 20 or 30 years. Employees seem to appreciate follow-up or refresher programs on benefits and financial education.

Both surveys included 12 financial literacy and retirement knowledge questions. Participant scores on these knowledge questions increased significantly after the seminars. In particular, respondents were more likely to know ages of eligibility of their employer pension plans, Social Security, and Medicare, and their responses to the financial literacy questions on inflation and investment allocations were more accurate.

Survey Three was sent to all seminar participants 1 year after the event. While there is sample attrition, the knowledge scores remained significantly higher than their pre-seminar scores. Results indicated that older workers increased the level of their financial literacy and enhanced their understanding of government and company retirement policies not just after the program but also in the short term. Prior to participating in the retirement seminars, individuals were asked to indicate their planned retirement ages, the ages that they anticipated initial claiming of Social Security benefits, and whether they planned to work after retirement. Other questions sought to determine whether the respondent planned to take a lump sum distribution from their defined benefit pension plan, and whether they planned to annuitize some or all of their account balance in

401(k) plans. We also controlled economic and demographic variables such as financial wealth, pension and Social Security wealth, health insurance, anticipated health care costs, housing wealth, earnings, life expectancy, marital status, and the pension and health insurance coverage of a spouse. We found that individuals' retirement plans were determined by those variables and by their knowledge of employer and national retirement benefits, their ability to understand the economic incentives imbedded in these plans, and their level of financial literacy that enables them to understand, for example, how their wealth and purchasing power might change during their retirement years.

Older workers must make retirement decisions using their (often limited) knowledge of benefit plans and financial concepts. Our findings from the three surveys indicated that many older employees did not possess the information necessary to make savvy retirement decisions. The lack of financial literacy implies that these older workers are unlikely to achieve their full potential in terms of savings and financial well-being. The survey data indicated a willingness of employees to devote time to gain a greater understanding of their retirement options. Seminar participants reported they found the seminars useful and many indicated that they would modify behavior and expectations in response to the information gained in the programs. The impact of the programs is shown by the increased number of correct answers on a bank of 10 financial knowledge and literacy questions. The mean number of correct answers across all of the participants from the five firms increased from 6.2 before the seminar to 7.5 immediately after the seminar.

It is important to note that the increase in knowledge affected retirement plans of the participants. While the mean planned retirement age increased only slightly, there was considerable movement in both directions, 31.1% of seminar participants changed planned retirement age (as measured by their expected age of retirement on Survey Two in comparison to their expected age of retirement as indicated on Survey One). Mean planned Social Security claiming age was also affected by attendance at the seminar as 36.7% of respondents indicated a change in the age they planned to start receiving Social Security benefits, of which 67.6% indicated plans to postpone benefit receipt. There was a 10 percentage point increase in the number of attendees indicating plans to work after retirement, while the number indicating uncertainty regarding plans to work after retirement dropped by 10 percentage point. These changes in age at which to draw on retirement benefits and plans to work after retirement may have been due to a better understanding of retirement income needs and total expected retirement wealth.

Employers who offer pre-retirement planning seminars as an employee benefit are naturally seeking to ensure that these programs are effective and valued by employees. Responses to Survey Two showed that participants had a very positive experience and the program provided considerable information. Approximately 95% of those attending the seminars indicated that the programs provided all or most of the information needed for them to make important retirement decisions. Eighty-six percent rated the seminars as very good or excellent, and 93% thought that the program leaders were very good or excellent. Eighty-seven percent of the attendees reported that they will be able to make better retirement choices. Almost three-quarters reported that the programs raised their awareness of the benefits provided by their employers. These findings provide evidence that employer-provided financial education programs can increase employee knowledge of company benefit programs and assist them in making better retirement choices. To the extent that companies designed pension plans to optimize employee retention and the age structure of its workforce, retirement planning seminars enhance the probability that these corporate goals will be achieved.

Important findings from this research indicate that company-provided retirement planning programs provide essential information to employees that increase their financial literacy and result in employees modifying their saving and retirement behavior. It is interesting to note that the programs we observed varied in length and whether they were provided by in-house Human Resources staff or whether they were conducted by outside firms. Both methods of delivery seemed to be effective in enhancing worker knowledge.

4. Retirement planning seminars for participants in defined contribution plans in higher education[15]

While many of the programs covered so far were provided by employers which offered defined benefits plans, we also did programs with employers providing mostly defined contribution plans. Individuals whose primary retirement plans are defined contribution plans, such as 401(k) or 403b plans, must make important decisions during the accumulation phase of their working careers concerning the proportion of earnings they contribute to the plans and how their account balances are invested. With advancing age, financial market risk and longevity risk become increasingly important as workers consider the age of retirement and their anticipated well-being when nearing the end of their work lives.

Can retirement planning programs help workers make better decisions as they approach and enter retirement? The research project was based on retirement planning seminars provided from March 2001 to May 2002 by TIAA to employees working in higher education institutions. A total of 36 seminars at 24 institutions along with 24 community-based seminars in eight different locations are included in the analysis. Participants completed a survey (Survey One) prior to the start of the seminar and a second survey (Survey Two) immediately after the completion of the event. A total of 633 individuals completed both Survey One and Survey Two. Three months later, these individuals were sent a third survey (Survey Three). We received 110 completed Survey Three questionnaires or 17% of the 633 respondents who completed the first two surveys. The substantial decline in the number of respondents is due to several factors including: (1) not all respondents provided a contract address so they could be sent Survey Three, (2) some incorrect addresses were given or individuals had moved, and (3) some simply did not want to provide the additional information requested. Thus, the analysis discussed in this section is more limited compared to the earlier sections. Seminars included information on setting retirement goals, employer-provided saving plans, the risk and return characteristics of various asset classes, investment choices available, and the amount of annual saving needed to achieve certain retirement income objectives.

Prior to the start of the seminar, participants were asked in Survey One to indicate their retirement goals, provide information on current retirement saving behavior, and provide baseline demographic and employment data. At the conclusion of the seminars, participants were asked to complete a second survey that asked respondents to indicate whether, because of the information provided in the seminar, they had changed their retirement goals and whether they now intended to change their retirement saving behavior. This allowed us to measure the short-term impact of the programs on goals and intentions. Survey Three was sent to participants about three months after their participation in the seminar either by e-mail or through the U.S. mail. The survey was similar in content to Survey Two but asked what actions had actually been taken.[16]

The primary focus of the research was to examine whether the financial education programs resulted in workers altering their retirement goals and/or their retirement saving behavior. The research suggested that financial education could produce significant changes in how individuals think about and plan for retirement. Some workers learned that they based their desired retirement age and expected

[15] This section draws heavily from Clark and d'Ambrosio (2003) and Clark et al. (2006). The research was conducted with the support of the TIAA Institute.

[16] For a more detailed description of the surveys and the respondents, see Clark and d'Ambrosio (2003) and Clark et al. (2006).

retirement income on inadequate saving behavior. Thus, many of these participants tended to revise the goals and stated that they wanted to alter their behavior. Individuals with low desired retirement ages often increased their expected retirement ages based on the information provided, while those with low retirement income goals tended to raise their income targets toward levels more consistent with their net incomes while working.

Survey responses indicated that many workers intended to alter their saving behavior by opening new retirement savings plans and increasing contributions to existing plans. Presumably, they were considering making these changes to increase the likelihood that they achieved their old or newly revised retirement goals. Throughout this analysis, we found that women were more likely to revise their goals and alter their behavior.

To determine the influence of new information and whether individuals actually acted on the new information, we examine the responses from Survey Three which was completed several months after the event. Even though the sample is small and potentially self-selected, participants indicated that the programs were effective in increasing their knowledge, and on the basis of the new information, many participants in the programs altered their behavior and plans. A significant proportion of the respondents indicated that they had revised their goals and planned to modify their savings and investments. However, intentions are not always realized by follow-up actions. Specifically, Survey Three showed that many respondents did not change retirement savings. Thus, additional help may be needed to guide employees to go from intentions to actions.

The analysis associated with these surveys indicates that financial education matters and ignorance is not bliss in the area of retirement planning. Quality educational programs provide the opportunity for participants to reconsider their retirement and saving plans, make more realistic plans, and change their behavior in order to achieve their objectives.

5. Conclusions

The research described in this paper is based on a series of studies over the past 20 years that span from employer-provided on-boarding to mid-career financial education programs to retirement planning programs. The analysis indicates the importance of employer-provided financial education programs. Many key financial decisions that affect the well-being of Americans are based on benefits provided by their employers. Knowledge of these benefits, their value, and the economic incentives embedded in them are essential to making better-saving decisions and decisions on the timing of retirement. Employers have a vested interest in their employees being aware of the value of their benefits and the choices available to them.

The best place to learn the relationship between financial concepts and benefit choices is indeed the workplace. Many employers recognize the value of such programs and make them available to employees through on-boarding and other programs.

Our findings highlight some of the best practices associated with employer-provided programs and how it is possible to increase the effectiveness of these programs, which are listed below[17]

5.1. Equip new employees with basic retirement plan information

When new employees understand the fundamentals of their employer-sponsored retirement saving plans, they are more likely to participate in and contribute to the plan at higher levels of contributions. Thus, the information that employers provide to employees

[17] This section draws heavily from the analysis presented in Clark and Lusardi (2012).

https://doi.org/10.1017/flw.2023.1 Published online by Cambridge University Press

is critically important to retirement saving. Orientation/on-boarding programs for new hires should provide basic information about the plans but also include lessons on basic financial issues and how these concepts help make decisions about the benefit plans. Upon completion of an on-boarding plan, employees should understand the basic characteristics of the health and retirement plans. Knowledge of plan features such as matches, ability to borrow, ability to roll prior employer or IRA plans into the account, and investment choices offered is key to making good choices; and actions must also be based on a basic level of financial literacy.

5.2. A focus on key concepts can improve employees' overall financial literacy

Higher levels of basic financial literacy are associated with better saving and retirement decisions. On-boarding and financial education programs should focus on improving worker knowledge of a few specific fundamental concepts. The programs could discuss, for example, interest compounding, investment diversification, and the eroding effect of inflation, and they should also relate these concepts to choices that must be made concerning retirement plans. Assisting new hires to better understand tax advantages associated with retirement plans, the importance of contributing early in one's career, and risk and return issues associated with invest products and strategies will also help new employees make better financial decisions.

5.3. Financial information and educational programs should reflect the needs of employees

Research shows that financial information is more effective when it is customized to the needs of specific groups, i.e.; targeted programs are more effective than one-size-fits-all information. Programs that target women, young workers for whom this might be their first job, or workers who are nearing retirement can often be more effective than programs for a general audience. Program content of the programs should also be relevant to someone of that age, gender, and career stage. Research findings indicate sharp gender and age differences in financial literacy, with women demonstrating lower financial literacy than men and young people showing consistently low levels of financial literacy.

5.4. Provide sound financial information and counseling to employees

It may not be in the best interest of all newly hired employees to have their take-home pay reduced by retirement plan contributions. Providing appropriate financial information and counseling helps workers to consider the value of retirement contributions in relation to other needs and savings motives. Employers could require the providers of their retirement savings plans to supply such unbiased information and counseling.

5.5. Remind employees about investment risk

Employees must decide not only how much to contribute but also how to allocate their retirement investments. Research shows that most employees lack knowledge about the workings of risk diversification: Financial literacy surveys indicate that this concept is consistently the most difficult aspect of financial knowledge for many individuals. Therefore, even when contributions are being directed to target date or life cycle funds, employees would benefit from basic guidance to enhance their understanding of what these funds do and the composition of risky assets in these funds.

5.6. Regularly remind employees of the value of a retirement plan

Research shows that providing new hires with regular and timely reminders of the value of contributing to the company retirement plan increases retirement savings. There are several teachable moments: annual reviews, the time following a promotion, at match eligibility, or upon being vested in other pension plans, as well as several important individual life events (marriage, for example, or the birth of a first child) that might lead workers to alter other benefits, such as health insurance plan options.

This paper has reviewed a series of research projects that examined the impact of employer-provided programs that discuss employee benefits, financial knowledge, and the need to save for retirement. Each of the projects was based on a partnership with a diverse set of large employers. Findings show that employees value and learn from these programs. On-boarding programs are important and provide key information on benefit plans that affect worker decisions. Mid-career informational nudges can help employees alter saving decisions. Finally, planning seminars for workers nearing retirement can provide essential information that alter retirement plans.

Considering all of the studies reviewed in this article, one can see the power of employer-provided financial education programs for workers Throughout careers, from initial hiring to the last day of employment, programs can increase financial literacy and lead to changes in saving and retirement decisions. Examining the value of workplace financial education is not easy as it requires the cooperation of high-level management, access to administrative records, and the capacity to survey employees before and after the programs. These challenges are some of reasons that there has been relatively little research on the effectiveness of employer-provided financial education in comparison to other programs.

Future research should consider whether short-term gains are retained several years later. Of course, evaluating long-term effects introduces greater complexity as it requires additional employer buy-in on the research and the ability to reconnect with program participants after several years. Employers also need to compare the cost of the programs to the gains for their employees and the company as well. Of course, it is extremely difficult to determine the total costs as well as the return on these investments. Finally, it would be useful to learn whether there is a role for employers in extending financial education programs to other financial decisions that affect worker well-being and their productivity on the job, such as credit card debt and the ability to manage finances to minimize short-term financial crisis.

Acknowledgements. The studies discussed in this paper were conducted in conjunction with a series of collaborators. The papers and coauthors are noted throughout the article. Funding for the research projects was provided by (a) a grant from the Social Security Administration provided through the Financial Literacy Center, (b) the FINRA Investor Education Foundation, (c) the TIAA Institute, and (d) the Office of Employee Benefits at the Federal Reserve System. All errors are the author's responsibility.

References

Allen, Steven, Robert Clark, Jen Maki, and Melinda Morrill. 2016. "Golden Years or Financial Fears? How Plans change After Retirement Seminars." *Journal of Retirement* 3(3): 96–115.

Bureau of Labor Statistics. 2022. "Employer Cost for Employee Compensation – June 2022." https://www.bls.gov/news.release/pdf/ecec.pdf

Clark, Robert and Madeleine d'Ambrosio. "Ignorance is Not Bliss." *Research Dialogue*, December. New York: TIAA, 2003.

Clark, Robert, Madeleine d'Ambrosio, Ann McDermed, and Kshama Sawant. 2006. "RetirementPlans and Saving Decisions: The Role of Information and Education." *Journal of Pension Economics and Finance*, 45–67.

Clark, Robert, Robert Hammond, Christelle Khalaf and Melinda Morrill. 2019. "Informing Retirement Savings Decisions: A Field Experiment on Supplemental Plans." *Economic Inquiry* 57(1): 188–205.

Clark, Robert and Annamaria Lusardi. 2012. "*How Employers Can Help New Hires Save for Retirement: Best Practices that Build Long Term Financial Security*." FINRA Investor Education Foundation, Insights.

Clark, Robert, Annamaria Lusardi, and Olivia Mitchell. 2017a. "Employee Financial Literacy and Retirement Plan Behavior: A Case Study." *Economic Inquiry* 55(1): 248–259.

Clark, Robert, Annamaria Lusardi, and Olivia Mitchell. 2017b. "Financial Knowledge and 401(k) Investment Performance." *Journal of Pension Economics and Finance* 16(3): 324–347.

Clark, Robert, Jennifer Maki, and Melinda Morrill. 2014. "Can Simple Informational Nudges Increase Employee Participation in a 401(k) Plan." *Southern Economic Journal* 80(3): 677–701.

Clark, Robert and Olivia Mitchell. 2020. "Target Date Defaults in a Public Sector Retirement Saving Plan." *Southern Economic Journal* 86(3): 113–1149.

Clark, Robert and Olivia Mitchell. 2023 forthcoming. "Influencing the Choice of Pension Distribution at Retirement." *Journal of Pension Economics and Finance.*

Clark, Robert, and Melinda Sandler Morrill. 2010. "Evaluating Workplace Education for New Hires." RAND Working Paper WR791-SSA. https://www.rand.org/pubs/working_papers/WR791.html

Clark, Robert L, Melinda S. Morrill, and Steven G. Allen. "Employer-Provided Retirement Planning Programs." In *Reorienting Retirement Risk Management*, edited by Robert L. Clark and Olivia S. Mitchell, pp. 36–64. New York: Oxford University Press, 2010.

Clark, Robert L., Melinda S. Morrill, and Steve G. Allen. 2011. "Evaluating Employer-Provided Financial Education Programs for Pre-Retirees." Report prepared for the FINRA Investor Education Foundation.

Clark, Robert, Melinda Morrill, and Steven Allen. 2012. "Effectiveness of Employer-Provided Financial Information: Hiring to Retiring." *American Economic Review: Papers and Proceeding* 102(3): 314–318.

Clark, Robert L., Melinda S. Morrill, and Jennifer Maki. 2011. "Encouraging New Hires to Save for Retirement." RAND Working Paper WR-892-SSA. https://www.rand.org/content/dam/rand/pubs/working_papers/2011/RAND_WR892.pdf

Lusardi, Annamaria and Olivia S. Mitchell. 2014. "The Economic Importance of Financial Literacy: Theory and Evidence." *Journal of Economic Literature* 52(1): 5–44.

Cite this article: Clark, Robert L. (2023). Effectiveness of employer-provided financial education programs. *Journal of Financial Literacy and Wellbeing* **1**, 154–168. https://doi.org/10.1017/flw.2023.1