

# Effective Financial Planning for Retirement

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## Abstract

In industrialized nations around the world, effective financial planning for retirement has become a cornerstone of the successful aging process. A financially secure retirement is one in which the retiree is unconstrained by money-related concerns, and all key options remain open (Mottorn & Mottorn, 2006). The implications of such a lifestyle are broad and far reaching—but relatively few future retirees can realistically expect to experience this level of financial freedom. Our objective in this chapter is to critically examine the factors that differentiate the quality of individuals' retirement-related financial planning efforts. In doing so, we examine not only the characteristics of effective retirement planners and savers, but also the underlying dimensions that help to explain their success. This is accomplished by synthesizing empirical and theoretical work on retirement preparedness, exploring global trends related to *financial planning for retirement* (FPR), and presenting a tripartite conceptual model of the financial planning process. Our broad goals in developing this review are to shed light on emerging trends, identify key unresolved issues, and point out limitations and profitable directions for future research.

**Key Words:** retirement, financial planning, aging, planning, investing, finance, psychology

## Introduction

For industrialized nations around the globe, financial planning for retirement in the twenty-first century presents a host of challenges to individuals, financial professionals, and institutions. For individuals, the task has become a full-time job just to stay abreast of the range of financial products and services that are offered. That, combined with the computational complexities associated with the task, has left many overwhelmed and effectively marginalized when it comes to managing their own late-life savings. Financial professionals also face challenges in terms of staying abreast of the changing marketplace. Perhaps a greater challenge for those in the industry, however, involves finding ways to get investors to trust their advice at a time in which the average investor has become jaded and distrustful. Institutions, such as large pension funds

and governments, are confronted with the challenge of designing pension financing systems that are on the one hand equitable and supportive, but at the same time sustainable in the face of the onslaught of baby boomers who each day creep closer to retirement. When it comes to *financial planning for retirement* (FPR), these are indeed challenging times.

So just how effective are individuals at FPR? Unfortunately, a definitive answer is difficult to formulate, as perspectives tend to be as wide ranging as the variety of measures used to assess planning competence. Economists rely on econometric indicators (such as household saving rates and wealth accumulations) as the gold standard when it comes to measuring future financial security (Sabelhaus, 1997). Sociologists, in turn, often use normative data to determine how aggressively individuals are planning relative to peers, or performance relative to

some form of life course timeline (Ekerdt, Kosloski, & DeViney, 2000). Psychologists, in contrast, frequently use self-report indicators to tap the quality of individuals' saving efforts (e.g., Stawski, Hershey, & Jacobs-Lawson, 2007). And finance researchers often rely on industry archival data (cf. Croy, Gerrans, & Speelman, 2010a). An adequate multidisciplinary definition of FPR is not currently available, which also limits the conclusions that can be drawn regarding planning effectiveness. But methodological differences aside, the clear takeaway message from each of these disciplines is that when it comes to individual patterns of saving for retirement, there exists much room for improvement.

### *Scope of the Review*

In this chapter we endeavor to summarize what is known about the factors associated with effective FPR from the individual's perspective. In other words, we strive to capture the key psychological, social, and economic dimensions that make some people better financial planners than others. However, given the breadth of the topic, we acknowledge at the outset that any such attempt will in some ways be biased and incomplete. A second goal of this chapter will be to explore the varied cultural contexts in which financial planning and saving take place. Finally, a conceptual model is presented that is designed to capture three important dimensions that underlie the task of saving for the future: (1) the capacity to plan and save, (2) the willingness to plan and save, and (3) opportunities to plan and save for the future. These three dimensions were adapted from an organizational research model published by Blumberg and Pringle (1982). More will be said about this model in a subsequent section of the chapter.

We do not attempt to address the literature on retirement transitions, nor how one should go about planning and saving for old age. Other excellent books and reviews have been penned on these topics. Instead, our focus is on empirical and theoretical articles on planning competence that have appeared in the primary literature. Whereas some review articles tend to be literature driven (e.g., all papers on a topic during some set period of time), the present review will be issue driven in that we strive to address the key set of topics that bear on financial planning competence. In selecting articles for consideration, we found it beneficial to draw upon journals from a diverse set of fields including psychology, sociology, economics, financial counseling, and finance, rather than limiting the scope

of the chapter to a single discipline. This breadth reflects the multidisciplinary nature of the topic. In addition, although our focus is on work published since the early 1990s, in certain instances we found it useful to include other, more seminal works that first appeared in the literature prior to that date.

In addition to capturing intrapersonal dimensions of the financial planning task that bear on effectiveness, we explore, when possible, how the planning and saving process is shaped by cultural constraints. In light of important systemic differences across countries, one of the goals of this chapter is to describe the factors that characterize effective financial planning for retirement in relation to broad geographic and/or geopolitical contexts. With those overarching goals and limitations in mind, we now proceed to examine the range of forces that shape investor behaviors.

### *Global Perspectives*

There are a common set of issues related to retirement preparedness that can be identified across most industrialized nations. But in most societies there are unique elements associated with the planning process that lead to culture-specific idiosyncrasies. For example, employer pension provisions are particularly strong in many countries in Western Europe (Askins, 2010; Hughes & Stewart, 2004) and notably so in the Netherlands (Alessie & Kapteyn, 2001; van Dalen, Henkens, & Hershey, 2010), which has implications for how much individual workers will need to accumulate in personal retirement savings. The emphasis on individual saving is particularly important in the U.S. and the U.K. (Waine, 2006), which highlights the need for workers to be well informed when deciding how to invest their retirement savings. In South Africa, the collapse of apartheid led to the extension of universal basic pension benefits to South Africans (Asher, 2006), which has done much to improve the overall quality of life in old age. And in Brazil, relatively few high-quality work-related pension opportunities exist outside the civil service system, and income inequality levels tend to be high (Queiroz, 2007). This lack of occupational pensions means that many lower-income Brazilian workers are heavily reliant on state-based pension support in old age (Barrientos, 2002), despite the fact that fewer than half formally contribute to the social welfare system.

Old-age support systems also vary widely across East Asia and the Pacific Rim, with population aging, urbanization, patterns of rapid economic development, and the effects of globalization all

driving systemic changes in pension support systems (Holtzmann, MacArthur, & Sin, 2000; Phang, 2006). But, that said, the availability of retirement investment products has bourgeoned in recent years across Asia, where investors are increasingly taking advantage of new saving opportunities (Lai, 2010). In Hong Kong, few working adults plan for retirement, which is complicated by the fact that many Chinese workers feel the ability to count on family members for support is eroding (Lee & Law, 2004). In Australia and New Zealand, government policies have put in place employer-mandated superannuation guarantee programs (Barrett & Tseng, 2007; St. John, 2007; Worthington, 2008), which on the one hand has reduced the need for personal savings among workers, but on the other hand has increased workers' responsibility for the management of their own retirement resources (Gerrans, Clark-Murphy, & Speelman, 2006).

A recent survey of retirees living in twenty-seven countries across five continents revealed that fewer than half of the respondents (48%) enjoyed sufficient retirement income (AXA, 2008). That same investigation found that 54% of working adults expected a similar shortfall once they retire. A sufficient income was reported by two-thirds of retirees in only four of the twenty-seven countries surveyed: Switzerland, New Zealand, China, and Canada. Data from the 2010 and 2011 Retirement Confidence Surveys indicate that although a majority of American workers are confident that they are saving enough for retirement, fewer than half have carried out some of the most basic tasks associated with the financial planning process, such as computing how much retirement income will be needed or setting appropriate financial goals (Helman, Copeland, & VanDerhei, 2010, 2011; see also Millar & Devonish, 2009). In fact, Lusardi (1999) found that among individuals over the age of 51, as many as one-third of respondents had not thought about retirement at all. According to one industry report, failing to calculate how much in the way of savings will be needed is equivalent to "driving while blindfolded" (Wells Fargo, 2009).

Data examining the adequacy of savings in Europe are not much more encouraging (Fornero, Lusardi, & Monticone, 2009), despite the fact that household saving rates are significantly higher in E.U. countries than they are in the United States (Eurostat, 2009). Findings from the European Employee Benefits Benchmark investigation reveal that over one-third of Europeans have concerns about their pension savings, a number that jumps

to over one-half for citizens in the United Kingdom and Ireland (AON, 2010). Similar findings have been reported based on a twelve-country investigation carried out by Litwin and Sapir (2009). But that said, there is substantial heterogeneity across European nations, and future financial worry levels (as well as retirement saving rates) tend to vary appreciably (Hershey, Henkens, & van Dalen, 2010a).

In sum, the global pension panorama is a complex one in which the adequacy of different channels of support varies widely across nations (AXA, 2008; Whitehouse, 2007); accordingly, we also see vast differences in the need for individuals to save that tend to covary with different forms of structural and institutional support. Next, we turn our attention to the three foundations of financial support upon which most pensioners in industrialized nations rely.

### *The Three-Pillar System*

In light of key structural differences in retirement systems around the globe, it would be useful to describe some of the major sources of income for retirees. We begin with a description of the "three-pillar" system, which includes state-based pensions, occupational (employer) pensions, and individual savings. These three different sources of retirement income, taken together, account for the bulk of financial support received by pensioners in more-developed nations.

First-pillar public retirement plans—sometimes referred to as state-based old-age pension programs—are either redistributive or mandatory funding schemes that seek to guarantee for the retiree a basic standard of living in old age. These social security systems serve an insurance function—they are a financial safety net for retirees—which is particularly important for those at the lower end of the socioeconomic spectrum. Although the financing mechanisms that underlie state-based plans differ from one country to the next, many are based on a "pay as you go" approach, in which employer contributions and the payroll taxes of workers are used to provide benefits for pensioners.

According to McGillivray (2006), public schemes are designed to replace from 40%–45% of wages in countries with strong occupational pensions (e.g., Canada, the United States), and substantially more (up to 70% or more) in certain Western European countries, the former Soviet Union and its satellites, and other parts of the developing world. These plans tend to be contributory in

nature, and the defined benefit (DB) amount one can expect to receive is typically calculated on the basis of one's final income at the time of retirement and the number of years the worker contributed to the system. In a study of pensions in 53 countries, Whitehouse (2007) found that 32 countries had public defined benefit (DB) arrangements, and 19 of the 53 had defined contribution (DC) arrangements, in which employer contributions are actively managed by the individual worker. DB plans are the only type found in the Middle East and North Africa; they are found in half of the countries in Eastern Europe and Central Asia, and in more than half of the high-income Organisation for Economic Co-operation and Development (OECD) countries including Canada, France, Japan, and Spain (Whitehouse, 2007). First-tier support has not been universally embraced throughout much of East Asia and the Pacific Rim (Asher, 2010), where in many countries the absence of state-based support for the elderly reflects the deeply ingrained view that "handouts" would serve to threaten the family and its informal support system (Holzmann, MacArthur, & Sin, 2000). In light of shifting population and work patterns that are expected to take place during the first quarter of the twenty-first century, many existing first-pillar systems will require radical structural reforms in an attempt to remain sustainable in the decades to come (Clark, 2003).

For many retirees, occupational pensions—which are typically managed by either one's employer or labor union—make up a significant second pillar of financial support in old age. This is particularly true in countries with modest state-based support systems such as the United Kingdom and United States (Munnell, 2006). But that said, some continental European countries and industrialized nations throughout the rest of the world have signaled an interest in moving in the direction of funded private plans (Organisation for Economic Co-operation and Development, 2009). In the United States, occupational pensions have dramatically increased in popularity over the past seventy years, with somewhat fewer than 10% of workers covered by them in 1940, to more than 40% of workers in 2010. A phenomenal growth in employer pensions has also been witnessed in the United Kingdom over the past century, with some 83% of workers receiving second-tier coverage as of 2001 (UKDWP, 2003). In the United States, occupational pensions were once dominated by a defined benefit (DB) approach, but over the past two decades they have shifted in the direction of

DC arrangements (Munnell, Webb, & Golub-Sass, 2009). These employer plans are often referred to as 401(k) or 403(b) plans, which refer to the sections of the U.S. tax code under which they were established. With DC plans, the employee invests a portion of his or her earnings in a tax-deferred savings vehicle, and the employer typically matches a portion of those contributions. Under this type of arrangement, the employee is largely responsible for managing his or her own retirement savings. A comparable shift away from DB plans in the direction of DC plans has not been witnessed in other countries that support voluntary employer pensions, such as Canada and the Netherlands (Munnell, 2006).

Individual savings and voluntary retirement plans make up the third pillar of retirement income support. It is clearly within this dimension of the three-pillar system that individuals have the most direct control over their own financial future. To stimulate voluntary private savings, many countries offer generous tax advantages for workers who invest their resources in certain savings accounts, individual retirement accounts, supplemental employer saving arrangements, and investment opportunities for the self-employed. Despite the myriad of investment vehicles available, there is clear evidence that many households—even those with substantial resources—fail to save enough for retirement (Venti, 2006). Data from the 2010 Retirement Confidence Survey indicated that 27% of American workers surveyed had total accumulated savings of less than \$1,000, and 43% had set aside less than \$10,000 (Employee Benefit Research Institute [EBRI], 2010). The picture is indeed more heterogeneous in Europe, with a recent investigation (Hershey, Henkens, & van Dalen, 2010a) finding that saving behavior is quite common among workers in Denmark, Austria, and Slovakia, where over 80% of the population set aside discretionary resources for old age. Saving rates were much lower in former Eastern Bloc countries such as the Ukraine, Russian Federation, and Bulgaria, where only 25%–35% of the population indicated that they had saved for retirement.

As members of the baby-boom generation continue to leave the workforce, public support systems will become increasingly strained, and the relative significance of the third pillar of retirement income—personal savings—will take on additional importance. To that end, high-quality financial saving and investment decisions will become one of the keys to successful aging in contemporary society. This is true not only in more developed countries

such as Canada, Germany, France, and the United States, but also in developing nations throughout Latin America, Eastern Europe, Central Asia, and the Middle East.

It is important to point out that there are other sources of retirement income support in addition to the three pillars outlined above. Although these tend not to be primary sources of support, they do nonetheless contribute to the overall financial picture for many retirees. These sources include financial gifts from children and family members, inheritances, early retirement incentives and buyouts, income from savings and investments, equity withdrawals from one's house (i.e., reverse mortgages), and the decision to take on some form of bridge employment during retirement. It is worth noting, however, that opportunities for these secondary support mechanisms differ markedly as a function of occupation, socioeconomic status, family situation, and country of origin. In developing countries, informal sources of support (e.g., support from one's children; land ownership) tend to take on added importance. In fact, Velladics, Henkens, and van Dalen (2006) found evidence that individuals in former Eastern European countries rely more on their children for old-age care relative to other European countries. In that respect, children can be viewed as a capital good (Nerlove, Razin, & Sadka, 1987; Schultz, 1974).

In sum, the three types of retirement income outlined above—state-based support, occupational pensions, and private savings—make up the lion's share of income for most retirees. The latter of the three has received the majority of attention from retirement finance researchers in recent years, due to the range of issues that have bearing on the quality of individuals' financial and investment decisions.

### **The Challenge of Financial Planning for Retirement**

The task of planning and saving for retirement, on a very basic level, involves effectively balancing one's post-employment resource needs against one's future income streams. The challenge lies not only in the dynamic nature of the task but also among certain uncertainties inherent in the planning process. In terms of the task, both the life course perspective (Elder, Johnson, & Crosnoe, 2003) and the life cycle model (Modigliani & Brumberg, 1954)—drawn from the sociology and economics literatures, respectively—suggest that an individual's level of motivation to plan and save should differ at different points in the adult life span (see also van

Dalen & Verbon, 1999). Moreover, planning and saving practices have been shown to vary with one's work situation and career stage (Berger & Denton, 2004), thereby contributing further evidence to the existence of a normative life span developmental pattern. One of the keys to effective planning, therefore, is to find ways to maximize personal savings contributions when one's overall motivational level to do so is attenuated.

To complicate matters, shifting state-based pension priorities and the dynamic environment in which savings and investments grow and change over time adds a layer of uncertainty and challenge to the task of effective financial planning. Consider, for example, the impact that the 2007–2008 global financial shock had on investors. Although most individuals failed to change their basic saving and investment strategy in response to the crisis (Gerrans, 2010), in the time span from mid-2007 to mid-2008, retirement savings in OECD countries fell by \$4 trillion dollars (Whitehouse, 2009). Equally troubling was the fact that pension fund assets plummeted by up to 35% (Boersch, 2009). Although clearly an aberration, this riotous market volatility serves to underscore the uncertainty associated with the personal retirement planning process. Accordingly, market volatility spawns declines in investor confidence (Dailami & Masson, 2009), and, presumably, financial worry ensues. In light of these external dynamics, a degree of flexibility on the part of the investor and a willingness to adapt are essential when it comes to effectively managing one's personal finances (Butrica, Smith, & Toder, 2010).

Taking into consideration the cognitive and motivational complexities faced by individuals when it comes to planning and saving, it is reasonable to pose the question: Who should ultimately be responsible for the management of one's retirement finances—the individual, the employer, or the state? On the one hand, there is a longstanding tradition in countries such as the United Kingdom, Canada, and the United States of allowing workers to manage their own financial affairs. This “libertarian” approach to saving clearly highlights the importance of individual responsibility, with each worker being accountable for the quality of his or her own decisions. The “paternalistic” view of saving, in contrast, stresses the role of the employer or the state (or both) when it comes to ensuring individuals' late-life financial security—a perspective adopted by many countries throughout Western Europe (the Netherlands as a case in point). Middle ground in

this debate can be found among emerging “libertarian paternalistic” perspectives, which highlight the role of public and private institutions when it comes to shaping saving behaviors, while at the same time still respecting individual freedom of choice. One example of this approach can be found in the choice architecture model of saving advanced by Sunstein and Thaler (2008).

### ***FPR: Process and Implications***

At the individual level, FPR is best thought of as an ongoing process as opposed to a discrete task or event. According to McCarthy, FPR involves six stages: “(1) collecting data to identify where you are [financially], (2) defining personal and financial goals, (3) identifying problems and constraints, (4) charting a course of action, (5) implementing the plan, and (6) periodically reviewing, revising and monitoring the plan” (1996, p. 2). However, being effective at each of these six stages clearly requires different types of capacities, motives, and opportunities, which makes the overall task of financial planning for late life simple and straightforward for a select few, a significant challenge for most, and seemingly impossible for others (EBRI, 2002).

It is well worth mentioning that those who are effective retirement planners and savers can arguably expect to achieve a higher standard of living and quality of life than those who are less attentive to the task. Across a series of investigations, retirement planning and/or saving for the post-employment period has been shown to be related to the quality of health care one can expect to receive (Jurges, 2010), the quality of one’s housing and possessions (Gibler & Taltavull, 2010), happiness and life satisfaction (Bender & Jivan, 2005; Price & Balaswamy, 2009; Taylor & Doverspike, 2003; Spiegel & Shultz, 2003; Wang & Shultz, 2010), a sense of “ownership” of one’s retirement (Olson & Wiley, 2006), enhanced leisure and recreational opportunities (Chung, Domino, Stearns, & Popkin, 2009; Scherger, Nazroo, & Higgs, 2011), a sense of financial security and independence (Miron-Shatz, 2009), and a feeling of financial freedom (Neukam & Hershey, 2003). Last but certainly not least, households with a propensity to plan have been found to acquire more wealth (Ameriks, Caplin, & Leahy, 2003). Given the clear benefits of engaging in a conscientious pattern of personal financial planning over one’s working life, it is surprising just how many individuals fail to adequately save for old age. This lack of action begs the question: What are the dimensions that

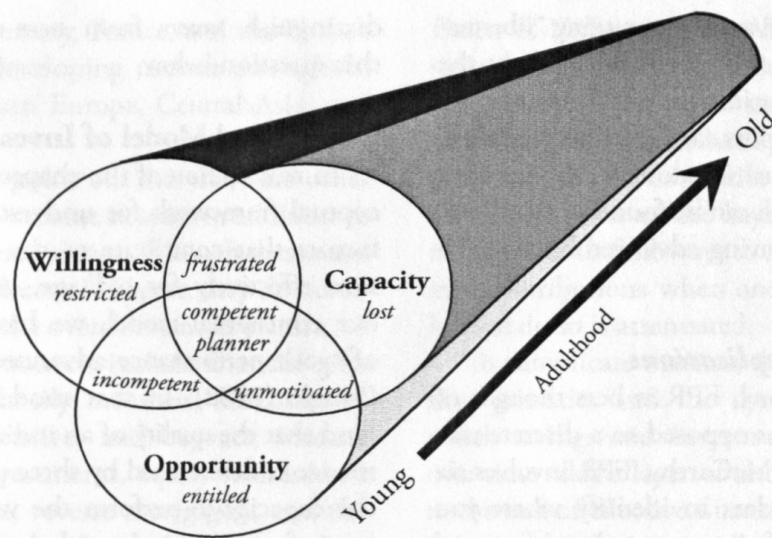
distinguish savers from non-savers? We address this question below.

### **Conceptual Model of Investor Behavior**

In this section of the chapter we develop a conceptual framework for understanding the array of factors that contribute to the ability to plan and save effectively for old age. As a foundation for our conceptual model, we have adapted a model of work performance advanced by Blumberg and Pringle (1982). In that model, the authors contend that the quality of an individual’s work performance is determined by three primary dimensions: the capacity to perform the work, the willingness to perform the work, and the opportunity to perform. The first dimension, capacity, includes various cognitive and individual difference factors that distinguish the worker from others, such as one’s ability, knowledge, skills, intelligence, and level of training and education. It is clear how these factors would likely contribute to differences in the ability to effectively plan and save for retirement. The second dimension, willingness, is a motivational force defined by the psychological and emotional characteristics that determine the likelihood of carrying out a task. Examples of factors that make up this dimension include the clarity and nature of one’s financial and retirement goals, degree of retirement anxiety, attitude, personality makeup, perception of social norms, and one’s self-image and values. Like the first dimension, it is clear how factors linked to willingness would have an important impact on the tendency of individuals to plan and save. The third dimension in the model—opportunity—comprises influences that are external to the individual. According to Blumberg and Pringle, these are environmental opportunities or constraints that are related to task performance. In the retirement planning context, opportunities include such factors as the availability of a voluntary workplace retirement savings program, tax incentives to save, reasonable access to knowledgeable financial advisors, and the requisite discretionary income with which to invest.

Figure 26.1 graphically represents the three dimensions of the Blumberg and Pringle model as they relate to FPR. Unlike the originators of the model, who conceived of the dimensions as being additive, in this configuration we acknowledge the potential for inter-dimensional interactions. Accordingly, the “crossed” factors in the model are sketched in such a way as to represent seven of the eight uniquely different types of planners (or





**Figure 26.1** Conceptual Model of the Three Dimensions that Underlie the Tendency to Plan and Save.

non-planners, as the case may be). The “competent planner” is at high levels on all three dimensions—a clear *willingness* to plan and save, the cognitive and intellectual *capacity* to do so, and sufficient *opportunities* to effectively invest. Relative to the competent planner, each of the other types of individuals is in some way lacking. That does not mean that the other subtypes would not be likely to plan and save; it means only that if they were to do so, they would have to overcome certain obstacles to effective performance. A description of each of the eight types of financial planners, developed on the basis of high and low levels on each of the three dimensions, can be found in Table 26.1. The one subtype not shown in the figure is individuals who are low on all three dimensions. We have identified this type as “non-planners” on the basis of three negative (i.e., low) predispositions. This subtype may provide particularly fertile opportunities for intervention.

One important aspect of the conceptual model is the representation of continuity (and thus strengthening) of predispositions over the course of adulthood, as illustrated by the conical shape of each of the three factors. This developmental aspect of the model is designed to convey the notion that for most individuals, a predisposition early in adulthood—say, a positive attitude toward planning—would be expected to be maintained over time. That is, one may think of the entrenchment of willingness, capacity, and opportunity as developmentally stable, with individuals proceeding along an established trajectory. Theoretical and empirical support for this proposition can be found in the work of economists and decision researchers, who have

identified a cognitive decision-making bias in which people favor the status quo. This “status quo bias” (Kahneman, Knetsch, & Thaler, 1991) suggests that individuals are predisposed to maintain an established pattern of behavior unless the incentive to change is compelling. The influential power of the status quo has been borne out in both laboratory and field experiments involving the choice of financial investments (Samuelson & Zeckhauser, 1988) and consumer preference decisions (Hartman, Doane, & Woo, 1991; Johnson, Hershey, Meszaros, & Kenreuther, 2000).

Other support for the notion of continuity over change can be found among the tenets of image theory (Beach & Mitchell, 1987; Beach, 1998). According to the theory, individuals adopt a set of concrete behavioral tactics that are designed to achieve a favored goal state (e.g., saving to ensure financial security in old age; spending freely to maximize hedonic experience). In making ongoing decisions about behavior, tactics will be reviewed for the possibility of revision only when one mentally “forecasts” that those tactics will fail to lead to the desired goal state (Beach, 1993). Thus, the absence of a negative discrepancy in one’s forecast, or a lack of change in the environmental circumstances that support one’s tactics, should result in continuity of the established pattern of behavior.

The theoretical propositions cited above are not the only reasons why one would expect to see a general pattern of life span continuity when it comes to financial planning. Indeed, many of the individual difference and situational constituents of the tripartite model center around stability rather than change. Examples of this include the stability of

**Table 26.1 Eight Types of Financial Planners Obtained by Crossing the Three Dimensions that Make up the Capacity-Opportunity-Willingness Model.**

Competent Planner	Characteristics: HW, HC, HO. This is the best case scenario when it comes to FPR. The competent planner is not only willing and capable to engage in adaptive planning and saving behaviors, but also has optimal opportunities to do so. Likely to exhibit very high FPR performance.
Restricted Planner	Characteristics: HW, LC, LO. Although this individual is willing to plan and save for the future, he or she lacks not only the capacity to do so competently, but also good opportunities to save. Lacking in opportunity and capacity, this individual is effectively restricted from producing high levels of performance. Likely to exhibit low to moderate FPR performance.
Lost Planner	Characteristics: LW, HC, LO. This individual has the capacity to plan and save but, lacking in willingness and opportunity, he or she is effectively "lost" when it comes to having sufficient motivation and mechanisms through which to demonstrate effective FPR performance. Likely to exhibit low to moderate FPR performance.
Entitled Planner	Characteristics: LW, LC, HO. In this scenario the individual has optimal opportunities to plan and save (thereby making him or her "entitled"), but he or she falls short when it comes to the two internal dimensions necessary to be a good financial planner. Likely to exhibit low FPR performance.
Frustrated Planner	Characteristics: HW, HC, LO. This individual has both the willingness and capacity to plan and save, but lacks good opportunities to invest. Despite the latter, given high levels of motivation this person is likely to find some mechanism(s) to fulfill the desire to set aside resources for the future. Likely to exhibit high FPR performance.
Incompetent Planner	Characteristics: HW, LC, HO. The incompetent planner is one who is willing to save and who has the opportunity to invest, but who lacks the cognitive and intellectual capacity to effectively carry out the task. This individual is likely to be engaged by the task but, based on cognitive or knowledge deficits relative to others, would be the most likely to make suboptimal investment decisions. Likely to exhibit moderate FPR performance.
Unmotivated Planner	Characteristics: LW, HC, HO. This individual has the capacity and opportunity to plan and save but, due to some internal factor(s) (e.g., negative attitude toward finances; poor personality predisposition), lacks the level of motivation required to perform at a high level. Likely to exhibit moderate FPR performance.
Non-planner	Characteristics: LW, LC, LO. This is the worst case scenario. The non-planner has little interest in planning and saving and lacks the cognitive and intellectual wherewithal to do so effectively. To compound matters, he or she lacks reasonable opportunities to save. Likely to exhibit very low FPR performance, or avoid retirement planning and saving activities altogether.

Note 1: LW = low willingness, LC = low capacity, LO = low opportunity, HW = high willingness, HC = high capacity, HO = high opportunity.

Note 2: Predictions regarding FPR performance levels were adapted on the basis of Blumberg and Pringle (1982, Table 2).

personality traits and intellectual abilities throughout adulthood, the tendency to engage in employment within particular occupational spheres (the vocational personalities defined by John Holland), and the likelihood of enmeshment in social milieus that are differentially supportive (or not) of FPR. Recognition of the importance of these stabilizing forces when it comes to planning and saving, and the resulting pattern of continuity these forces are

likely to promote, brings to mind the old adage that "leopards don't change their spots." Within a range of limits, highly engaged planners *tend* to remain engaged in the planning process, and non-planners *tend* to remain disengaged.

It is also recognized, however, that an age-linked pattern of continuity when it comes to planning and saving is not immutable. Baltes, Reese, and Lipsitt (1980) point to three classes of



developmental influences that *can* lead to changes in behavior: (a) normative age-graded influences, (b) normative history-graded influences, and (c) non-normative life events. An example of a normative age-graded influence would be the social force dimensions that lead many workers to become interested in financial planning around the age of 50. History-graded influences are exemplified by the 2007–2008 global financial crisis and the resulting increase in societal discussions about the importance and vulnerability of retirement savings. And non-normative events involve significant life experiences that would affect the ability to meet one's saving goals—such as the financial impact of an appreciable health shock, or receiving a sizeable unanticipated inheritance. All three classes of influences can alter one's behavioral propensities; however, their effect on the willingness to save will naturally be constrained by existing individual differences in capacity and opportunity.

We also acknowledge the potential for overlap between one dimension of the model and another. Orthogonal dimensions are not claimed. For instance, it is easy to see how an effective information campaign by an employer—what would be considered part of the opportunity dimension—could motivate an increased willingness to save. Another example would be the way in which an increase in the willingness to plan for the long term (for whatever reasons) could lead one to meet with a financial advisor to seek out new and different investment opportunities. A third example involves the individual with superior knowledge, skills, and abilities (elements of the capacity dimension) who on the basis of his or her KSAs is more likely to land a good job and, therefore, have superior opportunities to plan financially.

### **Empirical Research on Financial Planning for Retirement**

In this section of the chapter we use the tripartite model outlined above to organize key empirical research findings on the factors that influence the tendency to plan and save. In doing so, our goal is to provide a framework for understanding the broad field of forces (Lewin, 1951) that impinge on the worker as he or she makes (or fails to make) key investment decisions.

#### ***Capacity to Plan and Save***

*Financial literacy.* Of the numerous factors that influence planning and saving behaviors, perhaps none has received as much attention as the quality

of individuals' financial knowledge (Lusardi, 2011). Indeed, the twenty-first-century thrust of financial literacy education is in some ways equivalent to educational initiatives launched during the second half of the twentieth century, designed to increase levels of digital literacy and health literacy in the population. Dozens of investigations have been carried out on financial literacy during the past three decades, which have revealed that the extent and veracity of one's domain-specific knowledge is related to the tendency to plan for the post-employment period (Ekerdt, Hackney, Kosloski, & DeViney, 2001; Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007; Lusardi & Mitchell, 2006), the likelihood of saving (or having positive intentions to save) (Croy et al., 2010a; Grable & Lytton, 1999; Hershey & Mowen, 2000; Lusardi & Mitchell, 2007), and the nature of one's information search and investment strategies (Kimball & Shumway, 2010; Moore, Kurtzberg, Fox, & Bazerman, 1999; Qihua & Jinkook, 2004; Van Rooij, Lusardi, & Alesie, 2011).

An unsettling finding from a study by Lusardi and Mitchell (2006) revealed that only about half of Americans had sufficient financial knowledge to compute interest rates over a five-year period; similarly, few knew the difference between nominal and real interest rates (see also Hilgert, Hogarth, & Beverly, 2003; and Volpe, Chen, & Liu, 2006). Lack of financial sophistication is not limited to American workers, but it extends to individuals living in Europe and other parts of the world (Christelis, Jappelli, & Padula, 2010; Lusardi & Mitchell, 2011; Smith & Stewart, 2008). When workers with weak domain-specific knowledge are confronted by the complexities of modern-day investing, it is no wonder so many people fail to carry out even the most basic financial planning activities, such as determining how much will need to be saved for old age (Pension Research Council, 2010).

*Decision-making skills and abilities.* There is a growing literature that points to the fact that cognitive and intellectual abilities have a direct bearing on the capacity to make sound financial planning decisions. A study by Ackerman and Beier (2006) found that both crystallized and fluid intelligence are implicated in the ability to acquire domain-specific financial knowledge, with crystallized intellect being the stronger predictor of the two. This is not an inconsequential finding in light of numerous published studies that have shown fluid intelligence declines over much of adulthood (Horn & Hofer, 1992).

Another investigation (Hershey, Jacobs-Lawson, & Walsh, 2003) revealed that the ability to formulate an efficient “decision script” for solving retirement investment problems covaried with both age and domain-specific knowledge, which led the authors to conclude that the observed developmental differences stem from age-linked declines in fluid abilities. And in a study carried out on over 11,000 English adults beyond the age of 50, Banks and Oldfield (2007) observed that low levels of numerical ability were associated with low levels of retirement savings, even when controlling for other dimensions of cognitive ability and educational attainment.

In addition to intellectual influences on investment capabilities, cognitive factors have been implicated in the quality of individuals’ financial decisions (Agarwal, Driscoll, Gabaix, & Laibson, 2009). A large number of studies, in fact, have shown that a variety of perceptual biases and illusions lead to suboptimal financial judgments and investment decisions (Nofsinger, 2001; Pronin, 2011). Some of these biases lead individuals to make over-investments, others lead to under-investments, and still others lead the individual to postpone taking action when doing so is clearly counter-indicated. While a complete description of biases and effects goes beyond the scope of this review, a partial list of cognitive biases drawn from the literature is shown in Table 26.2. What is perhaps most troubling is the fact that by definition these cognitive biases occur without awareness, which means that it is nearly impossible to prevent them unless the decision maker is well aware of their existence and how they operate (Charupat & Deaves, 2004).

### Willingness to Plan and Save

If one thinks of the capacity to plan for retirement as placing limits on the ability to plan effectively, then one might think of the willingness dimension as psychological factors that constrain performance within that range of limits. Collectively, the willingness factors (e.g., goals, personality traits, attitudes, and affect) initiate a degree of motivational inertia that drives individuals to act, or fail to act, as the case may be.

*Importance of goals.* In the retirement planning context, financial goals may be thought of as either residing at the meta-level (e.g., have the goal of sufficient income adequacy throughout retirement), the meso-level (e.g., meeting with a professional financial advisor once a year), or the micro-level (e.g., contributing \$400 to a Roth Individual Retirement Account [IRA] plan from the next paycheck). Having goals at all three levels is important, given the hierarchically organized nature of individuals’ psychological goal structures (Austin & Vancouver, 1996; Klein, Austin, & Cooper, 2008). A key to success when it comes to FPR involves the self-monitoring of micro-level goals to ensure that they are being accomplished so as to fulfill meso- and macro-level goals. The theoretical propositions outlined in image theory (Beach, 1998; Beach & Mitchell, 1987) suggest that this form of monitoring is a natural part of individuals’ “progress decisions,” in which one attempts to identify whether an ongoing pattern of behavior (e.g., regular savings contributions of \$400/month) will lead to desired long-range outcomes (e.g., personal savings that will result in a 70% retirement income replacement

**Table 26.2 Partial list of Cognitive and Decisional Biases Shown to Affect Financial Reasoning and Investing for Retirement.**

Attachment bias	Fast thinking bias	Positive outcome bias
Attentional bias	Future self effect	Projection bias
Availability cascade	Halo effect	Pseudo-certainty effect
Bandwagon effect	Herd instinct	Restraint bias
Bias blind spot	Hindsight bias	Representativeness heuristic
Break-even effect	Illusion of control	Risk aversion effect
Choice-supportive bias	Interloper effect	Rosy retrospection
Confirmation bias	Money illusion	Selective perception
Delay discounting	Negativity bias	Status quo bias
Disposition effect	Neglect of probability	System justification
Egocentric bias	Never happen to me effect	Telescoping effect
Endowment effect	Optimism bias	Wishful thinking
Exponential growth bias	Ostrich effect	
False consensus effect	Overconfidence effect	

rate). If, through the process of action control, one perceives that higher-order goals are unlikely to be met, then either superordinate goal expectancies are revised (i.e., downgraded), or strategic changes in micro-level goal striving are enacted in an effort to bring planning and saving behaviors in line with pre-existing aspirations (Bagozzi & Dholakia, 1999; Hershey & Jacobs-Lawson, 2009).

The breadth of goals related to financial planning for retirement is indeed extensive, but the picture becomes infinitely more complex when one considers the range of goals (beyond finances) that surrounds broader aspects of the retirement preparation process (e.g., maintaining sound psychosocial adjustment; ensuring high levels of social and interpersonal engagement; selective engagement in lifestyle-appropriate recreational activities). Moreover, many retirement goals can be considered “deadline goals,” that is, goals that need to be achieved within specified time frames. Multiple deadline goals can be tricky to master inasmuch as they require the individual (i) to allocate sustained time and effort to achieving individual goals, while at the same time (ii) simultaneously and strategically allocating resources across different goal domains. Work by Mitchell and his colleagues (Mitchell, Harman, Lee, & Lee, 2008; Mitchell, Lee, Lee, & Harman, 2004) have referred to these two dimensions as the “pacing” and “spacing” of one’s personal resources, respectively. These authors go on to point out that individual differences in resource allocation priorities can be understood on the basis of attributions individuals make regarding the perceived importance of different goals, how difficult they are to achieve, their temporal range, the degree of urgency in meeting goal deadlines, and the extent to which individuals are accountable for their goal accomplishments. Thus, the study of attributions surrounding retirement goals could provide a particularly fruitful avenue for future research.

A dearth of goal-based retirement planning investigations have appeared in the literature, but of those that have, most have focused on the role that goal clarity plays in determining the likelihood of exhibiting adaptive planning and saving behaviors. A recent investigation of nearly 1,500 New Zealanders revealed that the clarity of one’s financial goals was moderately correlated with perceived financial preparedness (Noone, Stephens, & Alpass, 2010). Similarly, Stawski et al. (2007) found retirement goal clarity to be predictive of financial planning activities, which in turn were predictive of saving behaviors. In a methodologically

sophisticated investigation of Australian workers by Petkoska and Earl (2009), goals were found to be a positive and consistent predictor of planning across multiple retirement domains (e.g., financial, health, interpersonal/leisure). Moreover, a longitudinal intervention study by Hershey, Mowen, and Jacobs-Lawson (2003) revealed that the addition of a goal-setting module to an information-based financial information seminar resulted in increased planning activities at a one-year follow-up. Taken together, the findings from these investigations and others suggest that having clear and specific financial planning goals serves an important motivational function when it comes to the retirement preparation process.

*Impact of personality on FPR.* Of the various theoretical approaches to personality that have been advanced, only one—trait theory—has been empirically studied in relation to retirement planning practices. Of these investigations, most have focused on only one or two traits in relation to saving or financial preparedness, sometimes examined in combination with other psychological or demographic indicators.

An investigation by Noone et al. (2010) revealed that among New Zealanders, both an internal locus of control and a long future time perspective were positively related to financial preparedness, and an investigation by Davis and Chen (2008) demonstrated that an internal locus of control was associated with high levels of financial knowledge. In a different study that used the Theory of Planned Behavior (Ajzen & Fishbein, 2004) as a theoretical backdrop, Croy et al. (2010a) found that perceptions of behavioral control had significant positive effects on the intention to save among a sample of 2,300 Australian savings fund members. Furthermore, in a series of studies on the relationship between personality and FPR, Hershey and colleagues (Hershey & Mowen, 2000; Hershey et al., 2007; Jacobs-Lawson & Hershey, 2005) found that conscientiousness, future time perspective, and risk tolerance were all related to either the tendency to save or the nature of one’s saving and investment decisions. However, a study of Australian workers by Petkoska and Earl (2009) failed to reveal a relationship between future orientation and late-life financial planning practices.

An investigation by Loix, Pepermans, Mentens, Goedee, and Jegers (2005) identified an individual difference dimension they referred to as “orientation to finances,” which was found to covary with financial information seeking and personal financial

planning practices. Neymotin (2010) demonstrated a link between self-esteem and financial planning, in which those who earned high scores on the construct were more likely to engage in planning activities relative to their low-self-esteem counterparts. And finally, a report by Ferrari, Barnes, and Steel (2009) revealed that relative to non-procrastinators, procrastinators were failing at financial planning for retirement and, accordingly, had more regret over their financial decisions. On a related note, O'Donoghue and Rabin (1998) put forth a theoretical model of procrastination designed to illustrate how delayed retirement savings practices could best be conceived of as a problem of self-control.

Continuing with the topic of personality, it seems that more studies have focused on financial risk tolerance than any other single trait. An investigation by Jacobs-Lawson (2004) found that risk tolerance was positively related to financial allocations among women who made hypothetical contributions to a DC plan. Bajtelsmit, Bemasek, and Jianakoplos (1999) also found risk tolerance levels to be linked to retirement investment strategies, as did Hariharan, Chapman, and Domian (2000) and Sunden and Surette (1998). Furthermore, using data drawn from six waves of the Survey of Consumer Finances, Yao, Gutter, and Hanna (2005) found that blacks and Hispanics were less likely to take financial risks than whites. Interestingly, in an investigation that used data from the Retirement Confidence Survey, Joo and Grable (2001) identified financial risk tolerance as being positively related to the likelihood of seeking advice from financial professionals. Turning to research on financial planning among couples, an investigation by Roszkowski, Delaney, and Cordell (2004) suggests that an open pattern of communication between husbands and wives can bring dyadic financial risk tolerance levels into equilibrium (see also Gilliam, Dass, Durband, & Hampton, 2010).

An investigation by Gilliam, Goetz, and Hampton (2008) indicates that dyadic risk tolerance relationships can be complex, inasmuch as certain demographic factors (notably gender and wives' level of education) interact to determine risk tolerance levels among members of the dyad. Specifically, Gilliam and colleagues reported that wives with advanced levels of educational attainment (i.e., a university degree) were found to have higher levels of financial risk tolerance, but the risk tolerance scores of husbands married to university-educated women were lower than those of men married to women with a high school education. By way of explanation, the authors suggest that dyads that include a highly

educated woman could be expected to have a higher household income, thereby reducing the need for the husband to assume high levels of risk in order to accomplish their long-range financial goals.

*Attitudinal investigations of FPR.* Relative to other areas of research, investigations into the relationship between attitudes and FPR are lacking. One exception can be found in the work of Croy and his colleagues (2010a), who found that the perceived importance of saving had strong positive effects on the perceived future likelihood of saving. In a different investigation, Grable and Joo (2001) found that positive and proactive attitudes toward retirement were associated with the seeking of advice from financial professionals. Furthermore, an investigation by Glass and Kilpatrick (1998) suggested that the perceived importance of financial planning was positively related to one's existing level of retirement savings.

In the wake of the global financial crisis, investor trust in institutions is an attitudinal variable that has taken on added significance (Jordan & Treisch, 2010; Salisbury, 2008). Garling, Kirchler, Lewis, and Van Raaij (2009) identified seven factors that have implications for trust in financial institutions. These factors include an institution's competence, stability, integrity, benevolence, transparency, value congruence, and reputation. Institutional trust is important in the age of increasing DC pension programs because it serves to determine the types of institutions with which workers will choose to invest, the strategies they use to manage their resources, and their level of financial worry. Unfortunately, by seemingly all accounts, confidence in institutions is seriously lacking (Zinn, 2006). Singh and Sirdeshmukh (2000) define "cognitive trust" as the belief that institutions will act responsibly and not behave in a potentially injurious fashion.

With regard to the developments to pension programs in the twenty-first century, a critical question is which type of institution will be able to provide workers with the security they desire: employers, a financial intermediary (e.g., banks, insurance companies), or the state? A recent survey carried out by Helman et al. (2010) found that among American workers, only 23% reported being "very confident" in the ability of private employers to meet this need, 19% expressed high levels of confidence in banks, 13% indicated being very confident in insurance companies, and only 11% of respondents indicated high levels of confidence in the government. Moreover, it has been reported that institutional trust is systematically lower among members

of minority groups relative to Caucasians (SPRY Foundation, 2000).

*Affective considerations.* Only a handful of investigations have explored the role of emotions when it comes to retirement planning and saving (Zinn, 2006), and of those that have, nearly all have focused on some form of negative affect. Data from the 2010 Retirement Confidence Survey revealed that 40% of American respondents endorsed the statement “[I] worry about being financially dependent on others during [my] retirement/later years” (Helman et al., 2010). Similarly, in countries throughout Europe, retirement-related affect is equally problematic, with respondents from about half of the twenty-three countries surveyed in a study by Hershey et al. (2010a) reporting moderate to high levels of savings-related worry. In that investigation, worry was reportedly higher in countries with high levels of income inequality and a high future old-age dependence ratio (i.e., few workers relative to many retirees). In a psychometric investigation of FPR, Neukam and Hershey (2003) found evidence for two separate affect-related constructs: financial worry (i.e., concerns about insufficient income adequacy in retirement) and planning worry (i.e., worry about the inability to plan effectively), with the latter being negatively related to financial saving practices.

In addition to worry, researchers have looked at linkages between the anticipation of retirement and anxiety. Hayslip, Bezerlein, and Nichols (1997) found indisputable evidence of anticipatory retirement anxiety among a sample of university faculty members, and in a study of Canadian workers, retirement anxiety levels were found to be negatively related to expectations of (future) satisfaction with retirement finances (MacEwen, Barling, Kelloway, & Higginbottom, 1995). In related work, Gutierrez, Hershey, and Gerrans (2011) argued that the prospect of anxiety brought on by meeting with a financial professional can be a hindrance when it comes to seeking financial advice.

In one of the only studies that could be located on positive affect in relation to financial planning, Grable and Roszkowski (2008) found that being in a happy mood (a transient emotional state) was associated with higher levels of financial risk tolerance when answering hypothetical financial investing questions. Those not in a happy mood showed a reduced willingness to accept risk, which the authors concluded was consistent with tenets of the Affect Infusion Model (AIM; Forgas, 1995). According to the AIM, differing mood states can cause decision

makers to construe subjective probabilities differently, with good moods leading individuals to focus on positive cues from the environment and bad moods leading individuals to attend to negative features of the financial decision-making situation.

*Consumer segmentation research.* Consumer attitudinal segmentation studies have been carried out that have sought to develop typologies of financial planners. A 2004 investigation by MacFarland, Marconi, and Utkus found evidence of five qualitatively different types of retirement planners based on survey-based attitudinal responses from over 1,100 individuals. The first segment—“successful planners”—made up 21% of the sample. These were individuals with a strong, goal-oriented vision of a successful retirement. The “up and coming planners” (26%) were those individuals who possessed the characteristics of successful planners but who lacked confidence in the quality of their plans. The “secure doers” (20%) had a high level of interest in planning but were security-conscious to a fault—unwilling to take on an appropriate level of market risk. “Stressed avoiders” (19%) were those respondents who found financial matters to be stressful, anxiety provoking, and confusing. Finally, the “live-for-today avoiders” (14%) were not particularly stressed by the prospect of financial planning, but instead were found to be uninterested in the future whatsoever. MacFarland and colleagues found that participant direction in a workplace retirement saving plan covaried with these five different consumer segments. A different typology was developed on the basis of data drawn from the Retirement Confidence Survey, which found evidence of six distinct types of retirement planners: retiring savers, planners, cautious savers, impulsives, strugglers, and deniers (EBRI, 1998).

The research cited in this section of the chapter clearly indicates that a variety of psychological individual difference dimensions impact not only the willingness to plan and save but also the ability of individuals to carry out the task. Next, we turn our attention to the last of the three dimensions in the conceptual model; specifically, the way in which opportunities affect retirement planning practices.

### ***Opportunity to Plan and Save***

The opportunity dimension of the conceptual model refers to facilitators and constraints associated with planning and saving that are external to the individual. Sociologists often refer to these opportunity elements as contextual factors, and psychologists describe them as situational variables. In the context of financial planning for retirement,



these external forces can be generally broken down into three major categories: social forces, institutional opportunities, and economic dynamics and incentives. Each is discussed separately below.

*Social forces.* Both perceived social norms and social support mechanisms have been implicated in the likelihood and quality of planning and saving for retirement (Bailey, Nofsinger, & O'Neill, 2003), although a relatively small number of investigations have been published on either topic. Social norms are important because they provide pre-retirees with reference information on the normative behavior of peers (Liefbroer & Billari, 2010), thereby shaping individuals' behavioral predispositions (Etzioni, 2000). Such a mechanism would seem to be particularly important in helping to guide the complex behavioral repertoire involved in saving for the future. Social norms dictate, in part, the financial goals one is likely to set, whether or not resources are set aside for the post-retirement period, the specific investment strategies one is likely to adopt, and the age at which one begins to save.

In an investigation of Australian savings fund members, Croy and colleagues (2010b) demonstrated that injunctive social norms (what is commonly approved or disapproved of) exert a greater force on *saving intentions* than disjunctive social norms (what is commonly done). Although economists have sounded the alarm when it comes to delaying the age at which one should start saving for retirement (Byrne, Blake, Cairns, & Dowd, 2006), psychologists have identified a bimodal distribution among American retirees when it comes to the perceived age at which one should begin saving (Hershey, Brown, Jacobs-Lawson, and Jackson, 2001). In that study, some indicated that workers should begin saving for retirement upon entering the workforce, whereas others believed individuals should wait until their 40s, when children are more likely to have left the household. In an intriguing investigation of workplace saving patterns, Duflo and Saez (2002) studied university librarians working in a large, eleven-building university library system. They found that the likelihood of worker contributions to a tax-deferred savings account (TDSA) was dependent on the specific library in which one worked, which suggests that savings behaviors are partially governed by local norms operating in one's immediate workplace. This workplace savings effect may, in part, be due to different norms governing the gathering and sharing of financial information in specific workplace settings (Loibl & Hira, 2006). More large-scale studies are clearly needed on this

topic in an attempt to establish an empirically based normative savings timetable.

Relative to research on social norms, there is more in the way of literature that addresses the role of social support mechanisms in relation to financial planning. However, studies in this area are also sparse. In an empirical extension of social learning theory, MacEwen et al. (2001) found that Canadian parents' financial and activity planning for retirement had an effect on their adult children's expectations of retirement well-being. This indicated a parent-to-child mechanism through which retirement anxiety is transmitted (see also Lusardi, 2001, on this point). However, Dan (2004) failed to find a link between parental financial planning for retirement and the planning practices of their adult children. Perhaps it is the case that lessons learned as a child are too distal in nature to have an impact on money management behaviors some twenty to forty years in the future.

Having a partner, friends, or colleagues who are supportive of sound financial planning practices has, in contrast, unequivocally been shown to have a positive impact on FPR. A study of over 3,000 households by DeVaney and Chiremba (2005) revealed that financial planning was positively related to being married, and an investigation by Hershey, Henkens, and van Dalen (2010b) found that a partner's support of pre-retirement planning had a positive impact on planning activities, which was mediated by one's future time perspective. That same study demonstrated that friends and colleagues who were supportive of saving also had a positive effect on financial planning tendencies, an effect mediated by retirement goal clarity.

For many, financial professionals also play an important role when it comes to social support for the financial planning process. The phrase "financial professional" is a broad one that implies one who provides financial advice on a professional basis. This subsumes a number of different occupations including financial planners, financial counselors, and financial advisors, each of whom may have earned different forms of accreditation or professional credentials (e.g., CFP, CSA, AFC, and CPA). Some financial professionals work in a sales capacity offering products to investors, whereas others strictly serve in an advisory capacity. Some charge a fee for their services, and others do not.

The good news is that financial professionals have been identified as being more analytical than members of the general population when they were in "reasoning mode." This was the finding from

a study by Nofsinger and Varma (2007), which was based on respondents' performance on the Cognitive Reflection Test (a test designed to assess general reasoning abilities). Moreover, in that same investigation, highly analytical planners scored higher on a measure of financial patience than those who were less analytical, and they performed better on inter-temporal choice problems. These are all promising findings for pre-retirees who seek competent professional advice. The bad news, however, is that at least one recent study calls into question the competence of financial professionals. An investigation based on the accounts of over 32,000 clients of a German discount brokerage firm revealed that working with a financial professional was associated with lower total returns (relative to self-managed accounts), higher portfolio risk levels, a higher likelihood of loss, and a greater frequency of trades (Hackethal, Haliassos, & Jappeli, 2009). This study also found that clients of professional advisors tended to be older and have more in the way of wealth. Joo and Grable (2001; see also Grable & Joo, 2001) identified wealth to be a predictor of professional advice-seeking, but they also found that clients were more likely to exhibit better financial behaviors when they had better attitudes toward retirement and higher levels of financial risk tolerance. On the whole, more research is warranted on the effectiveness of financial planning professionals and financial educators, as well as their ability to tailor professional interactions to the needs of individual clients (Glass & Kilpatrick, 1998).

Although more in the realm of technological support than social support, scholars have found convincing evidence that a variety of electronic tools and decision support systems contribute to financial literacy, planning competence, and patterns of saving. Particularly notable information and support systems include the internet and media sources (Glass & Kilpatrick, 1998; Harrison, Waite, & Hunter, 2006; Koonce, Mimura, Mauldin, Rupured, & Johnson, 2008) and computerized financial planning programs such as the *Quicken Financial Planner* and *Torrid Technology's Retirement Savings Planner* (Lusardi, 2008), and on the horizon there exists the commercial prospect of intelligent agent-assisted decision support systems (i.e., computer bots) that can aid individuals with the task of personal financial planning (Gao, Wang, Xu, & Wang, 2007).

*Institutional opportunities.* Institutions are uniquely poised to serve as a catalyst for encouraging employees to plan and save for the future.

Forward-thinking policies, programs, financial literacy seminars, and planning guidance have all been shown to have a beneficial impact on the financial behaviors of pre-retirees. One study by Kim, Kwon, and Anderson (2005) found that employees who attended a workplace financial education program had higher levels of retirement confidence than their peers. Kim, Garman, and Quach (2005) reported a similar finding, but in addition found that attendance at a financial education workshop was related to both employees' and spouses' contributions to retirement plans. In a similar vein, Joo and Grable (2005) found that employer educational programs were related to the likelihood of having an established retirement savings plan. Clearly, this line of research on workplace retirement programs has important implications not only for the employees who benefit from them but also for the employers who administer the programs, retirement educators, and policymakers.

Work from the fields of behavioral economics (which has been described as the application of psychology to finance; Charupat, Deaves, & Luders, 2005) and behavioral finance has also contributed in important ways to our understanding of investor behavior. Moreover, findings from these fields have implications for institutions that offer retirement savings and investment products. According to Charupat et al. (2005), behavioral researchers have found that not only are individuals prone to cognitive biases that lead to suboptimal investment decisions, but they also rely on their emotions when investing, which can adversely cloud their judgments. To make matters worse, Charupat and colleagues point out that investors are predictably overconfident in the quality of their investment decisions, even when those decisions are flawed.

In order to combat these rational shortcomings, a variety of paternalistic approaches have been introduced as of late, including auto-enrollment retirement savings programs (in which employees automatically participate in a payroll deduction savings program unless they opt out; John, 2011), target date investment funds (in which the investor simply chooses the planned date at which to retire and his or her resources are managed based on an appropriate level of risk; Basu, Byrne, & Drew, 2011), and programs such as Save More Tomorrow (which allows employees to postpone initial savings payroll deductions for a number of months, after which deductions periodically increase at a specified rate; Thaler & Benartzi, 2007). Taken together, behaviorally inspired approaches such as the ones

outlined above help to combat a lack of employee inertia when it comes to initiating investments, they protect the worker from excessive risk when managing assets, and they direct attention to important ongoing investment decisions when warranted (Clark & Knox-Hayes, 2009). Other institutions that offer financial products such as banks, insurance companies, and pension funds could benefit from taking into account principles from behavioral finance and behavioral economics by designing user-friendly investment vehicles that consumers find attractive.

*Economic dynamics and incentives.* There is little doubt that elements of the external economic environment are linked to individuals' financially based retirement saving and investment decisions (Adams & Rau, 2011; Hatcher, 2003). As pointed out above, in countries around the world, significant economic shocks, bank closures, and market upheavals do much to erode investor trust and confidence in financial systems and institutions. Moreover, trends in funding levels for first-pillar social security systems and the perceived adequacy of public pensions also presumably have an impact on workers' expectations of the need to save. Other factors that affect the need for personal savings during retirement include the rate of inflation (both prior to and following employment), the availability of occupational pensions, their income replacement value, and whether second-pillar sources are associated with cost of living adjustments. Indeed, there is no shortage of economic forces to give the individual investor pause as he or she navigates the rocky road to a financially secure retirement.

One class of incentives that are generally believed to have a positive effect on pre-retirement worker savings are TDSAs (Venti & Wise, 1991). TDSAs are savings accounts that provide tax incentives for contributions up to some allowable annual limit. Examples of TDSAs include IRA and 401(k) plans in the United States, Registered Retirement Savings Plans (RRSPs) in Canada, and Self-Invested Personal Pensions and Group Personal Pension Plans (SIPPs and GPPPs) in the United Kingdom. These types of accounts have become increasingly popular among individual investors over the past three decades, in part due to the shift from DB to DC accounts in many countries. In general, participation rates in TDSAs have been shown to increase among workers as a function of age and level of income (Springstead & Wilson, 2000).

A different form of incentivized saving has been proposed by social workers Shobe and Sturm

(2007). They have suggested an extension to the idea of youth Individual Development Accounts (IDAs; Giuffrida, 2001) to promote retirement saving behaviors. "Retirement IDAs" are designed to cultivate savings habits among children living in the United States by creating a savings account for each child upon birth. The account would be funded to the tune of \$1,500 per child, or some economically feasible amount at the time the accounts are legislated. Additional deposits could be made by the child either from wages, scholarships, or monetary gifts, or they may be made by friends or family members on behalf of the child. Contributions would be subject to a matching amount for children whose families live below the federal poverty level, in an effort to cultivate a habit of saving among those who are at a greater risk of living in poverty after leaving the workforce. According to Shobe and Sturm (2007), the accounts would teach children important lessons about money management and investing, while at the same time cultivating a life-long pattern of saving.

### *Demographic Indicators*

In addition to the various psychological, social, and situational factors related to planning and saving outlined above, a host of demographic indicators has been shown to be related to FPR. Many of these findings have come from research carried out by economists, who seem predisposed to focus on the predictive value of demographic and structural variables. These effects, while interesting, have limited implications for the development of theory. This is because demographic indicators are, in and of themselves, not explanatory variables, but instead proxies that covary with other indicators that are explanatory in nature. Take gender as an example. There is nothing inherent in being male or female that leads individuals to be good planners and savers. Rather, gender is related to other variables (e.g., financial knowledge, availability of workplace pensions, income level) that are related to financial preparedness.

With that limitation in mind, it is worth pointing out that demographic indicators can serve an important function when it comes to interventions, by allowing counselors and educators to target those who are most at risk of experiencing poverty in old age. Furthermore, knowledge gained from demographic investigations can be useful in the development of public policy initiatives aimed at encouraging individuals to save. Finally, understanding the extent to which demographic markers

are associated with planning and saving has relevance to basic research, inasmuch as they can be used as control variables in models as a way of reducing error variance.

Of the various demographic indicators that have been investigated, perhaps none has received as much attention as age. In study after study, older pre-retirees have been shown to be more engaged in the financial planning process than their younger counterparts' (DeVaney, 1995; Fernandez-Lopez, Orero, Vivel, & Rodeiro, 2010; Glass & Kilpatrick, 1998; Hershey et al., 2007; Hira, Rock, & Loibol, 2009; Phua & McNally, 2008). There are many good reasons why age is significantly related to planning. Among them is the fact that older adults have higher incomes (and thus potentially more discretionary income to invest); they are nearer to retirement age and the reality of the post-employment period is likely in sharper focus; and, relative to younger adults, older adults tend to be more knowledgeable about financial matters. Moreover, increases in age have been shown to be inversely related to one's willingness to take on investment risk (Dulebohn, 2002). And although age is not synonymous with the concept of saving horizon, they are positively correlated with one another, and the latter has been observed to be highly related to the likelihood of making regular savings contributions (Fisher & Montalto, 2010).

Gender has also been shown to be linked to financial planning processes, with men generally outperforming women in terms of planning, saving, and financial accumulations (Glass & Kilpatrick, 1998; Moen, Erickson, Agarwal, Fields, & Todd, 2000; Noone et al., 2010). This is in part due to the fact that men have higher incomes than women (and thus more resources to invest, which means increased opportunity; Jefferson & Preston, 2005), women tend to have more discontinuous work patterns than men (thereby affecting their pension eligibility; Schultz, Rosenman, & Rix, 1999), and among older cohorts of individuals, traditional sex-role patterns dictate that men be responsible for family financial planning activities (Glass & Kilpatrick, 1998). This latter gender difference seems to be less pronounced among younger individuals, with women in contemporary society taking on greater responsibility for their own financial futures (Adams & Rao, 2011; Jefferson, 2009). Furthermore, Helman et al. (2011) found that perceptions of a comfortable future retirement are higher among men compared to women.

Despite the corpus of studies that have found gender effects in FPR, a handful of investigations have revealed either small or nonexistent findings between the sexes. According to Noone and colleagues (Noone et al., 2010), studies that report limited gender effects tend to be historically more recent. These authors contend that shrinking sex differences are the result of (a) women's more positive perceptions of retirement that have occurred over the past two decades, (b) a trend toward higher levels of socioeconomic status among women during that same time period, and (c) more continuous patterns of workforce involvement among women that stem from trends toward educational and occupational equality. Indeed, these rapidly shifting trends and their impact on FPR are a cogent reminder that retirement, as a social institution, is dynamically changing, as are the strategies that different subgroups of individuals use to prepare for the post-employment period.

For understandable reasons, household income has been found to covary not only with financial planning activities but also with retirement savings contributions (Fernandez-Lopez et al., 2010; Hira et al., 2009; Lee, 2003; Schellenberg, Turcotte, & Ram, 2005). This is because high-income individuals often have more discretionary resources to invest, they tend to be more knowledgeable about financial matters, they are likely to have clearer financial goals, and they are more likely to engage the services of a financial professional. All of these factors have previously been shown to be associated with either high levels of involvement in FPR or savings accumulations. Accordingly, worker confidence in having sufficient resources for a comfortable retirement is positively related to income (Helman et al., 2011; Kim et al., 2005). Taylor and Geldhauser (2007) point out that low-income workers, who are over-represented by women and minority group members, are less likely to engage in both formal (e.g., financial) and informal (e.g., psychological; attitudinal) forms of retirement planning, and Gruber and Wise (1999) report that one's financial status is a predictor of the timing of one's departure from the workforce. Finally, in an information processing study of investors, high-income, highly educated males were the most likely to carry out a thorough search of relevant information when making investment decisions (Loibl & Hira, 2009).

Partnership status is yet another demographic indicator that has shown to be predictive of planning and saving, with individuals in a dyadic relationship shown to plan and save more than

their single counterparts (EBRI; 2009; Glass & Kilpatrick, 1998). One apparent reason for this is because dual-earner households typically have higher combined incomes than single households, and therefore more discretionary resources to invest. Other possible reasons why working couples typically “outperform” single workers have to do with a desire to ensure financial security for one’s partner, and the potentially higher levels of social support for planning and saving that one may experience when in a committed relationship. In general, findings from research on same-sex couples mirror the findings from studies on different-sex dyads, suggesting a planning benefit of partnership (Mock, Taylor, & Savin-Williams, 2006). However, Mock and Cornelius (2007) present empirical evidence to indicate that the interdependence of retirement planning is particularly strong among lesbian couples.

One’s health status, and among couples the health status of one’s partner, has also shown to be linked to retirement planning and saving (Fisher & Montalto, 2010). Using data from the Health and Retirement Study (HRS), Lum and Lightfoot (2003) found that healthy individuals nearing retirement were more likely to have an IRA and were likely to have more money invested in same. The authors speculate that this is due to the fact that those in ill health experience more in the way of out-of-pocket expenditures for health care. These authors went on to speculate that those with poor health may foresee a shorter life span for themselves, thereby limiting the amount they are willing to set aside for old age. In that same study, Lum and Lightfoot found that having a partner in ill health was associated with a decreased likelihood of working in a job that provided a pension plan. Along related lines, Gupta and Larson (2010) suggest that pre-retirement health shocks can be expected to have a larger economic effect on individuals living in countries such as the United States relative to those living in welfare states such as Denmark or Sweden (where health care services are subsidized), due to the sheer magnitude of expenditures in countries where the patient bears the burden of the cost.

Taken together, the demographic findings presented above perhaps raise more questions than they answer. Inasmuch as demographic indicators are not explanatory constructs in and of themselves, it leaves open to question as to why these variables (e.g., age, gender, income, partnership status) covary with planning and saving practices. For some markers—such as income—the answer to this question is fairly clear. Higher incomes are important

because they increase the availability of discretionary resources to invest. But a full understanding of the mechanisms that underlie associations of planning and saving with age, gender, and partnership status is lacking. A number of interesting investigations have systematically explored the impact of demographic factors on FPR (e.g., Petkoska & Earl, 2009), but future research is needed to flesh out the causal mechanisms that covary with these indicators. At present, we have only speculative evidence as to the nature of the linkages between FPR, demographic indicators, and key underlying psychosocial-economic constructs.

## Limitations and Future Directions

In this section of the chapter we begin by describing the limitations of research on FPR. In doing so, we will comment on (a) disciplinary shortcomings of existing empirical work; (b) the lack of integrative approaches designed to explain financial planning practices, as well as the need for closer collaborations among stakeholders; (c) insufficiencies associated with methodologies and research designs; and (d) cultivating ways to motivate children and adolescents to think about their future financial needs. These limitations will be followed by a future directions section, which outlines a series of significant questions, issues, and challenges related to effective financial planning. These questions are designed to encourage the reader to think deeply about innovative directions the field might take, as well as their implications.

### *Limitations of Existing Research*

*Disciplinary shortcomings.* Each discipline can be credited with making unique contributions to our understanding of the financial planning process. But at the same time, each has exhibited certain weaknesses or shortcomings when it comes to conceptualizing, designing, and implementing their work. Take research from the field of economics as an example. In an effort to develop robust predictive models, economists have relied almost exclusively on econometric predictors of saving behavior. Their hesitance to employ psychosocial constructs leaves their models in some respects incomplete (Elster, 1989). Particularly valuable at this point in time would be the inclusion of empirically validated perceptual and self-report predictors of saving (e.g., personality constructs; perceived financial goals; indices of social support) in ongoing longitudinal investigations, such as the HRS.

Turning to psychology, in some respects the Achilles’ heel in that field is the opposite of the



fault exhibited by economists. In developing their models of financial planning competence, psychologists have demonstrated a reluctance to adopt clear, objective, and verifiable measures of key outcome variables (e.g., household saving rates; wealth accumulations). Instead, they have shown a reliance on perceptual and self-report outcome measures that call into question the accuracy and veracity of respondents' claims. Another shortcoming is that psychologists rely heavily on cross-sectional research designs and convenience sampling, which can tell only part of the story when it comes to understanding retirement planning as a process and generalizing the findings. More will be said below about the role that commonly used research designs play in advancing our understanding of FPR.

One of the clear strengths of work by sociologists has been their ability to conceptualize broad theoretical frameworks (such as the life course perspective; Elder & Johnson, 2002) that explain the ways in which agency and contextual factors shape individuals' behaviors (Hitlin & Elder, 2007). But that said, attempts to empirically test propositions regarding the interaction between human agency and context have not been forthcoming (see van Solinge & Henkens, 2005, 2007, for notable exceptions). Thinking on the topic of FPR would truly be advanced if sociologists could transform elements of theory into clear, testable hypotheses. Identification of a normative timetable for the financial planning process (and individuals' perceptions of same) would be a particularly valuable contribution, as would identification of the mechanisms through which social forces and contexts shape saving predispositions.

Next, we turn our attention to the field of finance, which as a discipline has developed some very attractive lifetime savings models (e.g., the life-cycle savings model; the permanent income hypothesis). Despite the existence of these models, the field of finance seems to lack consensus when it comes to predictions regarding the timing of saving behavior and the form it should take. For example, strategies for reducing equity in favor of cash for the individual who is approaching retirement are poorly specified, as are propositions about how to manage longevity risk. Like sociologists, in the coming years those in finance could advance the field by transforming key elements of dominant theories into empirically testable propositions. Further progress would be made by testing the limits of those propositions in relation to particular subgroups of workers and retirees who exhibit special needs.

*Integrative approaches.* The field of forces that motivate individuals to plan and save for old age is extensive, and the nature of the interrelationships between intra-psychic, economic, and contextual variables is indeed complex. With that being the case, it is clear that holistic and interdisciplinary approaches to the study of financial planning are needed (Adams & Rau, 2011; Altfest, 2004). Relatively few scholars have pursued work in that direction (see Dan, 2004; Dulebohn, 2002; and Hershey, 2004, for notable exceptions). But among those who have, the results have been generally fruitful. It is only by stepping outside traditional disciplinary boundaries that retirement researchers will take meaningful strides toward constructing a comprehensive theoretical framework from which to conceptualize the determinants of investor behavior. Toward that end, future interdisciplinary collaborations among empiricists will be an important key to success.

In addition to the need for increased collaborations among disciplines, opportunities also exist for closer collaborations among key stakeholders in the financial and retirement planning arena. Examples of stakeholders who might benefit from interacting with one another include:

1. governmental institutions (such as the Social Security Administration, which funds a network of financial literacy centers that include retirement as part of their mandate)
2. non-governmental organizations (e.g., the European Financial Planning Organization) that provide advice to individuals through web-based computational tools and resources, as well as other forms of modern networks
3. financial firms that profit from wealth creation and management (e.g., AXA Equitable; JP Morgan Chase, MassMutual, Wells Fargo)
4. researchers who are interested in building and testing models of savings practices and investor behavior
5. practitioners who are interested in the development and evaluation of educational, training, and intervention programs

*Methodology and design.* Near the beginning of this chapter we noted a takeaway message across contributing disciplines—when it comes to individual patterns of saving for retirement, there is much room for improvement. One way to improve knowledge of FPR, in addition to conceptualization, is through careful attention to measurement, design, and analysis. Our approach in this brief section is to describe selected prototypical studies and

to then offer observations on the study of FPR from the perspective of research strategy.

Consider measurement first. An exemplary approach is represented in work by Noone and colleagues (Noone et al., 2010). Their careful investigation resulted in a validated instrument, the Process of Retirement Planning Scale (PRePS). This instrument was justified through review of research constructs defined using either single or few indicators. Instrument development (across financial, health, psychosocial, and lifestyle domains) used a general model of planning (Friedman & Scholnick, 1997) as well as data from several pilot studies to identify subscales that focus on retirement representation, the decision to retire, and the preparedness stages of planning. A sample of 3,000 persons aged 49–60 from the New Zealand electoral roll comprised the intended respondents, and a response rate of 53% was achieved before data cleaning. Variables measured in a single questionnaire included the PRePS, the HRS retirement planning measure, future time perspective, locus of control, age and time to retirement, the Economic Living Standards Index to capture socioeconomic status, educational attainment, and the Social Functioning Scale to assess self-reported health. The analysis showed appropriate use of confirmatory factor analysis (cf. MacCallum & Austin, 2000). A similar study reported by Muratore and Earl (2010) but conducted in Australia with a smaller sample produced the 27-item Retirement Planning Questionnaire II. Both of these studies point to strategies that improve measurement of constructs in FPR.

Design refers to structuring data collection in terms of units (usually persons, but sometimes dyads, families, or other groups), manipulations and measures, and occasions/sequencing. The majority of the research we reviewed and cited is quantitative in nature. A qualitative tradition offers understanding through a different approach. An exemplary study was reported by Kemp and colleagues (Kemp, Rosenthal, & Denton, 2005). These authors worked from the quantitative literature to identify themes that were assembled into life-history interviews with 51 mid- to later-life Canadians. The interviews were used to understand catalysts and constraints associated with planning in financial, personal, and familial domains. The authors oversampled females to understand gendered pathways to retirement planning. An important finding was that constraints and catalysts varied between individuals and over time, which suggests the need for longitudinal research, whether it be qualitative or quantitative

in nature. Working from quantitative findings to design a qualitative study is also an attractive reversal that, if repeated, could result in a back-and-forth cycle that improves understanding and enriches knowledge.

Most studies in the domain of FPR are cross-sectional, but Wang and Shultz (2010) advocated longitudinal approaches to the study of retirement adjustment and later advanced a resource dynamics approach (Wang, Henkens, & van Solinge, 2011). Temporal aspects fit well with the perspective taken by Noone et al. (2010) in which a chain of cognitive representations precedes the process of planning for retirement, although measurement at earlier developmental points (adolescence, early career, mid-career) would give a better vantage point on group or individual trajectories. Temporal dynamics of resources could be useful linking concepts between different aspects of retirement. In particular, this framework could link FPR as addressed in this chapter to actual adjustment levels during retirement. Event history models with multiple spells might also be useful as individuals retire (occasionally through “bridge employment”) and then return to work (sometimes cycling between the two).

We have mentioned the AXA (2008) Retirement Scope survey, which spanned multiple continents and twenty-six nations. This large-scale project provided a snapshot of retirement perceptions for a firm whose business model is assisting individuals in wealth creation and management. Such surveys have smaller numbers of items (sometimes anchor and rotating) and are designed to provide useful information to the firm for strategic planning, but they also serve a secondary purpose of dissemination to individuals and researchers. They are not generally peer-reviewed but can provide useful information nonetheless. The HRS, operated by the University of Michigan Institute for Social Research on behalf of several federal agencies since 1992, surveys more than 22,000 Americans over the age of 50 every two years. This large-scale survey supports archival research to a greater extent than industry efforts such as the AXA Retirement Scope survey.

Experimental research is uncommon in FPR, but two studies illustrate the range. Hershey, Mowen, and Jacobs-Lawson (2003) conducted a study that compared retirement planning seminars structured using information, motivation (goal-setting), information plus motivation, and a control seminar on memory. Results for a sample of 118 individuals showed that the information and motivation

seminar had the greatest effects on goal clarity, planning practices, and saving practices. Beshears and colleagues at the NBER reported a field experiment to investigate the effects of social marketing norms (Beshears, Choi, Laibson, Madrian, & Milkman, 2010). Specifically, separate letters promoting quick enrollment in a savings plan and easy escalation of savings were mailed to members of three groups at a manufacturing firm. Two of the groups were created by providing relative information about peers' savings in five- and ten-year age ranges, while the third was a no-information control condition. The results indicated effects for quick enrollment in a savings plan, but not for the easy escalation letters.

We advise consideration of a classic article by Cronbach (1984). He discussed what Raymond Cattell called a "treasure chest" in describing for researchers a set of facets for studying phenomena proposed in 1946. Cattell's initial facets were persons (P), tests or situations (J), and occasions (O), but extensions provide additional potential for systematic research on FPR. When developmental considerations are added to permit separation of age, cohort, and time of measurement (cf. Adam, 1978), the study of the relationship of FPR to other constructs and domains addressed in this handbook is enhanced. Indeed, designs informed by the data box and cross-sequential strategies should assist in robust knowledge creation and honor a commitment to longitudinal research advocated by Wang and Shultz (2010; also see Shultz & Wang, 2011).

Analysis refers to how researchers investigate obtained data, and typical categories for grouping statistics include descriptive, inferential, and exploratory. Primary analysis of single studies and secondary analysis of archival data are the most prevalent analyses we found in reviewing literature for this chapter. Both strategies are valuable in their own right. Meta-analysis of primary studies (Cooper, Hedges, & Valentine, 2009) would also help to support within- and cross-discipline integration. However, this will occur only if common measures can be specified in exogenous and endogenous domains, and if primary researchers provide a minimum set of statistics in their publications.

A chapter on the topic of analysis by Zickar and Gibby (2003) presents strategies for the general study of retirement. These authors focus on longitudinal techniques in a section that presents hierarchical linear models and latent growth models. They then touch on discontinuous change (e.g., spline regression fit to different sections of a temporally ordered variable using theoretical points

of expected discontinuity), and they also present other techniques including logistic regression, item response theory (which, for example, could be used to analyze the scale data collected by Noone et al. [2010]), missing data, and computational models (i.e., simulations). Taken together, the recommendations found in the Zickar and Gibby chapter provide good food for thought when it comes to analytic approaches that investigators might adopt.

*Cultivating financial literacy among children and adolescents.* Many scholars have written about the need for financial literacy training early in life in order to stimulate successful patterns of personal money management and life span saving, but few have taken meaningful steps in that direction. Findings from a 2008 survey of high school students carried out by the Jump\$tart Coalition (Mandell, 2008) revealed that American teenagers' level of financial knowledge is woefully inadequate.

Of the financial literacy programs that have been developed, few have been subject to empirical scrutiny (Varcoe, Martin, Devitto, & Go, 2005). Those that have been evaluated have been shown to improve not only literacy rates but also money management skills and financial confidence (Danes, Huddleston-Casas, & Boyce, 1999; Varcoe et al., 2005). Moreover, a paper published in 2001 by Bernheim, Garrett, and Maki reached the conclusion that high school curriculum mandates that stress household financial decision making are beneficial, although the effects of these programs tend to be gradual. The importance of early and continual inculcation of financial literacy training is that educators can positively exploit supra- and subconscious implementation intentions and goal intentions (Dijksterhuis & Aarts, 2010; Klein et al., 2008), as well as increase future time orientation, as suggested by Shobe and Sturm (2007).

Despite the development of national standards for youth financial education in the United States some years ago (Jump\$tart Coalition, 2007), cross-walks to national and state standards provided by the National Endowment for Financial Education (NEFE, 2007a), and parallel standards for adults (Institute for Financial Literacy, 2007), a comprehensive and integrated approach to financial education from childhood to adulthood remains lacking. One of the closer approximations, although limited to secondary educational settings, is the High School Financial Planning Program (HSFPP) produced by NEFE (2007b). Adding retirement considerations to early education (such as how to use retirement calculators, and understanding the way

in which interest compounds over time) could help youth to initiate individual savings accounts earmarked for retirement. Program evaluations, based on logic models, are needed to document outputs, outcomes, and impact along those lines.

One key to the success of educational interventions at the K–12 level will be to ensure that program content is both engaging and lifestyle relevant (Zollo, 2003). If not, the intervention will stand the risk of being disregarded. Toward that end, games aimed at enhancing personal financial literacy seem to be one fruitful applied direction, such as the game “Get Rich Slow,” which is available from the Center for Retirement Research at Boston College (CRRBC), 2011). A different player-friendly intervention entitled “Save! The Game,” which is designed to be played on iPhones by younger children, has as its goal to motivate long-term saving behaviors (Massachusetts Mutual Life Insurance Company, 2010). Developing games and ensuring that core FPR concepts are front and center when it comes to financial literacy instruction are just two practical strategies for improving financial competence among youth. Certainly, more in the way of motivational interventions will also be needed in the coming years if we are to be successful at cultivating future cohorts of savers. Ideally, all such programs will be designed to take into account age levels, individual differences in interests, and pre-existing propensities to plan and save.

### ***Future Directions***

In this section, we outline a number of issues and questions designed to identify gaps and limitations in the current literature. Our hope is that these questions will stimulate meaningful discussions of ways to design and implement forward-thinking theoretical investigations, and how those investigations, in turn, can inform efforts aimed at intervention and application.

1. There has been much discussion in recent years about designing “libertarian paternalist” approaches to public and private pension systems. As part of this approach, control over policies and saving practices are largely managed by the employer or the state. Within these systems, however, individuals are still responsible for certain key financial investment decisions. When it comes to the development of personal savings initiatives, under what circumstances should “libertarian paternalist” policies be enacted? How far-reaching should these initiatives be when it comes to taking

control out of the hands of investors and placing the responsibility for pension planning and saving in the hands of institutions?

2. What is the best way to encourage individuals to make regular retirement savings contributions? What are the barriers to stimulating a successful pattern of saving in terms of individuals’ capacity to effectively plan and save, their willingness to take on financial management tasks, and their opportunities to save for the future?

3. In what way could social influence forces be harnessed to encourage individuals to plan and save effectively for old age?

4. What meaningful steps could be taken to educate children to grow up to be forward-thinking planners and savers? In raising children to become fiscally responsible adults, what are the respective roles of parents, employers, and the state?

5. How can technology be harnessed to support effective planning and saving practices? What types of computational tools and decision support systems would be most useful for advanced investors? How would these tools be different from the ones that would be most useful to novices?

6. How can findings from market segmentation studies be used to develop “tailored” saving intervention programs that meet the psychological needs and predispositions of workers with different planning orientations (e.g., successful planners, secure doers, stressed avoiders, live-for-today avoiders)?

7. What measurement, design, and analysis strategies will support research and evaluation efforts across the disciplines that examine FPR? A predominant quantitative tradition yields many studies that feature limited measurement using self-report perceptions, cross-sectional designs, and regression-based analyses. In what ways can investigators develop and deploy improved measures, add to their models’ consideration of temporal factors, and be creative in their analytical strategies?

8. How could Bayesian concepts be incorporated into the development of personal financial planning strategies? More specifically, how could individuals’ perceptions of prior probabilities associated with health, longevity, and quality of life be meaningfully integrated into individuals’ long-range financial plans so as to custom-tailor appropriate goal-striving activities.

9. Would it be possible to develop a generally agreed upon definition of “FPR”? In what ways

would having such a definition help to advance research in the field? Could a definition of financial planning for retirement serve as the basis for developing benchmark accomplishments, which in turn could help to establish developmentally appropriate performance levels associated with the planning process?

## Conclusion

In this chapter we have attempted to sketch a portrait, in broad form, of the factors that are associated with effective FPR. The relative importance of these factors is, of course, largely contingent on the country in which the pre-retiree resides, as it dictates not only the types and availability of institutional support but also the social norms that govern behavior. Moreover, the picture becomes more complex upon recognition of the fact that a catalyst for one person may be a constraint for another (Kemp et al., 2005). A centerpiece of the chapter involved presenting a theoretical model of effective FPR, which posited the existence of three major sets of forces that shape individual behavior. This model, which acknowledges forces of capacity, willingness, and motivation, served as the basis for defining eight different types of planning predispositions, as well as an organizational framework from which to characterize existing empirical findings. The chapter closed with a set of discussion questions aimed at encouraging the reader to think about future directions for the field.

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## List of Abbreviations

AIM	Affect Infusion Model
DB	Defined Benefit
DC	Defined Contribution
CRRBC	Center for Retirement Research at Boston College
EBRI	Employee Benefits Research Institute
E.U.	European Union
FPR	Financial Planning for Retirement
HC	High Capacity
HRS	Health and Retirement Study
HO	High Opportunity
HW	High Willingness
IDA	Individual Development Accounts
IRA	Individual Retirement Account
LC	Low Capacity
LO	Low Opportunity
LW	Low Willingness
NEFE	National Endowment for Financial Education
OECD	Organisation for Economic Co-operation and Development
TDSA	Tax-Deferred Saving Accounts
U.K.	United Kingdom
U.S.	United States