

Saving for Tomorrow Today:

How Message Framing Can Improve Retirement Saving Rates for Younger Workers

By

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Abstract:

Most Americans, particularly young people, are not saving enough for retirement, which can have serious financial consequences for their long-run financial wellbeing. It can also cause immediate, short-term problems for employers if enough younger, lower-paid employees do not contribute sufficiently to their company-sponsored 401(k) plans. Failure to have broad employee participation in the plan can not only lower employee satisfaction but can also decrease a company's ability to recruit top talent. In this paper, we hypothesize that one reason younger workers do not sufficiently save is because retirement seems too far away to warrant action. We build on existing savings research by examining how to adjust communication strategies to improve intended savings rates for this group. In Study 1, we compare the relative responses of two different age groups: younger Millennial workers and older Baby Boomer workers. We find that younger people respond better to abstract versus concrete advertisements, whereas savings rates for older workers do not differ by communication type. We attribute these findings to how differences in distance to retirement alter how each age group construes the event. In Study 2, we show that younger workers' savings intentions increase further when the savings goal is presented using concrete messaging and as a milestone versus a distant goal. Overall, this research demonstrates that by aligning goal time frames with perceptions of retirement, younger workers can be encouraged to make better long-term savings decisions that benefits themselves and their employers.

Keywords: company-sponsored retirement plans, Millennial workers, employee retirement planning, retirement communications, worker retirement goals

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Organizations commonly use generous benefit packages to help attract top talent. Retirement plans are an important component of these packages. Over the years, employers have transitioned from defined benefit retirement plans to defined contribution plans (e.g., 401(k) savings plans). This change has shifted the burden of accumulating enough money for retirement to the individual employees, many of whom may lack the understanding or motivation to save enough to guarantee sufficient retirement income. While younger workers, in particular, face significant savings challenges, their active participation in retirement plans is not only important to their own long-run financial well-being but also to the competitiveness of their employers' retirement plan. Plans that have inadequate participation by non-highly compensated employees (which tend to be younger employees) can suffer severe consequences from the government. That is, companies' retirement plans may become less attractive to potential management hires and also force executives to restrict their retirement savings below the level they want to contribute. For these reasons, human resource departments should encourage younger people to save more in their company sponsored retirement plans. This paper addresses these issues by investigating how organizations can utilize different communication techniques to help younger workers save.

The lack of savings among the young is well documented. In her analysis of the Federal Reserve's 2010 Survey of Consumer Finances, Rhee (2013) found that 80.3% of younger households (between the ages of 25-34) do not meet their suggested saving targets. Furthermore, Vanguard (2016) reports that in their universe of retirement plans, younger people are less likely

to participate than any other age group.¹ While pressing student debt may preclude some younger workers from saving, research shows that for those who can, starting early is a critical factor in accumulating sufficient funds for retirement (Munnell, Web & Hou, 2014). Therefore, organizations can help their employees by encouraging them to contribute as much money as possible to their company-sponsored plan as early as they can.

Organizations also benefit from encouraging employees to save because a lack of savings by younger workers with lower salaries can affect other employees. While retirement plans benefit all employees, the tax deferral feature is particularly attractive to highly compensated employees in top tax brackets. In order to insure that all employees benefit from the company's retirement plan, and not just the wealthy, the IRS has instituted several annual non-discrimination tests for 401(k) plans. For many of the tests, employees are divided into two groups: highly compensated employees (HCEs), who are owners or employees with salaries above a certain limit, and non-highly compensated employees (NHCEs). These tests create an incentive for management to encourage broad participation among all employees. Additional tests examine other aspects of participation to ensure adequate coverage and fairness.²

If the company fails a test, the organization must correct the imbalance. For example, one option is to return to the HCEs some of their excess contributions. If the imbalance is not corrected, HCEs must report their entire vested balance as income. Moreover, failure of the non-discrimination tests is not uncommon. In a 2014 survey, the PlanSponsor Council of America reported that just under 15% of plans surveyed needed to return HCE contributions after the plan year ended (PlanSponsor Council of America 2015). Thus, the risk of disappointing HCE

¹ Using preliminary 2015 data, Vanguard (2016) reports 37% participation rates among those under 25 and 62% participation rates for those from 25-35 years old. Participation rates increase until they peak at 74% for those 54-64 years old.

² See PlanSponsor (2015) for explanations of the tests.

employees is real, carrying the potential of affecting morale and possibly future recruiting. In order to avoid failure, employers use plan features like automatic enrollment, employer matches and/or marketing of the plan to encourage NHCE participation.

This paper focuses on the less frequently studied use of effective marketing to increase participation. While finance research centering on the effectiveness of plan features such as automatic enrollment and automatic escalation to improve savings has shown great success, research into marketing approaches also show promise. For example, Lusardi, Keller and Keller (2008) examine how to increase participation among employees in a university's retirement plan, and they demonstrate that a social marketing approach can increase plan participation among new employees. Through focus groups and surveys, they developed a brochure encouraging participation by providing step-by-step instructions for how to join the retirement plan. Age was not a specific factor in their analysis; their sample of new employees consisted of individuals from all age groups, although 53.9% were under 35 years old (p. 215). Respondents indicated that they lacked basic information on how to even open a retirement savings account.

While not focusing specifically on age, their initial survey findings do suggest that employees' ability to think about retirement might vary by age. Specifically, they report that 6.8% of the younger employees report that it was "[h]ard to think that far in the future" (p.216) compared to 0.0% of the older employees. This may be why some younger workers often ignore their long-term savings needs. In a 2012 National Financial Capability Study survey, only 36% of younger workers report having a retirement account; of those with an account, 17% took a loan within the past 12 months and 14% took a hardship withdrawal (Schuyler, Buckley & Lusardi, 2015), suggesting that this generation is not focused on and/or not committed to more distant financial obligations.

We argue that since the distance to retirement for younger workers may seem far away, it influences how they think about retirement savings, suggesting that we need to communicate with them differently than we do with older workers. In this paper, we draw on construal theory to account for perceptions of retirement and explore how to encourage younger workers to make better long-term savings decisions. First, in Study 1 we test whether younger workers respond differently from older workers when presented with abstract or concrete messages about saving. We find that younger people intend to save more when they are exposed to abstract versus concrete communications, whereas older workers do not differ in their intended savings by communication type. This is consistent with temporal construal theory. In Study 2, we show that younger workers' savings intentions increase further when the savings goal is presented as a shorter term, milestone goal with a concrete message versus a longer term, distant goal. Overall, this research demonstrates that by aligning goal time frames with perceptions of retirement, younger people can be encouraged to make better long-term savings decisions.

We contribute to past research on retirement and construal theory in two ways. First, we demonstrate that temporal construal theory can influence retirement savings decisions and, in doing so, may affect workers' financial preparation for retirement. Second, and more importantly, we integrate past research from multiple domains to suggest specific message characteristics that best encourage normative saving behavior among younger workers. The results of this research will be critical for designing employer communications that seek to persuade workers at various stages of their careers to engage in saving behaviors appropriate for their age. This will not only improve younger workers' retirement preparedness but will also help maintain the corporate retirement plans' attractiveness as a benefit in recruiting potential employees.

Construal Theory & Retirement Savings Messages

The basic premise of temporal construal theory is that individuals tend to view things differently based on whether they think an event will happen in the near or distant future. More specifically, temporal construal theory predicts that individuals farther away from an event prefer to think about the event in general (abstract) terms rather than considering the details of the event (Trope & Liberman, 2003). On the other hand, if an event will occur in the near future, people think more concretely, focusing on the specific steps needed to achieve the desired outcome (the feasibility of reaching the goal). Liberman and Trope's (1998) study of Israeli students provides empirical evidence consistent with this theory. They gave students a choice between two writing assignments. One was interesting but difficult in that it was to be written in English, the students' non-native language. The other one was less interesting but easy in that it was to be written in Hebrew, the students' native language. When the assignment was due the next day, students overwhelmingly preferred the boring, easier assignment because they were focusing on the process required to write the paper (i.e., feasibility) (p. 13). However, when the assignment was due at the end of the semester, students preferred the more interesting yet more difficult assignment because they were focusing on how much they liked the assignment (i.e., desirability), rather than on the steps required to complete it (p.13).

While it has not yet been applied to retirement savings, construal theory has been studied in a variety of other contexts. For example, past work has examined construal theory in adoption of new products (Alexander, Lynch & Wang, 2008), product preference and task/job preference (Trope & Liberman, 2000), social plans (Eyal et al., 2004), healthy eating (Eyal et al., 2004), and personal savings (Ülkümen & Cheema, 2011). Building on the existing literature, we propose there are two main areas where temporal construal theory may offer suggestions on how to best

encourage retirement savings among younger workers: (1) the use of abstract versus concrete messaging; and (2) the distance to defined goals.

Applying construal theory to retirement, we can expect that younger workers would naturally think about retirement in abstract terms (because it is an event that will happen in the distant future), whereas older workers would naturally think about retirement in concrete terms (because it is an event that will happen in the near future). More specifically, younger workers should think about retirement in a very simplistic manner, considering only the big picture without regard to the amount of money they should be saving now in order to achieve their desired distant goals (Trope & Liberman, 2003). Since younger workers are thinking about retirement abstractly, we propose that this may be the type of information they would seek, as they would be able to process it more efficiently. Accordingly, abstract messages should be more effective at encouraging savings when communicating with younger workers versus when communicating with older workers nearing retirement. Alternatively, because individuals nearing retirement may think more about the complexities of building retirement savings, more concrete information detailing the specific steps necessary to achieve a financially secure retirement will better guide their decision-making. We suggest that such consistency between the natural thought process and the communication frame will encourage each group to focus on and engage in the steps needed to adequately finance their retirement. Therefore, we hypothesize an interaction between age and ad framing such that:

H1: Younger workers exposed to an abstract ad will report intentions to save more for retirement than younger workers exposed to a concrete ad, whereas older workers exposed to a concrete ad will report intentions to save more for retirement than older workers exposed to an abstract ad.

Construal Theory & Retirement Savings Goals

Past work has also posited a possible interplay between construal theory and goal framing on behavior (Townsend & Liu, 2012; Ülkümen & Cheema, 2011), suggesting the importance of better understanding how framing a goal within a message about retirement savings targeted towards a specific age group affects savings behavior. That is, should a goal be presented as a distant goal of how much to save for retirement, or should the goal be more proximal? Ülkümen and Cheema (2011) found that when thinking more abstractly, consumers are more successful at achieving savings goals when the goal is framed as a specific dollar amount (vs. a non-specific savings goal) because it was viewed as more important. However, when thinking more concretely, consumers were less successful when the goal was framed as a specific dollar amount because it was viewed as more difficult. Although not focused on age or retirement, the findings from this research suggest that for younger workers, for whom retirement is in distant future, setting a specific milestone savings goal (e.g., save a particular amount from each paycheck) might be more successful at encouraging them to save than providing a general, long-term goal (e.g., amount needed in total for retirement) (p. 964).

In another example, Townsend and Liu (2012) studied the motivational and cognitive effects of planning. They found that while concrete planning helps aid self-control when a person is close to a goal, when a goal is in the distant future, a person's goal standing (how much progress has been made in achieving a goal) determines whether concrete planning helps or hinders self-control (p. 696). When a person is in poor goal standing (not much progress has been made in achieving a goal) and the goal is distant, planning can backfire and lead to less self-control than if there were no concrete plan at all. For younger workers who have only recently started saving for retirement, it is possible that they perceive themselves to be in poor

goal standing because the amount of money they actually have saved is a small portion of what they need in retirement. We argue that this may be the case even if they have saved an amount of money that would be considered appropriate for a younger worker with a considerable amount of time to save for retirement.

However, if we presented younger workers with a milestone goal not so far in the distant future, the dollar amount of the goal would be substantially less than the final amount of savings needed at retirement. As a result, younger workers may perceive themselves to be in better goal standing, and, as a result, may be more motivated to save in order to achieve the closer, smaller goal. Moreover, since the milestone would be in the near future, we expect that a concrete focus would be more effective. As such, we expect that the goal framing will moderate H1, such that

H2: When presented with a long-term savings goal, younger workers will report intentions to save more for retirement upon exposure to an abstract (vs. concrete) ad, whereas when presented with a milestone goal, they will report intentions to save more for retirement upon exposure to a concrete (vs. abstract) ad.

Processing Fluency Theory

We attribute our hypothesized effects to differences in processing fluency. Processing fluency theory suggests that when information is easier to process, it has more of an impact than information that is more difficult to process.³ It is possible that when construal level and temporal distance match, the information is easier to process and therefore may have more of an impact on a person's saving behavior. For instance, Tsai and McGill (2011) investigated the roles of processing fluency and construal level on consumer confidence. They found that processing fluency improved consumer confidence at lower construal levels but not at higher levels, underscoring processing fluency's role in explaining why this may occur. Taken together,

³ See Schwartz (2004) for a review.

we expect that when presented with a long-term goal, younger workers will find it easier to process abstract information. However, when presented with a short-term goal, their processing fluency will be greater on exposure to concrete information. Thus,

H3: Processing fluency will mediate the interactive effect of ad and goal framing on retirement savings intentions in H2.

Study 1

The goal of Study 1 was to investigate the extent to which there are saving differences between younger and older workers when they are presented with abstract versus concrete message framing (H1). To that end, we presented younger workers (18-34) and older workers (50-64) with a concrete or an abstract savings message via an ad and asked them to indicate how much they would save after viewing it.

Method

Prior to this experiment, we conducted a pretest to develop two advertisements for use in the study – one with an abstract savings guideline description and one with a concrete description (see Appendix). The abstract version of the ad consisted of a vague description of the actions required for retirement financial preparation, whereas the concrete version consisted of step-by-step guidelines for saving for retirement. Our intent was to develop different versions of the ad that conveyed the same information via different communication techniques. In the pretest, thirty-seven respondents were asked to view either the abstract ad or the concrete ad and subsequently to provide their opinions. The objective of this pretest was to ensure that the two versions of the ad differed on their perceived concreteness while not differing on any other factors, such as attitude towards the ad, imagery elicited by the ad, fear elicited by the ad, perceived distance of the savings goal conveyed in the ad, interest in the ad, believability,

understandability, meaningfulness, originality, informativeness, argument strength, and personal relevance. Consistent with research on temporal construal theory, ad concreteness was measured using a two-item scale to assess the extent to which the ad emphasized process and the extent to which the ad was action-oriented, with higher concreteness associated with greater perceived belief in both statements. An analysis of the pretest findings revealed that the concrete version of the ad was perceived as more concrete than the abstract version of the ad, while the two versions did not differ on any of the other variables (see Table 1). Thus, these ads were utilized in our subsequent studies.

<Insert table 1 about here>

Study 1 was a 2 (younger workers vs. older workers) x 2 (abstract ad vs. concrete ad) between-subjects design. 342 respondents from a general online survey panel participated in our research. Respondents were divided into one of two age groups: 18-34 (younger workers) and 50-64 (older workers). All of the individuals recruited for this research were employed full-time and were varied in demographics, such as race, education, and income, although there were no differences by condition (all p -values $> .1$). Half of the respondents in each age group viewed the abstract ad generated from the pretest, and the other half viewed the concrete ad. To assess the effectiveness of each version of the ad for each age group, respondents were asked to report the percentage of their income that they were currently saving for retirement prior to viewing the ad. Subsequently, after viewing the ad, they were asked to report their savings intentions by indicating the actual amount they intended to save in the future (represented as a percentage of their salary). Our main dependent measure was change in savings percentage, which was calculated by subtracting their current savings percentage from their intended future savings percentage (after exposure to the ad).

Results

We analyzed the survey data using an analysis of variance with age and ad as the factors of interest. The analysis illustrated a main effect of age group such that younger workers were more likely to report a larger intended increase in their future retirement savings percentage after viewing one of the ads ($M = 4.81\%$) than older workers ($M = 2.14\%$; $F(1,338) = 12.79$, $p < .05$). More importantly, the analysis revealed a significant interaction between age group and ad abstractness/concreteness ($F(1,338) = 4.85$, $p < .05$). We conducted planned contrasts to further examine the results. Consistent with temporal construal theory and our expectations, saving behavior of younger workers, for whom retirement is in the distant future, appears to be impacted by framing of the ad (see Table 2). More specifically, younger workers exposed to the abstract ad were more likely to report that the ad would increase the percentage of income they would save for retirement ($M = 6.11\%$) than younger workers exposed to the concrete ad ($M = 3.32\%$; $t_{338} = 2.69$, $p < .05$), supporting H1 (see Figure 1). In contrast to younger workers, older workers did not report any differences in saving behavior as a result of exposure to the abstract and the concrete versions of the ad ($M = 1.96\%$ vs. 2.34% , $p > .1$). While we still obtained our predicted interaction between age and ad framing, the attenuated effect of ad framing observed for older workers was contrary to our expectations. We discuss possible reasons for this outcome later.

<Insert table 2 about here>

<Insert figure 1 about here>

Discussion of Study 1

Based on the results of Study 1, our findings suggest that younger workers respond more positively to an abstract message than to a concrete one, consistent with construal theory and our expectations. As our results show, younger participants indicated that they would increase their retirement savings by a significantly higher percentage of their income when they viewed the abstract ad versus the concrete ad, supporting the proposal that their reluctance to save may be due to their inability to grasp the future event of retirement. We expected our older respondents to show improved savings intentions on exposure to the concrete ad, but they demonstrated no significant differences in the percentage of the income they would save in response to either ad. Perhaps our older workers were already saving as much as they had planned, or they may have been unable to drastically alter their savings rate so close to retirement. Alternatively, they might have perceived themselves to be so far away from reaching their savings goals that they just gave up on attaining them. Future research could further investigate this finding.

In sum, the results of Study 1 support our contention that younger workers are more persuaded by abstract information, presumably because this is consistent with how they are viewing their distant retirement. Study 2 further investigates younger workers' saving behavior by examining the impact of goal framing, as well as exploring processing fluency as an underlying account of our proposed effects.

Study 2

While Study 1 explored only the impact of changing the abstractness/concreteness of the message, Study 2 considered the moderating role of a savings goal time-frame in the effect of the ad's abstractness/concreteness on younger workers' saving behavior (18-34 years). Thus, one goal of Study 2 was to test H2, thereby integrating past research on construal theory and message framing to better understand the characteristics of communication that are most likely to

encourage saving behavior among younger workers. In addition, we investigated processing fluency as the underlying mechanism responsible for the observed effects (H3).

Method

Study 2 was a 2 (abstract ad vs. concrete ad) x 2 (short-term savings goal vs. long-term savings goal) between-subjects design. 324 respondents from a general online survey panel participated in the study. All the individuals recruited for this research were younger workers (18-34 years old) who were employed full-time and were varied in demographics, such as race, education, and income. The same study procedure and survey design were utilized as in Study 1. That is, prior to viewing an ad, respondents were asked to report their current retirement savings amount (represented as a percentage of their income). Then, they were assigned randomly to evaluate one of four versions of the ad, in which we varied the abstractness/concreteness of the information and the savings goal. The four versions of the ad were: (1) abstract/short-term goal, (2) abstract/long-term goal, (3) concrete/short-term goal, and (4) concrete/long-term goal. Abstractness/concreteness of the ads was varied in the same manner as in Study 1. The two long-term goal versions of the ad were the same ads utilized in Study 1; the two short-term goal versions of the ad were developed by calculating the amount of money necessary to save each month to obtain the savings amount by retirement that is represented in the long-term goal versions of the ad. As such, both the short-term and long-term versions of the ad conveyed the same savings goal information while only varying the time-frame of the savings objective (see Appendix).

After viewing the ad, respondents were asked to report the extent to which they believed the ad impacted their saving behavior and the actual amount they intended to save in the future, which were measured in the same manner as in Study 1. Our main dependent measure again was

the change in savings percentage (new savings percentage – old savings percentage) after exposure to the ad. In addition, respondents in this study were asked to assess their attitudes towards the recommendations, their likelihood of following the recommendations, and their attitudes toward the ad. These additional measures were included in Study 2 to further examine saving behavior and to parallel past research that has examined framing effects and goal attainment (Hollenbeck et al., 1989). Finally, to better understand the processes underlying the observed effects, respondents in this study were asked to report processing fluency of the ad. See Table 3 for additional details on the dependent measures.

<Insert table 3 about here>

Results

We analyzed the survey data for each of the dependent measures using an analysis of variance with goal and ad as the factors of interest.

Savings increase. An analysis of the post-ad savings increase revealed a significant interaction between ad and goal ($F(1,311) = 17.71, p < .05$), suggesting that saving behavior can be enhanced for younger workers by considering the distance to the goal (short-term vs. long-term) and the concreteness of the saving guidelines (abstract vs. concrete) (see Table 4). Planned contrasts were utilized to further examine the effects. Consistent with H2, when respondents were given the long-term savings goal, they were more likely to report that the ad would increase the percentage of income that they would save for retirement when it was abstract ($M = 9.51\%$) than when it was concrete ($M = 4.96\%$; $t_{311} = -1.88, p = .06$), replicating the pattern obtained for younger workers in Study 1 (see Figure 2). Yet, when the ad conveyed the short-term savings goal, respondents were more likely to report that the ad would increase the percentage of income that they would save for retirement when it was concrete ($M = 13.36\%$) than when it was abstract

($M = 3.80\%$; $t_{311} = 4.12$, $p < .05$), representing a complete reversal in ad effectiveness. Moreover, the concrete version of the ad containing the short-term savings goal resulted in the highest projected savings increase of any of the ads (all contrasts $t > -1.66$, $p < .1$), indicating that this version of the ad would be most effective at encouraging saving behavior among younger workers.

Likelihood of following recommendations. Replicating the findings for savings increase, an analysis of likelihood of following the recommendations yielded a significant interaction between ad and goal ($F(1,320) = 8.79$, $p < .05$). Further, planned contrasts showed that respondents that read the short-term goal were more likely to save more following exposure to the concrete ad ($M = 4.99$) than the abstract ad ($M = 4.59$; $t_{320} = 2.47$, $p < .05$), replicating the findings for savings increase. An analysis of the dependent measures, attitudes towards the recommendations, and attitudes towards the ad showed a similar pattern of results.⁴

Processing fluency. An analysis of processing fluency showed a significant interaction between ad and goal ($F(1, 320) = 5.71$, $p = .017$). Consistent with our expectations, planned contrasts indicated that upon exposure to the short-term goal, respondents reported that the ad was easier to process when it was concrete ($M = 5.43$) compared to when it was abstract ($M = 4.67$; $t_{320} = 3.10$, $p < .05$). However, there were no differences in processing fluency in the long-term goal condition, regardless of whether the ad was abstract or concrete ($t < 1$).

<Insert table 4 about here>

<Insert figure 2 about here>

Mediation analysis. To test our assertion that processing fluency mediates the effect of ad and goal on anticipated savings increase, we employed the test for mediation outlined in

⁴ Due to space considerations, we do not report these measures in the text; however, results for all of the measures are reported in Table 4.

Zhao, Lynch and Chen (2010), using Preacher and Hayes's (2008) macro with bootstrapped samples (1,000). The analysis revealed that the direct path of the effect of the interaction on savings increase was significant ($c = -12.93$, $t_{311} = -3.88$, $p < .05$). The path of the interaction on processing fluency and the path of the mediator on savings increase were also significant ($a = -0.76$, $t_{311} = -2.10$, $p < .05$; $b = 1.56$, $t_{311} = 3.00$, $p < .05$). Importantly, the indirect path of the effect of the interaction on savings increase through processing fluency was negative and significant ($a \times b = -1.18$), indicating complementary mediation, with the 95% confidence interval excluding zero (-3.0151 to -0.2035). We conducted this analysis with all the dependent measures to test the robustness of our theoretical account. For likelihood of following the recommendation, the mediation results replicated. We found a similar pattern for attitudes towards the recommendation and for attitudes towards the ad; however, the direct path of the interaction was not significant for either dependent measure, indicating indirect-only mediation and increasing our confidence in our hypothesized explanation (H3).

Discussion of Study 2

The findings from Study 2 show that the effectiveness of an ad in encouraging saving behavior for younger workers is dependent on the concreteness of the ad, as well as on whether the goal is framed as long-term or short-term. We find that with long-term savings goals, an ad that presents abstract guidelines for saving appears to be more effective than an ad that communicates concrete guidelines at encouraging retirement saving behavior, replicating the results of Study 1. However, this result is qualified by the framing of the retirement savings goal (short term vs. long term) presented in the ad. Based on the results for the projected savings increase, it appears that the most effective ad for encouraging saving behavior overall for younger workers is the concrete ad with a short-term goal. This finding was replicated across a

variety of dependent measures in Study 2, increasing our confidence in our results. Importantly, these findings are also consistent with temporal construal theory (e.g., Trope & Liberman, 2003) and our expectations of how individuals are viewing retirement. When retirement and/or the retirement savings goal is distant, workers appear to be more easily persuaded by the communication techniques utilized in an abstract ad; when the retirement savings goal is proximal, younger workers appear to be more easily persuaded by communication techniques utilized in a concrete ad.

General Discussion

Retirement systems, including company-sponsored programs, across the world are increasingly requiring individuals to make important decisions that affect their retirement well-being. It is commonly accepted that two of the most important investment decisions people make are: (1) when to start saving; and (2) how much to save. The probability of retiring with sufficient funds is directly related to how early and how much the individual saves.⁵ As a result, organizations, researchers, financial firms and public policy makers have devoted time and resources to develop ways to increase savings, particularly for younger workers.

Over recent years, there has been success increasing savings as a result of changes to retirement plan designs, such as automatic enrollment and auto-escalation in 401(k) plans (Madrian & Shea, 2001; Thaler & Bernatzi, 2004). However, not all companies can offer these features in their plans, and some would argue that individuals should be encouraged to save beyond just their retirement needs to prepare for unexpected expenses caused by a variety of possible emergencies (e.g., health issues or job loss). In addition, because the government has implemented anti-discrimination tests with corporate retirement plans, the success of these plans

⁵ For one of many examples, see Munnell, Webb & Hou (2014).

hinges on whether the participation rate of younger, lower income employees matches the participation rates of older, more highly compensated workers.

The contribution of this paper lies in demonstrating how the interplay between construal theory and goal framing can be effectively used to better motivate younger workers to save. We build on the work of Lusardi, Keller and Keller (2008) by showing that providing younger workers milestone, short-term savings goals may be more effective because such goals appear to be more do-able and less daunting. One strength of our paper is that we draw from many academic domains to develop our theory and tests. Our paper shows that without goal framing, younger workers respond the best to abstract communications. This is an outcome in line with our predictions and based on construal theory. Of importance, we also find that by introducing a short-term goal frame into our long-term savings problem, savings intentions among the young can be increased even further by combining the short-term goal with a concrete message frame. To our knowledge, we are the first to integrate these two streams of research. This finding is noteworthy in that it can easily be implemented in an internal or external marketing campaign designed to encourage saving behavior among younger workers. We utilize intended savings behavior for our investigation; future research could use field studies, such as those used by Lusardi, Keller and Keller (2008), along with milestone versus final savings goals to determine if they are more effective in actual employee participation and savings rates.

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Table 1: Study 1 Pretest Findings[‡]

Dependent Variable (N = 37)	Abstract Advertisement	Concrete Advertisement	Scale Reliability	Test Statistic
Concreteness*	4.19	5.50	$\alpha = .84$	$F(1,35) = 6.41$
Attitude towards the ad	4.46	4.86	$\alpha = .92$	$F(1,35) < 1$
Ad imagery	4.56	4.54	$\alpha = .80$	$F(1,35) < 1$
Ad fear	4.33	4.43	$\alpha = .79$	$F(1,35) < 1$
Distance of ad goal	5.67	5.37	$\alpha = .83$	$F(1,35) < 1$
Interest	4.22	4.37	N/A	$F(1,35) < 1$
Believability	5.50	5.37	N/A	$F(1,35) < 1$
Understandability	5.22	5.11	N/A	$F(1,35) < 1$
Meaningfulness	5.11	5.16	N/A	$F(1,35) < 1$
Originality	4.00	3.95	N/A	$F(1,35) < 1$
Informativeness	5.72	5.53	N/A	$F(1,35) < 1$
Argument Strength	5.28	4.47	N/A	$F(1,35) = 3.06$
Personal Relevance	4.39	4.84	N/A	$F(1,35) < 1$

[‡] The objective of Pretest 2 was to ensure that the two versions of the ad differed on their perceived concreteness only, while not differing statistically on any of the other factors listed above.

* Denotes significance at the .05 level

Table 2: Study 1 Findings[‡]

Dependent Variable (N = 342)	Abstract Advertisement	Concrete Advertisement	Test Statistic
Younger workers (18-34)	6.11 (9.85)	3.32 (5.41)	$t_{338} = 2.69^*$
Older workers (50-64)	1.96 (5.36)	2.34 (4.40)	$t_{338} = -0.38$

[‡] Study 1 compares differences between abstract and concrete messages in both younger and older workers to assess whether message framing can enhance saving behavior. Using survey data from 342 respondents, the analysis examines how the dependent measure, the difference between the intended percentage savings rate after the intervention and the reported percentage savings rate before the intervention, is affected by age and type of ad (abstract vs. concrete). This table reports results from an analysis of variance.

* Denotes significance at the .05 level

Table 3: Study 2 Additional Dependent Measures[‡]

Dependent Variable	Questions	Scale Reliability
Attitude toward recommendations	I should save the amount of income recommended by the ad for retirement. (1 = strongly disagree, 7 = strongly agree) Saving the amount of income recommended by the ad is important in securing my retirement.	$\alpha = .85$
Likelihood of following recommendations	To what extent did the ad make you feel more (vs. less) likely to save for retirement? (1 = less likely to save, 4 = neither more or less likely to save, 7 = more likely to save)	N/A
Ad attitude	The ad that I just read was... 1 = Negative, 7 = Positive 1 = Unfavorable, 7 = Favorable 1 = Bad, 7 = Good	$\alpha = .94$
Processing fluency	The ad that I just read was... 1 = Difficult to process, 7 = Easy to process 1 = Difficult to understand, 7 = Easy to understand	$\alpha = .93$

[‡] Study 2 uses several dependent measures to investigate the moderating role savings goal timeframe plays in the effect on the ad's abstractness/concreteness on younger worker's savings behavior (18-34 years). This table describes the new dependent variables used in this analysis that are in addition to the 'savings increase' dependent variable used in Study 1.

Table 4: Study 2 Findings[‡]

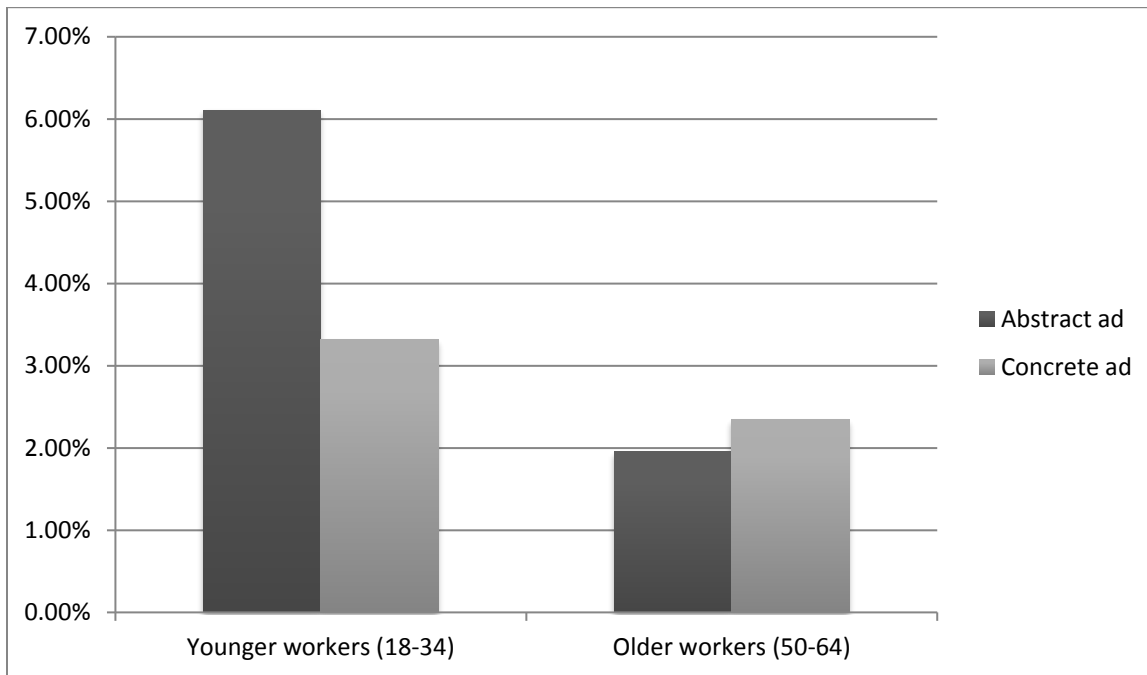
Dependent Variable (N = 324)	Short-Term Goal			Long-Term Goal		
	<u>Abstract</u>	<u>Concrete</u>	<i>Test Statistic</i>	<u>Abstract</u>	<u>Concrete</u>	<i>Test Statistic</i>
Savings increase	3.80 (7.86)	13.36 (19.95)	$t_{311} = 4.12^*$	9.51 (17.73)	4.96 (9.14)	$t_{311} = -1.88^{\#}$
Attitude toward recommendations	4.73 (1.37)	5.30 (1.16)	$t_{320} = 2.77^*$	4.94 (1.37)	4.87 (1.36)	$t_{320} = -0.33$
Likelihood of following recommendations	4.59 (1.17)	4.99 (1.07)	$t_{320} = 2.47^*$	4.90 (0.94)	4.61 (1.02)	$t_{320} = -1.74^{\#}$
Ad attitude	4.96 (1.31)	5.58 (1.18)	$t_{320} = 3.16^*$	5.49 (1.31)	5.29 (1.32)	$t_{320} = -.94$
Processing fluency	4.67 (1.69)	5.43 (1.39)	$t_{320} = 3.10^*$	5.19 (1.64)	5.11 (1.62)	$t_{320} = -0.32$

Fluency: Construal x goal $F(1, 320) = 5.71$, $p = .017$, Construal $F = 3.73$, $p = .05$ (concrete = 5.28, abstract = 4.93); Savings: interaction $F(1,311) = 17.71$, $p = .000$

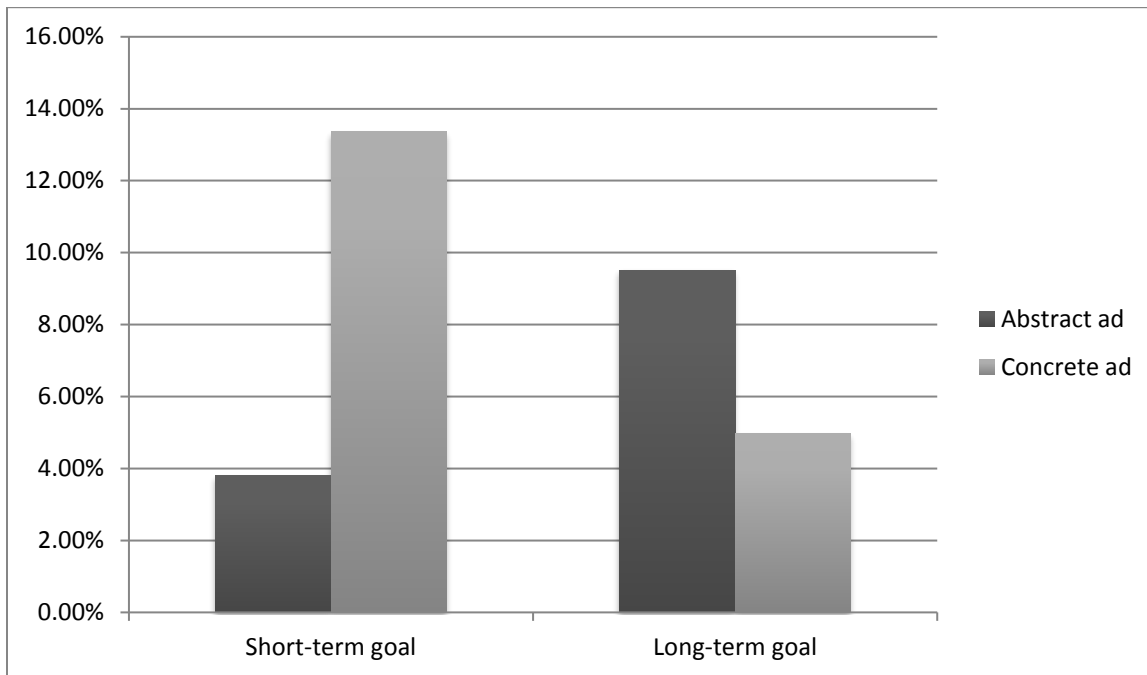
[‡] Study 2 uses several dependent measures to investigate the moderating role savings goal timeframe plays in the effect on the ad's abstractness/concreteness on younger worker's savings behavior (18-34 years). This table reports the results for several different dependent variables using an analysis of variance with goal and ad type as the factors of interest. The dependent variable, "Savings increase," is the difference between the intended percentage savings rate after the intervention and the reported percentage savings rate before the intervention. The other dependent variables are described in Table 3.

* Denotes significant contrast between the abstract and concrete versions of the ad at the .05 level

Denotes marginally significant contrast between the abstract and concrete versions of the ad at the .1 level

Figure 1: Study 1 Savings Increase Findings[‡]

[‡] Study 1 compares differences between abstract and concrete messages in both younger and older workers to assess whether message framing can enhance saving behavior. Using survey data from 342 respondents, the analysis examines how the dependent measure, the difference between the intended percentage savings rate after the intervention and the reported percentage savings rate before the intervention, is affected by age and type of ad (abstract vs. concrete). In this figure, the dependent measure is reported in percentages.

Figure 2: Study 2 Savings Increase Findings[‡]

[‡] Study 2 uses several dependent measures to investigate the moderating role savings goal timeframe plays in the effect on the ad's abstractness/concreteness on younger worker's savings behavior (18-34 years). This figure for the dependent variable 'Savings increase,' the difference between the intended percentage savings rate after the intervention and the reported percentage savings rate before the intervention. The Y axis reports these numbers in percentages.

Appendix: Advertising Stimuli

Abstract Ad with Long-Term Savings Goal

WHY YOU SHOULD SAVE MORE NOW TO ENSURE YOU ARE ON THE RIGHT PATH TO RETIREMENT



Saving for retirement can lead to a retirement that is as enjoyable as you anticipate. You may be able to purchase luxury goods that you have always wanted, you may be able to retire when you planned, and you may be able to live in your home as long as you want.



You can prepare for retirement by saving now. On average, most people need an income of about 80% of their current salary for every year they live in retirement. Thinking about your retirement now will help ensure that you meet your future retirement goals.

If you haven't done so already, you may want to consider setting up a retirement account through one of the many available organizations offering retirement planning assistance. You should consistently contribute an amount of money that you can afford to your retirement account and slowly increase the amount you invest as it fits within your budget. Invest your money in a diversified portfolio that provides an appropriate level of risk for you, and remember to check your retirement account from time to time to assess whether you are meeting the saving objectives that you set.

What that means for you...

ANNUAL SALARY	TOTAL RETIREMENT CONTRIBUTION GOAL*
\$25,000	\$168,750
\$50,000	\$337,500
\$75,000	\$506,250
\$100,000	\$675,000

*This simplified calculation assumes a fixed salary and a 45 year working life. Based on a fixed savings rate, this figure provides a guideline for the total amount you should contribute to your retirement savings plan. The amount does not include the investment returns you should earn on your contributions over time.

Concrete Ad with Long-Term Savings Goal

HOW YOU CAN SAVE MORE TO ENSURE YOU ARE ON THE RIGHT PATH TO RETIREMENT



Saving for retirement can lead to a retirement that is as enjoyable as you anticipate. You may be able to purchase luxury goods that you have always wanted, you may be able to retire when you planned, and you may be able to live in your home as long as you want.



You can prepare for retirement by saving now. On average, most people need an income of about 80% of their current salary for every year they live in retirement. Planning for retirement now through a couple of steps will help ensure that you meet your retirement goals:

- Step 1:** If you haven't done so already, set up your retirement account, like a 401(k) or Individual Retirement Account (IRA) through your employer or a financial advisor.
- Step 2:** Aim to contribute 15% of income from each paycheck to your retirement account, or consistently contribute what you can afford and slowly increase the amount if possible.
- Step 3:** Invest in a single fund that has a combination of stocks and bonds that automatically adjusts your level of risk as you age.
- Step 4:** Check your retirement account each year at tax time to ensure you are meeting your saving objectives.

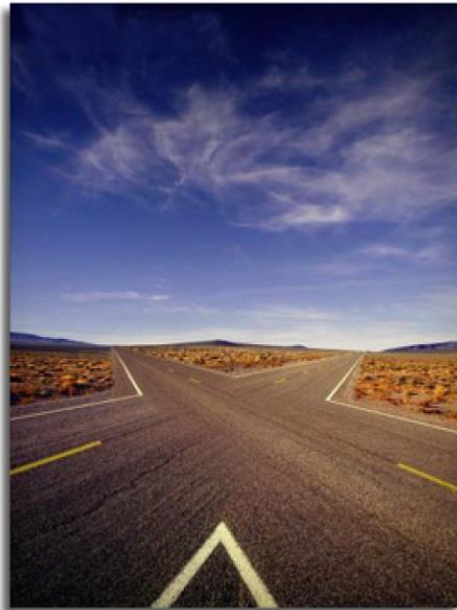
What that means for you...

ANNUAL SALARY	TOTAL RETIREMENT CONTRIBUTION GOAL*
\$25,000	\$168,750
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\$100,000	\$675,000

*This simplified calculation assumes a fixed salary and a 45 year working life. Based on a fixed savings rate, this figure provides a guideline for the total amount you should contribute to your retirement savings plan. The amount does not include the investment returns you should earn on your contributions over time.

Abstract Ad with Short-Term Savings Goal

WHY YOU SHOULD SAVE MORE NOW TO ENSURE YOU ARE ON THE RIGHT PATH TO RETIREMENT



Saving for retirement can lead to a retirement that is as enjoyable as you anticipate. You may be able to purchase luxury goods that you have always wanted, you may be able to retire when you planned, and you may be able to live in your home as long as you want.



You can prepare for retirement by saving now. On average, most people need an income of about 80% of their current salary for every year they live in retirement. Thinking about your retirement now will help ensure that you meet your future retirement goals.

If you haven't done so already, you may want to consider setting up a retirement account through one of the many available organizations offering retirement planning assistance. You should consistently contribute an amount of money that you can afford to your retirement account and slowly increase the amount you invest as it fits within your budget. Invest your money in a diversified portfolio that provides an appropriate level of risk for you, and remember to check your retirement account from time to time to assess whether you are meeting the saving objectives that you set.

What that means for you...

ANNUAL SALARY	YOUR BIWEEKLY CONTRIBUTION GOAL*
\$25,000	\$156.25
\$50,000	\$312.50
\$75,000	\$468.75
\$100,000	\$625.00

*This simplified calculation assumes a fixed salary and a 45 year working life. Based on a fixed savings rate, this figure provides a guideline for the total amount you should contribute to your retirement savings plan. The amount does not include the investment returns you should earn on your contributions over time.

Concrete Ad with Short-Term Savings Goal

HOW YOU CAN SAVE MORE TO ENSURE YOU ARE ON THE RIGHT PATH TO RETIREMENT



Saving for retirement can lead to a retirement that is as enjoyable as you anticipate. You may be able to purchase luxury goods that you have always wanted, you may be able to retire when you planned, and you may be able to live in your home as long as you want.



You can prepare for retirement by saving now. On average, most people need an income of about 80% of their current salary for every year they live in retirement. Planning for retirement now through a couple of steps will help ensure that you meet your retirement goals:

- Step 1:** If you haven't done so already, set up your retirement account, like a 401(k) or Individual Retirement Account (IRA) through your employer or a financial advisor.
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What that means for you...

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\$50,000	\$312.50
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\$100,000	\$625.00

*This simplified calculation assumes a fixed salary and a 45 year working life. Based on a fixed savings rate, this figure provides a guideline for the total amount you should contribute to your retirement savings plan. The amount does not include the investment returns you should earn on your contributions over time.

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