

Changing Temporal Discounting in College Students

Deborah C. Haynes, Montana State University¹

Dawn Tarabochia, Montana State University²

The purpose of this research was to determine if college-age students could become more knowledgeable about the importance of planning for the future and to experience a change in attitude towards saving and investing at a young age. Research indicates that young people are more interested spending for present wants and needs and are less interested in what financial situation they may face in fifty years (Lahav, Benzion, & Shavit, 2010; Frederick, Loewenstein, & O'Donoghue, 2002).. Further, many students currently in college, known as Millennials or Generation-Y, have been characterized as educated and optimistic, but the financial position of this generation is fragile, because of student debt and an uncertain economy (Scheresberg, Lusardi, & Yakoboski, 2014). It can be said that this idea of finding the future less compelling than the present indicates that young people have a high rate of temporal discounting (discounting the future in favor of the present).

If the financial situation of Millennials is fragile at the beginning of their working careers, concern about their future retirement saving and investing is warranted, as they may not feel they have the funds early in their working careers to put toward retirement preparedness. As life expectancies lengthen and retirement age stays relatively constant, the need for financial resources beyond Social Security is growing in younger age groups in the United States. With Millennials, determining how to motivate students to save and invest for future needs, with a particular emphasis on retirement needs, is problematic. In order to motivate early saving for retirement, young people must be convinced to view their future financial well-being as an important consideration for the present.

Each fall semester over a two-year period, students from a 100-level introduction to personal finance class at a land grant university were asked to complete an assignment focused on saving and investing for the future, with particular emphasis on saving and investing for retirement. Students were asked to complete a series of questions regarding their own perspectives on saving and investing for the future, with an emphasis on retirement saving and investing. Then the assignment asked the students to interview a retiree that the student admired and respected. The interview was conducted to determine the retired person's perspectives on saving and investing for the future, with a focus on retirement. The students were then asked to respond to a series of questions in order to assess any changes in attitudes and perceptions of saving and investing as a result of the interview.

Approval was gained for this research from the Institutional Review Board at the university level and students were offered the opportunity to refuse participation in the study. A copy of this assignment and its associated questions is available from the researchers.

Using qualitative research methodology, the two researchers involved in this study conducted a content analysis by reviewing the student responses to each question to discover emerging themes. Responses were grouped into similar categories and then the researchers developed themes from the categories of responses. The two researchers independently evaluated the student responses and then agreed upon themes expressed for each question asked in the assignment.

The results presented below were developed from an analysis of the first two waves of students in this four-year study. In 2013, the first year of this study, 52 students participated in the study, and in the second year, 2014, 76 students participated in the study. Given that this was a freshman-level class, most of the students were between 18 and 22 years old. The class had more women than men and the course was an elective for most of the students. A wide distribution of college majors was represented.

¹ Deborah C. Haynes, Ph.D., Associate Professor and Department Head, Department of Health and Human Development, Herrick Hall, Montana State University, Bozeman, MT, 59717, USA. Phone: 406--994-5013. Email: dhaynes@montana.edu.

² Dawn Tarabochia, Ph.D., Assistant Professor, Department of Health and Human Development, Herrick Hall, Montana State University, Bozeman, MT, 59717, USA. Phone: 406-994-2057. Email: dawn.tarabochia@montana.edu.

The focus of the analysis was on two questions. The first was a question students answered before interviewing the retiree. Then after the interview, the students responded to a second question, which was designed to ascertain changes in attitude because of the interview. The students turned in written papers with the answers to these two questions as the basis for content analysis. The following table summarizes the themes.

Question #1, prior to the interview of the retiree	Major Theme(s)
At what age do you think you will start saving for retirement?	<ul style="list-style-type: none"> • When I leave college (undergraduate but some said graduate school) and get a job • I am already saving on my own or through an employer • I will save after I pay off student loans • I will save when I am 40 or 50 • My parents (mom, dad, grandparents) are saving for me
Question #2, after the interview of the retiree	
Did the interview of the retiree change your perspective on saving for retirement?	<ul style="list-style-type: none"> • Yes, it did change my perspective; I see I have to save as soon as possible • No, it did not change my perspective—I know I need to save and invest. However, the assignment did solidify and reinforce how important it is to save early for retirement

Results indicate that many of the students were already engaging in saving and investing behaviors, but not as many students had retirement savings and investments. In a final discussion of the paper, students did reflect on the idea that the retirees they interviewed may be living in a financially compromised situation and the students expressed concern about that. Many students did not know the retiree had financial problems and it was an eye-opening realization that financial problems were present in the older generation. Evidence was found that students were more aware of and open to the idea of saving and investing in general and for retirement, specifically, as a result of the interviews. A common response was, “I don’t want to end up like my (retiree) when I am old.” In general, results indicated that the temporal discounting attitudes of students were impacted, making the students more willing to consider their financial well-being in the distant future by changing present saving and investing behaviors.

However, one important finding outside of the answers provided by students is that no student reported that the results of the interview were so compelling that the student immediately started a savings and/or investing program, either in general or just for retirement. While the interview question did not require the student to report a behavioral change, the interview seemed to not elicit a behavioral change. It is true that many college students are investing heavily in their own human capital and have no extra dollars beyond paying for college and living expenses. Nonetheless, not every student is strapped for cash, so the finding that no behavioral impacts were reported in the student papers is of note.

Nevertheless, the interview did make retirement seem more real to the students and the memory of the interview could be available to the student when making choices about saving/investing, especially for retirement, while they are young. While behavioral change was not reported, attitudinal changes were reported and therefore, the assignment did result in some shifts of awareness in the students. Therefore, some evidence was found that the assignment decreased students’ temporal discounting.

This research has limitations. First, the students knew they were being graded and they also knew clearly that one of the purposes of the course was to incentivize saving and investing behaviors. However, the students provided a variety of answers that did not necessarily parrot the instructor’s lectures or the content of the readings. Secondly, while a large number of assignments were collected, the results of this study are not generalizable to any group but the classes involved in the study.

More research is needed to see if students have a different behavioral trajectory for increased saving and investing in the longer run because of courses in personal finance and because of specific classroom assignments compared to students who do not have these educational experiences.

References

- Frederick, S., Loewenstein, G. & O'Donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of Economic Literature*, 40, 350-401.
- Lahav, E., Benzion, U. & Shavit, T. (2010). Subjective time discount rates among teenagers and adults: Evidence from Israel. *The Journal of Socio-Economics*, 39, 458-465.
doi:10.1016/j.socec.2010.02.012.
- Scheresberg, C. D., Lusardi, A., & Yakoboski, P. J. (2014, February). College-educated millennials: An overview of their personal finances. Retrieved from <http://www.worldpensionsummit.com/Portals/6/GFLEC%20Report%20-%20College%20Educated%20Gen%20Y.pdf>