

DISCUSSION PAPER SERIES

IZA DP No. 17639

**Does Learning Economics Make You Less
Susceptible to the Sunk Cost Fallacy?**

Stefani Milovanska-Farrington
G. Dirk Mateer

JANUARY 2025

DISCUSSION PAPER SERIES

IZA DP No. 17639

Does Learning Economics Make You Less Susceptible to the Sunk Cost Fallacy?

Stefani Milovanska-Farrington

University of Tampa and IZA

G. Dirk Mateer

University of Texas at Austin

JANUARY 2025

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Does Learning Economics Make You Less Susceptible to the Sunk Cost Fallacy?*

The sunk cost fallacy is typically covered in introductory economics courses. It is among the most important biases that influence decision making. Ronayne et al. (2021a,b) find evidence of behavior consistent with the sunk cost effect and utilize eight questions that measure individuals' susceptibility to the sunk cost fallacy. We extend their research by examining whether a "pop culture" teaching intervention in principles of microeconomics lowers students' predisposition to the fallacy. We find that students become -14.95% less susceptible to the sunk cost fallacy after learning about it. We also observe that students who have taken economics previously exhibit lower susceptibility in all time periods.

JEL Classification: A20, A22, I21

Keywords: controlled experiment, empirical test, introductory economics, sunk cost fallacy, teaching economics

Corresponding author:

Stefani Milovanska-Farrington
Department of Economics, ICB 205
The University of Tampa
401 W. Kennedy Blvd.
Tampa, FL 33606-1490
USA

E-mail: smilovanska@ut.edu

* The authors wish to thank Charity-Joy Acchiardo and Wayne Geerling for their advice and reading of an earlier manuscript.

Introduction

Sunk costs are costs that have already been incurred and cannot be recovered. They should not affect future decisions of rational economic agents. Yet, people often take unrecoverable costs into account in decision making processes and continue actions because they have already invested resources into them. The sunk cost fallacy occurs when it would be beneficial to ignore unrecoverable costs and start over. The concept is typically discussed in introductory economics courses, and the ability to identify the sunk cost fallacy indicates that the student understands marginal decision making. Therefore, it is important to explore whether teaching about sunk costs makes students less prone to the sunk cost fallacy and improves their decision-making capabilities. This motivates the current research.

Specifically, we build upon an experiment conducted by Ronayne et al. (2021a, b). They use eight questions (called SCE-8) to provide an efficient way to capture susceptibility to the sunk cost fallacy. Respondents presented with the situations can choose one of six responses, each of which reflects different degree of decision-making bias in the presence of sunk costs.

We adopted SCE-8 from Ronayne et al. (2021a, b) and distributed a survey with these questions to one section of a principles of microeconomics course at the University of Tampa, and one section of the same course at the University of Texas at Austin in the Spring of 2024. We gave students a QR code to the survey on the first day of class, and then again, immediately after a teaching lesson that provides real-world applications of sunk costs.

We present a description of the classroom activity, summary statistics of the collected data, and results from statistical analysis in this article. We find that a classroom intervention on sunk costs reduces susceptibility to the sunk cost fallacy and helps students make more rational decisions.

Literature Review

Rational decision making requires an understanding of marginal analysis. This involves learning to ignore past decisions, or sunk costs, which have no effect on the payoffs of future decisions. Thaler (1980) points us toward a positive theory of consumer choice, but it is not as simple as it sounds. Psychology reminds us that people are not as rational as traditional economic analysis assumes. Decision makers are often susceptible to the sunk cost fallacy. Wang and Yang (2001 and 2004) note that most textbooks lay out the rational basis for avoiding the sunk cost fallacy by examining incremental changes in costs. This approach does not explicitly recognize that sunk costs are a form of cognitive bias (Knapp & Knapp 2012).

Sirois (2019) provides a detailed classroom activity that helps students distinguish between sunk costs and (avoidable) fixed costs. If you are looking for a classroom activity that takes a deep dive (approximately 40 minutes), Sirois used famous scenarios from psychology and found a significant reduction in the sunk cost bias after completing the activity. Ronayne et al. (2021a, b) find evidence of behavior consistent with the sunk cost effect and provide eight questions (SCE-8) that measure individuals' susceptibility to the sunk cost fallacy. Ronayne et al. provide a more sensitive measure of the susceptibility to the sunk cost fallacy than Sirois. Instead of asking prompts with yes/no choices as Sirois did, Ronayne et al. ask respondents to measure their likelihood of engaging in decisions that avoid the sunk cost fallacy using six possible responses.

Our approach uses a shorter classroom activity than Sirois and deploys "pop culture" that makes extensive use of music as part of the classroom activity (see section 3). We also use the more sensitive measure described by Ronayne et al. There is a robust literature on the use of music to teach economics. Tinari and Khandke (2000) were the first to make use of popular songs dating back to the 1930s to help teach economics. Hall et al. (2008) created a library consisting of more modern music. Lawson et. al.

(2008) built on the work of Hall and created a website that made the latest music related to economic education easily accessible. Rousu (2016) developed a website dedicated to the music found in Broadway musicals that relates to economics. Geerling et al. (2020) describe how to take any music video, add lyrics, and commentary explaining the economics. Rousu et al. (2021) created lesson plans that showcase music for agricultural, applied, and environmental economics. Finally, Geerling et al. (2024) created a website that houses music videos (with economic commentary) across many genres, and which is applicable in numerous undergraduate economics courses.

Description of the Experiment and Data

Survey and Classroom Intervention

To collect data for this study, we asked students in principles of microeconomics classes to complete a survey at the beginning of the semester with the SCE-8 (the questions and possible answers are available in Appendix 1), plus two general questions about whether they had taken economics before and their major. A second survey was administered after teaching a lesson on sunk costs (see below) roughly halfway through the semester and included the SCE-8 questions.¹

The teaching lesson immediately preceding the second survey involved the following:

(1) We played “[Let it go](#)” (from *Frozen*) at the beginning of the class period as pre-class music before covering the sunk cost concept. After the song had finished, we pointed out that if Elsa allows her past to affect her future decisions, she suffers from the sunk cost fallacy. See this excellent resource from Broadway Economics: [Let it Go \(Frozen\) – Broadway Economics](#)



(2) The definition of sunk costs was provided and explained.

(3) An example was provided. The prompt we used was, “Would you leave a movie theater early if the film was really bad or stay all the way through the film since you had already paid?” A show of hands was asked for. Students were invited to comment about their answers.

¹ A third survey with the SCE-8 questions was given in the last week of the semester (t3) to assess retention, but the large drop from 274 students who participated in the first two surveys to only 113 students made the results of the third survey unreliable. Awarding in-class participation points was an effective incentive in t1 and t2 but by t3 there were a lot of students who had maxed out their in-class participation points, which resulted in the t3 sample being comprised of students with lower grades and a comparatively large number of absences. We decided against including t3 in our analysis.

(4) We played “Closing Time” by Semisonic (See Rousu 2021) during a three-question think-pair-share activity regarding the optimal time for a business to shut down for the day. The song shows a barista who closes a coffee shop to meet up with a musician. The two are unable to connect during the video. This think-pair-share is especially good at identifying flaws in marginal thinking – the crucial element that distinguishes between the sunk cost fallacy (which is often based on a comparison of total costs and total benefits) and marginal thinking (which is based on a comparison of marginal costs and marginal benefits).

In the song, the singer voices, "every new beginning comes from some other beginning's end" – a perfect metaphor for avoiding the sunk cost fallacy. Students were encouraged to work in small groups, and they had until the end of the song to submit their responses to the following three questions via a Google form:

- (1) Assume the business owner is rational and would like to remain open. the money the bar is bringing in during that last hour should exceed the _____ of operating.
 - a. fixed costs
 - b. variable costs (Answered correctly by 80.7% of students.)
 - c. total costs
- (2) The money customers spend from 2 AM to 3 AM should exceed _____.
 - a. the hourly wage of the bartender
 - b. the cost of the drinks
 - c. the hourly wage of the bartender and the cost of the drinks (Answered correctly by 75.7% of students.)
 - d. the hourly wage of the bartender, costs of the drinks, and the rent on the building
- (3) Operating from 2 AM to 3 AM isn't the most profitable hour—and if every hour was like that, the bar wouldn't make a profit because they couldn't pay the rent. But staying open in the short run isn't about prices being more than average total cost, it is about _____.
 - a. $MR > MC$ (Answered correctly by 27.7% of students.)
 - b. $MR < MC$
 - c. $MR = MC$ (60% of students provided this response.)
 - d. Maximizing MR

Once the responses were collected, the instructor led the class through the questions to ensure that students could apply the profit-maximizing rule ($MR = MC$) to the shutdown decision. In its simplest form, the sunk cost fallacy is the inability to weigh the MR against the MC, with respect to income, time, emotional cost, or effort.



(5) After steps (1)-(4) were completed, students were asked to complete the SCE-8 as they would in real life. All students were told they would receive credit for each of the eight questions, regardless of which choice they selected. At no point did the instructor discuss the SCE-8 responses or guide student decisions toward the most economical (sunk cost) answer.

This teaching lesson (which requires 10-12 minutes in a regular class period) requires 20-40 fewer minutes to complete than the activity suggested by Sirois (2019).

Once we had collected the data, following the study of Ronayne et al. (2021a, b), we assigned numerical values from 0 to 5 to the answer for each question, where 0 and 5 indicate the lowest and the highest degree of susceptibility to the sunk cost fallacy, respectively. Then, we calculated a total score for each student (between 0 and 40). This is the sum of the scores obtained from the eight questions. A higher score indicates higher susceptibility to the fallacy. We followed the same procedure for both time periods: beginning of the semester (t1) and after the intervention (t2). At t1, students had not learned about sunk costs in the course, while at t2, the instructor had already taught the lesson on the topic.

The first survey asked students about their major: (i) economics, (ii) business major different from economics, (iii) other non-business major, or (iv) undecided. We also collected data on whether the respondents have taken an economics course in the past.

Data

Because we want to compare susceptibility between time periods, we drop students who completed the survey only once. We also chose to base the analysis only on data from the University of Texas at Austin even though we had administered the survey in two institutions. The reason for this decision is that utilizing data from both universities could potentially add noise without adding much benefit given that 256 out of the 274 students who completed both the first and the second survey (or 93.43%) were from the same institution². There are 256 observations in the final dataset.

All 256 students have reported their major and whether they have taken an economics class in the past. We present the summary statistics in *Table 1*. Students who have taken Economics before represented 63.28% (162 students) of the sample. Most of the students (61.33%, or 157 students) have declared a major other than Economics/Business, followed by students who have selected other Business majors (18.75%, or 48 students) and Economics (16.02%, or 41 students).

Table 1. Tabulation of major and prior economics classes

	Freq.	Percent
Taken economics before		
0	94	36.72
1	162	63.28
Major		
Business	48	18.75
Economics	41	16.02
Something other than economics/business	157	61.33
Undecided	10	3.91
Total obs.	256	100%

Summary statistics for the total score and the scores for each question in each of the two time periods are reported in *Table 2*. The maximum values of the total scores in the two time periods are 33 in t1, and 31 in t2. The minimum score is zero in both periods. The average total score for time periods 1 and 2, reported in *Table 2* and graphically shown in *Figure 1*, are 10.456 and 8.893, and result in a 14.95% drop in susceptibility. The results indicate an improvement in students' rational decision-making capabilities because of the teaching intervention. We find that teaching about sunk costs decreases students' susceptibility to the sunk cost fallacy. However, we do not distinguish between different types of interventions. Therefore, even though our result is promising, additional research could look at a variety of

² All results discussed in the Results section of the paper were consistent with the findings we obtained using data from both universities.

sunk cost interventions to see which approaches are most efficacious. Alternatively, one group of students could be taught the concept in the “conventional” way while two other groups could be taught with different amounts of pop culture exposure or could be subject to two alternative teaching methods. Future research could also explore retention at the end of the semester and periodically after completing the course.

The decline in respondents’ susceptibility to the sunk cost fallacy immediately after the intervention is consistent among scenarios. Specifically, the average total score in the second survey is lower than the beginning-of-the-semester survey for questions 2 to 7 (all except questions 1 and 8). The mean values reported in our student sample are not that different from those reported by Ronayne et al. who found a mean of 9.5 in their sample.

Table 2. Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Total score t1	252	10.456	5.858	0	33
Total score t2	252	8.893	6.158	0	31
q1 (Halloween) t1	255	1.447	1.459	0	5
q1 (Halloween) t2	254	1.500	1.552	0	5
q2 (Wedding toast) t1	256	1.672	1.731	0	5
q2 (Wedding toast) t2	256	1.184	1.466	0	5
q3 (Painting) t1	256	0.988	1.483	0	5
q3 (Painting) t2	256	0.648	1.155	0	5
q4 (Project) t1	255	1.255	1.355	0	5
q4 (Project) t2	256	1.094	1.360	0	5
q5 (Investment) t1	255	1.306	1.461	0	5
q5 (Investment) t2	255	1.047	1.402	0	5
q6 (Relationship) t1	255	1.584	1.600	0	5
q6 (Relationship) t2	255	1.192	1.471	0	5
q7 (Voting) t1	256	1.105	1.138	0	5
q7 (Voting) t2	256	1.078	1.329	0	5
q8 (Route) t1	256	1.199	1.629	0	5
q8 (Route) t2	256	1.203	1.721	0	5

(Insert Figure 1)

Results

First, we perform a series of paired t-tests to compare the mean total scores or the scores by question before and after the intervention. Specifically, paired t-tests using data from the beginning of the semester (t1) and after-the-intervention survey (t2) for the same students are used to examine whether exposure to the concept of sunk costs is associated with a statistically significant difference in the average susceptibility scores. The null hypothesis being tested suggests that there is no difference in the mean scores of the two paired samples.

The results are presented in *Table 3* and indicate *a statistically significant difference in the average students’ susceptibility to the fallacy pre- versus post-intervention* ($t = -3.863$; $p = 0.0001$) at any significance level. The paired t-tests rely on the assumption that the subjects (students) are independent and the differences in the scores are normally distributed. Anderson-Darling Z test cannot reject the null hypothesis of normality, so the normal distribution assumption is satisfied.

Table 3. Average total scores and paired mean-comparison test results

Time period	Mean
Beginning of the semester (t1)	10.351
After the intervention (t2)	8.790
Difference	-1.560***

*** $p < .01$, ** $p < .05$, * $p < .1$

Subsample Analysis

To explore differences between different groups of students, the next step in our analysis involves distinguishing between students who have and have not taken an economics class prior to the current course. *Figure 2* shows the average total scores in the two time periods for the two groups of students. The figure indicates that students who have taken an Economics class before are, on average, less susceptible to the sunk cost fallacy in both time periods.

(Insert Figure 2)

The results from the t-tests are located in *Table 4*. In the subsample of students for whom the current class is their first Economics course, there is no statistically significant difference in the mean scores between the two periods. For students who have previously taken at least one Economics course, there is a statistically significant difference in the mean total susceptibility score between t1 and t2 ($t = -3.757$, $p = 0.0002$). This implies that the previous findings are primarily driven by students who have had prior exposure to Economics and most likely, the sunk cost fallacy.

Table 4. Mean differences by prior exposure to Economics

	(1) Have taken Economics before	(2) Have not taken Economics before
Score t1	10.083	10.804
Score t2	8.218	9.761
Score t2 – Score t1	-1.865***	-1.043

*** $p < .01$, ** $p < .05$, * $p < .1$.

Then, we distinguish between majors (*Figure 3* and *Table 5*). *Figure 3* shows the average total scores in the two time periods by major. It confirms that students tend to consistently become less susceptible to the sunk cost fallacy after the intervention, regardless of their major.

(Insert Figure 3)

The results in *Table 5* indicate that the declines in the average susceptibility before and after the intervention for Economics and non-business students (majoring in something different from Business/Economics) are statistically significant. The largest statistically significant decline is observed in the subsample of students majoring in Economics. In t1, economics majors are not better than other majors at internalizing the sunk cost fallacy. However, by t2, economics majors are the least susceptible group. One hypothesis is that economics majors may be paying more attention because the course counts for their major, whereas other students may be taking the course as an elective or part of the core curriculum. Differences in the average scores are statistically insignificant pre- and post-intervention for students who have reported a Business or an “undecided” major. Note that only 10 students were undecided; this was not enough data to determine significance.

Table 5. Mean differences by major

	(1) Business	(2) Economics	(3) Something other than econ/business	(4) Undecided
Score t1	8.023	10.55	10.729	13.7

Score t2	7.628	7.60	9.310	10.5
Score t2 – Score t1	-0.395	-2.95**	-1.419***	-3.2

*** $p < .01$, ** $p < .05$, * $p < .1$.

Next, we differentiate between different costs that can be sunk. In the original study of Ronayne et al. (2021a, b), the authors distinguish between categories of questions based on whether they measure susceptibility to different kinds of sunk costs. The four categories are:

Effort (measured by the questions about the wedding and the painting, i.e., Q1 and Q3)

Time (questions about Halloween, the project, voting, and the route, i.e., Q1, 4, 7 and 8)

Money (question about investment, i.e., Q5)

Emotions (question about a relationship, i.e., Q6)³.

Similarly to Ronayne et al. (2021 a,b), we distinguish between the four kinds of sunk costs: time, money, emotions and effort. We calculate total scores for each category as described above and run paired t-tests, like the ones we presented earlier in the paper, but using the total scores that measure susceptibility to the different kinds of sunk costs.

As shown in *Table 6*, for effort, emotions, and money, we find a statistically significant decline in susceptibility after the intervention ($t = -5.134$, $p = 0$ for effort; $t = -3.749$, $p = 0.0002$ for emotions; $t = -2.189$, $p = 0.0295$ for money). For time, there is no evidence of a statistically significant difference before and after the intervention. The specific differences and results from paired t-tests are presented in *Table 6*. They provide strong evidence that *a teaching intervention reduces students' susceptibility to the sunk cost fallacy in scenarios related to money, emotions, and effort*. However, the intervention is not statistically significant with respect to time. Our conjecture is that college students have low time values which are consistent with the wages paid to low-skill workers. Further research appears to be necessary to design an intervention that will make students less susceptible in sunk cost scenarios that chiefly rely on time management.

Table 6. Mean differences by kind of sunk costs

	(1) Time	(2) Money	(3) Emotions	(4) Effort
Score t1	4.968	1.291	1.587	2.660
Score t2	4.849	1.047	1.193	1.832
Score t2 – Score t1	-0.119	-0.244**	-0.394***	-0.828***

*** $p < .01$, ** $p < .05$, * $p < .1$. Scores by kinds of sunk costs are measured by the following survey questions: 1. Time: Q1 (Halloween), Q4 (project), Q7 (voting) and Q8 (route); 2. Money: Q5 (investment); 3. Emotions: Q6 (relationship); and 4. Effort: Q1 (wedding) and Q3 (painting).

Conclusion

In this study, we run a controlled empirical test to examine whether learning about sunk costs could reduce students' susceptibility to the sunk cost fallacy. We find evidence that covering the sunk cost fallacy in economics courses using pop culture is an effective way to make students less likely to consider unrecoverable costs in their decisions. Of note, research on the use of popular music, movies, and television shows to teach economics typically find increased engagement among students, but rarely demonstrate that a "pop culture" lesson results in a significant increase in understanding of an important concept. Although we do not differentiate between "conventional" and "pop culture" teaching approaches, we find evidence

³ Recall the scenarios that each question references in the survey: Q1 – Halloween, Q2 – Wedding toast, Q3 – Painting, Q4 – Project, Q5 – Investment, Q6 – Relationship, Q7 – Voting, and Q8 – Route.

that students become less prone to the fallacy after our teaching intervention that involved the use of “pop culture” and the difference is highly statistically significant. Our results, a 14.95% reduction in susceptibility to the sunk cost fallacy are encouraging, but much work remains to be done to understand why students in scenarios dealing with time management remain susceptible to the sunk cost fallacy and to distinguish between the effect of various teaching approaches on students’ susceptibility to the fallacy.

Figures

Figure 1. Average total scores in time periods 1 (beginning of the semester) and 2 (after the teaching intervention)

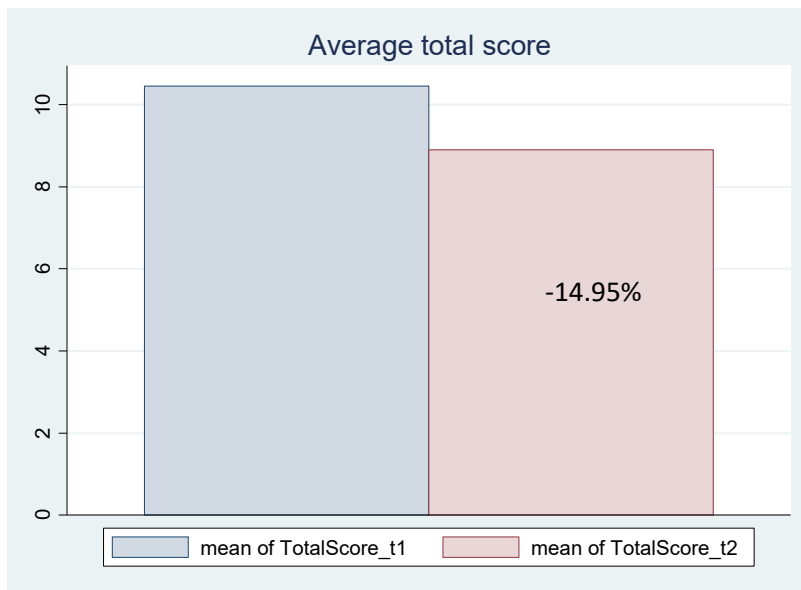


Figure 2. Average total scores for students who have and have not taken an economics

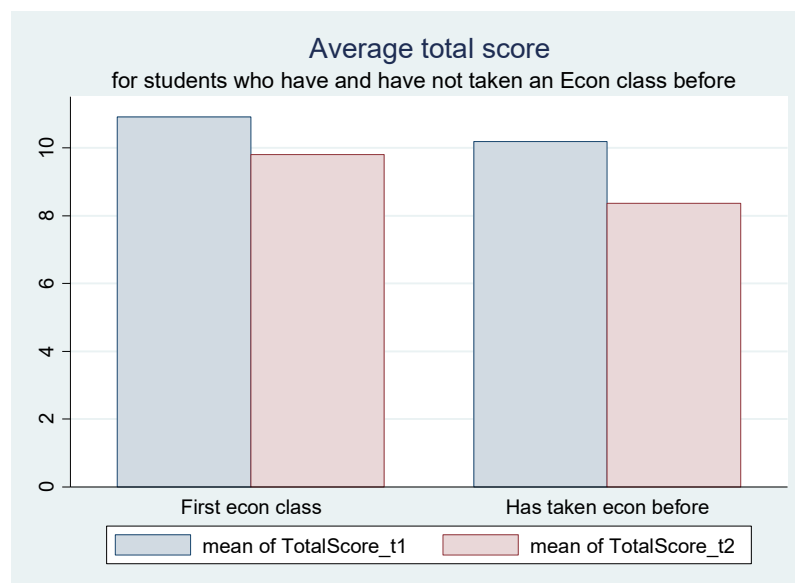
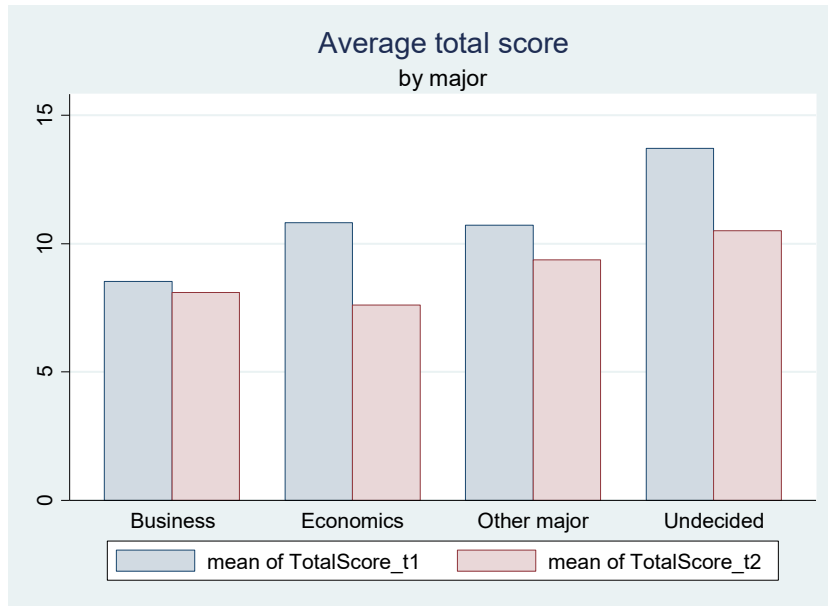


Figure 3. Average total scores by major in time periods 1 and 2



References

- Geerling, W., Mateer, G. Dirk, and O’Roark, Brian. 2020. “Music then and now: Using technology to build a lyric animation module.” *The American Economist* 65(2): 264-276.
- Geerling, W., Mateer, G. Dirk, O’Roark, Brian, and Smith, Ben. 2024. “Music 4 Econ.” *Journal of Economics Teaching* 9(1): 67-71.
- Hall, Joshua C., Lawson, Robert A., Mateer, G. Dirk, and Rice, A. 2008. “Teaching Private Enterprise Through Tunes: An Abecedarium of Music for Economists.” *Journal of Private Enterprise* 23(2): 157-166.
- Knapp, M. C., and C. A. Knapp. 2012. “Cognitive biases in audit engagements.” *The CPA Journal* 82(6): 40 – 45.
- Lawson, R. A., Hall, J., and Mateer, G. D. 2008. “From Abba to Zeppelin, Led: Using Music to Teach Economics.” *Journal of Economic Education* 39(1): 331.
- Ronayne, D., Sgroi, D., and Tuckwell, A. 2021a. “Evaluating the sunk cost effect.” *Journal of Economic Behavior & Organization* 186: 318 – 327.
- Ronayne, D., Sgroi, D., and Tuckwell, A. 2021b. “How susceptible are you to the sunk cost fallacy?” *Harvard Business Review*. Retrieved from hbr.org.
- Rousu, M., Melichar, M., and Hackenberry, B. 2021. “Using Music to Teach Agriculture, Applied, and Environmental Economics.” *Applied Economics Teaching Resources* 3(4): 1-29.

Rousu, M. 2016. "Broadway Economics." *Journal of Economic Education* 47(3): 268. [Let it Go \(Frozen\) – Broadway Economics](#)

Sirois, L. 2019. "The psychology of sunk cost: A classroom experiment." *The Journal of Economic Education*, 50(4): 398-409.

Thaler, R. 1980. "Toward a positive theory of consumer choice." *Journal of Economic Behavior & Organization*, 1(1): 39 – 60. Doi: 10.1016/0167-2681(80)90051-7.

Tinari, F., and Khandke, K. 2000. "From rhythm and blues to Broadway: Using music to teach economics." *Journal of Economic Education* 31 (Summer): 253-270.

Wang, X. H., and B. Z. Yang. 2001. "Fixed and sunk costs revisited." *Journal of Economic Education* 32(2): 178–85

Wang, X. H., and B.Z. Yang 2004. "On the treatment of fixed and sunk costs in principles textbooks: A comment and a reply." *Journal of Economic Education* 35(4): 365–69.

APPENDIX 1. SCENARIOS FROM THE SURVEY

Question 1

You have been looking forward to this year's Halloween party. You have the right cape, the right wig, and the right hat. All week, you have been trying to perfect the outfit by cutting out a large number of tiny stars to glue to the cape and the hat, and you still need to glue them on. On the day of Halloween, you decide that the outfit looks better without all these stars you have worked so hard on.

Which point on the scale below best describes what you would do?

Wear stars [Most susceptible = 5] ... Probably wear stars ... Lean toward wearing stars ... Lean toward going without ... Probably go without ... Go without stars [Least susceptible = 0]

Question 2

You have been asked to give a toast at your friend's wedding. You have worked for hours on this one story about you and your friend taking drivers' education, but you still have some work to do on it. Then you realize that you could finish writing the speech faster if you start over and tell the funnier story about the dance lessons you took together.

Which point on the scale below best describes what you would do?

Finish the toast about driving [5] ... Probably finish the toast about driving ... Lean toward finishing the toast about driving ... Lean toward rewriting about dancing ... Probably rewrite about dancing ... Rewrite the toast about dancing [0]

Question 3

You are painting your bedroom with a sponge pattern in your favorite color. It takes a long time to do. After you finish two of the four walls, you realize you would have preferred the solid color instead of the

sponge pattern. You have enough paint left over to redo the entire room in the solid color. It would take you the same amount of time as finishing the sponge pattern on the two walls you have left.

Which point on the scale below best describes what you would do?

Finish the sponge pattern [5] ... Probably finish the sponge pattern ... Lean toward finishing the sponge pattern ... Lean toward redoing the room in a solid color ... Probably redo the room in a solid color ... Redo the room in a solid color [0]

Question 4

You have invested a good deal of your time into a project, and it is failing. You have the option to start on something different that you now know is more likely to be successful, but you know you cannot get the time back that you spent on the project.

Which point on the scale below best describes what you would do?

Keep going with the project [5] ... Probably keep going with the project ... Lean toward keeping going with the project ... Lean toward starting something different ... Probably start something different ... Start something different [0]

Question 5

You have an investment strategy that you have developed over several months. It is not working and you are losing money, but there is no way for you to recover the lost effort put into developing the strategy.

Which point on the scale below best describes what you would do?

Start afresh [0] ... Probably start afresh ... Lean toward starting afresh ... Lean toward keep going ... Probably keep going ... Keep going [5]

Question 6

Your relationship with your partner is not going well. You have reasoned it out and you have realized that if you knew how it would go when you started the relationship you would not have gone through with it. You now have the opportunity to break up, but you have been together for many months.

Which point on the scale below best describes what you would do?

Keep going [5] ... Probably keep going ... Lean toward keep going ... Lean toward breaking up ... Probably break up ... Break up [0]

Question 7

You have been thinking about how to vote in an election and have invested a good deal of your time to try and make the right decisions including reading newspapers and comment pieces online and thinking hard about the issues. You discover that much of the information you were using is false and a more trustworthy source suggests your initial view was wrong.

Which point on the scale below best describes what you would do?

Keep beliefs [5] ... Probably keep beliefs ... Lean toward keeping beliefs ... Lean toward changing beliefs ... Probably change beliefs ... Change beliefs [0]

Question 8

You have been thinking hard about the best route to get to somewhere you haven't been to before. Unfortunately, your internet connection isn't working so you have to base your decision on your beliefs about the town's layout. You come to a conclusion on the best possible route but then suddenly the internet is back online.

Which point on the scale below best describes what you would do?

Look up route online [0] ... Probably look up route online ... Lean toward looking up route online ... Lean toward sticking to planned route ... Probably stick to planned route ... Stick to planned route [5]