

Teaching Happiness (Economics) in Your Dismal-Science Courses

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Abstract: This paper discusses ideas for incorporating the study of happiness and other measures of self-reported or subjective well-being (SWB) into undergraduate economics courses. We begin by motivating why students of economics would benefit from learning about SWB, and then proceed to provide examples of ways to introduce this topic into different parts of the curriculum: macroeconomics, microeconomics, and upper division electives.

Keywords: happiness; subjective well-being; undergraduate curriculum; pedagogy

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One of the bedrock assumptions of economics is that individuals seek to maximize their utility. In spite of this, economists have traditionally ignored what people say about the subjective quality of their lives and focused on more objective measures of progress such as income, unemployment rates, and measures of output. There are two major impediments to studying and understanding utility: many economists have long believed that it is impossible to directly measure utility in any meaningful way; and until more recently, most individual and household surveys have focused on objective questions about people's well-being. With the proliferation of surveys that ask people about happiness and other subjective measures of well-beingⁱ, the economics of happiness has developed into a subfield of economics with a burgeoning literature and a rapidly growing number of researchers.ⁱⁱ Given this recent development in happiness research, this paper discusses why and how we might incorporate happiness into the economics curriculum, particularly at the undergraduate level.

There are a number of potential benefits to introducing students to happiness research in their early exposure to economics. Learning and engagement may increase by asking students to respond to one of life's most fundamental questions: "what makes you happy?" Students will have their own opinions as to what determines happiness and will have opportunities to contribute to class discussions. Research in pedagogy shows that creating a sense of belonging and validating students' contributions can greatly enhance learning outcomes (Delahunty et al. 2014; Masika and Jones 2016). Another benefit of incorporating happiness into the economics curriculum is that it allows students to see the breadth and applicability of economics to one's daily life. Subjective well-being research is multidisciplinary and interdisciplinary, and economic research is increasingly branching out and incorporating findings from psychology, sociology, philosophy, and other fields (Angrist et al. 2020; Truc et al. 2023). And there is evidence

demonstrating that classroom learning can be improved by illustrating the relevance of course material to students' lives and experiences (Kember et al. 2008; Priniski et al. 2018).

How happiness is measured

One important issue in navigating research on subjective well-being is understanding the different types of measures that are included in surveys. Some questions are more geared towards asking individuals to provide an overall assessment of their lives and general well-being. To assess one's overall happiness, the United States General Social Survey asks the following: "Taken all together, how would you say things are these days--would you say that you are very happy, pretty happy, or not too happy?" The World Values Survey asks a similar question, though they allow respondents to answer on a four-point scale (very happy, rather happy, not very happy, not at all happy). Some surveys ask about the degree to which someone believes they are a happy person, while sometimes people are asked to compare their level of happiness to that of their peers. Life satisfaction is another component of well-being that is commonly surveyed, with a typical wording being something to the effect of "All things considered, how satisfied are you with your life these days?" (World Values Survey) or "In general, how satisfied are you with your life?" (Behavioral Risk Factor Surveillance System). A third important type of well-being measure (used in a number of surveys such as the Gallup World Poll, among others) is the Cantril Ladder, developed in 1965 by social psychologist Hadley Cantril. Respondents are provided with the following context: "Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would

you say you personally feel you stand at this time? On which step do you think you will stand about five years from now?”

Some measures of well-being focus on one's evaluation of specific domains of life. Commonly studied domains include job satisfaction, satisfaction with one's marriage and family situation, financial satisfaction, and satisfaction with one's mental and physical health. While these domain-specific measures of well-being are often very correlated with a person's overall assessment of their lives, discrepancies can occur across domains. Well-being can also be measured using responses to questions about how often people feel specific types of positive and negative emotions, described as positive and negative affect. Examples of positive affect include joy, excitement, engagement, and pride; sadness, anger, fear, and anxiety are negative affect examples.

While research has shown that the various different measures are often highly correlated with one another, they do often contribute distinct information about well-being. Kapteyn et al. (2015) use factor analysis and find that although various evaluative measures such as life satisfaction load on the same factor, positive and negative experienced feelings load on different factors, so measures of subjective well-being are not necessarily all interchangeable.

One concern with assessing economic progress with subjective measures is the degree to which they are reliable and valid. Researchers worry about the reliability of these measures because an individual's subjective assessments may be fickle and change according to circumstances related to the time and day of measurement. While the consistency of measures varies over time, Krueger and Schkade (2008) find that when individuals are interviewed twice over a two-week span, test-retest correlations are sufficiently high to support research using these types of measures. To test for the validity of these measures, Davidson (1992) shows that brain

scans for people who report being happy are demonstrably different from analogous scans for those who report being sad. As another test of the validity of subjective measures, Oswald and Wu (2010) show that in the U.S.A., states where people report to be very satisfied with their lives also rate highly on objective measures of well-being such as days of sunshine, being along a coastline, and the number of visitors to national and state parks.

Nonetheless, a recent literature questions the use of subjective survey responses as proxies for individual utility. Bond and Lang (2019) argue that because subjective measures are only categorized into a small number of intervals, comparisons of the means of different groups may not be valid, though Chen, Oparina, Powdthavee, and Srisuma (2022) show that using median instead of mean comparisons can address this problem. Meanwhile, Benjamin, Cooper, Heffetz, and Kimball (2017) discuss some of the challenges of coming up with well-being measures that are valid and can be accurately measured.

A class discussion on how to measure happiness

The robust debate surrounding the question of whether or not one can accurately and reliably measure utility provides students an opportunity to appreciate and contribute to this discussion. In fact, instructors who have sufficient time could pose a number of questions for class discussion, such as:

1. Can you measure utility by asking people how they feel about their lives?
2. Do you trust the answers people give to commonly used questions about happiness or satisfaction with life?
3. Can you think of alternative questions that would be helpful in getting at the notion of utility?

4. Do you think you are good at predicting what would make you happy?
5. Do you think we can compare the answers of subjective well-being measures across different people? What about for the same person over time?
6. Do you think your answers to SWB questions would be sensitive to the time of day or the circumstances surrounding the time you are asked?

Teaching about traditional and non-traditional macroeconomic indicators

A macroeconomics class might seem like an unlikely context for undergraduate students to be introduced to self-reported well-being (SWB) data. Yet teaching about non-traditional macroeconomic indicators as part of a macro class can be a natural step—indeed, an important component—in a class that is otherwise centered around traditional indicators such as unemployment, inflation, income, expenditures and, above all, the revered GDP.

One key question that students often wonder about early in a macroeconomics class is: Why should we care? Specifically: Why should we care about all these macroeconomic indicators, such as GDP, that macroeconomic policymakers try to grow in the long run and stabilize in the short run? Devoting a class to exploring these traditional indicators' relationships with alternative indicators that attempt to capture important well-being dimensions that the students can more intuitively connect with, and that traditional measures may miss, can be an important step in answering this question for students, and in turn in winning their attention.

The class should consider questions such as: What is the relationship between GDP per person and well-being? (What *is* well-being?) Between GDP per person and *self-reported* well-being (SWB)? Between survey-based measures (such as SWB) and (actual, underlying) well-

being? What is not included in GDP, or does not get the “right” weight? (What *is* a “right” weight?) What can we do about it? (*Should* we do anything about it?)

In their encyclopedic book *Beyond GDP*, Fleurbaey and Blanchet (2013) provide four broad alternatives to GDP, summarized in a diagrammatic map (p. 3) that shows graphically the progress and development of these alternatives since the 1960. Table 1 lists the four alternatives and, for each, reproduces one of the diagram’s many examples. Fleurbaey and Blanchet’s (2013) introduction, which could be assigned prior to class, asks all the right questions.ⁱⁱⁱ Even without having students pre-read the introduction, it is easy to organize a lively classroom discussion around these questions. Should we improve GDP or entirely replace it? Should we construct a single alternative, or a dashboard of indicators? *How* should we aggregate across people? *What* is it that we’re aggregating? When thinking about inequality and redistribution—that is, moving beyond an aggregate such as GDP that, by construction, deemphasizes heterogeneity—what is it that we want to redistribute? Opportunities or outcomes? And which outcomes—objectively measured income or expenditure, or self-reported well-being, or what? Finally, economics is about tradeoffs. If according to some indicator, some lose and some gain, how should we think about interpersonal comparisons?

A class discussion on alternative measures to GDP

For a small class, the jigsaw method could be used to introduce the debate. Form “specialist” groups of equal size. Assign them one of five measures: GDP per capita (<https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>), Green GDP (e.g., Hawai’i’s Genuine Progress Indicator: <https://dbedt.hawaii.gov/economic/hawaii-genuine-progress-indicator-hi->

gpi/), Sustainable Development Goals (<https://unstats.un.org/sdgs/report/2023/>), Human Development Index (<https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>), Happiness Data (<https://worldhappiness.report/data/>). Have the students do quick research (using phones or computers) on their measure. Have them answer: What is the measure? How is it constructed? Is it widely available for many years and countries? Is it easy to compare across years and countries? Does it focus on averages or does it also measure inequalities within a country? Most importantly: Is the measure related to how “well off” people in the country are?

After the specialist groups have completed their tasks, create groups composed of one of each type of specialist. Have them answer the questions: Which, if any, of the indicators would you recommend to use to compare countries in terms of well-being? Which one, if any, would you recommend policymakers use to guide the country? What are the tradeoffs between the different indicators you explored? Should we improve GDP or entirely replace it? Should we construct a single alternative, or a dashboard of indicators? *How* should we aggregate across people? *What* is it that we’re aggregating? Have each group report on their opinions. Conclude by noting one first important message to students, summarized by Fleurbaey and Blanchet: “the problem with challenging GDP is not the lack of competitors, but rather their multiplicity.”.

To be clear, the GDP alternatives on the map and in the rest of the book are still works in progress. While some appear to have (so far, at least) led us nowhere, others have become widely adopted. The UN’s HDI, for example, has gained the attention of the public, media, policymakers, and researchers, and has changed the discourse around economic development.^{iv} But it took GDP around 90 years to turn from an abstract idea to the “King of Indicators” it is today; it may take a similarly long time for alternatives to be able to compete. In particular, as unambiguously conveyed by the title of a recent paper, some SWB researchers argue that, at

present, "Self-reported well-being indicators are a valuable complement to traditional economic indicators but are not yet ready to compete with them" (Benjamin, Cooper, Heffetz, and Kimball, 2020). However, that they may not yet be ready to be actively used in *policy* is by no means an excuse not to introduce them to students in the *classroom*. Indeed, a well-balanced "Beyond GDP" class would cover indicators' promise and progress, their weaknesses and limitations, the active research to better understand them and to improve them, and the lively debate about them and about their use.^v

Microeconomics applications with multi-dimensional well-being

In the microeconomics classroom, the concepts of happiness and well-being are generally invoked in the discussion of utility theory. Textbooks often equate one or both concepts with the level of utility itself. In this section, we utilize a different conceptual approach, similar to the approaches of, e.g., Becker and Rayo (2008), Benjamin et al. (2014), Kimball and Willis (2023), and O'Donnell and Oswald (2015), wherein emotions such as happiness are the arguments of the utility function itself. This multi-dimensional approach offers new possibilities for applications of utility theory: in addition to market goods and labor/leisure choices, students can study tradeoffs between dimensions of well-being. Below, we will focus on three dimensions: *feelings of happiness*, *feelings of excitement*, and *feelings of security*. We elucidate a series of classroom activities where interesting research questions in the study of happiness and well-being are interwoven with utility theory. All of these applications could easily be adapted to other dimensions of well-being.

Class activities on dimensions of well-being in microeconomics

1. A first activity for the class could be a brainstorming exercise on, *What dimensions of well-being should be included in the utility function?* To begin the brainstorming exercise, it may help to start with a market good. The discussion could proceed as follows:
 - a. If you were buying an apple, what are the characteristics of the apple that would matter to you? Students might come up with answers, such as, the size of the apple, its color, its sweetness, or its ripeness.
 - b. Suppose you consider the bigger questions of life: not just which apple to buy but what kind of career to pursue or which apartment to rent. What are the features of the possible choices that would matter to you?
 - c. Students' answers may include "objective" or physical features of the choices (e.g., a desirable apartment is large, a desirable career is high-paying). The class can be encouraged to think beyond these "intermediate goods" to the "final goods" or outcomes that are desired. For example, how might you consider your expected feelings? What kind of feelings would matter for the expected utility of each choice? The students will come up with many ideas. As they do, a number of interesting theoretical issues arise immediately. Could the suggestions include an undesirable feeling, such as anxiety, in the utility function? Yes. Students could either have a dimension called *feelings of anxiety*, which is an economic "bad" and has a negative relationship with utility; or, they could have a dimension called *not feeling anxious*, which is a more typical economic

“good” and has a positive relationship with utility. Could we include other people’s feelings? Yes! (The next section of the paper develops this idea further.) How do we know if we have the right set of dimensions?

Benjamin et al. (2014) define a utility function over “aspects of well-being” and explain as follows: “Our treatment of aspects as arguments of utility requires that for our purposes, any proposed set must be *exhaustive*, i.e., include *all* arguments of preferences; and it must comprise aspects that are *nonoverlapping*, i.e., that are conceptually distinct” (p. 2707).

Since the exercises at hand emphasize two-dimensional graphs, the set of dimensions is not an issue. However, the two aspects should be conceptually distinct.

- d. At the end of the discussion, suggest to the students that further analysis can focus on just three types of feelings: happiness, excitement, and security. Now, consider a utility function whose arguments are the levels of these “goods,” just like a typical utility function has quantities of apples, bananas, or oranges as the arguments:

$$u_i = f(\text{feelings of happiness}_i, \text{feelings of excitement}_i, \text{feelings of security}_i)$$

(Equation 1)

This equation says that person i ’s overall level of utility or preference satisfaction (how this person would evaluate the results of one choice versus another) depends on the levels of their feelings of happiness, excitement, and security in each choice.

2. To connect to the exercise on a personal level, students could be asked to rate their own lives. For example: *Thinking about the past year, how would you rate your **feelings of security**? How would you rate your **feelings of excitement**? Please choose a whole number from 0, which is the lowest level possible, to 100, which is the highest level possible.* (This question is adapted from Benjamin et al. 2023.)
3. Building on the idea of a utility function where the “goods” are feelings, elicited by self-reported well-being measures which have well-defined and interpersonally-comparable units, one can apply another key microeconomic concept: ***What do indifference curves look like for dimensions of well-being?*** Students can be prompted to answer this question for themselves, by considering whether they would prefer, e.g., one more unit of dimension x or dimension y. This identifies whether the Marginal Rate of Substitution (MRS) is greater than or less than one. For the chosen dimension, one can ask follow-up questions to find the threshold and pin down the MRS. Are two units of the chosen dimension preferred to one of the other? If so, the MRS is greater than two. And so on. Students can also be asked to interpret indifference curve graphs. Figure 1 shows indifference curves representing the preferences for two individuals, a skydiving instructor and an economics instructor. *Explain who you think is more likely to be Person A and who is more likely to be Person B.*
4. A final multi-dimensional well-being application of utility theory uses a model like Lancaster (1966), where activities in life are inputs to producing the well-being dimensions. In a Lancasterian model with market goods, the choice between goods is re-characterized as a choice between attributes. In a Lancasterian model for multi-dimensional well-being, the choice of life activities is re-characterized as a choice

between the levels of well-being that each activity would produce. Figure 2 illustrates how three different activities – meeting with a financial planner, trying a new restaurant, and going skydiving – might compare with respect to the security and excitement well-being dimensions. An “average day” point is also shown. Students can be asked to name other activities and imagine where they would be located on the graph. Students can also be asked to draw indifference curves which illustrate different choices. *Faced with these options and assuming that the standard assumptions about preferences hold, draw a few indifference curves to illustrate a person’s preferences which would lead to them choosing to try a new restaurant rather than meet with a financial planner or go skydiving.*

The overall benefits of including happiness concepts and SWB measures in principles of microeconomics courses are similar to their benefits in other courses. Discussions about happiness may be of great interest to students, and these exercises show the broad applicability of economic thinking. In addition, students can be challenged to think about the textbook concepts of utility theory in new ways when they are asked to apply them in the multi-dimensional well-being context.

Finding happiness in upper division courses

Given the breadth of the happiness literature, there are many ways to incorporate happiness economics into upper division economics courses. Further, there are many reasons to do so. Some of those reasons have already been discussed earlier in this paper, for example, students are naturally interested to learn about (i) what makes people happy and (ii) ways that economics applies to daily life. Other reasons pertain more specifically to upper division economics courses.

For example, happiness economics provides instructors with great opportunities: (i) to integrate recent research papers and findings into their upper division course, (ii) to discuss both the strength and the limitations of economics research, (iii) to generate lively classroom discussion (as happiness economics has in our experience), (iv) to examine economics topics from a new angle, and last but not least, (v) to incorporate course material that we as instructors find interesting and compelling.

Incorporating happiness economics content into upper division economics courses can be easy and enjoyable. In the past, the authors of this paper have started with a line of inquiry from happiness economics that directly related to the course content and that we found interesting. For example, in a behavioral economics course, we have integrated research that examines the relationship between one's own happiness and others' income to help explore and understand relative income concerns, that is, the relationship between one's own utility and others' outcomes. In a public economics course, we have supplemented research that examines the impact of social safety net programs on traditional economic outcomes, such as employment and income, with research that also explores the impact of those programs on self-reported happiness.

Now we will provide details about three happiness-economics learning modules that we have successfully implemented in our courses as well as provide some additional ideas about ways one could integrate happiness economics into additional upper division economics courses.

Exploring relative income concerns in a behavioral economics course using happiness economics

One important insight that students will likely be exposed to in an upper division behavioral economics course is that one's utility might be dependent not only on one's own

consumptions but also on others' consumptions. This can be modeled as follows: $U_i(x_i, x_{-i})$ is the utility that individual i obtains given their own consumption, x_i , as well as the consumption, x_{-i} , of all other individuals in the model. For simplicity, we will assume that there are only two individuals, i and j , in the model; so, i 's utility function simplifies to $U_i(x_i, x_j)$ (Equation 1). In such a model, economists have generally assumed that individuals exhibit relative income concerns (RIC): that one's utility is (i) increasing in one's own consumption and (ii) decreasing in others' consumption, i.e., $\frac{\partial U_i}{\partial x_i} > 0$ and $\frac{\partial U_i}{\partial x_j} < 0$, respectively.

Students are often intrigued by the concept of RIC and wonder whether it is descriptively accurate – that is, whether there is empirical evidence for RIC. Happiness economics provides strong evidence for RIC. Specifically, Luttmer (2005) uses self-reported happiness data from the National Survey of Families and Household, as a proxy for utility, and matches it to average earnings in Public Use Microdata Areas (PUMAs); on average 150,000 individuals live in a PUMA.

Discussion involving relative income concerns in a behavioral course

The Luttmer (2005) paper can serve as the basis for the following discussion questions.

1. How do you think others impact your happiness? Do you think the answer to this question varies across different people?
2. Conduct a thought experiment with your students: To conduct a similar study, the researcher would need to control for other things that might impact a person's happiness. Ask students which of the following controls they think will impact happiness and in what way (positively or negatively).
 - a. The household's own income

- b. Working hours
 - c. Whether the person is unemployed
 - d. Whether the person is not in the labor force (discussing the difference between this and unemployed)
 - e. Years of education
 - f. Size of household
3. After discussing each, share with the students the results from Luttmer (2005, p. 575, Table 1, column 3): own income, positive; working hours, negative; unemployed, negative; not in the labor force, positive; years of education, no significant relationship; household size, negative.
 4. Tell the students that the evidence in the paper does indeed show that the income of others around you has a negative impact on happiness. Ask what they think would happen to a person's happiness if both their income and the income of people around them rose by the same percentage. After discussion, reveal that though the difference is not significant, the effect on income is higher for one's own income than the neighbor's income, so a person's happiness would rise if both their income and their neighbor's income increased.
 5. Conclude the discussion by encouraging the students to continue to consider how others impact their happiness by talking to friends and family members.

Lastly, it warrants mention that the exposition of Luttmer (2005) is clear and thorough, making it a great paper to teach.

To push the exploration of RIC further, you might consider integrating either or both of the following two papers into your lesson plan: Brodeur and Flèche (2019) and/or Ifcher,

Zarghamee, and Graham (2018). Each paper explores an additional question: does the negative relationship between self-reported happiness and average area income persist in smaller geographic areas, e.g., ZIP codes. Both papers find that the relationship between happiness and average income is positive within ZIP codes (on average 10,000 individuals live in a ZIP code), and negative within larger areas, such as Metropolitan Statistical Areas. The papers then discuss why the relationship might be positive in smaller areas but negative in larger areas.

Exploring social preferences in an experimental economics course using happiness economics

A topic that has been heavily studied by experimental economists is social preferences; in one line of inquiry, experimental economists have attempted to categorize individuals' social preferences. Four of the most studied categories are: (i) inequity aversion, (ii) pure self-interest, (iii) relative income concerns, and (iv) social surplus maximization. Using Equation 1 from earlier., categories (i) through (iv) can be defined as follows: inequity aversion implies that for $\frac{\partial U_i}{\partial x_j} > 0$ for $x_i > x_j$ and $\frac{\partial U_i}{\partial x_j} < 0$ for $x_i \leq x_j$, pure self-interest implies that $\frac{\partial U_i}{\partial x_j} = 0$ for all x_j , relative income concerns implies that $\frac{\partial U_i}{\partial x_j} < 0$ for all x_j , and social surplus maximization implies that $\frac{\partial U_i}{\partial x_j} > 0$ for all x_j .

To determine which type of social preferences an individual exhibits, experimental economists have often used economics games. In such games, participants are presented with a set of choices over payment distributions between the decision-maker and other participants. Measuring social preferences using such methods can be confounded by intentions-based concerns like reciprocity.

In response to such concerns, Diaz, Houser, Ifcher, and Zarghamee (2023) develop a widely applicable and easy to implement tool—the inequity list—for measuring social

preferences using happiness economics. Specifically, study participants directly report their satisfaction with various payment-profiles that hold their own payment constant while varying another randomly selected participant's payment. From this data, the authors can measure individuals' social preferences, and they find that the majority of participants' exhibit inequity aversion. A nice bonus of integrating the inequity list into your experimental economics course is that it is easy to implement in a classroom setting, using a program like Qualtrics (see Figure 3 for a sample inequity list and participant instructions). Doing so enables the instructor to demonstrate to students how experiments work, discuss experimental design decisions, analyze data, and discuss the results. Moreover, our students have very much enjoyed participating in this classroom exercise.

To push the exploration of social preferences further, you might consider integrating any of the following papers into your lesson plan: Ifcher, Zarghamee, Houser, and Diaz (2020), Ifcher, Zarghamee, and Goff (2021), and or McBride (2010). The first and third paper also explore RIC in laboratory experiments. The second paper is a handbook chapter that explores what can be learned in experiments about happiness.

Using happiness economics to explore the impact of social safety net programs in a public economics course

It is common in public economics courses to consider both what actions the government should take as well as the impact of those actions. For example, in a public economics course, one might study: (i) whether there should be a universal social insurance program that provides retirement benefits, e.g., the U.S. social security system, and (ii) the impact of such a program on economic indicators, e.g., elder poverty and the saving behavior of working-age adults. One portion of the U.S. social safety net—the components that are designed to support low-income

single mothers—has been heavily studied by economists. Two of these components are the earned income tax credit (EITC) program and the temporary assistance for needy families (TANF) program. Both programs have been shown to increase employment among single mothers.

Discussion of happiness in public economics courses

This topic can serve as the basis for the following, interesting discussion questions.

1. Do you think that single mothers would be happier if they received social payments insurance and did not have to work in exchange for the payments? Or would they be happier if they had to work in exchange for the payments?
2. What might be the challenges of being a working single mother and how might those challenges impact their happiness?
3. Why might working increase the happiness of single mothers? What are some of the benefits, in terms of happiness, of working?
4. Would you expect that the answer to the two questions above be different if the person in question was not a single mother?

As it turns out, happiness economics can help us answer these questions. A series of papers, Herbst (2013), Ifcher (2011), and Boyd, Herbst, Ifcher, and Zarghamee (2016), studied the impact of the TANF and EITC programs on self-reported happiness using a difference in difference identification strategy and various observational datasets. The results indicate that both programs increased happiness among single mothers.

Additional ideas for using happiness economics in upper division economics courses

What follows are additional ideas for using happiness economics in various upper division economics courses that the authors have not tried to date; the ideas are listed alphabetically by the course title. This list is certainly not exhaustive and is meant to provide some ideas that the authors believe would be worth trying and that the authors would like to implement in a future upper division economics course.

In an Experimental Economics course, discuss how happiness, or more precisely mild positive affect, impacts economic decision making, including strategic interactions (Capra, 2004), prosocial behavior (Drouvelis and Brit Grosskopf, 2016), time preferences (Ifcher and Zarghamee, 2011), and productivity (Oswald, Proto, and Sgroi, 2015).

In a Gender Economics course, discuss the gender happiness gap—females have typically reported being happier than men—and the evolution of the gender happiness gap over time. Stevenson and Wolfers (2009) find that women’s average happiness has been declining over time and converging to men’s average happiness.

In an Intermediate or Advanced Macroeconomics course, discuss the relationship between happiness and various macroeconomic indicators, e.g., inflation and unemployment (Di Tella, MacCulloch, and Oswald, 2001 and 2003).

Conclusion

Students enjoy happiness topics. When well-being courses are offered as a part of the elective curriculum, enrollment numbers remain consistently high. Because these topics are not typically part of an economics degree, they intrigue students enough to convince them to join the course. And, according to teaching evaluations, they are rarely disappointed. After the course, the overwhelming majority report finding economics of happiness both interesting and useful, and many mention discovering how the field is broader and more established than they initially

anticipated. Based on the authors' experience, there are several explanations for the students' enthusiasm.

First, social science students typically have a genuine interest in the state of contemporary societies and in related topics of public debate, such as “deaths of despair” and the mental health crisis. The economics of well-being provides a framework for exploring these and other topics relevant to young people, such as voting behavior (Ward, 2020) and social media use (Allcott et al., 2020), among other subjects mentioned in this paper. Introducing topics that resonate with students can lead to deeper student engagement and increased effort.

Second, for courses with empirical content, well-being offers a framework that connects various topics introduced in stand-alone courses such as education, health, crime, labor, or family. The existing literature provides evidence on the relationship between the economic outcomes studied in these courses and individual well-being. When these papers are introduced in class, they help students relate to the topics on a personal level, making economics as a discipline more relevant to their daily lives.

Third, for students interested in public policy, well-being offers a view of societal progress that goes beyond measuring GDP growth. As discussed earlier in the paper, well-being provides a set of non-traditional macroeconomic indicators that can help to start conversations about measures of societal progress. Well-being also offers an alternative way of evaluating and comparing public policies through their effects on individual well-being (see Layard & De Neve (2023) for examples). Students can see how these ideas work in real-life policymaking using examples such as the United Kingdom Government Policy Appraisal Guidelines, which include well-being as a policy outcome (HM Treasury, 2021).

Lastly, as a dynamic field, the economics of well-being has many actively debated questions. One example is whether there is an income point after which additional money does not bring more happiness. Kahneman and Deaton (2010) found that while life evaluation increases steadily with income, emotional well-being plateaus at an annual income of around \$75,000.^{vi} About a decade later, these findings were challenged by Killingsworth (2021), who found that both experienced and evaluative well-being increase with income, and there is no evidence of a plateau above \$75,000.^{vii} Two of the authors of the two papers then engaged in what they referred to as an “adversarial collaboration” that resulted in a joint 2023 paper by Kahneman, Killingsworth, and Mellers, entitled “Income and Emotional Well-being: A Conflict Resolved.” The joint work suggested several reasons for the differences in findings. A reanalysis of Killingsworth’s data confirmed the plateau for the least happy people, but not for the happier groups. Both earlier papers failed to anticipate that increases in income affect more and less happy people differently. This ongoing debate shows students that there are many open, unresolved, and hotly debated questions in this field—just like in other active research fields that are in constant flux. Following such discussions exposes students to the process of generating knowledge and offers them an exciting opportunity to follow academic contributions emerging “in real time.” For students interested in contributing to this debate by pursuing an academic career, the field provides numerous topics of investigation.

Incorporating happiness economics topics into economics courses is easy and rewarding. This paper provides examples of applications and discussion topics for Macroeconomics and Microeconomics, as well as a range of specialized courses. Beyond the examples discussed in the paper, Layard et al. (2023) provide a set of open-access discussion questions and exercises with solutions and datasets that can be directly incorporated into teaching.

As this paper illustrates, well-being applications can be taught to students in various courses and at different stages of their degree. In an Introductory Microeconomics course, well-being measures can be discussed in the context of their relationship with utility, where students can consider well-being as a proxy for utility or as an input in the utility function. In Introductory Macroeconomics courses, well-being can provide an alternative measure of societal progress. It introduces students to Beyond GDP initiatives and can spark discussions about why we care about macroeconomic indicators, what constitute ‘good measures’ of the success of macroeconomic policies, and what are the (dis-)advantages of GDP compared to alternative measures such as the Human Development Index or the OECD Better Life Index. Although students might not yet be able to read academic papers in full, they can be exposed to introductions, illustrative materials such as graphs and cross-tabulations, and less technically demanding sources, such as chapters from the World Happiness Report. An introductory Contemporary Issues in Economics course can include a group discussion on the well-being of youth after the pandemic, based on cross-country and across-time evidence (Marquez et al., 2024). This discussion can expose students to the basics of statistics and economic modeling while focusing on a topic that interests them.

In upper-division courses, when students are prepared to handle more advanced material, instructors can directly incorporate recent research papers and their findings. This paper provides readily implementable examples of how well-being can be used in a Behavioral Economics course to study how one’s utility is affected by the income of others, in Experimental Economics to understand social preferences like inequality aversion, and in Public Economics courses to explore the impact of social safety net programs. Upper-division courses also offer opportunities for more advanced discussions on the relationships between well-being and utility within

Intermediate or Advanced Microeconomics courses, as well as well-being and macroeconomic indicators within Intermediate or Advanced Macroeconomics courses, building on concepts introduced in introductory courses.

Including well-being topics enriches students' learning experiences by examining economics from a fresh and somewhat unexpected angle. Students enjoy well-being topics in economics courses because they are naturally curious about what contributes to people's happiness. These topics are personally relatable and help contextualize broader societal questions, such as measuring societal success. Incorporating well-being topics in the curriculum makes classes more fun for both the students, who engage with a subject they are interested in, and the instructors, who can incorporate material they personally find exciting.

Endnotes

ⁱ The [World Database of Happiness](#) provides a list of surveys across many different countries that ask questions about self-reported or subjective well-being (SWB).

ⁱⁱ As of January 2025, The Research Papers in Economics (RePEC) database lists the Economics of Happiness as a research field with 321 authors contributing at least five papers in this specific area. This is lower than established fields such as industrial organization (548 authors) and international finance (694 authors), but more than fields such as resource economics (212 authors), sports and economics (177 authors), and tourism economics (121 authors).

ⁱⁱⁱ The book is highly recommended for instructors and interested students. While its theoretical framework may be challenging to some undergraduate students, who may be advised to skip its more technical parts, instructors would not find it particularly demanding. Indeed, as one of us (Heffetz, 2013) wrote in a book review, the book is “essential reading for any economist who ever wondered about GDP as a welfare measure—or about its alternatives.” If reading the entire book is impractical for instructors, one could gain a lot from reading its introduction (especially the discussion surrounding the alternatives-to-GDP diagrammatic map referred to above). If the entire introduction is impractical, the above-cited 2-page book review would be a place to start, and could also be a short assigned reading as background for class discussion.

^{iv} An instructor could visit in class the HDI’s website at <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>, discuss with students its purpose and method (“The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.”), show its one-minute-long *What does the HDI measure?* video, and spend time with its inviting *Explore HDI* interactive tool, where one could make comparisons across years, regions, and countries.

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^{vi} Emotional well-being in this study was assessed by yes-no questions about experiencing various emotions the previous day (e.g., enjoyment, happiness, anger, sadness, stress, worry) coming from a daily survey of 1,000 U.S. residents conducted by the Gallup Organization.

^{vii} Killingsworth (2021) used real-time data from 33,391 employed U.S. adults collected through a smartphone app. The respondents were asked to report how they were feeling at the moment on a scale from “Very bad” to “Very good.”

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References

- Alesina, Alberto, Rafael Di Tella, and Robert MacCulloch. "Inequality and happiness: are Europeans and Americans different?" *Journal of Public Economics* 88, no. 9-10 (2004): 2009-2042.
- Allcott, Hunt, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow. "The Welfare Effects of Social Media." *American Economic Review* 110, no. 3 (2020): 629-76.
- Angrist, Josh, Pierre Azoulay, Glenn Ellison, Ryan Hill, and Susan Feng Lu. "Inside job or deep impact? Extramural citations and the influence of economic scholarship." *Journal of Economic Literature* 58, no. 1 (2020): 3-52.
- Becker, Gary S., and Luis Rayo. 2008. "Comment on 'Economic growth and subjective wellbeing: Reassessing the Easterlin Paradox' by Betsey Stevenson and Justin Wolfers." *Brookings Papers on Economic Activity*, Spring: 88–95.
- Benjamin, Dan, Kristen Cooper, Ori Heffetz, and Miles Kimball. "Self-reported wellbeing indicators are a valuable complement to traditional economic indicators but are not yet ready to compete with them." *Behavioural Public Policy* 4, no. 2 (2020): 198-209.
- Benjamin, Daniel J., Ori Heffetz, Miles S. Kimball, and Nichole Szembrot. 2014. "Beyond Happiness and Satisfaction: Toward Well-Being Indices Based on Stated Preference." *American Economic Review* 104 (9): 2698–2735.
- Benjamin, Daniel J., Kristen B. Cooper, Ori Heffetz, and Miles Kimball. 2017. "Challenges in constructing a survey-based well-being index." *American Economic Review* 107, no. 5: 81-85.
- Benjamin, Daniel, Kristen Cooper, Ori Heffetz, Miles Kimball, and Jiannan Zhou. 2023. "Adjusting for Scale-Use Heterogeneity in Self-Reported Well-Being." NBER Working Paper w31728, National Bureau of Economic Research, Cambridge, MA.

Bond, Timothy N., and Kevin Lang. "The sad truth about happiness scales." *Journal of Political Economy* 127, no. 4 (2019): 1629-1640.

Boyd-Swan, Casey, Chris Herbst, John Ifcher, and Homa Zarghamee. "The earned income tax credit, mental health, and happiness." *Journal of Economic Behavior and Organization* 126 (2016): 18-38.

Brodeur, Abel, & Sarah Flèche. "Neighbors' income, public goods, and well-being." *Review of Income and Wealth* 65, no. 2 (2019): 217-238.

Capra, Monica. "Mood-driven behavior in strategic interactions." *American Economic Review* 94, no. 2 (2004): 367-372.

Chen, Le-Yu, Ekaterina Oparina, Nattavudh Powdthavee, and Sorawoot Srisuma. "Robust ranking of happiness outcomes: A median regression perspective." *Journal of Economic Behavior and Organization* 200 (2022): 672-686.

Davidson, Richard J. "Emotion and affective style: Hemispheric substrates." *Psychological Science* 3, no. 1(1992): 39-43.

Deaton, Angus. 2008. "Income, health, and well-being around the world: Evidence from the Gallup World Poll." *Journal of Economic Perspectives* 22 (2): 53–72.

Delahunty, Janine, Irina Verenikina, and Pauline Jones. "Socio-emotional connections: Identity, belonging and learning in online interactions. A literature review." *Technology, Pedagogy and Education* 23, no. 2 (2014): 243-265.

Diaz, Lina, Daniel Houser, John Ifcher, and Homa Zarghamee. "Estimating social preferences using stated satisfaction: Novel support for inequity aversion." *European Economic Review* 155 (2023): 104436.

Di Tella, Rafael, Robert J. MacCulloch, and Andrew J. Oswald. “Preferences over inflation and unemployment: Evidence from surveys of happiness.” *American Economic Review* 91, no. 1 (2001): 335-341.

Di Tella, Rafael, Robert J. MacCulloch, and Andrew J. Oswald. “The macroeconomics of happiness.” *Review of Economics and Statistics* 85, no. 4 (2003): 809-827.

Drouvelis, Michael and Brit Grosskopf. “The effects of induced emotions on pro-social behavior.” *Journal of Public Economics* 134 (2016): 1-8.

Ferrer-i-Carbonell, Ada. “Income and well-being: an empirical analysis of the comparison income effect.” *Journal of Public Economics* 89, no. 5-6 (2005): 997-1019.

Fleurbaey, Marc, and Didier Blanchet. 2013. *Beyond GDP: Measuring Welfare and Assessing Sustainability*. Oxford: Oxford University Press.

Frank, Robert H., Ben S. Bernanke, Kate Antonovics, and Ori Heffetz. 2024. *Principles of Macroeconomics* (9/e). McGraw-Hill.

Heffetz, Ori. 2014. “Review of *Beyond GDP* by Marc Fleurbaey and Didier Blanchet.” *Economica*, 81: 788–789.

Herbst, Chris. “Welfare reform and the subjective well-being of single mothers.” *Journal of Population Economics* 26 (2013): 203-238.

HM Treasury. Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance. Government of the United Kingdom, 2021. <https://www.gov.uk/government/publications/green-book-supplementary-guidance-wellbeing>.

Ifcher, John, and Homa Zarghamee. “Happiness and time preference: The effect of positive affect in a random-assignment experiment.” *American Economic Review* 101, no. 7 (2011): 3109-3129.

Ifcher, John, Homa Zarghamee, and Carol Graham. "Local neighbors as positives, regional neighbors as negatives: Competing channels in the relationship between others' income, health, and happiness." *Journal of health economics* 57 (2018): 263-276.

Ifcher, John, Homa Zarghamee, and Sandra Goff. "Happiness in the Lab: What Can Be Learned about Subjective Well-Being from Experiments?" In *Handbook of Labor, Human Resources and Population Economics*. Cham: Springer International Publishing, 2021.

Ifcher, John, Homa Zarghamee, Daniel Houser, and Lina Diaz. "The relative income effect: an experiment." *Experimental Economics* 23 (2020): 1205-1234.

Ifcher, John. "The happiness of single mothers after welfare reform." *BE Journal of Economic Analysis & Policy* 11 (2011), no. 1.

Kahneman, Daniel, and Angus Deaton. "High income improves evaluation of life but not emotional well-being." *Proceedings of the National Academy of Sciences* 107, no. 38 (2010): 16489-16493.

Kahneman, Daniel, Matthew A. Killingsworth, and Barbara Mellers. "Income and Emotional Well-being: A Conflict Resolved." *Proceedings of the National Academy of Sciences* 120, no. 10 (2023): e2208661120.

Kember, David, Amber Ho, and Celina Hong. "The importance of establishing relevance in motivating student learning." *Active learning in higher education* 9, no. 3 (2008): 249-263.

Killingsworth, Matthew A. "Experienced Well-being Rises with Income, Even Above \$75,000 per Year." *Proceedings of the National Academy of Sciences* 118, no. 4 (2021): e2016976118.

Kimball, Miles, Robert Willis. 2023. "Utility and Happiness." NBER Working Paper w31707, National Bureau of Economic Research, Cambridge, MA.

Krueger, Alan B., and David A. Schkade. "The reliability of subjective well-being measures." *Journal of Public Economics* 92, no. 8-9 (2008): 1833-1845.

Lancaster, K. J., 1966. "A new approach to consumer theory." *Journal of Political Economy*, 74(2), pp.132-157.

Layard, R., & De Neve, J.-E. (2023). *Wellbeing: Science and Policy*. Cambridge: Cambridge University Press.

Layard, Richard, Ekaterina Oparina, Jan-Emmanuel De Neve, Micah Kaats, and Richard Layard. "Exercises." In *Wellbeing: Science and Policy*, edited by Richard Layard and Jan-Emmanuel De Neve. Cambridge: Cambridge University Press, 2023.

Luttmer, Erzo F.P. "Neighbors as negatives: Relative earnings and well-being." *The Quarterly Journal of Economics* 120, no. 3 (2005): 963-1002.

Kapteyn, Arie, Jinkook Lee, Caroline Tassot, Hana Vonkova, and Gema Zamarro. "Dimensions of subjective well-being." *Social indicators research* 123 (2015): 625-660.

Marquez, Jose, Laura Taylor, Leoni Boyle, Wanying Zhou, and Jan-Emmanuel De Neve. "Child and Adolescent Well-being: Global Trends, Challenges, and Opportunities." In *World Happiness Report 2024*, edited by John F. Helliwell, Richard Layard, and Jeffrey Sachs, chap. 3. Sustainable Development Solutions Network, 2024. <http://doi.org/10.18724/whr-91b0-ek06>.

Masika, Rachel, and Jennie Jones. "Building student belonging and engagement: Insights into higher education students' experiences of participating and learning together." *Teaching in higher education* 21, no. 2 (2016): 138-150.

McBride, Michael. "Money, happiness, and aspirations: An experimental study." *Journal of Economic Behavior and Organization* 74, no. 3 (2010): 262-276.

O'Donnell, Gus, and Andrew J Oswald. 2015. "National Well-being Policy and a Weighted Approach to Human Feelings." *Ecological Economics*, 120:59-70.

Oswald, Andrew J., and Stephen Wu. "Objective confirmation of subjective measures of human well-being: Evidence from the USA." *Science* 327, no. 5965 (2010): 576-579.

Oswald, Andrew. J., Eugenio Proto, and Daniel Sgroi. "Happiness and productivity." *Journal of Labor Economics* 33, no. 4 (2015): 789-822.

Priniski, Stacy J., Cameron A. Hecht, and Judith M. Harackiewicz. "Making learning personally meaningful: A new framework for relevance research." *The Journal of Experimental Education* 86, no. 1 (2018): 11-29.

Stevenson, Betsey, and Justin Wolfers. "The paradox of declining female happiness." *American Economic Journal: Economic Policy*, no. 2 (2009): 190-225.

The CORE Econ Team. 2023. *The Economy 2.0: Microeconomics*. Open access e-text <https://core-econ.org/the-economy/>.

Truc, Alexandre, Olivier Santerre, Yves Gingras, and François Claveau. "The interdisciplinarity of economics." *Cambridge Journal of Economics* 47, no. 6 (2023): 1057-1086.

United Nations. 2019. *Human Development Report*. <https://hdr.undp.org/content/human-development-report-2019>

Ward, George. "Happiness and Voting: Evidence from Four Decades of Elections in Europe." *American Journal of Political Science* 64, no. 3 (2020): 504-18.

Table 1: Alternatives to GDP as a Measure of Well-Being

<u>Type/Approach</u>	<u>Example</u>
GDP “corrected” for perceived deficiencies	Green GDP
Dashboards of country well-being indicators	Sustainable Development Goals
Composite indices	Human Development Index.
Subjective approaches	Self-reported well-being

Figure 1: Indifference Curves Between Feelings of Security and Feelings of Excitement

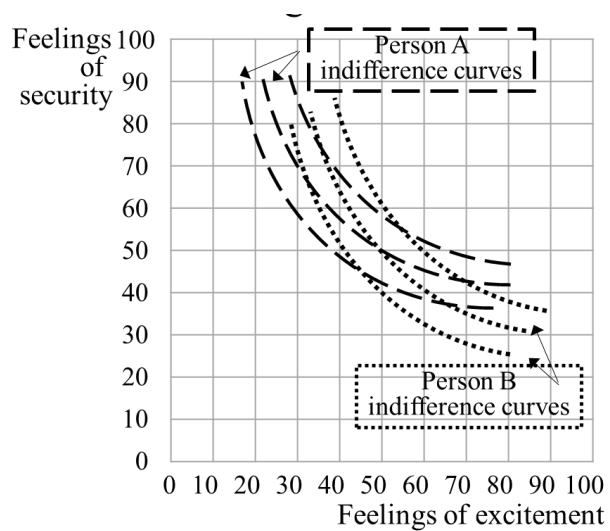


Figure 2: Three Activities and Feelings of Security and Excitement

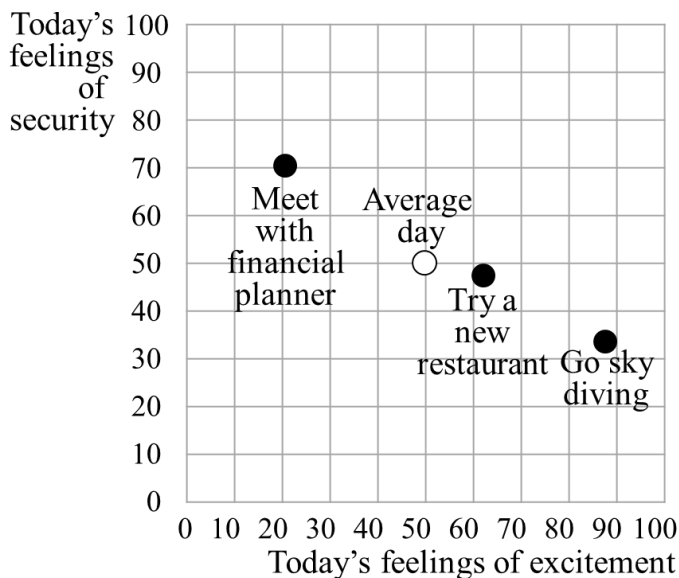


Figure 3: The Inequity List

Instructions:

In this task you will indicate your level of satisfaction with different allocations of money, on a scale from 1 to 7, where 1 corresponds to "extremely dissatisfied" and 7 corresponds to "extremely satisfied." Move the slider to the position that best represents your level of satisfaction with the allocation.

(There are no wrong answers. Please answer carefully and do your best to indicate your exact level of satisfaction. You can move the sliders as many times as you like before clicking the next button at the bottom of the page to proceed.)

Payment (optional):

At the next class I will randomly choose two students and pay them based on this task. If a chosen student is not present, I will randomly choose another student. After selecting the two students, I will randomly choose one of the allocations below and pay two randomly chosen students based on allocation. For example, if the second allocation below--"You get \$5 and the other person gets \$2"--is randomly chosen, then the first randomly selected student will get \$5 and the second randomly selected student will get \$2.

It warrants mention that the position of the sliders in this task have no implication whatsoever on your final payment, should you be one of the two chosen students who are paid based on this task

For each allocation below, please indicate your level of satisfaction.

Extremely dissatisfied 1	Moderately dissatisfied 2	Slightly dissatisfied 3	Neither dissatisfied, nor satisfied 4	Slightly satisfied 5	Moderately satisfied 6	Extremely satisfied 7
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You get \$5 and the other person gets \$1



You get \$5 and the other person gets \$2



You get \$5 and the other person gets \$3



You get \$5 and the other person gets \$4



You get \$5 and the other person gets \$5



You get \$5 and the other person gets \$6



You get \$5 and the other person gets \$7



You get \$5 and the other person gets \$8



You get \$5 and the other person gets \$9



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ⁱⁱ As of January 2025, The Research Papers in Economics (RePEC) database lists the Economics of Happiness as a research field with 321 authors contributing at least five papers in this specific area. This is lower than established fields such as industrial organization (548 authors) and international finance (694 authors), but more than fields such as resource economics (212 authors), sports and economics (177 authors), and tourism economics (121 authors).

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