

# **We Are Happier than We Realize: Underestimation and Conflation in Happiness**

## **Measurement**

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We evaluate a very common question designed to measure happiness: “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?” Through five representative survey experiments, we show that the question is flawed. Rather than measuring satisfaction with one’s life, the oft-cited happiness question is far more likely to reflect satisfaction with the state of the world. Results provide evidence that a simple correction better measures personal happiness. Furthermore, our findings reassess the foundation of a considerable volume of scholarship about happiness, especially as relevant to politics and economics.

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Happiness matters. Happiness can be a useful indicator of a healthy society or of the impact of a policy, perhaps an indicator even more useful than traditional measures such as GDP (Frey and Stutzer 2010; Layard 2005). Oswald (1997, p. 1815) notes that "No-one is concerned in a genuine sense about the level of gross national product". While serving as Federal Reserve Chairman, Ben Bernanke devoted an entire university commencement address to the importance of the social scientific study of happiness, and in another speech he said, "We should seek better and more-direct measurements of economic well-being, the ultimate objective of our policy decisions." As Aristotle argued material wealth is a means, not an end. Wealth is useful in that it allows us to do things that make us happy (Helliwell 2003; Ryff 1989). And happiness is arguably one of the most important goals, or even the ultimate goal for both individuals and society (Frey and Stutzer 2002; Veenhoven 1995; Lyubomirsky and Lepper 1999). When Jefferson articulated a set of goals for government in the United States Declaration of Independence he outlined those goals as life, liberty and happiness (Frey and Stutzer 2002; Lyubomirsky and Lepper 1999).

Recognizing the social importance of happiness, the number of studies examine the concept has exploded in the past two decades (Ferrer-i-Carbonell & Frijters, 2004; Frey & Stutzer, 2010). Within this body of work the debate over how to measure happiness is arguably the most central issue in this growing field (Abdel-Khalek, 2006). Happiness is among the most difficult concepts to define and measure in social science. The complexity of happiness is perhaps only surpassed by the concept of love, yet even that concept is frequently measured in numerous surveys (Graham 2010). As Veenhoven (1991) suggests that measurement difficulties may lead one to conclude that "happiness is both an evasive and inconsequential matter" for serious researchers. The diversity of methods used to measure happiness has led to diverse findings and innovations, but as Cummins (1995) argues, "the absence of a 'gold standard' for subjective well-being has severely

hampered the interpretation of results from different studies.” The different measures of happiness are often used interchangeably, yet some believe that “empirical findings often depend critically on which particular measure of happiness is analyzed” (Huang 2010, p.405).

We evaluate a very common question designed to measure happiness to see if a small variation in wording can influence how respondents answer and interpret the question: “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?” We show that rates of happiness differ depending on the wording of the question and uncover why this difference occurs using an open-ended follow up question. Through five representative survey experiments, we show rather than measuring satisfaction with one’s life, the oft-cited happiness question is far more likely to reflect satisfaction with the state of the world. Besides eliciting different response rates regarding levels of happiness, we show that the minor change in wording has important implications when modeling the determinants of happiness. The strength of the relationship between happiness and macro-level conditions, such as the economy, depends on whether the wording of the question causes the respondent to reflect on their personal life or reflect upon the world in general. Findings reassess the foundation of a considerable volume of scholarship about happiness, especially as relevant to politics and economics.

### **The State of Happiness Measurement**

Scholars conceptualize and measure happiness in multiple ways. Single-item measures of subjective well-being attempt to capture the “global” nature of happiness (Bradburn 1969). Numerous indexes and scales, both short and long, attempt to capture multiple dimensions of mental, emotional, physical, and environmental well-being (Hills and Argyle 2002; Kammann and Flett 1983). These measures are administered in a variety of ways: telephone survey (Connolly

2013), face to face interviews (Brickman 1978), self-administered survey (Schwarz et al 1991), online surveys (Howell et al 2010). Others collect information on happiness through a diary method (Krueger and Schkade 2008). Most research relies on self-reports of happiness (Diener 2000), but a few studies use external evaluations of an individual's well-being (Sandvik et al, 1993).

The diversity of these measures reflects the diversity how scholars conceptualize happiness. Happiness is sometimes conceived as being part of a broader concept of “subjective well-being” (Scott 1958). Some scholars treat happiness and satisfaction with life as interchangeable (Frey & Stutzer 2000b; Veenhoven 1991), others maintain distinction between the two concepts (Ellison 1991; Cummings 1995; Haller and Hadler 2006). A handful suggest that happiness is a personality trait, while others argue that it is a more malleable state of being (Schimmack et al 2002; Stones et al. 1995). Evidence that happiness changes over time in association with age, income, health, marital status. However, other findings suggest that an individual's subjective well-being is rather stable (Pavot and Diener 1993b) and even linked to genetics (Huppert 2009; Lykken and Tellegen 1996; Weiss, et al 2008).

Not surprisingly, the diversity in measures has caused a sizable debate as to the most appropriate method of measuring happiness. Much attention has been focused on the reliability and validity of various measures. Many scholars have concluded that most of these measures are reliable, valid, and relatively stable (Diener 1994; Cummings 1995; Lyubomirsky and Lepper 1999), while others have highlighted the sensitivity of measures to conversational context (Strack 1988), question order (McClendon and O'Brien 1988), and interview format (Smith 1979). Measuring happiness merits further research in social science, especially in survey research.

## **Standards of Evaluating Happiness Questions**

Given that most happiness measures employ self-reported responses from individuals, much of the literature on the topic is concerned about question wording, questionnaire construction and survey methodology. Numerous studies compare results from different items (Lyubomirsky and Lepper 1999), response categories (Andrews and Withey 1976) or question ordering (Smith 1990). Less research focuses on how a small modification of a question's wording may change how respondents interpret and thus respond to a survey question. Though, Tourangeau, et al. (1991) modified a common happiness question from the General Social Survey by adding one of the following two phrases: "aside from your marriage" and "including your marriage." The authors concluded that adding the two different phrases caused respondents to interpret the question of happiness differently. Similarly, Schwarz, et al (1991) provided some respondents with instructions to evaluate specific aspects of their life, and then "leaving aside the life-domain(s) that you already told us about, how satisfied are you currently with other aspects of your life?" Both Tourangeau, et al. (1991) and Schwarz, et al (1991) show respondents can be directed to think about specific information and, resultantly, can change responses.<sup>1</sup>

Lyubomirsky and Lepper (1999) note that "every student of happiness and well-being has had to tackle the problem of how to measure levels of individual happiness." This problem is complicated by the fact there is no "gold standard" measure out there, but a range of measures that have been developed to meet different needs and goals (Cummings 1995). There are measures that attempt to assess the domains of happiness (health, financial, job, marriage, etc.), different states

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<sup>1</sup> Additionally, Smith (1979) investigated the slight difference between the National Opinion Research Center (NORC) wording and the Survey Research Center, University of Michigan (SRC) wording of a single item happiness question and finds noticeable differences in responses but suggests that much of this may be due to question ordering in the two surveys.

of happiness (affective states or cognitive) and there are single-item measures that attempt to solicit a global evaluation of a person's overall happiness (Van Praag, et al 2003; Ellison 1991; Lyubomirsky and Lepper 1999).

Like Tourangeau, et al. (1991) this study is interested in how the wording of a question influences the interpretation of the concept happiness. Fundamentally a "good question" is one where all respondents interpret the question in a consistent manner (Fowler 1995). Many scholars believe that respondents draw on a wide range of information and experiences when asked to judge their subjective well-being (Schwarz and Strack 1999). Individuals may evaluate their level of happiness by comparing their circumstances to others, some may recall past experiences, and others may think to what the future holds for them (Frey and Stutzer 2002). Ross, et al (1986) examined what type of information respondents were accessing by asking them why they responded to the SWB question. They found the most common reason mentioned referred to their present state or circumstances, followed by references of future or anticipated events or states of being, followed by references of past events. All of these reasons cited by Ross, et al (1986) involve personal reasons. This study is interested in how some respondents draw on non-personal reasons, or more specifically, societal level conditions, such as the overall condition of the economy or the direction the country is heading politically.

Most studies assume that individuals are using information about their own lives, but depending on the question wording or order they may be prompted to make "intraindividual comparisons" (e.g., comparing your present life circumstances with your past or your expected circumstances) or interindividual comparisons (e.g., comparing your current life circumstances with those around you) (Schwartz and Stack 1999). Much of the literature on happiness highlights the difficulty in identifying what type of information respondents is accessing when asked about

happiness. When respondents review their life or conditions, their reviews may not be systematic, but arbitrary or incomplete (Krueger and Schkade 2008) or primed by preceding questions (Pavot and Diener 1993b).

We suggest that one of the most common measures of happiness actually causes many respondents to reference the state of the world, not their own personal circumstances. This is especially true if there are questions preceding the happiness question that reference societal conditions (i.e., the state of the economy). We developed this hypothesis after observations from the pretesting of a questionnaire that contained the standard GSS happiness question. While asking this question to individuals that were expected to be happy based on past information and knowledge we were surprised to find test subjects responding with “not very happy.” When prompted as to why they were unhappy, test subjects frequently mentioned political, economic, or societal problems, not personal conditions specific to the subject’s life.

Several scholars have found that individuals who state they are happy are likely to have knowledgeable informants (friends or family members) describe the individual in the same manner (Hartmann 1934; Moskowitz 1986; Sandvik et al 1993; Pavot and Diener 1993b). Finding subjects in the pre-test that were expected to be happy but found responding as unhappy suggested the measure was not performing as expected. Given that pre-tests of surveys are not based on large or random samples, the findings could have been an anomaly, an artifact of question ordering, or influenced by the political or economic events in the news that week. We then developed a series of population-based survey experiments to test the hypothesis.

### **Reconsidering the Dominant Happiness Question**

In this study we focus on the single-item, global question, specifically the question: “Taken all together, how would you say things are these days—would you say you are very happy, pretty

happy, or not to happy?” This question, and ones that are almost identical to this question, are used in many surveys (e.g., General Social Survey; Gallup; European Social Survey, World Values Survey, Americans’ Changing Lives study, National Survey of Families and Households, Social Capital Community Benchmark Survey). Single-item questions are the most commonly used method of measuring happiness (Smith 1979; Diener 2000; Krueger and Schkade 2008; Abdel-Khalek 2006) and this version is the most widely used single-item happiness measure. Andrews and Robinson (1991, p. 71) note “Happiness has been assessed in numerous other ways. None, however, has seemed markedly better than the measures presented above and none has as long a history of observation in the United States (or anywhere else).” Schwarz and Strack (1999) note that “hundreds of thousands of survey respondents around the world have been asked questions like ‘Taking all things together, how would you say things are these days—would you say that your are very happy, pretty happy, or not too happy?’” The GSS online document archive shows 433 publications relying on this question.<sup>2</sup>

Although some may caution on the use of a single item in measuring the happiness, several studies have shown that a single measure can accurately measure this concept (Abdel-Khalek 2006; Wanous & Reichers 1996; Cummings 1995). In practical terms, unless a survey is specifically designed to study happiness, it is unlikely to contain more than one item. General purpose surveys, such as the General Social Survey, are interested in hundreds of concepts, happiness being only one of them. Therefore surveys often cannot dedicate numerous items to explore happiness in all of its complexity and ambiguity. Instead, surveys typically rely on a single-item global measure that is more cost-effective (Abdel-Khalek 2006).

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<sup>2</sup> GSS variable name HAPPY. Document count accessed on 3/29/2015.



The question we are testing has been tested and retested for decades. What new can be uncovered by examining this question again? Although numerous studies compare single-item measures with indexes or scales, or compare continuous measures with discrete measures (Studer 2012), far less research has been devoted to examining how slight modifications in wording can change the way a respondent interprets a question. Several potential factors explain the lack of research. Subjective well-being questions have been asked for decades and changing the question would compromise comparisons across certain time periods. Our goal is not to lobby for changing the traditional single-item global measure, but to better understand how respondents are interpreting this commonly used survey item.

Our theory generates three preliminary hypotheses:

- H1: Adding “in your life” to the traditional happiness question will be associated with increased levels of self-reported happiness.
- H2: Adding “in your life” to the traditional happiness question will be associated with more respondents referencing personal characteristics when answering the question.
- H3: Respondents who reference personal characteristics when answering the happiness question will be more likely to report higher levels of happiness than those who reference societal circumstances.

## **Data and Methods**

Several population-based survey experiments were conducted using a Computer Assisted Telephone Interview (CATI) system to conduct a live-interview dual-frame (cell phone and land-line) telephone survey of residents in North Carolina. Respondents were randomly assigned into a control group or treatment group. The control group was given the standard question

wording: “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 treatment group was given the modified question: “Taken all together, how would you say things are these days **in your life**--would you say that you are very happy, pretty happy, or not too happy?”

We expect that by adding the words “in your life” respondents will be more likely to reflect on personal conditions rather than societal conditions. This means two things: we predict the alternative wording will solicit less unhappy responses and we predict that the modified measure will be less correlated with political and economic variables.

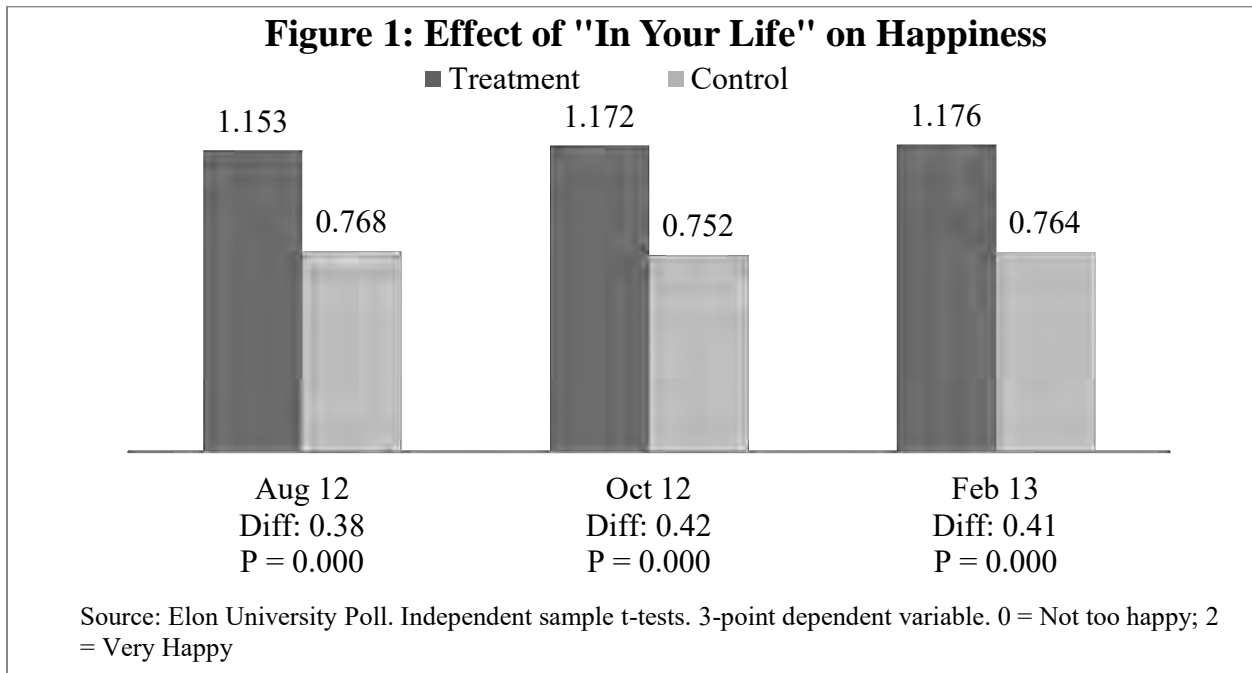
Most surveys on happiness are conducted with national samples. Fewer studies look at a specific region or state. Studying a single state offer several advantages.<sup>3</sup> The climate and weather is more likely to be similar throughout a state than an entire country, and weather has a potentially biasing effect on responses to happiness questions (Connolly 2013; Rehdanz and Maddison 2005). More importantly for this study, it is useful that residents of a single state have the same president, governor and two U.S. Senators as their elected officials. If residents lived among various states they would be exposed to various state policies and political leaders. The lack of variation benefits our study by exposing both the control group and treatment group to similar political stimuli and allows the survey to ask about those political conditions. By focusing on a single state and asking more specific questions relevant to that state’s politics the “black-box” can be opened and the mechanisms of how politics influences happiness can be explored in greater detail (Haller and Hadler 2006). Furthermore, the state of this study, North Carolina is populous and diverse. As a “swing state,” North Carolina very roughly approximates a “typical” state in the United States.

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<sup>3</sup> See Nicholson-Crotty and Meier (2002) for a defense of single-state studies.

## Results: We Are Happier than We Realize

Figure 1 depicts results of three experiments from three different population-based experiments.<sup>4</sup> The first experiment was conducted in August 2012. The second experiment was conducted in October of 2012. The third experiment was conducted in February 2013.<sup>5</sup>



The dependent variable has three response options ranging from “very happy” (2) to “pretty happy” (1) to “not too happy” (0). Those assigned to the treatment group reported statistically and substantively higher levels of happiness in each of the three experiments. The mean happiness level for control group subjects was 0.768 in August 2012, 0.752 in October 2012, and 0.764 in February 2013. In contrast, subjects in the treatment group receiving the “in your life” addition reported substantially higher mean happiness: 1.153 in August 2012, 1.172 in October

<sup>4</sup> See Appendix # for detailed information about each survey.

<sup>5</sup> Pavot and Diener (1993b) found that question ordering could significantly influence responses to a global happiness or satisfaction with life measure, especially if it is a single-item measure. Therefore we rotated both our traditional happiness item and our modified item so as to ensure that any difference observed was not exaggerated by question ordering.

2012 and 1.176 in February 2013. The maximum effect of the treatment ranged from 0.38 in August 2012 to 0.41 in February 2013. Results are remarkably consistent over time, implying consistent effects of the treatment. To put a 0.4 difference in context, the mean happiness difference was 0.27 in August 2012 between subjects with household incomes of less than \$25,000 and those with incomes over \$75,000. Question wording was associated with a bigger difference than a 300 percent increase in respondent income.

### *Validating the Societal Evaluation Causal Mechanism*

In the February 2013 study we tested our expectation about the mechanism causing happiness to be measure at higher level in the “in your life” treatment. We followed the happiness question (in both randomized control and treatment forms) with a follow-up question asking respondents to explain why they gave a particular answer. This was an open-ended question that read, “What is 1 reason why you answered that you are...(very happy; pretty happy, not too happy)?” We then coded open-ended responses coded into the following a 5 point scale taking the following values, 1= definitely personal, 2= mostly personal, 3= neither personal or societal, 4= mostly societal, 5= definitely Societal.<sup>6</sup>

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<sup>6</sup> To assess accuracy of coding, we coded responses with multiple coders. Intercoder reliability was 0.71. Original open-ended responses are available in the replication data.

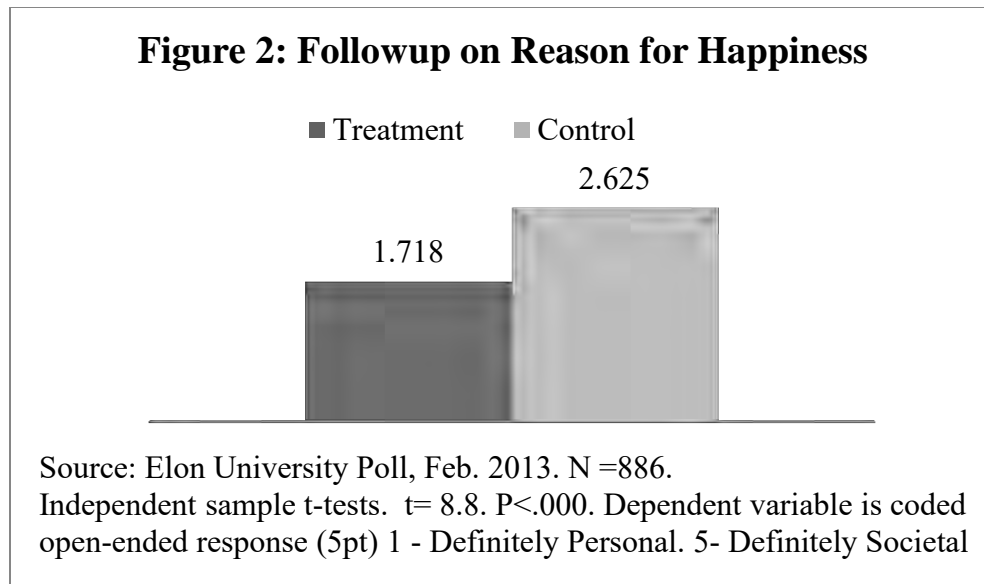


Figure 2 shows an independent sample t-test resulting from this mechanism experiment. Subject who received the ubiquitous wording in the control group were much more likely to respond to the follow up question with a societal reason in the follow-up question than those in . The mean response in the control group was 2.625 compared to 1.718 in the treatment group. This result is statistically significant ( $t=8.8$ ;  $p<0.01$ ). Also noteworthy is that reported happiness tends drop as the reason for the response becomes more societal (Kendall's tau-b = -0.4412;  $p<.01$ ). For instance, the mean happiness was 1.234 for respondents in both control and treatment groups who offered a definitely personal reason for their happiness. In contrast, mean happiness dropped to 0.339 among respondents offering a definitely societal explanation for happiness. Taken together, these results support our three hypotheses that the standard question about happiness encourages respondents to evaluate society rather than their personal lives and that the societal reference points leads to more negative responses to the question.

### **Measurement-Driven Findings about Politics, Economics and Happiness?**

If happiness is one of the most important goals, how do individuals, government, and society facilitate the achievement of this goal? Much of the political science and economic

literature would argue that two of the most important “mechanisms...for the generation and distribution of well-being are markets and politics.” Radcliff (2001, p.941). Until recently, the field of economics was slow to see the usefulness of studying happiness, in part perhaps because economics was more interested in choices people made, rather than less observable features such as attitudes and beliefs (Ferrer-i-Carbonell and Frijters 2004; Frey and Stutzer 2002; Sen 1988). For many years studies of happiness were almost entirely produced in the field of psychology (Frey and Stutzer 2002). Political science, as a field, has seemed far less interested in the concept of happiness and has lagged far behind psychology and economics in this area.<sup>7</sup> This neglect by political science is unfortunate, given that much of the scholarship on happiness seems to hold the idea that politics and government should try to promote the happiness of citizens (Brülde 2010).

Although Pacek and Radcliff (2008) suggest limited empirical research examines the connection between political factors and self-reported well-being, some studies incorporating political factors in their statistical models have uncovered important and interesting findings. Orviska et al (2014) finds that countries or regions that have populations that are satisfied with democracy also have populations that are happy and satisfied with life in general. Similarly, some scholars have found government performance, as measured by level of corruption, level of democracy, and level of service provision, is associated with the happiness of citizens (Helliwell and Huang 2008; Tavits 2008; Rodríguez-Pose and Maslauskaitė 2012; Veenhoven 1995). Frey and Stutzer (2000a) find that individuals were more likely to describe themselves as happy when they lived in a political jurisdiction that offered ballot initiatives and referenda to voters. The researchers seem to suggest that increased opportunities for political participation yield policy outcomes closer to the median voter, making individuals, in the aggregate, more satisfied. Di Tella

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<sup>7</sup> Some notable exceptions include: Alvarez-Diaz, et al 2010; Gerber & Huber 2010; Gerber, et al. 2013; Tavits 2008; Radliff; Pacek and Radcliff 2008; Weitz-Shapiro and Winters 2011.

& MacCulloch (2005) find respondents are happier when the party in power shares their political ideology.

Many studies have included macro-level factors that include variables that measure difference in democracy, political institutions, macroeconomic outcomes (Easterlin 2013; Frey and Stutzer 2000b; Wills-Herrera, et al. 2011). Other studies may also include respondents' attitudes toward democracy and the economy Economic (Graham and Pettinato 2001). Some studies have shown how individuals are generally happier when their party or candidate wins an election (Alvarez-Diaz, et al 2010; Gerber & Huber, 2010; Gerber, et al. 2013; Tavits 2008).

While we do not dispute the aforementioned findings, we do posit that some findings about happiness's relationship with politics and the economy may be biased to the extent that wording of the most common happiness question causes respondents to reflect more acutely on societal conditions rather than their personal situation. This has important implications for studies that are examining how political and economic factors influence happiness. Question wording that draws attention to a respondent's personal life may correlate less with political and economic factors, while wording that is interpreted in such a way as to include conditions outside the respondent's personal life may be more strongly associated with various political and economic variables

As shown above, when respondents were asked why they responded the way they did to the traditional worded question, they were more likely to reference a personal event or condition. When given the modified questions respondents were more likely to reference a societal, political or macroeconomic condition (I don't like the President; the country is going downhill). Because of this we offer two additional hypotheses:

- H4: Personal economic circumstances will be more strongly associated with the modified measure of happiness than with the traditional question.

- H5: Overall political satisfaction will be more strongly associated with the traditional measure of happiness than with the modified question.

We test both hypotheses using ordered probit models with interaction terms.<sup>8</sup> Table 1 presents ordered probit estimates for a model testing Hypothesis 4. The August 2012 Elon University Poll question asked North Carolina registered voters who were currently employed, “How worried are you about losing your job--very worried, somewhat worried, not too worried, or not worried at all?” The right hand side of the model includes a dummy variable for the treatment (treatment = 1; control = 0), the four point job insecurity question (not worried at all = 0; very worried = 1) and the multiplicative interaction term of the two.

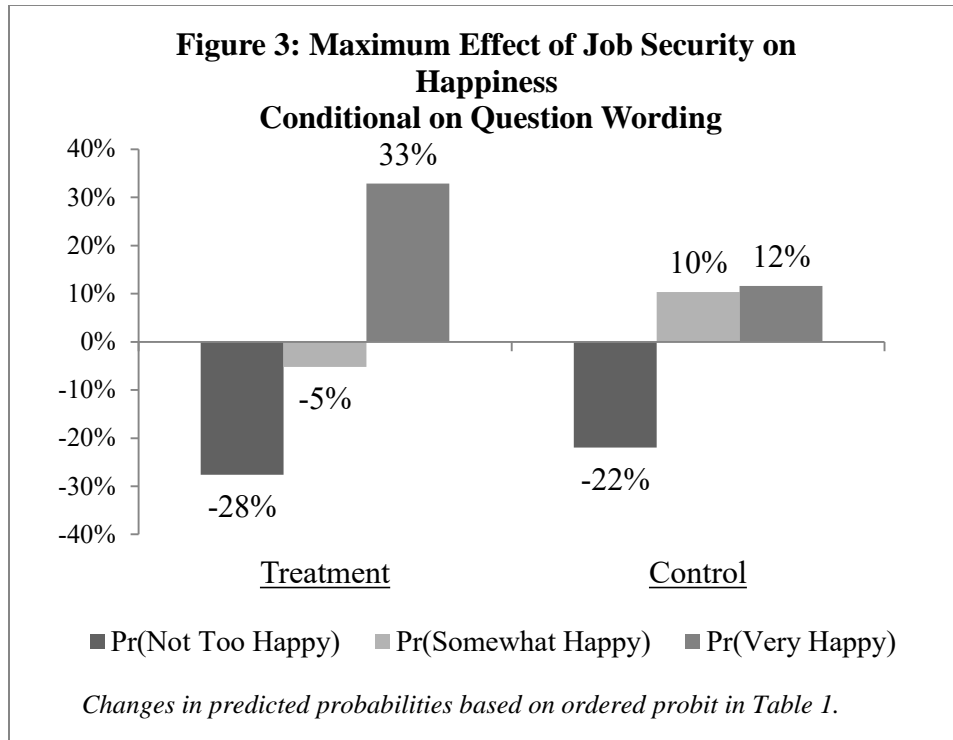
---TABLE 1 ABOUT HERE---

Figure 3 shows maximum effects of job insecurity on happiness conditional on question wording. In the control group, moving from “very worried” to “not at all worried” about job loss increased the probability of responding as “very happy” from 18.8% to 7.1%, a statistically significant change in probability. However, the magnitude job insecurity’s effect was almost three times as large in the treatment group. Among subjects who received “in your life,” the probability of saying “very happy” increased from 13.7% to 46.5% as their job worry moved from “very worried” to “not at all worried,” a 33 point maximum effect. These results support our expectations in Hypothesis 4. Personal economic circumstances seem to matter more when happiness questions encourage respondents to reflect on their personal lives instead of society as a whole.

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<sup>8</sup> We estimate a parsimonious model. However, results are consistent with additional right-hand side variables. Appendix (#) provides randomization balance information.



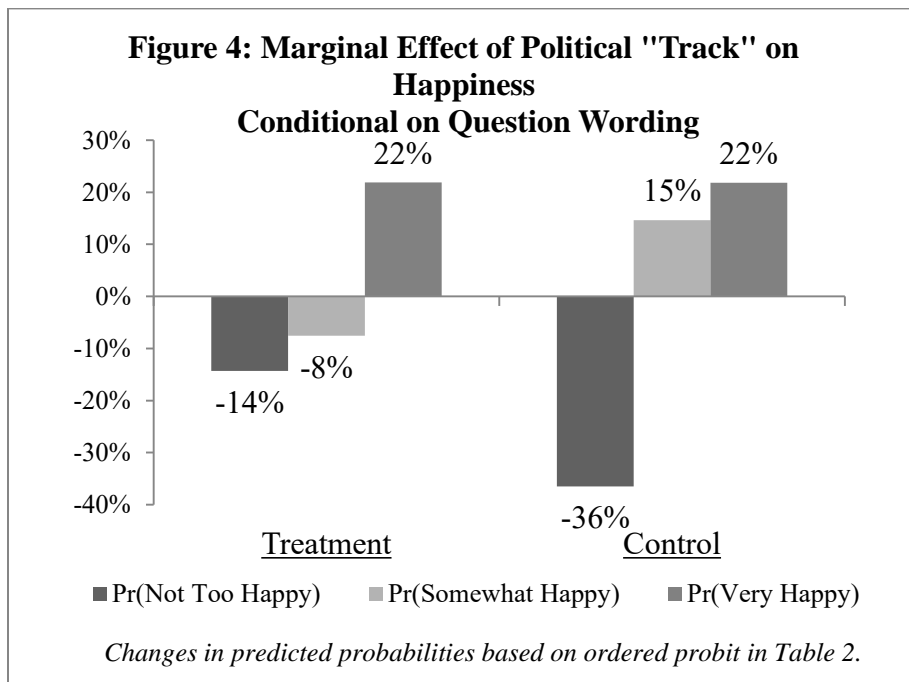


Though we find that personal economic effects matter more in the treatment, we expect broad social and political perceptions to matter less. Table 2 presents a similar ordered probit model of October 2012 Elon University Poll data. Happiness is again the dependent variable. Instead of job security, the right hand side includes the variable, “Do you think things in the nation are generally headed in the right direction, or do you feel things are off on the wrong track?” The model also includes a multiplicative interaction between the treatment dummy and the dichotomous “right track / wrong direction” variable.

---TABLE 2 ABOUT HERE ---

Figure 4 presents an interpretation of the estimates in Table 2 to visualize the effect of "right track/ wrong direction" on happiness conditional on question wording. In the treatment, the probability of responding very happy is 45.4% if respondents said “right track” and 23.5% if “wrong direction.” In the control, the probability of saying very happy is 27.2% if respondents

thought the country was on the “right track” and 5.3% if respondents said “wrong direction.” Both of these represent statistically discernable 22% effects of the track variable. However, in the control condition, the track question is much more powerful in terms of making people unhappy (“not too happy”). In the control question, moving from wrong direction to right track is associated with a 36 point drop in the probability of being unhappy from 56.6% to 20.1%. In the treatment, moving from right track is only associated with a 14 point decline in probability of responding as unhappy, a change from 23.5% to 9.2%. When respondents think about themselves instead of society when they evaluate their happiness, they tend to be less sad.



## Conclusion

The ubiquitous GSS happiness measure is likely to cause respondents to reflect on societal conditions rather than themselves. This leads to lower reported levels of happiness. And, it decreases the measured effect of job insecurity on happiness while increasing the measured effect

of political satisfaction. Are these effects a problem? The answer depends on whether a study is attempting to examine how happy individuals are with current societal conditions or if they are happy with their personal lives. The paradox of growing unhappiness in the face of increasing resources observed by various scholars (Easterlin 1995; Lane 2000) is likely due, in part, to how respondents differentiate between personal circumstances and societal conditions and how different measures will capture one interpretation more than another. The traditional GSS better captures evaluations of societal conditions. Porta and Scazzieri (2007, p.96) write that once a person's basic needs are met, happiness is a "cognitive state associated with beliefs and opportunities." However, those beliefs might not always be the personal well-being of the respondent but instead might be driven by perceptions of society, causing some doubt about the popularized notions that happiness is unresponsive to income after a certain threshold.

One critique of the single-item, global measure of happiness is that it is too general and respondents must think of something specific to answer the question (McClendon and O'Brien 1988; Schwartz and Strack 1986). Much of the debate in the literature is about what personal experiences or conditions are being reference (marriage, job, income, etc.). In this study we show that it may be none of these personal phenomena, but instead the respondent might likely be referencing some societal event or condition.

Many happiness researchers have concluded that their concept can be measured in a meaningful and reliable way, both at the individual and aggregate level (Easterlin 2013; Frey and Stutzer 2002). But it is also clear from numerous studies that some uncertainty remains about exactly how respondents interpret a question and what cognitive process generates that answer. We hesitate to offer a "gold standard" for a happiness measure, but a good question is one where respondent interpret the question in a similar way (Fowler 1995). The evidence presented here

suggests that the traditional single-item, global happiness measure used in hundreds of studies is often not interpreted as “how happy am I” but rather “should I be happy given what the world is like today”? This measurement error surely has led to overestimation of some variables’ effects on happiness and underestimation of other variables’ effects. Future studies should revisit existing scholarship on happiness dependent on single item measures.

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Table 1: Effect of Job Insecurity on Happiness Conditional on Question Wording

	Param. Est. (Std. Error)
Interaction: Job Insecurity * Treatment Wording	-0.429 (0.370)
Job Insecurity	-0.578* (0.258)
Treatment Wording	0.799*** (0.152)
Cut 1	-0.557*** (0.116)
Cut 2	0.886*** (0.120)
Observations	397
Pseudo R-squared	0.069

Source: Elon University Poll- Aug. 2012

Dependent variable is happiness (0 - Not too happy; 1 - Pretty Happy; 2 - Very Happy).

Ordered probit. Employed registered voters in NC. Independent variables range from 0 to 1.

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Table 2: “Direction of Country” Effect on Happiness Conditional on Wording

	Param. Est. (Std. Error)
Treatment Wording * Right Track	-0.397*** (0.127)
Right Track	1.003*** (0.0928)
Treatment Wording	0.889*** (0.0845)
cut1	0.167** (0.0623)
cut2	1.610*** (0.0717)
Observations	1325
Pseudo R-squared	0.101

Source: Elon University Poll, October 2012

Dependent variable is happiness (0- not too happy; 1-pretty happy; 2 - very happy).

Ordered probit. Registered Voters in NC . Independent variables range from 0 to 1.

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001