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Income and Happiness: a Commentary

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The paper discusses five items pertinent to Palanca-Tan (2021) – namely, Easterlin paradox, Easterlin hypothesis, happiness-income model, happiness survey question, and happy poor. The goal is to offer clarification and to help enrich the understanding of readers of Palanca-Tan.

Keywords: Easterlin paradox, Easterlin hypothesis, happiness-income model, happiness survey question, happy poor

INTRODUCTION

Palanca-Tan (2021) analyzed the relationship between income and happiness using cross-section data from Koronadal in South Cotabato, Philippines. The study found that the impact of income on happiness was small compared to other factors like asset ownership and social capital, among others. In addition, Palanca-Tan found that the level in which income had an impact on happiness was PHP 20,000, an amount which she viewed as an estimate of the income poverty threshold for Koronadal.

This paper offers clarification and helps enrich the understanding of readers of Palanca-Tan. In the following sections, I present five items that I found to be most important to discuss – namely, Easterlin paradox, Easterlin hypothesis, happiness-income model, happiness survey question, and happy poor

EASTERLIN PARADOX

Standard economic theory stipulates a positive relationship between the level of income and the level of well-being or, in this case, happiness. Presumably, happiness rises over time as income grows over time.

But Easterlin (1974) found that an income-happiness relationship existed only at a point in time but not across time. Later, Easterlin (2001) argued that an income-happiness relationship was possible in the short-run period but not in the long-run context [see Easterlin (2017) and Easterlin and O'Connor (2020) for recent discussions].

Time is a crucial element of the Easterlin paradox. Thus, an investigation on the paradox would need time-series data that extended over a sufficiently long period. Palanca-Tan resorted to Stevenson and Wolfers (2013) because she only had cross-section data from a survey in November 2019.

I should mention that there is a debate between the “Easterlin group” and the “Stevenson-Wolfers group” (Beja 2014, 2015a). The latter group would tend to redefine the Easterlin paradox, apply creative econometric techniques, and resort to cross-section data. Stevenson and Wolfers (2013), for instance, did not confront the core issue of the Easterlin Paradox head-on.

EASTERLIN PARADOX VS. EASTERLIN HYPOTHESIS

Palanca-Tan referred to the Easterlin paradox as the “Easterlin hypothesis” and, in other parts of the paper, she wrote “Easterlin hypothesis or paradox” (Palanca-Tan

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2021: p. 951, 954). Her labeling merely followed the labels introduced in Stevenson and Wolfers (2013).

I would like to emphasize that there is specificity to the labels “Easterlin paradox” and “Easterlin hypothesis” because they refer to different scientific contributions of Richard Easterlin. Footnote 2 in Stevenson and Wolfers (2013: p. 598) cautioned against the misapplication of labels.

In particular, the Easterlin paradox springs from Easterlin (1974), the seminal paper in the field of happiness economics; whereas the Easterlin hypothesis arises from Easterlin (1961), a pioneering explanation to the mid-20th century baby booms, in the field of demography economics. The Easterlin hypothesis basically argues that the positive relationship between fertility and income is due to relative income. Easterlin (1974) actually presented relative income as a factor behind the Easterlin paradox.

CONCEPTUAL MODEL

The standard economic model of utility, $U = f(\cdot)$, would not be problematic to use as a starting point for an analysis of the income-happiness relationship. Palanca-Tan referenced its theoretical foundation by citing Arthur Pigou, but I would go further back in the literature and at least mention Jeremy Bentham. In this regard, Kahneman *et al.* (1997) showed that well-being could be used to represent utility, a proposition that Palanca-Tan also agreed with.

Happiness research restates the expression $U = f(\cdot)$ as $H = f(h(\cdot))$, where H is reported well-being and $h(\cdot)$ is latent well-being. Note that happiness research uses happiness or satisfaction to mean well-being.

The claim with a setup like $H = f(h(\cdot))$ is that “true” well-being is latent because it is an internal experience of a person. Another claim is that reported well-being is some transformation of latent well-being. Discrepancies between H and h —that is, $(H - h) = e$, where e means error—are presumed to be the result of cognitive biases, cultural predispositions, *etc.* Yet an additional claim is that the error is not from a change in the valence of life circumstances (*e.g.* winning a gold medal is a positive experience) but only from the interpretation of experiences. Thus, if $e \sim N(0, \sigma_e^2)$, then $H \equiv h$ when there is a sufficiently large set of observations.

Palanca-Tan used a version of $H = f(h(\cdot))$ in her analysis of the data from Koronadal. I would argue that her setup is valid even without a reference to the Easterlin paradox.

As Layard *et al.* (2008) showed, marginal utility analysis would be possible for such a setup. In fact, $H = f(h(\cdot))$ had been used as an alternative approach to the valuation of the environment and other non-marketed goods [see Frey *et al.* (2010) for a review].

HAPPINESS SURVEY QUESTION

Palanca-Tan stated that her happiness survey question was based on the pioneering work of Hadley Cantril and Robert Inglehart. I would like to stress that Cantril and Inglehart imply different metrics.

Cantril (1965) developed the ladder method for eliciting well-being. In this method, respondents are initially shown a ladder with 10 rungs, with the best possible scenario being at the top rung and the worst possible scenario at the ground level or below the first rung. The rungs of the ladder are numbered, with 1 at the first rung, *etc.* Zero is located at the ground level or below the first rung. Respondents are informed that the number 0 represents the worst possible life, while number 10 represents the best possible life for them. Then, they make an evaluation of their lives using the integer values between 0–10. Note that the setup is an 11-point scale.

World Values Survey (WVS), which Richard Inglehart directed for many years, contains separate queries for happiness and for satisfaction. In the WVS, the happiness query is: “Taking all things together, would you say you are very happy, rather happy, not very happy, not happy at all.” Respondents state their happiness using these labels. Note that the WVS happiness query is a four-point scale.

Meanwhile, the WVS query for satisfaction is: “All things considered, how satisfied are you with your life as a whole these days?” Respondents see a card with a scale that contains the integer values between 1–10, where 1 means “completely dissatisfied” and 10 means “completely satisfied”. Then respondents assess their lives. Note that this satisfaction query is a 10-point scale.

I do not see any problem if someone wishes to develop a happiness query or a satisfaction query using existing surveys as starting point—I ventured into this area before (Beja 2015b, 2019; Beja and Yap 2013). The issue that I would like to point out here is that the labels “completely unhappy and dissatisfied” and “completely/perfectly happy and satisfied” that Palanca-Tan (2021: p. 954; emphasis mine) introduced in her November 2019 survey in Koronadal are unusual because the norm in happiness research is to use separate queries for happiness and satisfaction. For instance, Social Weather Stations uses separate queries for happiness and satisfaction, among others, in their regular quarterly surveys.

Of course, happiness and satisfaction are related to each other, but they are not really identical concepts. And the stylized fact is that happiness and satisfaction queries elicit different responses because the former draws more on emotion and the latter draws more on evaluation. The phrasing of scale labels actually affects the outcome of a survey (Schwarz 1999).

Palanca-Tan did not discuss survey question validity. Thus, I am not convinced that her survey question in Koronadal elicited happiness responses only or elicited satisfaction responses only. Or Palanca-Tan could be asserting that the responses to her survey question be read as net assessments of well-being like Campbell *et al.* (1976). But Palanca-Tan also did not discuss how one ought to read answers of her respondents from Koronadal.

Nonetheless, a re-reading of Table II of Palanca-Tan would be possible. So, let values between 0–4 mean “suffering,” values between 5–6 to mean “struggling,” and values between 7–10 to mean “thriving”—that is, to read the results along the lines of Gallup. In this manner, I would argue that Table II of Palanca-Tan actually indicated that the respondents from Koronadal in the income groups below PHP 20,000 were in the struggling zone (group mean for happiness indicated between 6.31–6.87), whereas those in the income groups above PHP 20,000 were in the thriving zone (group mean of happiness indicated between 7.02–7.57). Notice that average happiness for the whole sample from Koronadal would still fall in the struggling zone (Table II).

HAPPY POOR

Amartya Sen alluded to the “happy poor” in his work on capabilities in order to highlight a problem with the utility approach to economic analysis. He argued that human adaptation could lead poor people to experience great pleasures from small positive changes in their life circumstances. Sen (1985: p. 21) wrote:

“A person who is ill-fed, undernourished, unsheltered, and ill can still be high up in the scale of happiness or desire-fulfillment if he or she has learned to have ‘realistic’ desires and to take pleasure in small mercies. The physical conditions of a person do not enter the view of well-being seen entirely in terms of happiness or desire-fulfillment, except insofar as they are indirectly covered by the mental attitude of happiness or desire.”

Obviously, human adaptation happens over time. In this context, an application of “happy poor” would presume time-series data. Therefore, the reference to the “happy poor” in Palanca-Tan was misleading.

All other things the same, the quality of life of poor people is lower than that of the non-poor. Put another way, poor people are less happy with their lives than the non-poor. Hunger, for instance, is clearly positively correlated with a low level of happiness, as bared by the data from Social Weather Stations. Thus, given the context of Sen (1985), public policy would not be one that made the poor happy; rather, it would be one that addressed the conditions that brought about poverty such as lack of education, poor quality of health, inability to get a job, among others. In the end, an approach that dealt with the causes of poverty would be more effective in helping the poor to overcome poverty and, in turn, more relevant in enabling them to experience better well-being in life.

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CONFLICT OF INTEREST

The author declares no conflict of interest.

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Income and Happiness: a Rejoinder

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I thank Dr. Beja for guiding us to additional literature as well as giving a more extended discussion of literature cited in the paper, thus further clarifying concepts in happiness research.

In this response, I would like to focus on the happiness survey question. In the survey instrument, I combined happiness and satisfaction in a single question. Dr. Beja pointed out that “the norm in happiness research is to use separate queries for happiness and satisfaction.” Dr. Beja further argued that: “... happiness and satisfaction are related to each other, but they are not really identical concepts. And the stylized fact is that happiness and satisfaction queries elicit different responses, because the former draws more on emotion and the latter draws more on evaluation.”

I have a data set obtained from an online survey that included separate questions on happiness and satisfaction. The survey was conducted in April 2021 by my Statistics students (as a requirement for the course) using the snowballing approach in generating respondents. Students were allowed to get respondents from all over the Philippines, but about half (51.8%) of the 587 respondents were residents of the National Capital Region at the time of the survey. Two questions asked are as follows:

How satisfied are you in your current life conditions? Please answer this question using a scale of 1–10, where 1 means very dissatisfied and 10 means fully satisfied.

How happy are you at present? Please answer this question using a scale of 1–10, where 1 means very unhappy and 10 means perfectly happy.

I conducted some statistical procedures on this data set to look for some indication of how different or similar Filipinos answer separate happiness and satisfaction questions. The first panel of Table 1 presents summary statistics for the happiness and satisfaction scores. The means of the happiness and satisfaction scores are very close, and so are their standard deviations. The 95% confidence intervals for the mean scores are

Table 1. Happiness and satisfaction scores comparison.

	Mean	Std. error	Std. deviation	95% confidence interval
Happiness	6.855	0.078	1.889	6.702–7.008
Satisfaction	6.835	0.079	1.920	6.679–6.900
Test of hypothesis				
paired difference (s-h)	0.020	0.058	1.393	-0.093–0.133
t-stat	0.3555			
$H_0: \mu_{(s-h)} = 0$				
$H_a: \mu_{(s-h)} \neq 0$				
Coefficient of correlation	0.7325			

essentially overlapping. The test of hypothesis on the paired difference (satisfaction score – happiness score), averaging 0.02 for all respondents, concludes with the acceptance of the null hypothesis, suggesting that there is no statistically significant difference between the happiness and satisfaction scores of the respondents (second panel of Table 1). This is further supported by a substantially high (0.7325) correlation of coefficient between the two scores (third panel of Table 1).

One of the objectives of my paper is to find empirical evidence for the effect of income on a broader welfare measure – self-assessed or self-reported happiness, as a proxy for utility. In introductory economic classes, the economic concept of utility is commonly explained using the layman’s term, satisfaction. Accordingly, the broader welfare measure question in the paper was phrased in terms of happiness and satisfaction. To take a cursory look at how divergent or similar the impact of income is on separate happiness and satisfaction scores, I ran two regressions with the two scores as dependent variables and income as the independent variable. The regression results are presented in Table 2. Consistent with the findings in my paper that used the combined happiness-satisfaction score, the ordinary least squares regression runs for the happiness score and the satisfaction score both yield a

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Table 2. Relative effects of income on happiness and satisfaction scores, ordinary least squares results.

Dependent variable	Coefficient of income		R ²
	Point	95% confidence interval	
Happiness	0.00000295***	0.00000088–0.00000502	0.0132
Contentment	0.00000439***	0.00000237–0.00000641	0.0303

statistically significant positive effect of income that nevertheless has a very small magnitude. The minuteness of the values of the coefficients of income in the regressions may suggest that the distinct effects of income on happiness and on satisfaction are essentially equal. With the R-squared slightly higher for the satisfaction regression than for the happiness regression; however, it appears that income is more correlated with satisfaction than with happiness, implying that income accounts for a slightly greater proportion of the variation in the satisfaction score than it does for the happiness score. In other words, income appears to be a slightly more relevant factor for satisfaction than for happiness.

As a final note, let me reiterate that the statistical analyses undertaken for this response are quick and preliminary probe into how Filipino respondents may perceive and answer separate happiness and satisfaction questions in a survey. The two measures may differ conceptually, most particularly within the frames of Psychology and Sociology (the discussion of which is beyond the objective of this response), but preliminary empirical results presented here indicate that separate questions for these two elicit very similar responses, almost equivalent in statistical terms.

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