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Gazi Islamro

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Objective and subjective indicators of happiness in Brazil: The mediating role of social  
class

Gazi Islam  
Department of Administration  
Ibmec, São Paulo  
Rua Quatá 300, 4 andar  
Vila Olímpia, São Paulo SP  
Brazil, 04546-042  
gislamster@gmail.com  
tel. 55-11-4504-2438

Eduardo H. Wills  
Universidad de los Andes, Bogotá

Marilyn Hamilton,  
Royal Roads University

*Objective and subjective indicators of happiness in Brazil: The mediating role of social class*

Abstract

The following research note tests the proposition that monetary household income affects Subjective Well Being (Deiner et al, 1999) through the mediating mechanisms of objective and subjective social class. A representative sample is drawn from a Brazilian urban center, in a door-to-door survey format. A back-translated version of Diener et al's (1985) Satisfaction with Life Scale showed a significant relationship with income. However, this effect was mediated by both objectively measured and subjectively measured social class. These effects reinforce, extend, and internationally generalize the person x situation perspective elaborated by Diener et al.

Key Words: Happiness, Social Class, Subjective Well Being, Income, Latin America, Brazil

The last 30 years have seen a proliferation in studies of the correlates of subjective happiness (e.g. Diener et al, 1999). The recognition that economic well-being is distinct from subjective well-being has become an important development in the social science literature; however, the frequent correlation between the two (Diener et al, 1999) has led researchers to attempt to disentangle the complicated link between material prosperity and happiness.

The idea that financial buying power is linked to happiness through various intermediary mechanisms has gained currency in recent years, particularly in the psychological literature (e.g. Johnson & Krueger, 2006; Solberg, Diener, Wirtz, Lucas, & Oiahi, 2002). Johnson & Krueger, for example, demonstrate a mediating role of control over life circumstances in the relationship between wealth and subjective well-being, suggesting a gene-environment interaction between personality and wealth. Campbell, Converse and Rogers (1976) and later Solberg et al (2002) suggest that this mediating link involves self-discrepancy comparisons between lifestyle-related desires and economic reality. With regards to other comparisons, however, the evidence has been mixed (Solberg et al 2002); Diener & Fujita (1997), for example, found that happiness can itself determine social comparison points, which would reduce the situational importance of material prosperity in affecting happiness.

Because of this plasticity of reference points for self-comparison, it makes conceptual sense to compare both objectively measured social comparisons and subjective social comparisons when studying mediators of income and subjective well-being. Using social class – an inherently comparative notion- can be informative in this respect. The notion of social class, particularly as it has been studied in Brazil (e.g. Berti & Barros, 1986; Lombardi, Bronfman, Facchini, Victora, Barros, Béria & Teixeira 1988) is based on an economic, but also an ideological and legal-political stratification

within a society. It refers to the placement of individuals within a social and ideological hierarchy, and is operationalized as the ability to carry out a material existence consistent with specific consumption habits. Thus, as measured in the current Brazilian sample, objective social class is a lifestyle variable (e.g. Schaninger, 1981), which should be subject to constraints based on income, but should also reflect subjective desires for the acquisition of goods. Second, since in Brazil the notion of social class is often used in the colloquial as a shorthand for one's "position" in society, the subjective measurement of social class should capture peoples' view of how they fare compared to society *in general*, without imposing experimenter-specified group membership or reference points as in some past literature (e.g. Diener, Sandvik, Siedlitz & Diener, 1993). Thus, we hypothesize that both objective and subjectively measured social class should provide a mechanism linking income to subjective-well being.

We here propose and test the idea that social class provides an important mediating link between these two concepts. As stated above, we conceptualize two different forms of social class: objective social class (OSC), or social segmentation based on materially observable consumption habits and subjective social class (SSC), or the "feeling" of being in a high, middle or low class. Past literature comparing psychological effects of income versus social class have emphasized that the latter is more reflective of lifestyle differences versus simple buying power (e.g. Schaninger, 1981). Because social class depends on some degree of material wealth yet is proximal to the subjective daily experiences people encounter than raw income, we posited that social class, both objective and subjective, will statistically mediate the relationship between income and subjective well being (SWB).

Our sample was a representative sample of citizens of Belo Horizonte Brazil (N=576), who took part in a survey conducted by national polling agency working with

the authors. Income was measured in terms of monthly household income in Brazilian Reais. Objective social class was measured using official census measures (based on a representative array of consumer goods indices used by the federal government statistical association [IBGE]), and subjective class was measured by a questionnaire item asking respondents to classify themselves between class A-E (a common colloquial way to speak about class in Brazil). Low scores indicated higher social class (i.e. 1<sup>st</sup> class, 2<sup>nd</sup> class, etc). The objective and subjective measures were conceptualized as indicating separate constructs; not unexpectedly, however, they were significantly correlated ( $r = .455, p < .01$ ). This correlation was, however, low enough to sustain an argument for their distinctiveness, in addition to the theoretical distinction between material consumption and subjective evaluation of class. SWB was measured by Diener et al's (1985) Satisfaction with Life Scale, translated and back-translated,  $\alpha = 0.788$ .

In order to test for mediation, a four-step regression based method was used (Baron & Kenny, 1986). In the first step, SWB was regressed on income, showing a significant linear relation ( $\beta = .186, t = 2.719, p < .01$ ). In the second step, social class measures were regressed on income, showing a strong relation for both objective and subjective social class (OSC:  $\beta = -1.198, t = -25.498, p < .01$ ; SSC:  $\beta = -.594, t = -13.198, p < .01$ ). In the third step, both objective and subjective social class were significantly related to SWB (OSC:  $\beta = -.117, t = -2.825, p < .01$ ; SSC:  $\beta = -.304, t = -.5601, p < .01$ ). Finally, to show mediation, SWB was regressed on income, as in the first step, but controlling for social class. In this case, mediation is shown if the effect found in the first step drops below significance (Baron & Kenny, 1986). Controlling for OSC, the income-SWB relationship was non-significant ( $\beta = -.097, t = .964, p = .335$ ). In the case of SSC, the relationship was also non-significant ( $\beta = .002, t = .027, p = .978$ ). In addition, in order to check for the independence of effects of OSC and SSC,

the effects of each on SWB were assessed controlling for the other. In the case of SSC, the effects held regardless of OSC ( $\beta = -.296$ ,  $t = -.484$ ,  $p < .000$ ). However, controlling for SSC, the effects of OSC dropped to non-significance ( $\beta = -.013$ ,  $t = -.278$ ,  $p = .781$ ), suggesting a particularly strong role for the subjective appraisal of class than for the objective measure.

These results suggest that income is an important consideration in the prediction of happiness, but that income may work through proximal lifestyle mechanisms such as how individuals perceive themselves to be placed within society, and how their objective consumption patterns reflect high status lifestyles. These results reinforce the person x environment perspective described by Diener et al (1999), showing empirically in an international sample how such a model may function. Consistent with the discrepancy comparison framework (e.g. Campbell et al 1976), income worked mainly through lifestyle factors that proximately affected subjective well being. Similar but distinct comparative lifestyle constructs such as socioeconomic status (e.g. Argyle 1994), social status (e.g. Jost & Burgess 2000) and social power (e.g. Kelter, Anderson & Gruenfeld, 2003) could thus provide related areas for future exploration.

This study compliments earlier self-discrepancy studies by linking macro, society level relative comparisons with subjective well-being. Rather than past studies that identify particular reference points or communities for comparison (e.g. Diener et al, 1993; Haggerty, 2000), we use a general index of placement within society as a whole. Particularly in countries with extreme levels of inequality by world standards (i.e. Brazil, WorldBank, 2003), this difference may be conceptually important. Specifically, where a very small percentage of the population controls a large portion of the wealth, such as is the case in Latin America (Hoffman & Centeno, 2003), large portions of the population may fall within the lower social classes, but be surrounded by



similarly low-income neighbors. That relative class standing can become salient even where the upper classes are so few and isolated attests to the power of class standing for psychological processes.

## References

- Argyle, M. (1994). *The psychology of social class*. New York: Routledge.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Berti, M. & Barros, A. (1986). A utilização do conceito de classe social nos estudos dos perfis epidemiológicos: uma proposta. *Revista da Saúde Pública*, 20, 4
- Campbell, A., Converse, P. E, & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Diener, E., & Fujita, F. (1997). Social comparisons and subjective wellbeing. In B. Buunk & R. Gibbons (Eds.), *Health, coping, and social comparison* (pp. 329–357). Mahwah, NJ: Erlbaum.
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, 28, 195–223.
- Diener, E., Emmons, R.A., Larsen, R.J. & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49,1 ,71-75.
- Diener, E., Suh, E.M., Lucas, R.E., and Smith, H.L. (1999). Subjective well being: Three Decades of Progress. *Psychological Bulletin*, 125, 2, 276-302.
- Hoffman, K. and Centeno, M.A. (2003). The lopsided continent: Inequality in Latin America. *Annual Review of Sociology*, 29, 63–90
- Johnson, W. & Krueger, R.F. (2006). How Money Buys Happiness: Genetic and Environmental Processes: Linking Finances and Life Satisfaction. *Journal of Personality and Social Psychology*, 90, 4, 680–691
- Jost, J.T. & Burgess (2000). Attitudinal Ambivalence and the Conflict Between Group

and System Justification Motives in Low Status Groups. *Personality and Social Psychology Bulletin*, 26, 3, 293-305.

Keltner, D., Anderson, C. & Gruenfeld, D.H. (2003). Power, Approach, and Inhibition.

*Psychological Review*, 110, 2, 265–284.

Lombardi, Bronfman, Facchini, Victora, Barros, Béria &Teixeira (1988).

Operacionalização do conceito de classe social em estudos epidemiológicos.

*Revista de Saúde Pública*, 22, 4 1-17.

Schaninger, C. M. (1981). Social Class Versus Income Revisited: An Empirical

Investigation, *Journal of Marketing Research*, 8, 192-208.

Solberg, E.C., Diener, E., & Wirtz, D. (2002). Wanting, Having, and Satisfaction:

Examining the Role of Desire Discrepancies in Satisfaction with Income.

*Journal of Personality and Social Psychology*, 83, 3, 725–734.

Worldbank (2003). *Brazil: Equitable, Competitive, Sustainable*. Washington, D.C.:

The World Bank