

## Subjective Wellbeing from a Developing Country Perspective. An Alternative Multilevel Approach.

Jorge Yamamoto<sup>1</sup>.

### INTRODUCTION.

This paper presents the wellbeing in developing countries (Wed) subjective wellbeing quantitative component (wedqol) rationale, method and analytic technique. It was designed by the Peru team (Yamamoto, 2004; Yamamoto & Feijoo, 2005) and its fieldwork was conducted at the four Wed countries. This paper summaries some aspects of the analyses and interpretation of the Peruvian fieldwork.

### Developing Countries People's Thoughts and Emotions Matters.

After my participation in a research program related to wellbeing and international development, I observed a sophisticated and intelligent discourse about the academic European tradition on the topic. However, listening to this rationale, I found that it can get very far and disconnected with the reality of a developing country.

The corner stone of the process is the theory. A sophisticated self-fulfilling discourse is related to a self-fulfilling research design which maximise the possibility of a fluent coincidence with the reality that leads to industrial-grade publication, academic jet-set conferences, and finishing the circle reinforcing the theoretical milestone. Sometimes, developing countries become just the ball required to play the game. It is not the goal; it is the mean for goal.

This is not colonialism in terms of territorial control. However, there is a property of the means for intellectual production and distribution, controlling development and wellbeing conceptions. Those conceptions are assumed as standards to be followed and the measures by which, programs, people's quality of life, researchers, and professors would be evaluated. If an Ethic procedure assumes the free determination of the consciousness and willingness of people, we have a huge ethical issue here. Developing countries people's thoughts and emotions matters.

Beyond ethics, developed countries life goals and life styles have been related to miserable subjective wellbeing. Kasser and Ryan (1993) found that American people's thoughts were related to economical motivation, and the centrality of the material motivation is negatively related to wellbeing, and mental health;

---

<sup>1</sup> Profesor asociado del departamento de psicología. Pontificia Universidad Católica del Perú. Avenida San Miguel cuadra 18, San Miguel, Lima Perú. [jyamamo@pucp.edu.pe](mailto:jyamamo@pucp.edu.pe)

shows less adjustment and lower social productivity, and describe more behavioural disorders. Following studies found consistent results in this direction (Kasser & Ryan, 1996, , 2001; Sheldon, Ryan, Deci, & Kasser, 2004). World happiness surveys also report consistently that self appointed first world countries reported the lowest happiness levels while appointed Latin American and Caribbean third world countries are among the happiest in the planet (See: Marks, Abdallah, Simms, & Thompson, 2006)

Therefore, if development means to change what we have in Latin American and Caribbean “developing” countries in order to achieve what they have in “developed” countries, this is not necessarily an intelligent trade in. Western popular culture expresses systematically an existential void and a quest for life essentials. Buss (2000) from an evolutionary psychology perspective concludes that human being was designed for happiness in the context of ancestral times which configured modern humans. The gap between those small communities surrounded by landscapes with strong interpersonal relations, and the modern society is the main source of contemporary (developed country) unhappiness. If contemporary western society is looking for life essentials, small traditional communities in rural remote areas in “developing” countries constitute a time tunnel to understand the essentials of wellbeing. Non-material motivated countries people’s thoughts and emotions matters; for ethical issues, and because we can give significant insights to increase subjective wellbeing in material motivated countries. An alternative epistemology is required to emancipate people, researchers and practitioners of the appointed third world.

A Method to Identify Native Wellbeing Conceptions: Emic Research and Post-Hoc Theorising.

An upside down proposal starts with milestone reality. Instead looking for the answer in our creative heads, we look for real happy places and investigate reasons behind. To identify the wellbeing categories those people have, in their own perspective or emic categories are required. Based on those emic categories, extensive exploratory and confirmatory research is followed in order to construct a post-hoc theory. This is translated into a slow publication process that marginalise in relation to the academic industry pressure and standards.

This epistemology is translated into a methodological framework that starts in the core of the reality to be investigated through ethnography and participant observation. This must be conducted by researchers that are culturally close to the research sites, speaks the birth language of the site, and quickly understands the subtleness of the cultural symbols. This mean that is not enough to spend months backpacking the country; is not enough to be born in country. I am Peruvian but I do not speak Quechua and I learn the symbols at the university through the lens of different authors that do not agree each other. Unbiased observers are required to get first hand information. After months of contact

with the community, in-depth open-ended interviews were conducted (N=400). Content analyses of those interviews reduce the information into emic categories which were the inputs for the items of native psychometric scales (N=550). An iterative process of exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) provides the basis of a less biased information reduction. After completing the identification of the wellbeing components (see wellbeing definition below), integration of these components were conducted using structural equation modelling (SEM). CFA and SEM require a theoretical basis to start the analysis (Hair, Anderson, Tatham, & Black, 2004). In order to jump this self-confirmatory theoretical conspiracy, we use the dense qualitative data instead of the theoretical grounds in an iterative process where quantitative and qualitative data interact and converge very closely. This leads to a post-hoc theorisation, looking for which (if any) theory fits better to the reality. This post-hoc theory, a pale reduction of the reality is the ball we play our game.

#### From Theory to Intervention and Back to Research.

The SEM model presents the complex interactions that lead to wellbeing. It opens the windows for the strategic design of wellbeing improvement multilevel programs that focus on the variables directly related. An additional emic-emic SEM model that goes in-depth to the singularities of the intervention site are required in addition to the general theoretical model. The implementation of the ad-hoc designed program constitutes an acid test for the model and the theory. Evaluating the program results at multiple levels using the same model, and comparing with the previous baseline data leads to a SEM program evaluation. This results feedback the model falsifying previous convictions, starting a new iteration into reality. On the next part results using this model at the research level are presented. At this time, there are still not results on the program implementation phase.

#### Wellbeing Definition and Components.

There is evidence about the importance on wellbeing of goals and needs (Brunstein, 1993; Brunstein, Schultheiss, & Maier, 1999; Sheldon, 2001; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001; Sheldon, Kasser, Smith, & Share, 2002; Sheldon, Ryan, Deci, & Kasser, 2004), resources (classic economics is virtually based in this assumption), life satisfaction (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Fujita & Diener, 2005), values (Diener, Oishi, & Lucas, 2003; Oishi, Diener, Suh, & Lucas, 1999; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002), and personality (Diener, Oishi, & Lucas, 2003; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002; Weiss, King, & Enns, 2002; Weiss, King, & Perkins, 2006). The core challenge is to integrate available evidence in a coherent model (Nesse, 2005). Wellbeing is here defined

as the process for satisfying universal needs considering personal, cultural and contextual conditions. A goal is set in relation to the individual (personality) and cultural (values) characteristics of the person for goal achievement, which is mediated by resources (material, subjective, social.). The achievement perception is moderated by individual and cultural characteristics.

#### Goals and Needs.

A three factor solution has confirmatory evidence (P .138., CMIN/DF 1.274., NFI 956): place to live better, raise a family and modern development. These factors do not have coincidence with established theories in European and American tradition. They describe the big social tendencies in Peru like strong systematic migration from rural areas to cities, early marriage and high number of children, and the importance of modern development. The latter also lead to an explanation of the reasons why they migrate despite the higher subjective wellbeing in the rural areas. In order to test how universal are these factors, a groups CFA analysing data from Bangladesh, Peru and Thailand was conducted. Result does not support the universality of this three factor solution. Two factor solution (P.801., CMIN/DF .713., NFI .983) confirmatory evidence was found for good place to live and raise a family. This solution suggests a universal evolutionary theory of needs. To raise a family is related to Darwin's survival of the fittest and Hamilton's Inclusive Fitness, grounded on the roots of any human being and all complex living creatures. Place to live well factor could be interpreted in terms of an extension of classic evolutionary model relating to territorial control. Ancestral migrations started on Africa some 60-50 thousand years before present and finished populating the whole planet about 10 thousand years before present; Y chromosome mutations and mitochondrial DNA provide evidence (Wells, 2003) of this migratory journey that puts the territorial control in the roots of ancestral history. In addition, territorial control and looking for a place to live explain patterns of organised war in chimpanzees (Pan Troglodytes)(Wilson & Wrangham, 2003) that cannot be explained by inclusive fitness. We propose that universal needs do exist and are rooted in evolution. The way how those needs are converted in practical goals that guides behaviour and wellbeing are cultural, and personal mediated. Universal needs are not those inspired on material oriented countries like competence and autonomy (see: La Guardia, Ryan, Couchman, & Deci, 2000; Ryan & Deci, 2001). Cultural relativism is neither suggested but the fulfilment of universal evolutionary needs in the context of the cultural values and individual personality.

#### Subjective Satisfaction with Life.

Subjective Satisfaction with Life is the contrast between needs and need achievement perception. Each of the three need factors are contrasted with the perception of its achievement. Using the same structure of goals, a CFA was conducted in order to verify the validity of the scale of need achievement perception obtaining confirmatory results. Therefore, we proceed to contrast goal with achievement perception for each factor. A simple T test or repeated

measures ANOVA can be performed. These procedures has the advantage to bring a statistical test, and the direction of the difference compared with established life satisfaction models that brings a general index of life satisfaction as a subjective evaluation of the life (see: Diener, Emmons, Larsen, & Griffin, 1985; W. Pavot & Diener, 1993; W. G. Pavot, Diener, Colvin, & Sandvik, 1991). In addition, it provides information about which specific needs are dissatisfied, very valuable information for program intervention and evaluation. Results suggest a significant dissatisfaction on place to live better and development; significant satisfaction on raise a family. If we understand these results with the findings from Kasser & Ryan (1993, 1996) and Sheldon & Elliot (1999) in the direction that material goals fulfilled does not increase wellbeing but intrinsic goals like family does, we can have an interpretation about why Latin American countries are higher than developed countries on the Happy Planet Index (Marks, Abdallah, Simms, & Thompson, 2006). Using repeated measures MANOVA to analyse the influence of demographic variables on satisfaction with the life provide evidence on the hedonic treadmill effect (P Brickman & Campbell, 1971; Philip Brickman, Coates, & Janoff-Bulman, 1978) and that raise a family is not hedonic tread milled.

#### Additional Wellbeing Components.

Due to time limitations additional wellbeing components will be mentioned shortly. An one-dimensional resource confirmatory solution is found (P.110., CMIN/DF 1.476., NFI .961) which includes social, societal, and interpersonal dimensions. A two factor confirmatory solution for values (P.872., CMIN/DF.309., NFI .999) is found: gregariousness and differential individualism. Gregariousness is not a subordination of the individual for the collective as Markus and Kitayama definition of interdependent cultures (Markus & Kitayama, 1991), it is a convergence between group and individual progress, in relations of sharing, support and advice. It is opposed (-.32) to differential individualism, which is defined by envy and selfishness. It is interesting to mention that education has a significant influence on values: as education increase, gregariousness decrease and differential individualism increase. In relation to the second millennium goal, we must first restructure education before promote it. Personality was measured by an adaptation of the Goldberg personality test for Peruvian samples (Calderón, 2003). There was no confirmatory evidence for the five factor model (FFM) of personality (McCrae & Costa, 1997; McCrae et al., 2000) which has cross-cultural validation on educated, western, individualistic contexts (Triandis & Suh, 2002). A three factor solution that has not similarity with the FFM was found (P. 067., CMIN/DF .1.349., NFI.869) which contents reflects the Peruvian common ways of behave and can be interpreted as strategies for adaptation at the individual level. The personality differences among subjects can be interpreted as a heterogeneity advantage for group adaptation. The factor names reflect the

local behavioural patterns what makes difficult to translate: mosca-ahuevado, buena gente-mala gente, and buena onda-mala onda.

### Integrating the Components: A Wellbeing Model.

The wellbeing definition presented elsewhere in this paper was translated into a structural equation modelling. The first analyses failed to fit the model. Latent variables were removed and the definition was translated into a second model drawing the relations directly between factor rather than latent variables. Using modification indices consulting qualitative data, a confirmatory solution was found for each individual level of satisfaction: quality of place to live (P .136., CMIN/DF 1.516 ., NFI .955), quality of family life (P .086., CMIN/DF 1.688., NFI .947), and development (P .118., CMIN/DF .1.514., NFI .904) as for an integrated model (P .088., CMIN/DF 1.342., NFI .932). As there is no space for details, three aspects of the model will be highlighted. First, quality of life is the effect of a complex interaction between different goals (not only its related goal) and personality factors, values and resources. Second, the relations are complex, some factors has a negative relation and some others positive relations. For example, the higher the goal for a good place to live leads to a reduction in the achievement perception, (what can be explained in terms of hedonic treadmill). In addition, an increase of quality of life can be a three band billiard game, where the impact on one variable will ignite a second that would impact on the final increase of the quality of life of the specific factor. The role of values and personality are substantial and was underscored in development programs. Third, intervention programs must focus on those complexities. The simplicity and linearity of development programs could be related to the general historic low impact.

### A Multilevel Wellbeing Theory.

Comparing the results with the available theories, no one provides a comprehensive framework; established theories provide important but partial explanations of the whole. A multilevel theory is proposed. The Level Three is related to an on-line process of need satisfaction which set goals, and look for resources. Achievement perception as any cognitive-affective process is subjective, complex and full of biases. It takes places on the daily context and supports the adaptation process in the short term. At this level have been focused developmental programs but generally with an over simplistic western-biased approach. The Level Two operates at the cultural dimension through values which functions as shared shortcuts for maximizing need satisfaction by generally successful strategies in the history and environment of the group. As an axiological process, its formation starts on childhood and after adolescences very few practical changes can occur. It takes place at the societal dimension. Level One is related to the individual characteristics, which are

related to the personality factors. It is hypothesized that individuals born with a wide array of adaptive strategies grounded on genetic configuration. Early childhood influences activates the subset of the array which will be more adaptive in their environment. However, modern society is prone to activate false active genes that could lead to pathology. For example, episodes of fighting among parents in critical periods of brain plasticity<sup>2</sup> could lead to maladaptive emotional arousal as a false lecture of a permanent aggressive surrounding. If this tendency is followed by stressful episodes in critical phases of adulthood, pathology could appear. In addition, genetic configuration as widely known is related to the inheritance of different traits, illness and abilities which are not linearly transmitted. The Zero Level is related to ancestral adaptations. Is the universal structure of all modern humans until the next evolutionary step will take place. It is related to universal human needs and the evolutionary adaptation design. Molecular genetics (which overlaps on level one) and genomics are mediators at this level.

#### Implications for Development.

It is not about universals, it is not about context, it is not a negotiation between both, it is about to understand human nature, what works for universal need satisfaction and promote its achievement considering individual adaptations, cultural conditioning and the level of goals met in a specific time and context. Millennium development goals are grounded on the western unhappy society model and theories. An investigation of native wellbeing models in non-material motivated, and developed countries could lead to a better understanding of human nature and a better design of wellbeing models. If there is no change, if we fulfil the Millennium Development Goals, we are going to achieve a generalisation of the neo-colonialism imposition of wellbeing conceptions and achieve a significantly unhappier world.

#### Concluding Remarks.

An emic research and post-hoc theorising procedure is proposed under ethical, practical and epistemological grounds. It is followed by an intervention strategy based on wellbeing modelling, program design and evaluation based on this model, and an iterative process which tunes the theory. The procedure presents empirical evidence of statistical robustness, meaningful context-sensitive interpretations, and usefulness for intervention programs.

Happiness is not an end; it is an illusory ephemeral state that guides for adaptation and need satisfaction. If it is followed, it would be further. If we look for the right goals that match our values, personality, and resources, it will naturally appear.

---

<sup>2</sup> Moment when a specific part of the brain, related to specific behaviors is ending its configuration.

## ACKNOWLEDGEMENTS.

The research was funded by the UK Economic and Social Research Council through the Wellbeing in Developing Countries Group at the University of Bath. The Psychology Department of the Pontificia Universidad Católica del Perú has provided significant support for the execution of this research. Ana Rosa Feijoo, Research Officer; Lidia Carhuallanqui, Edwin Páucar, Miguel Obispo, Percy Reyna, Maribel Arroyo Martín Jaurapoma, Field Researchers; Alejandro Lazarte, Mathematical Consultant; and James Copestake, country coordinator; José Luis Alvarez, Research Officer; Teófilo Altamirano, Country Collaborator, have provided an active and invaluable contribution to this investigation. The 550 people who participated in this study bringing their time, honest opinions and answers to the long and multiple questionnaires, their hospitality and generosity, particularly their wisdom about wellbeing constitute the centre of our gratefulness.

## Cited Literature.

- Brickman, P., & Campbell, D. T. (1971). Hedonic relativism and planning the good society. . In *Adaptation-level theory: A symposium* (pp. 287-302). New York: Academic Press.
- Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 36(8), 917-927.
- Brunstein, J. C. (1993). Personal Goals and Subjective Well-Being: A Longitudinal Study. *Journal of Personality and Social Psychology*, 65(5), 1061-1070.
- Brunstein, J. C., Schultheiss, O. C., & Maier, G. W. (1999). The Pursuit of Personal Goals: A Motivational Approach to Well-Being and Life Adjustment. In J. Brandtstadter & R. M. Lerner (Eds.), *Action & Self-Development: Theory and Research Through the Life Span* (pp. 169-196). Thousand Oaks, CA: Sage.
- Buss, D. M. (2000). The Evolution of Happiness. *American Psychologist*, 55(1), 15-23.
- Calderón, A. (2003). *Satisfacción marital desde la perspectiva de la psicología evolutiva en parejas urbano-marginales de Lima* Pontificia universidad católica del Perú, Lima.
- Diener, E. (1984). Subjective Well-Being. *Psychological Bulletin*, 95(3), 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). *The Satisfaction With Life Scale: Journal of Personality Assessment*. Vol 49(1) Feb 1985, 71-75.
- Diener, E., Oishi, S., & Lucas, R. (2003). Personality, Culture and Subjective Well-being: Emotional and Cognitive Evaluations of Life. *Annual Review of Psychology*, 54, 404-425.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.
- Fujita, F., & Diener, E. (2005). Life Satisfaction Set Point: Stability and Change. *Journal of Personality and Social Psychology*, 88(1), 158-164.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2004). *Análisis Multivariante* (5a ed.). Madrid: Prentice Hall Iberia.
- Kasser, T., & Ryan, R. M. (1993). A Dark Side of the American Dream: Correlates of Financial Success as a Central Life Aspiration. *Journal of Personality and Social Psychology*, 65(2), 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further Examining the American Dream: Differential Correlates of Intrinsic and Extrinsic Goals. *Personality and Social Psychology Bulletin*, 22(3), 280-287.
- Kasser, T., & Ryan, R. M. (2001). Be Careful What You Wish For: Optimal Functioning and the Relative Attainment of Intrinsic and Extrinsic Goals. In P. Schmuck & K. M. Sheldon (Eds.), *Life Goals and Well-Being: Towards a Positive Psychology of Human Striving* (pp. 116-131). Ashland: Hogrefe & Huber Publishers.
- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). *Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being: Journal of Personality and Social Psychology*. Vol 79(3) Sep 2000, 367-384.
- Marks, N., Abdallah, S., Simms, A., & Thompson, S. (2006). *The Unhappy Planet Index*: New Economics Foundation.

- Markus, H. R., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509-516.
- McCrae, R. R., Costa, P. T., Ostendorf, F., Angleitner, A., Hreb?ckov, M., Avia, M. D., et al. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78(1), 173-186.
- Nesse, R., M. (2005). Natural Selection and the Elusiveness of Happiness. In F. A. Huppert, N. Baylis & B. Keverne (Eds.), *The Science of Well-Being* (pp. 3-34). New York: Oxford University Press.
- Oishi, S., Diener, E., Suh, E., & Lucas, R. E. (1999). Value as a Moderator in Subjective Well-Being. *Journal of Personality*, 67(1), 157-184.
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment*, 5(2), 164-172.
- Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). *Further validation of the Satisfaction With Life Scale: Evidence for the cross-method convergence of well-being measures*: Journal of Personality Assessment. Vol 57(1) Aug 1991, 149-161.
- Ryan, R., & Deci, E. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, 52, 141-166.
- Schimmack, U., Radhakrishnan, P., Oishi, S., Dzokoto, V., & Ahadi, S. (2002). Culture, personality, and subjective well-being: Integrating process models of life satisfaction. *Journal of Personality and Social Psychology*, 82(4), 582-593.
- Sheldon, K. M. (2001). The Self-Concordance Model of Healthy Goal Striving: When Personal Goals Correctly Represent the Person. In P. Schmuck & K. M. Sheldon (Eds.), *Life Goals and Well-Being: Towards a Positive Psychology of Human Striving* (pp. 18-36). Ashland: Hogrefe & Huber Publishers.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal Striving, Need Satisfaction, and Longitudinal Well-Being: The Self-Concordance Model. *Journal of Personality and Social Psychology*, 76(3), 482-497.
- Sheldon, K. M., & Houser-Marko, L. (2001). Self-Concordance, Goal Attainment, and the Pursuit of Happiness: Can There Be an Upward Spiral? *Journal of Personality and Social Psychology*, 80(1), 152-165.
- Sheldon, K. M., Kasser, T., Smith, K., & Share, T. (2002). Personal Goals and Psychological Growth: Testing an Intervention to Enhance Goal Attainment and Personality Integration. *Journal of Personality*, 70(1), 5-31.
- Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The Independent Effects of Goal Contents and Motives on Well-Being: It's Both What You Pursue and Why You PursueIt. . *Personality and Social Psychology Bulletin*. , 30(4), 475-486.
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology*, 53(1), 133-160.
- Weiss, A., King, J. E., & Enns, R. M. (2002). Subjective well-being is heritable and genetically correlated with dominance in chimpanzees (Pan troglodytes). *Journal of Personality and Social Psychology*, 83(5), 1141-1149.
- Weiss, A., King, J. E., & Perkins, L. (2006). Personality and Subjective Well-Being in Orangutans (Pongo pygmaeus and Pongo abelii). *Journal of Personality and Social Psychology*, 90(3), 501-511.

- Wells, S. (2003). *The Journey of Man: A Genetic Odyssey*. New Jersey: Random House.
- Wilson, M. L., & Wrangham, R. W. (2003). Intergroup relations in chimpanzees. *Annual Review of Anthropology*, 32, 363-392.
- Yamamoto, J. (2004). *El protocolo de entrevista a profundidad de componentes de bienestar*. Lima: Pontificia universidad católica del Perú.
- Yamamoto, J., & Feijoo, A. R. (2005). *La escala psicométrica de bienestar WQP*. Lima: Pontificia universidad católica del Perú.