

Using the Satisfaction With Life Scale as Social Impact Measurement

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Introduction

Nowadays, social service agencies are increasingly subjected to pressures to conduct evidence-based program evaluations. While typically, by convention these assessments were output based, nonetheless, all stakeholders (i.e., the impact investors, donors, public funders, private sectors) increasingly look beyond this standard and request for demonstration of the social outcomes created. Thus, interests and attention have been rising among the funders on the use of Social Impact Measurement (“SIM”) to measure the social impact of a project.

Page | 1

At the level of the local service agencies, one of the challenges in conducting SIM is the lack of guidelines as to what constitute appropriate measures of social outcomes, and relatedly, for the purpose of comparison, what the local benchmarks are.

The purposes of this article are two-fold. First, we explain why we conceive that subjective well-being measures, such as the measure of life satisfaction, can be one of the appropriate measures for SIM. Second, we provide statistics of the local population scores on life satisfaction from a recent population survey conducted by the University of Hong Kong.

Part I: Why subjective well-being measures such as the measure of life satisfaction can be an appropriate tool for SIM?

By nature, social projects are diverse in context and program design. As such, the objectives are often very diverse too. Although some projects carry very specific objectives, e.g., the aim is to improve the beneficiaries’ health condition, others can be more all-encompassing, e.g., the aim is to alter different aspects of life such as build up self-esteem, increase social capital, improve skills & knowledge, alleviate mental illnesses etc.

While from a glance one may perceive that the objectives (and thus the outcomes) of these projects are extremely diverse with no “overlapping”, we argue that the “ultimate aim” of many of these projects is to enhance ones’ well-being.

Well-being is an abstract construct and is generally conceptualized as a description of the state of a person's life situation (McGillivray, 2007, p.3)¹. While well-being measures can be broadly classified into objective and subjective measures, the latter often refers to measures that capture people's feelings or real experience, such as happiness and life satisfaction (Easterlin, 2004²; Van Hoorn, 2007³).

In practicing SIM, one may believe that an "ideal" situation is to conduct impact assessment on each aspect of the project. This may be easy if the project has one or two specific objectives. However, in real-life situations, many projects aim at the change of multiple dimensions of the beneficiaries. This would create practical challenges in conducting SIM as the data collection process could be long and cumbersome, leading to frustration among the targets (just in filling the questionnaires). Thus, in some situations, using too many indicators may not be feasible.

A plausible solution is the use of a reasonably short measurement (hence keeping the data collection procedure manageable) but at the same time can capture multiple aspects of changes of the beneficiaries. As we highlighted that the ultimate aim of many projects is to improve the well-being of the targets, we believe that a well-being scale is appropriate.

Across the globe, life satisfaction is one of the common and widely recognized measures of subjective well-being. The Satisfaction with Life Scale ("SWLS"), developed by Diener, Emmons, Larsen, and Griffin (1985), is one of the most widely used tools for measuring life satisfaction⁴. This SWLS has been translated into both simplified and traditional Chinese and have been used many times in previous local survey.

¹ McGillivray, Mark. (2007). "Human Well-being: Issues, Concepts and Measures". In Mark McGillivray, ed. *Human Well-Being: Concept and Measurement*. Helsinki: UNU Wider.

² Easterlin, Richard. (2004). *The Economics of Happiness*". *Daedalus* 133(2): 26-33.

³ Van Hoorn, A. (2007). A short introduction to subjective well-being: Its measurement, correlates and policy uses.

⁴ Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. doi:10.1207/s15327752jpa4901_13.

What's more, the SWLS only consists of 5 questions and is very easy to manage. The respondents are only asked to give responses to a 7-point Likert scale (i.e., 1 indicating strongly disagree and 7 indicating strongly agree). The scores of all items can be summed up to generate an overall score, ranging from 5 to 35. The scores can be interpreted in a continuous fashion (i.e., the higher the total score, the higher the life satisfaction level) and in a categorical manner (from extremely dissatisfied to extremely satisfied).

Therefore, given that the SWLS (a measure of life satisfaction) encompasses multiple aspects of the individuals' well-being and is easy to administer, this well serves a common measurement in addressing the diversity of social projects. Furthermore, given the increasing demand from the funders and stakeholders in producing a compact matrix that demonstrates the "overall" social impact, the total score of the SWLS (representing the overall life satisfaction of the targets) may have its advantages in serving the purpose.

Part II: Statistics of the local population scores on life satisfaction from a recent population survey conducted in Hong Kong

Fullness Social Enterprises Society has been a SIM consultant for many social projects, covering various types of beneficiaries. Over the years, the most frequently asked questions related to SIM are:-

1. Are there any local benchmarks available that can be compared with the social impacts we created?
2. Can social impacts be aggregated and represented in monetary terms to compare the cost of funding (social return on investment)?

Both questions will be addressed here.

Are there any local benchmarks available that can be compared with the social impacts we created?

As we advocate the use of the SWLS for SIM, for the purpose of comparison, we go one step further to identify whether there are data in the local context that can serve as benchmarks. In this context, the term “benchmark” refers to a reliable standard derived from the local population.

What datum constitutes an “adequate” benchmark deserves some deliberations. First, we argue that the data should be drawn from a representative survey with random sampling strategy. Also, the data collection procedure should be carefully implemented (e.g., conducted by well-trained interviewers). Moreover, for the sake of obtaining high precision estimates, it is also preferable that the survey consists of a reasonable sample size. Under the aforementioned conditions, benchmarks for subdemographic groups can safely be made available.

The next question is, are such benchmarks on life satisfaction (specifically the scores of the SWLS) available in Hong Kong? Fortunately, there is one such survey recently conducted by the research team led by Prof Paul Siu Fai Yip (“Prof Paul Yip”) from the Department of Social Work and Social Administration of the University of Hong Kong. In this article, we are grateful that we have permission from Prof Paul Yip to produce some statistics from his team’s survey particularly related to the scores of the SWLS.

Description of the survey

The survey led by Prof Paul Yip’s team is a two-wave large-scale random sampling representative household survey (the Hong Kong Panel Survey for Poverty Alleviation)⁵ conducted in Hong Kong between 2015 and 2017. The survey includes face-to-face interviews with individuals aged 18 or above and the data collected were from a variety of demographic information, family information, poverty and social stratification, social participation and social support, physical, mental health and life experience of each household member. In this article, we

⁵ Details of the methodology of the survey can be found in: Peng, C., Kwok, C. L., Law, Y. W., Yip, P. S., & Cheng, Q. (2018). Intergenerational support, satisfaction with parent–child relationship and elderly parents’ life satisfaction in Hong Kong. *Aging & mental health*, 1-11.

present the data gathered in the second wave of the survey, which was conducted in 2017. In particular, the data of 1,132 individuals from 1,006 households were collected. After data cleansing, there were 1,020 valid responses, details of which are not provided in this paper.

For this article, the variables extracted from the survey include the scores of the participants' life satisfaction, their household income, and other demographic variables. The individuals' levels of life satisfaction were measured by the Chinese version of the SWLS translated and validated by Wu and Yao (2006)⁶. For household income, the respondents (i.e., the household heads) were asked to report their average monthly household earnings in the past 12 months⁷. To calculate the per capita household income, we simply divide the household income of the sample by the household size.

Statistics of the local population scores on life satisfaction

We split the data by demographic subgroups, including sex, age, and levels of per capital household income. The sample size in each subgroup is reported in the Table 3 in appendix. Table 1, shows the median scores of the SWLS, reflecting the participants' level of life satisfaction (means and standard deviations of the corresponding figures are shown in Table 4 and Table 5 in appendix). Overall, the median scores of life satisfaction among the sample across all sex and age subgroups were within the range of 21 to 26. Based on the SWLS categorization, they were at the level of "slightly satisfied" or above⁸.

⁶ Wu, C. H., & Yao, G. (2006). Analysis of factorial invariance across gender in the Taiwan version of the Satisfaction with Life Scale. *Personality and Individual Differences, 40*(6), 1259-1268.

⁷ The specified items identified all possible income sources, including but not limited to earnings from all employments, bonuses, commissions, rental incomes, interests, regular contributions from other persons, New Year bonuses, double pay and various kinds of government subsidies (i.e., the Comprehensive Social Security Assistance, Social Security Allowance, education subsidies and working subsidies).

⁸ The life satisfaction scores can be divided into 7 categories as follows: extremely dissatisfied (5 – 9); dissatisfied (10 – 14); slightly dissatisfied (15 – 19); neutral (20); slightly satisfied (21 – 25); satisfied (26 – 30) and extremely satisfied (31 - 35).

Table 1: Median of life satisfaction stratified by sex and age groups

| | Men | Women |
|----------------------------|-----|-------|
| aged 18-39 (n = 207) | 22 | 22 |
| aged 40-64 (n = 497) | 21 | 24 |
| aged 65 or above (n = 316) | 23 | 26 |

Table 2 further shows the figures stratified by the sample's age and per capita household income. As expected, the level of life satisfaction is lower among the groups with a lower per capita household income. Since the sample size of the data would have become too small ($n < 50$) for each subgroup and could potentially lead to biased results, we did not further split the data by the sex of the respondents. However, having done so, apparently the figures do not differ substantially.

Table 2: Median of life satisfaction stratified by age groups and tertiles of per capita household income⁹

| | Tertile I | Tertile II | Tertile III |
|-------------|-----------|------------|-------------|
| 18-39 | 18 | 21 | 24 |
| 40-64 | 19 | 24 | 24 |
| 65 or above | 22 | 25 | 29* |

While we argue that these figures can be used as some local benchmarks of life satisfaction for some demographic subgroups, we also need to remind the readers that this is definitely not equivalent to the true median/mean of the population. Moreover, the survey was not a CENSUS. We have highlighted this to show that there are nonetheless such statistics available in Hong Kong. Thus, when one is considering doing a SIM, these figure can well serve as a reference.

⁹ For those figures with a star (*), interpret the results with caution due to the small sample size (i.e., < 50).

Can social impacts be aggregated and represented in monetary terms to compare the cost of funding (social return on investment)?

To answer the second question, “can social impacts be aggregated and represented in monetary terms to compare the cost of funding (social return on investment)?”. According to the experience from the UK, this is actually feasible. This monetarization technique was first employed by the Social Value Bank (<http://socialvaluebank.org/>), and is also now used by the Australian Social Value Bank (<https://asvb.com.au/>). For example, they measured how change in hope in the future can be represented by a similar change in life satisfaction, then using a statistical technique, they further converted the changed life satisfaction into household income data in dollar terms. Hence, using this technique, some intangible social outcomes, such as the benefit of freedom from alcohol problems, reduction in anti-social behaviors, less reoffending, completion of secondary school, joining a social group, obtaining full-time/ part-time jobs, etc. can be monetized.

In Hong Kong, currently a dollar value for life satisfaction is not available. Also, a previous article written by Geoff Chan of the University of Hong Kong highlighted why it is inappropriate to simply adopt the monetary term from the West into the local context. In fact, Geoff’s team is now in the process of using similar techniques mentioned above to derive the monetary term for social outcomes. Thus in the future, it may be possible to convert some intangible social outcomes (such as increase in life satisfaction) into dollar value. As a practitioner in SIM, the FSES highly welcomes such research and expects the results would bring huge benefits to the social sector in Hong Kong.

Summary

With the increasing demand for evidence-based practice, we foresee that it is imperative to conduct a carefully-designed evidence-based SIM. Of course there are multiple ways to conduct SIM, but almost all of them require some form of measurements on social outcomes.

As we have highlighted that social projects are diverse and can have many social outcomes, it is therefore sometimes difficult to identify “what” to measure and relatedly “how” to measure them. In this article, we have also highlighted that

the “ultimate aim” of many social projects are tied to enhancing well-being, and thus the SWLS can be a good consideration to measure life satisfaction. The SWLS is a short 5-item questionnaire, easy to administer, has been translated into Chinese, and has been widely used in the local context. Thus we advocate the social agencies to consider using the SWLS to conduct SIM.

In this article, drawing from the data collected from a population-based representative survey conducted by the research team of Prof Paul Yip from the University of Hong Kong, we have provided some local up-to-date statistics on the life satisfaction scores. We contend that this information can be used as a benchmark when doing comparisons in SIM.

Furthermore, there are techniques to convert intangible social outcomes (e.g., increase in life satisfaction) into monetary terms. International example such as the UK Social Value Bank exists, although such data are not yet available in the local context. But blessed with both the technique and data in Hong Kong, it is likely that in the near future such information will be available and can be applied in conducting SIM.

Appendix

Table 3: Sample characteristics at the household level and the individual level

| Individual Level (n = 1020) | n (%) |
|--|--------------|
| Sex | |
| Male | 489 (47.9%) |
| Female | 531 (52.1%) |
| Age | |
| 18 - 39 | 207 (20.3%) |
| 40 - 64 | 497 (48.7%) |
| 65 or above | 316 (31.0%) |
| Per capita household income | |
| Tertile I – less than HK\$6,000 | 422 (41.4%) |
| Tertile II – HK\$6,000 to less than HK\$11,000 | 319 (31.3%) |
| Tertile III – HK\$11,000 or above | 279 (27.4%) |

Table 4: Mean and standard deviations of life satisfaction stratified by sex and age groups

| | Male | | Female | | Overall | |
|-------------|------|------|--------|------|---------|------|
| | Mean | (SD) | Mean | (SD) | Mean | (SD) |
| 18-39 | 21.5 | 6.8 | 20.7 | 6.8 | 21.1 | 6.8 |
| 40-64 | 20.7 | 7.1 | 22.2 | 7.3 | 21.6 | 7.2 |
| 65 or above | 22.1 | 7.3 | 24.7 | 6.7 | 23.3 | 7.2 |
| Overall | 21.3 | 7.2 | 22.6 | 7.2 | 22.0 | 7.2 |

Table 5: Mean and standard deviations of life satisfaction stratified by age groups and tertiles of per capita household income¹⁰

| | Tertile I | | Tertile II | | Tertile III | |
|-------------|-----------|------|------------|------|-------------|------|
| | Mean | (SD) | Mean | (SD) | Mean | (SD) |
| 18-39 | 17.9 | 6.7 | 20.5 | 7.0 | 24.0 | 5.6 |
| 40-64 | 19.1 | 7.5 | 22.4 | 6.9 | 23.4 | 6.6 |
| 65 or above | 21.4 | 7.1 | 24.5 | 6.8 | 27.7* | 5.4* |
| Overall | 19.9 | 7.3 | 22.7 | 7.0 | 24.3 | 6.3 |

¹⁰ For those figures with a star (*), interpret the results with caution due to the small sample size (i.e., <50).

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