

Executive summary

This report examines possible measures of wellbeing in the Longitudinal Surveys of Australian Youth (LSAY). Wellbeing is important from a policy perspective as it is related to a variety of factors, including educational outcomes and transition from education to work; hence, it is important to have effective measures of this.

Wellbeing is, however, a multi-dimensional concept that involves a range of constructs encompassing physical, social and emotional aspects (Nguyen 2011). This is reflected in the variety of wellbeing measures that currently exist.

In this report, we compare the findings of our analysis with a theoretical framework of wellbeing developed by Fraillon (2004) – although his framework was developed in the context of the young person at school – and a selection of wellbeing questionnaires. In his analysis of the literature, Fraillon argues that two dimensions are sufficient as a measurement model for (student) wellbeing. The first of these is the intrapersonal or psychological dimension, which refers to the person's sense of self and their ability to function within the (school) community. The second, the interpersonal or social dimension, on the other hand refers to the assessment of one's social circumstances, leading to the capacity to function in the (school) community.

The approach taken to the analysis presented in this report is as follows. Firstly, we undertook factor analysis of potential wellbeing variables in the LSAY 2003 cohort (LSAY Y03) and compared the results of this to Fraillon's findings as well as to the dimensions of wellbeing used in a selection of other wellbeing questionnaires. Secondly, we tested the factor structure obtained on the same questions in a different cohort of LSAY: the 2006 (Y06) cohort. This analysis indicates whether the factor structure is robust. Thirdly, we tested the factors obtained in terms of their discrimination ability; that is, we looked to see whether there is enough variance in the factor scores obtained to be useful in research.

The analysis of our original variable selection did not indicate a clear or useful factor structure. Consequently, it was decided to focus on a subset of questions related to happiness/satisfaction which seemed more intrinsic to wellbeing. This revealed three clear factors, which we term social wellbeing, material wellbeing and career. The factors demonstrated adequate reliability in terms of Cronbach's alpha (a measure of internal consistency). We then compared the three-factor structure obtained with data in wave 2 of the Y06 cohort. This comparison indicated that the factor structure is valid for a different population group. Correlations obtained between scores for each factor model were very high (around 0.99 for each factor). Goodness of fit indicators showed that the factor model obtained from the Y03 cohort fits the Y06 data well. Thus we are happy with the robustness of our construct.

As a final test of the three-factor model we looked at how well the factor scores are able to discriminate between population subgroups. To do this we ran regression models (one for each of the three factors), using factor scores as outcome variables and five other variables (gender, health status, disability status, volunteering and employment status) considered to influence wellbeing as predictor variables.

The regression results indicated that there is enough variation in the factor scores to discriminate between groups. In particular, the results for health status and employment status were highly significant ($P < .0001$) across all three factors and also had large estimates; for instance, young

people reporting good or excellent health were much more likely to report substantially higher levels (46–54%) of wellbeing across the three factors.

Weighing up the results, we can say that the analysis of the happiness/satisfaction questions indicated a stable three-factor structure with acceptable reliability. Importantly from a policy perspective, the factor structure has analytical power.

The main shortfall of this model is that it only partly captures wellbeing as described by Fraillon (2004) and the selection of wellbeing questionnaires that were examined. In particular, this set of variables does not capture the intrapersonal or psychological dimension of wellbeing. This suggests that more rounded measures of wellbeing are needed to supplement the current questions. The best way to do this may be to replace the current satisfaction questions with a proper wellbeing questionnaire. Consideration could be given to including the two wellbeing questionnaires PERMA (aimed at adults) and EPOCH (aimed at adolescents), which cover five dimensions of wellbeing, including Fraillon's dimensions. Importantly, these two questionnaires are derived from the same theoretical basis and therefore would be suitable.