

RESEARCH STUDY:

Lifelong Benefits of Catholic Schooling



*Analysis of post-school
outcomes using the Household,
Income and Labour Dynamics in
Australia (HILDA) Survey*



Victorian
Catholic
Education
Authority

“By educating the whole person, Catholic schools support the development of well-rounded individuals who will succeed and be happy and confident in the world during and after their schooling, whatever path they choose through life.”

Professor Elizabeth Labone
Chief Executive Officer
Victorian Catholic Education Authority

Why is the HILDA data important?

The HILDA Survey is the only study of its kind in Australia, in the sense that it collects data across a wide range of areas (economic wellbeing, personal health and wellbeing, labour market dynamics, family life, community participation, etc.) from a large, representative sample of Australians.

Participants are tracked over the course of their lifetime, enabling unique analysis of interactions between different personal characteristics, and changes in circumstances over time. As stated by the Melbourne Institute: 'It shows researchers many things; for example, how economics affects our lives, or how choices made in the past lead to particular life outcomes.' As undertaken in this study, one of the choices that can be assessed is the average effect of the school sector that a person attended.



What did the research investigate?

The research investigated the impact of attendance at a Catholic school on post-school outcomes.

This is possible because, when they first join the HILDA Survey, respondents indicate the sector of the school they attended. Post-school outcomes can then be analysed based on the sector of school a person attended.

The post-school outcomes analysed are wide-ranging and include:

- **Labour market outcomes:** employment status, wages, industry of employment, occupation type, and sector of employment.
- **Health and wellbeing:** happiness, life satisfaction, mental and general health, body mass index, alcohol consumption, smoking and physical activity.
- **Measures of community participation:** such as charitable giving, volunteering, talking about current affairs, satisfaction with community, etc.

The analysis was undertaken in two stages. The first stage comprised comparing the average outcomes for HILDA respondents by school sector attended. Outcomes with a positive, statistically significant, and substantial difference by school sector attended, progressed to the second stage model-based analysis. The model-based analysis sought to control for various factors that may influence outcomes. These included other personal and family characteristics (e.g. parental educational attainment and occupation types).

Some outcomes did not progress to stage two, as there was either:

- Not a statistically significant difference between estimates for Catholic sector and government attendees; or
- A negative result for Catholic school attendees.



How did the researchers estimate the effect of attending a Catholic school?

School sector attended is asked the first time that a respondent joins HILDA. For this analysis, those that ever attended a Catholic school are classified as a Catholic sector attendee.

This enables statistical analysis of the relationships between the sector of school a person attended, and a whole range of life outcomes that are recorded in the HILDA Survey.

The research seeks to isolate the average effect of attending a Catholic school from other characteristics that may impact the choice of school and/or life outcomes assessed. This is critical, as some outcomes may be influenced by other underlying personal characteristics – for example, parent educational attainment – rather than attendance at a Catholic school.

The adjustments that are made to the analysis are comprehensive and mean there is increased confidence the findings are an accurate reflection of the effect of Catholic schooling.

In the first instance, the modelling controls for ‘selection bias’ in the sector of school attended (i.e., the bias arising from the fact that school sector choice is not random). This means the modelling results are adjusted for factors that make a person more likely to have attended a Catholic school, including parental occupations and education attainment, and whether the individual is Catholic.

In the second instance, the modelling controls for personal characteristics known to impact the 'life outcome' under analysis.

The researchers do this through four models with escalating sets of controls.

- **Model 1** estimates differences between school sector attendees by sex and age after considering school choice.
- **Model 2** additionally includes variables measuring characteristics known to affect the outcomes of interest (e.g. field of study of highest post school qualification is included for a person's hourly wage).
- **Model 3** further adjusts for personal characteristics that effect ongoing participation in HILDA (long-term health condition, likelihood of moving house, etc.), which may also effect post-school outcomes.
- Finally, **Model 4** extends Model 3 by adjusting for factors that may be outcomes of schooling (i.e. highest educational attainment and attendance at a Group of Eight university).

Because of the complexity of relationships between variables, all of the models provide a guide to the effect of Catholic schooling. However, Model 3 contains the strictest set of controls the literature and theory suggest are most likely to isolate the effect of Catholic schooling. This means Model 3 is considered the most rigorous assessment. Model 4 extends this by assessing post-school effects controlling for educational attainment, but this adjustment may lead to an underestimate of the 'Catholic school' effect (as school sector attended may also impact post-school educational attainment, which itself affects other post-school outcomes such as wages). The adjustments that are made to the analysis are comprehensive and mean there is high confidence the findings are an accurate reflection of the 'impact' of Catholic schooling.

What were the findings of the research?

The research found 'positive average Catholic school effects' for many of the post-school outcomes that were analysed.

In other words, after controlling for a comprehensive set of alternative explanatory factors, attendance at a Catholic school was found to have a positive effect upon many outcomes. As summarised in Table 1, compared to people who attended government schools, people who attended a Catholic school were found, on average, to:

Be more likely to be employed



Earn higher wages



Be more likely to be working in an industry or sector that directly benefits the public



Have higher life satisfaction



Have better general health



Be more likely to donate to charity



Many of these findings also hold in comparisons against those who attended an independent school.

Table 1: Key differences in post-school outcomes based on school attended (Model 3)

	Catholic v government school	Catholic v independent school
Labour market	<ul style="list-style-type: none"> • More likely to be employed (99% confidence) • Higher wage (99%) • More likely to be working in an industry (99%) or sector (95%) that directly benefits the public 	<ul style="list-style-type: none"> • More likely to be employed (90% confidence) • More likely to be working in an industry (90%) or sector (90%) that directly benefits the public
Health and wellbeing	<ul style="list-style-type: none"> • Higher life satisfaction (90%) • Better general health (99%) 	<ul style="list-style-type: none"> • Higher life satisfaction (95%)
Community	<ul style="list-style-type: none"> • More likely to donate to charity (90%) 	

One example of the average effect of Catholic sector attendance is evident in the model-based results for hourly wages. Across the various models used, the researchers estimate there is a wage premium for Catholic school attendees, compared to government school attendees, of between 4% to 11%.

Who did the research?

The research was undertaken by a highly qualified team at the Centre for International Research on Education Systems (CIRES) at Victoria University.

The authors of this report are Mr Andrew Wade, Dr Beatriz Gallo Cordoba, and Dr Maria Prokofieva. It was led by Mr Andrew Wade. Mr Wade has over 20 years' experience in public policy analysis and research, most of which has focussed on education and skill formation among Australians, and the interface with the labour market. Mr Wade has led projects for most of Australia's state and territory education departments, as well as numerous projects for the Australian Government. These assignments encompass all levels of education – from early childhood through to higher education – and examined funding and resourcing, staffing, outcomes, and transitions between education levels. They have included provision of advice to the Australian Government on calculating the Schooling Resource Standard base funding amounts and on issues with measuring socio-economic status (SES) in schools, and quality assuring the 'similar student' methodology used by the Australian Curriculum, Assessment and Reporting Authority for assessing performance in NAPLAN.