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School Truancy and Welfare Receipt Dynamics in Early Adulthood: A Longitudinal Study

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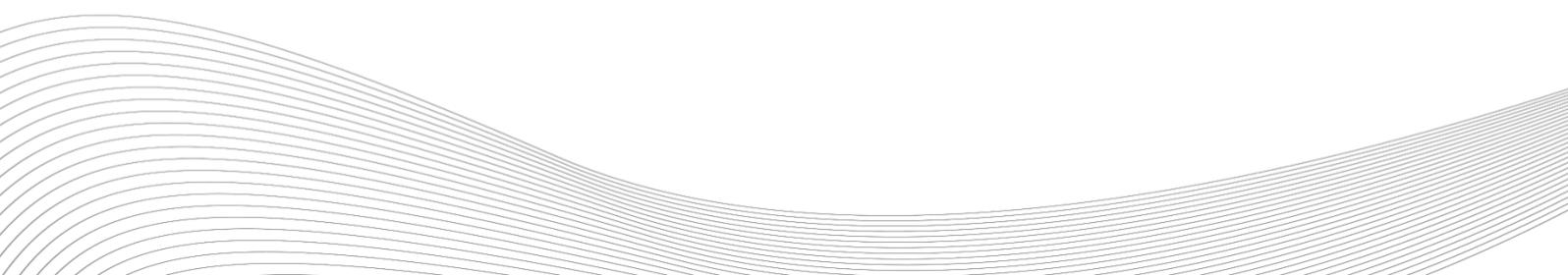
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NON-TECHNICAL SUMMARY

Skipping school without a valid excuse – school truancy – is a common behaviour during adolescence, and is associated with lifetime costs to individuals, families, and communities. In this study, we explore the association between school truancy in high school and later, during the early stages of young people’s transition to adulthood, one’s chances of receiving cash transfers from the Australian Government. This measure combines cash transfers one receives in the form of income and non-income support payments from the government. Our longitudinal study follows a sample of 787 young people from when most are aged 15 or 16 years, to when most are aged 20 to 21 years, by which time many young people have engaged in the paid work, tertiary studies, or both.

Exploring for a relationships or associations (not cause and effect), we found that the average person who truant in late adolescence has 4.5 times higher chances of receiving cash transfers from the government in their transition from late adolescence to adulthood. When we explore the effects of higher frequency truants, or “problem truants”, we find that they have 4.8 times higher chances of receiving government cash transfers in the same time period, compared to the average person who does not truant in late adolescence. This higher probability, we found, did not change over time. Instead, the gap between truants’ and non-truants’ probability of welfare receipt remained consistent over the study period.

This study’s results are relevant to academics, policy makers, and practitioners, both in Australia and overseas, in the pursuit of evidence-based policy that makes a positive, sustained impact on truancy: a perennial and costly social problem. From a social services policy standpoint, these results have relevance for discussions about the dynamics of disadvantage in young people’s transition from adolescence to adulthood, and the suitability of policies that relate to conditionality that government places on cash transfers. From an education policy standpoint, our results make a unique contribution to identifying the myriad costs associated with truancy, and – in a new contribution to the scholarly literature – demonstrate that truanting frequently may not matter as much as any degree of truanting, at least on the outcome of welfare receipt.



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ABSTRACT

School truancy can lead to a range of negative life outcomes, including criminal behaviour, poor mental health and poor employment outcomes. Other potential life outcomes for truants such as welfare receipt and reliance are not well understood in the truancy literature. This article investigates whether truancy is associated with the receipt of government-paid cash transfers during young peoples' transition from adolescence to early adulthood. Using data from a longitudinal household panel survey, our study follows 787 high school-attending young people aged 15-21 years, until they are aged 19-25 years. It uses two truancy measures – any truanting and problem truanting – alongside other variables in mixed-effects logistic regression models. This study finds that, over and above the effects of other variables, and compared to non-truants, “any truanting” in adolescence increases the odds of receiving cash transfers over time by 4.5 times, while “problem truanting” increases the odds by 4.8 times. Compared to non-truants, being a truant increases one's odds of being on an elevated trajectory of cash transfers by 4 to 5 times – depending on one's truanting frequency – but truants' and non-truants' cash transfer trajectories follow the same rate of change over time. This study demonstrates that high school truancy increases one's odds of receiving government assistance in the years following their truancy, deepening our understanding of the relationship between truancy and later life disadvantage.

Keywords: school truancy; welfare trajectories; early adulthood; Australia

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Introduction

Skipping school without a valid excuse — school truancy — is associated with a wide range of negative life outcomes. They include violent, property and drug offending in adolescence and in adulthood (Rocque et al. 2017; Mazerolle et al. in press; Vaughn et al. 2013), school dropout (Strand and Lovrich 2014), poor life satisfaction (Attwood and Croll 2015) and poor mental health as an adult (Hibbett and Fogelman 1990). Viewed collectively, the literature indicates that truanting disrupts a young person's ability to lead a conventional life, and may lead truants to require government assistance to maintain a suitable standard of living.

Some research appears to support this indication. Compared to non-truants, truants work lower-paying jobs (Attwood and Croll 2015; Farrington 1996) while having larger families at a younger age than non-truants (Hibbett and Fogelman 1990), and having an unstable job record at age 18 and 32 (Farrington 1996). These results suggest that truants may be more likely than non-truants to face financial hardship or stress. Despite this indication, no research has examined the relationship between school truancy and the government financial assistance paid to truants, as compared to non-truants. One longitudinal study using a UK sample has explored the link between conduct problems or conduct disorder and government benefits, but does not isolate the impact of truanting behaviour (Scott et al. 2001).

Our study focuses on identifying how high school truancy affects young people's welfare receipt dynamics in early adulthood. We obtain our sample from a nationally-representative longitudinal household panel survey, drawing seven waves of annual data on 787 people who were mostly aged 15–16 in 2012, until they were aged 20–21 in 2017. Mixed-effects logistic regression models estimate the effect of time, truancy, the interaction between time and truancy, and a range of social-structural variables, on young people's odds of receiving government-paid cash transfers. Our findings show that any truanting and problem truanting similarly increase one's odds of requiring government assistance to maintain a suitable standard of living. We conclude with a discussion about truancy's role in welfare dynamics.

Truancy and welfare receipt: the life course perspective

The truancy and school disengagement literature offers a range of evidence linking socioeconomic disadvantage and truancy. For instance, we know that, compared to non-truants, young people who truant are more likely to have low family income and be separated

from a parent at age 8–10 years and to have an unemployed father at ages 12–14 years (Farrington 1996; see also Vaughn et al. 2013 for comparable results). However, this conversation has yet to move into understanding how truancy affects welfare dynamics throughout the truant’s life course. That is, while indicators of disadvantage (and other complex needs) appear in the truancy literature, we do not yet understand whether this translates into deep and persistent disadvantage in the future, a spell of poverty from which the young person recovers quickly, or a long term tendency to drift into and out of poverty throughout adulthood. Despite this, the literature does offer a strong framework for the relationship between truancy and welfare receipt.

The extant literature suggests that truancy is associated with a cascade of mutually-reinforcing undesirable life events, from low academic achievement (Vaughn et al. 2013) and school dropout (Cabus and De Witte 2015), to delayed entry to the labour market and lower paying or lower status jobs (Attwood and Croll 2015). These are not limited to late adolescence and school-leaving age, however; longer-term life outcomes have also been identified. They include poorer life satisfaction at age 20 (Attwood and Croll 2015), a higher number of children and a higher rate of marriage breakdown at age 23 (Hibbett and Fogelman 1990), being charged for a violent criminal offence in their late 20s (Katsiyannis et al. 2012), and at age 32, being involved in fights and having a child who does not live with them (Farrington 1996). When these results are viewed chronologically and considered collectively, it leads to the question: is truanting behaviour propelling young people along a life pathway that can be differentiated from non-truants according to the financial assistance they receive from the government? If so, truancy is a disruptor or “snare” in one’s life course (Moffitt 1993; Moffitt et al. 1996), and may contribute to disadvantage accumulating throughout their lives (Sampson and Laub 1997).

The above argument, however, assumes that receiving financial assistance from the government is universally undesirable. While some believe that “learned helplessness” occurs, wherein welfare receipt perpetuates poverty (Rymysza, 2003, cited in Rymysza 2015), other evidence challenges this argument. For instance, a study conducted on a nationally-representative US sample found that government benefits alleviate both transient and chronic poverty, and that government assistance — in a range of forms — successfully moves recipients out of chronic poverty, and into transient poverty (Kimberlin 2016). In another study that is more relevant to our study’s age group, welfare receipt during post-school education and training increased a young person’s chances of completing their course by

between 4 and 10 percentage points (Ryan 2013). Despite the documented positive impacts of welfare receipt, however, any government-paid cash transfers that truancy increases are monies that could be invested elsewhere, if the incidence and prevalence of truancy was reduced.

Recognising the critical importance of longitudinal studies in both life course (see Elder et al. 2002; Sampson and Laub 1997) and poverty research (Buddelmeyer and Verick 2007; Bane and Ellwood 1986), our study uses longitudinal panel survey data to answer the research question. Our study explores the effect of two different truancy variables — any truancy and problem truancy — to ascertain: *is truancy as an adolescent associated with one's likelihood of receiving government-paid cash transfers during the life transition from late adolescence to early adulthood?* The remainder of this paper is dedicated to describing the study method, results, and the implications of our findings.

Method

Data and sample

We used seven waves of data from the Household Income and Labour Dynamics in Australia (HILDA) survey, from Waves 11 (2011) to 17 (2017). We selected these survey Waves because of their temporal relevance to Wave 12, which is the first year that school truancy items were asked in the HILDA survey. HILDA is an annual longitudinal panel survey that uses a representative sampling technique wherein households are randomly selected within defined geographic areas — stratified by state or territory, and by whether the area is metropolitan or non-metropolitan.

From the full HILDA sample, we drew people who were asked the school truancy questions in Wave 12 (thus, attended school to some extent in the year previous), and who were aged 15–21 years at their last birthday. We selected this age group because, from those who answered the school truancy questions, there were young people represented in each year of age from 15 to 21 years, but there were three respondents who were older (aged 24 to 38 years). Those three respondents were removed from the dataset as they were unlikely to represent the population of interest: high school-aged young people who attended high school.

Of the 787 young people who met these criteria, Table 1 shows that over one-half were female, about one in 20 identified as Indigenous Australian and/or Torres Strait Islander, and a similar proportion learned English as a second language. Those aged 15 or 16

years, when combined, comprised over two-thirds of the sample; 17 year olds comprised one-quarter of the sample (25.8%, $n = 203$); while about one in 14 (7.2%, $n = 57$) were aged 18–21 years at Wave 12. All Australian states and territories were represented in this sample, with 59.6 per cent ($n = 469$) living in a major city in Wave 12, 39.3 per cent ($n = 309$) living in a regional city or town, and the remaining 1.1 per cent ($n = 9$) living in a remote or very remote city or town.

Measures

Our study used 11 variables. We provide summary statistics about many of these in Table 1, for the whole sample, and divided by truancy status.

Cash transfers

This study's dependent variable is whether or not the Australian Government paid cash transfers to the young person in the financial year corresponding to Waves 12 to 17 (0 = *did not receive a cash transfer*, 1 = *did receive a cash transfer*). We refer to this variable as “cash transfers” and less often, “welfare receipt”, but it also goes by *public transfers*, *social support* and *cash benefits*, among other terms. This variable combines income support payments (which includes pensions, parenting payments and allowances) with non-income support payments (which includes family payments, bonus payments, and mobility and carer allowances) (Wilkins 2014), but does not include transfers between private parties, such as financial support from family members.

Truancy

HILDA operationalises truancy in line with the British Household Panel Survey's approach (Attwood and Croll 2006). It asks: “In the past year, have you skipped school without an excuse” (*no*, *yes*) and “How many times have you skipped school without an excuse in the past year” (*once*, *twice*, *several times*, *often*, *don't know*). From these survey items, we created two variables. The first is “any truancy”, which requires a “yes” response to the former truancy item (0 = *no*, or non-truant, 1 = *yes*, or truant at least once); the second is “problem truancy”, which requires a response of “twice”, “several times” or “often” to the latter truancy item (0 = *no*, or non-truant, 1 = *yes*, or twice, several times or often truant, see Table 1). Truancy items were also asked of school-attending people in HILDA Wave 16, but this is not relevant to the current study, as this study's cohort would have left high school by that time.

Past disadvantage

It is well established that, oftentimes, truants have histories of socioeconomic disadvantage (Farrington 1996; Vaughn et al. 2013; Attwood and Croll 2006), and separately, that a history of disadvantage is a strong predictor of future disadvantage (Sampson and Laub 1997; Bane and Ellwood 1986; Stevens 1994). Thus, it is plausible that any relationship we observe between truancy and later disadvantage may be confounded by past disadvantage. Consequently, we add to the models the dollar value (in thousands) the young person's household received in Wave 11, the year before truancy was measured (see Table 1). We use "cash transfers the *household* received" rather than "cash transfers the *individual* received" on the basis that, when the respondents are younger, their parents may be more likely to receive any cash benefits rather than the child receiving them directly.

Familial environment

Several studies identify that truants or otherwise disengaged students come from family environments with complex needs, or experiencing some elements of social exclusion. This includes challenges such as low income, whether their parents still live together, if their parents have poor education or otherwise poor employment prospects (Henry 2007; Farrington 1996; Vaughn et al. 2013; Hagan and Parker 1999), and whether they have carer responsibilities in the family (Thomas et al. 2003; Becker 2007). In this study, we measure whether the adolescent lived in a single headed household at age 14 (0 = *no*, 1 = *yes*), whether the parent has, or cares for a person with, a long term health condition (0 = *no*, 1 = *yes*), and the mother's education level (0 = *grade 11 or below*, 1 = *grade 12 or above*, see Table 1).

Demographics

Research has identified some gender effects in how often people engage in truancy (Vaughn et al. 2013; Smyth 1999; Attwood and Croll 2006) as well as age effects (Henry 2007; Attwood and Croll 2006; Smyth 1999). This study adds to the models as predictors the respondents' gender (0 = *male*, 1 = *female*) and their age at Wave 12. Further, truants and other disengaged students are significantly more likely to be of ethnic minority groups than non-truants (Henry 2007; Vaughn et al. 2013). Accordingly, our study adds as predictors whether the respondent identifies as an Indigenous Australian and/or Torres Strait Islander (0 = *no*, 1 = *yes*), and whether they speak English as a second language (0 = *no*, 1 = *yes*, see Table 1).

Table 1

Features of the sample, and of non-truants, truants and problem truants

<u>Variable name</u>	<u>Sample</u> (<i>N</i> = 787)	<u>Non-truants</u> (<i>n</i> = 628)	<u>Truants</u> (<i>n</i> = 159)	<u>Problem truants</u> (<i>n</i> = 134)
Truant, %	20.2	0.0	100.0	100.0
Female, %	51.3	53.0	44.7	45.5
15 or 16 years at Wave 12, %	67.0	69.1	58.5	43.3
Australian Indigenous and/or Torres Strait Islander, %	4.7	3.3	10.1	10.4
English is a second language, %	3.9	4.1	3.1	3.0
Lived in a single-headed household at age 14, %	19.4	16.2	32.1	31.3
Mother has grade 12 education or above, %	73.2	76.4	60.4	59.0
Parent has/cares for person with a long term health condition, %	27.7	27.6	28.3	27.6
Dollar value of household cash transfers at Wave 11 (in thousands), M (<i>SD</i>)	10.99 (<i>14.18</i>)	10.17 (<i>13.47</i>)	14.47 (<i>16.49</i>)	15.25 (<i>17.23</i>)

Analytic approach

The analysis proceeded in two stages. First, we examined bivariate relationships to establish whether a relationship exists between welfare receipt and high school truancy. We then estimated two multivariate models to explore the impact of different truanting frequencies (any truanting and problem truanting) on young people’s odds of receiving cash transfers from the government, over and above the effects of the social-structural variables. Specifically, we estimated two two-level generalised linear mixed-effects logistic regression models to explore whether truancy is associated with cash transfer receipt during the life transition from adolescence to early adulthood. The time variable in the mixed-effects models represents each Wave of the HILDA survey, and is coded from 1 (indicating Wave 12) to 6 (Wave 17).

Results

One in every ten young people (9.9%, $n = 78$) received a cash transfer at Wave 12, rising to one in every four (29.8%, $n = 192$) in Wave 17, when the respondents were in early adulthood. This increase of almost 20 percentage points indicates that this life stage features a substantial uptake in individual cash transfers. Upon splitting the sample by their response to truancy items at Wave 12, we found that, for each year of the observation period, people who truant one or more days in one year in late adolescence are significantly more likely than non-truants to receive a cash transfer in early adulthood (see Table 2). The magnitude of this difference, however, narrows over time.

Table 2 <i>Differences between non-truants’ and truants’ likelihood of receiving cash transfers, from 2012–2017</i>					
Year	Non-truants, %	Truants, %	χ^2		p
2012	6.5	23.3	39.83		< .001
2013	11.8	34.4	45.29		< .001
2014	19.1	35.5	17.59		< .001
2015	23.4	39.7	14.92		< .001
2016	24.4	35.4	6.50		.011
2017	28.1	37.1	3.89		.048

What is truants’ and non-truants’ recent history of cash transfers?

As shown in Table 2, respondents’ likelihood of receiving cash transfers varied significantly when truancy was measured in Wave 12. Using Wave 11 data, we looked for

evidence that their “pre-truancy measure” likelihood of receiving cash transfers is confounding the apparent bivariate relationship between truancy and cash transfers from Waves 12 to 17. While there was no significant difference in a young person’s household’s *likelihood* of receiving a cash transfer in Wave 11 and their response to the truancy measure in Wave 12 ($\chi^2 = 1.46, p = .228$), the *dollar value* of their household’s cash transfers in Wave 11 was significantly higher for households whose young people would report truancy in Wave 12 ($M = \$14,471.34, SD = 1373.89$), compared to Wave 12’s non-truants ($M = \$10,171.66, SD = 544.47; t(754) = -3.29, p = .001$). Accordingly, the dollar value of household cash transfers in 2011 was included in the multivariate analysis to account for its contribution to respondents’ likelihood of receiving individual cash transfers in the future.

Does “any truancy” explain the likelihood of receiving cash transfers?

We estimated a two-level mixed-effects logistic regression model to explore whether truancy is associated with individuals’ cash transfer receipt during the transition from adolescence to early adulthood. As shown in Table 3, the model was significant (Wald $\chi^2 = 156.95, p < .001$), and the likelihood ratio test indicates that this model is superior to an ordinary logistic regression model ($\chi^2 = 500.13, p < .001$). Further, the random slope is statistically significant ($p < .001$), indicating that there is significant variability between respondents over time in their odds of receiving cash transfers, and that this model accounts for the variability.

The fixed effects component of the model shows that reporting any truancy in Wave 12 is associated with a 4.5 times greater expected odds of a respondent receiving cash transfers over time, compared to non-truants. This is holding constant the influence of other covariates in the model, so is the unique contribution of truancy on cash transfers. Several other variables also contribute to our understanding of what predicts welfare receipt during this life stage.

The most prominent risk factor identified in this study was the age of the respondent at Wave 12. Those who were older when the sample was drawn were significantly more likely than younger respondents to receive cash transfers; respondents aged 17–21 in Wave 12 had 8.4 greater expected odds of receiving cash transfers, compared to respondents who were aged 15–16 in Wave 12. This suggests that truancy in older high school students is indicative of a troubled life trajectory compared to those who truant at a younger age (and subsequently cease their truancy). The time variable indicates that the odds of receiving a

cash transfer (of any value) also significantly increases over time; on average and holding all else constant, the odds increase by 1.6 times per year, compared to their odds of receiving a cash transfer in the year previous.

Other significant predictors from the model were living in a single headed household at age 14, having carer responsibilities in the family, and the household having a history of receiving cash transfers. Specifically, respondents who lived in a single-headed household at age 14 had 3.1 times greater expected odds of receiving a cash transfer over time, relative to respondents who lived in two-headed households at the same age. Those who had a parent with, or a parent who cared for, a person with a long-term health condition were 2.2 times as likely as others to receive individual cash transfers into early adulthood. This is expected, as those in this situation may be more likely to be eligible for financial support from the government. Finally, for every thousand dollars in government-paid cash transfers to the respondent's household in Wave 11, the odds of the individual receiving a cash transfer over time increased by 1.1 times.

Four variables — gender, whether they speak English as a second language, whether they identify as an Australian Aboriginal and/or Torres Strait Islander, and their mother's education level — did not have a significant bearing on young people's likelihood of receiving cash transfers during their transition from late adolescence to early adulthood. Thus, this study found no gender or ethnicity effects on the likelihood of receiving government-paid cash transfers, once other variables had been taken into account.

Variable	"Any truanting" model				"Problem truanting" model			
	Coefficient (SE)	OR	z	p	Coefficient (SE)	OR	z	p
Fixed effects								
Time	0.47 (0.09)	1.60	5.04	< .001	0.47 (0.09)	1.61	5.01	< .001
Reports truanting at Wave 12	1.51 (0.53)	4.51	2.86	.004	1.57 (0.57)	4.81	2.77	.006
Truancy*time	-0.26 (0.15)	0.77	-1.70	.089	-0.29 (0.16)	0.75	-1.80	.072
Female	-0.09 (0.27)	0.92	-0.32	.750	-0.05 (0.28)	0.95	-0.17	.867
Age at Wave 12	2.13 (0.31)	8.44	6.95	< .001	2.10 (0.32)	8.16	6.65	< .001
Australian Indigenous and/or Torres Strait Islander	0.95 (0.62)	2.58	1.53	.127	0.94 (0.64)	2.56	1.47	.143
English is a second language	1.16 (0.69)	3.20	1.68	.092	0.83 (0.73)	2.28	1.13	.257
Lived in a single-headed household at age 14	1.13 (0.34)	3.09	3.34	.001	1.22 (0.35)	3.39	3.49	< .001
Mother has grade 12 education or above	0.32 (0.32)	1.37	0.99	.324	0.38 (0.33)	1.46	1.14	.255
Parent has/cares for person w/ long term health condition	0.79 (0.29)	2.20	2.73	.006	0.63 (0.30)	1.88	2.12	.034
Dollar value of household cash transfers at Wave 11 (in thousands)	0.11 (0.01)	1.11	9.53	< .001	0.11 (0.01)	1.11	9.42	< .001
Random effects								
Variance for time	0.83 (0.16)	--	5.18	< .001	0.84 (0.17)	--	5.087	< .001
Variance for case ID	8.03 (1.95)	--	4.11	< .001	8.31 (2.04)	--	4.065	< .001
Covariance between case ID and time	-1.63 (0.42)	--	-3.88	< .001	-1.68 (0.44)	--	-3.83	< .001
Number of observations (number of groups)	3783 (683)				3677 (664)			
Wald χ^2	156.95 ($p < .001$)				150.48 ($p < .001$)			
Likelihood ratio test χ^2	500.13 ($p < .001$)				487.40 ($p < .001$)			

How do the results change in the “problem truanting” model?

We estimated a second model wherein the only change was substituting the “any truanting” variable for the “problem truanting” variable. As shown in Table 3, the variables performed consistently across the two models, and the odds ratio for “problem truanting” (4.8) was only slightly higher than the odds ratio for “any truanting” (4.5).

Does either truancy variable affect the rate of change in likelihood to receive cash transfers?

In both of the models, the interaction term between time and truancy was not significant, and its inclusion did not improve the model fit (using AIC and BIC values). This indicates that — while all truants, when considered together, are over four times more likely to receive cash transfers than their non-truant counterparts in this life stage, and problem truants are almost five times more likely — neither operationalisation of truancy modifies the rate of change in cash transfers. That is, truancy is associated with an increased odds of cash transfer over time, compared to his or her non-truant counterparts, but truants’ and non-truants’ cash transfer trajectories follow the same rate of change over time.

While the time*truancy interaction variable is not significant in either model, the *p* values in each model are smaller than .1, and the coefficients are negative, indicating that the trend, while not significant, is a decreasing one. That is, the gap between the truants’ and non-truants’ likelihood of receiving cash transfers could be narrowing. A longer observation period or a larger sample than this study’s may find a significantly different rate of change.

Limitations

Our study is not without some methodological limitations. First, the HILDA survey’s research design culminates in observational data, meaning that truants and non-truants were not randomly assigned to engage in those behaviours. Of course, young people choose for themselves whether or not to truant, and this decision is not random; their decision to truant (or not) is informed by an infinite number of variables from features of their community, school and school experience, and characteristics of the individual and their family life (for a summary, see Maynard, McCrea, Pigott, & Kelly, 2012, pp. 10-11). While causes and effects are entwined in these observational data, these results nonetheless provide a useful and unique contribution to the truancy literature. Further, we recognise that there may be some misspecification bias because truancy is a self-report measure, the response options for

truancy were limited, and the truancy variable is a static rather than dynamic measure of change over time. We also recognise that we have only included a relatively short observation period of six years. As such, it may be the case that over a longer time period, the life outcomes of truants improves relative to what we have found in our study.

Discussion

Our study explored the extent that any truanting, and problem truanting, affects a young person's likelihood of receiving government-paid cash transfers as they transition from late adolescence to early adulthood. Using a sample of 787 young people from seven waves of household panel survey, we found that truants were four to five times more likely than non-truants to receive individual cash transfers throughout their transition from late adolescence to early adulthood. The model estimating the effect of "problem truanting" differed so little from that estimating "any truanting" that it indicates that — on the measure of cash transfers and in this stage of life — truanting at different frequencies may not matter as much as *any* degree of truanting, on the measure of welfare receipt.

Our results suggest that high school truancy is associated with a life pathway that can be differentiated from non-truants' pathway, wherein their financial assistance from government sources is sustained as significantly higher than non-truants' across this life stage. While neither any truancy nor problem truancy affected the rate of change of likelihood of welfare receipt, there are early indications that the gap between their respective likelihoods is narrowing. If true, such a result may go some way to supporting findings of Kimberlin (2016) and Ryan (2013) that government benefits are helping truant recipients to have life trajectories that improves future life chances and opportunities.

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