

# **The meritocracy bias: Do young Australians' beliefs about academic success compound educational inequalities?**

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## **ABSTRACT:**

Meritocratic ideals, which emphasise individual responsibility and self-motivation, have featured prominently and at times controversially in discourses about young Australians' educational and occupational participation in recent years. This means that young people are often encouraged to attribute academic success to individual factors such as hard work and talent, and to blame failure on extrinsic factors such as luck, task difficulty, or broader structural advantages and disadvantages. Using longitudinal data on a large cohort (n=1,853) of young Queenslanders participating in the 'Our Lives' project, I analyse the relationship between attributions for academic success in the middle of high school (aged 14/15 years) and how they related to educational performance at the end of school (aged 16/17 years). The meritocratic belief that hard work would lead to academic success was widespread within the sample and positively associated with subsequent educational performance. However, most respondents also emphasized the importance of having a supportive family, despite this being negatively associated with performance. Consistent with claims about a 'social inequality of motivation', the findings also suggest that emphasising meritocracy may compound the educational disadvantages of respondents living in rural and regional Australia.

**KEYWORDS:** Social inequality; academic achievement; youth; meritocracy; motivation.

## **Introduction**

In its 2014 Budget, the Coalition Government proposed policy changes aimed at reducing welfare dependence and increasing labor market participation amongst Australian youth. The changes, which would expand the current 'Work for the Dole' program and require young Australians to wait six months before receiving unemployment benefits, imply that greater motivation or effort on the part of young people is needed to address youth unemployment (Sydney Morning Herald, 2014). While controversial in this case, meritocratic beliefs emphasising individual responsibility are common in the Australian population and in discourses about young people's educational and occupational participation (e.g. '*It's high time to foster meritocracy in education*' (The Australian, 2013). In this paper I examine how young people themselves account for academic success, and whether these attributions predicted their own educational performance. I argue that meritocratic beliefs may compound educational inequalities for young Australians from certain socio-demographic backgrounds.

## **Motivational inequality and young peoples' attributions for success**

In educational psychology, attribution theory posits that individual perceptions about the causes of academic success and failure are closely related to differences in academic motivation and educational outcomes (Weiner, 1985). Self-attributions, where learners

ascribe their results to individual effort and talent rather than external factors such as luck or task difficulty, are regarded as a critical part of academic socialisation (Marsh, 1984). They are linked to other dimensions of academic self-concept, such as self-efficacy, intrinsic motivation, achievement goals, and outcome expectancies (Linnenbrink & Pintrich, 2002). Numerous studies have documented a 'self-serving bias' by which individuals tend to attribute success to individual traits and failure to external factors, thereby insulating themselves against any negative effects on their self-esteem. It has therefore been suggested that educational practitioners might improve young people's academic self-concept and achievement by encouraging them to assign greater causal efficacy to factors over which they are assumed to have more influence, such as their level of effort (Craven et al., 1991).

Although there is considerable evidence showing that self-attributions are positively correlated with higher academic achievement, there remains ambiguity about the direction of this relationship and how it varies by social location and cultural background. For instance, in a large study New Zealand secondary students (aged 14/15 years), McClure et al. (2011) found that attributional styles differed by ethnicity, with students from Pacific and Maori groups more likely to attribute success and failure to their relationships with family, teachers, and peers, than to internal factors. Taking a broader perspective, other scholars have argued that attributional styles which emphasise meritocracy and individual responsibility are directly involved in the psychological justification of inequality (McCoy & Major, 2007). 'Meritocracy' itself may be conceptualised as a form of status ideology in which the distribution of social goods is seen to correspond with the merit and effort displayed by individuals (as opposed to structural or demographic factors such as family, class, gender or ethnicity) (McCoy & Townsend, 2011). Although high-status individuals stand to benefit the most from meritocratic beliefs that legitimise their positions within the social hierarchy, McCoy et al. (2013) note that low-status individuals tend also to endorse such beliefs even when they justify their relative disadvantage. They argue that meritocratic beliefs may be 'palliative' for low-status groups, who were found to have improved self-esteem and physical health as a result of the sense of control which these beliefs gave them (McCoy, 2013).

In an earlier study, as part of the international Educational Governance, Social Inclusion and Social Exclusion (EGSIE) project, Cooper (2001) measured a range of attributions for academic success amongst 635 young Australians aged 13-15 years. They found that self-attributions, such as 'hard work', 'positive attitude to schoolwork' and 'being quick to adopt new things' were amongst the highest ranked attributions, whilst explanations

involving other parties (e.g. ‘popularity with other pupils’, ‘having highly-educated/rich parents’) were much less common. To date, however, there have been few studies examining the socio-structural correlates and consequences of such attributions in the educational context. This gap is significant in light of claims about inequalities in young people’s abilities to cope with new challenges during the transition to early adulthood. Walther (2009) argues that the increasingly diverse types of post-schooling transitions undertaken by today’s youth emphasise distinct, unevenly distributed motivational characteristics. Difficult transitions in which individuals lack the resources, skills or qualifications to accomplish their goals may place greater emphasis on intrinsic motivation than those in which there are fewer obstacles to one’s goals (Walther, 2009).

### **The present study**

In light of these claims about the benefits of meritocratic beliefs (Craven et al., 1991) and about a ‘social inequality of motivation’ (Walther, 2009), this research will examine: (a) how prominent meritocratic beliefs are amongst young Australians early in high school; (b) how well they predicted their subsequent educational performance at the end of school; and (c) whether these effects varied for young people from different socio-demographic backgrounds. Based on Cooper (2001), I expect to find that:

***Hypothesis 1:*** Intrinsic or self-attributions for academic success will be rated as more important by young people than extrinsic or external attributions for academic success.

Consistent with the idea young people’s attributions for academic success are biased towards the preservation of their academic self-esteem (Craven et al., 1991), I anticipate that:

***Hypothesis 2:*** Intrinsic or self-attributions for academic success during high school will be correlated with higher educational attainment and performance.

***Hypothesis 3:*** Extrinsic or external attributions for academic success during high school will be correlated with lower educational attainment or performance.

Lastly, there is insufficient prior research with which to gauge how these effects might vary by socio-demographic background, if indeed they do vary as theorists such as Walther (2009) imply. To investigate this issue, this research also addresses the following research question:

To what extent does the impact of attributions for academic success on educational outcomes vary for young people from different socio-demographic backgrounds?

### **Methods**

Data for this paper are from waves 1, 2 and 4 of the Social Futures and Life Pathways (‘Our Lives’) project, which is a longitudinal survey of young people in Queensland, Australia. The survey asks about respondents’ values, behaviors, and aspirations, as well as their educational

and occupational trajectories. The study began in 2006 with a large cohort of 7,031 Grade 8 (aged 12/13) secondary school students in 213 schools across Queensland. Follow-up surveys of this cohort have been conducted in Grade 10 (n=3,649; aged 14/15), Grade 12 (n=3,139; aged 16/17), and three years after high school in 2013 (n=2,206; aged 19/20). The analysis for this paper focuses on measures of schooling outcomes asked in wave 4, and attribution measures asked in wave 2. The analytic sample is thus a smaller subset of respondents (n=1,853) who completed all these waves and had data on these measures.

Table 1 contains sample characteristics for the dependent and independent variables for this analysis. While initially quite representative, sample attrition has contributed to an overrepresentation of female respondents and students from the (typically wealthier) Independent schooling sector. This trend, observed in other Australian longitudinal studies of a similar demographic (Rothman, 2009), is addressed by controlling for these factors in the multivariate analysis (Winship & Radbill, 1994).

### ***Dependent Variables***

The analysis examines two measures of educational attainment asked in wave 4. The first of these is whether or not respondents received an Overall Position (OP) at the end of Grade 12. Similar to the Australian Tertiary Admission Ranking (ATAR) system employed in other states, OPs are used to rank the educational performance of Queensland students relative to their cohort, and to allocate of university degree places. Students may not receive an OP if they leave school prior to completing Year 12 (i.e. in order to undertake full-time work) or if they complete VET courses or vocationally-orientated subjects that do not contribute towards OP rankings. The second measure is the actual OP score of those who received one. This score ranges from 1 to 25, with 1 indicating the highest level of performance and 25 indicating the lowest. The sample distributions are skewed towards higher OP-eligibility and OP rankings than the actual population (QLD Government, 2011). However, the large sample size and the inclusion of socio-demographic controls may help account for this imbalance.

### ***Explanatory variables***

The analysis investigates how young people's attributions for academic success predict their subsequent academic performance. In wave 2, respondents were asked on a 5-point Likert scale '*How important are the following factors in succeeding at school?*' The measure in question contained all items from the Cooper (2001) study cited earlier, as well as two new items: 'having good habits' and 'having a supportive family'. Rather than creating composite measures of intrinsic and extrinsic attributional styles, these measures have been kept

separate in the analysis. This allows for the possibility that certain intrinsic/extrinsic beliefs may be more important for academic outcomes than others, and for an analytic approach which accounts for how young people reconcile these different beliefs.

**Control Variables**

To help ensure that any observed effect of each of the explanatory variables on the dependent variables is specific to the time period under examination (i.e. high school), we controlled for respondents’ educational performance at wave 1. Educational performance is measured using Trapnell’s (1994) ‘Smart’ Scale, which is a well-established self-assessed measure of IQ. The Smart Scale has a range from 4 to 36 (with a high score indicating higher intelligence), a mean of 24.4, and is highly reliable (Cronbach’s alpha = 0.88).

**Table 1: Frequency distributions for analytic variables**

<b>Variable</b>	<b>N</b>	<b>% / Mean (Std. Dev)</b>
<i>All respondents</i>	1,853	--
<b><u>Dependent variables</u></b>		
<i>Received OP Rank</i>		
Yes (ref.)	1,580	85.3%
No	273	14.7%
<i>OP Rank (1=Highest; 25=Lowest)</i>	1,580	8.0 (4.9)
<b><u>Control variables</u></b>		
<i>Smart Scale (4-36)</i>	1,853	24.4 (7.1)
<i>Gender</i>		
Male (ref.)	672	36.3%
Female	1,181	63.7%
<i>School sector</i>		
Government (ref.)	801	43.2%
Independent	715	38.6%
Catholic	337	18.2%
<i>Family living arrangement</i>		
Both parents (ref.)	1,497	80.8
Other arrangement	356	19.2
<i>Geographic region</i>		
Urban (ref.)	1,113	69.0%
Non-urban	492	31.0%
<i>Parental education (highest)</i>		
Bachelor’s degree or higher (ref.)	874	47.2%
Vocational	428	23.1%
Year 12 or less	493	26.6%
Don’t know/Missing	58	3.1%
<i>Parental occ. prestige (0-100)</i>	1,853	61.0 (22.4)

Socio-demographic factors which may affect educational performance were controlled for. Sex is controlled for with a dummy variable coded 0=Male and 1=Female. OP-eligibility and OP achievement are typically higher in the Independent schooling sector than it is in the State or Catholic school sectors (Marks et al., 2001, p. 26). The sector variable differentiates between these three school types, with State as the reference category. Educational achievement and university attendance tends to be lower amongst young people living outside major cities in Australia (Marks et al., 2011). Geographic location is thus controlled for with a measure of whether a respondents' postcode was inside or outside a major city area. Wealthier and higher-educated parents tend to invest more time (Guryan et al., 2008) and resources (Coleman, 1988) in cultivating their children's academic dispositions. Parental education is controlled for using the highest level of education attained by either parent, distinguishing between those with a bachelor's degree or higher, those with a vocational qualification (e.g. TAFE certificate or apprenticeship), and those with school-level qualifications. Those who were missing data or responded 'Don't know' to the parental education question were coded as such and included in the analysis. Responses to an open-ended question about parental occupation were coded according to the Australian Standard Classification of Occupations (ASCO) and assigned a score from 0-100 on the ANU4 occupational prestige scale. Parental influences on educational performance are contingent on the extent to which respondents have contact with parents (Coleman, 1988). Family living arrangement is thus controlled for with respondents living with both parents (biological or adoptive) coded as 0 and all other arrangements coded as 1.

### ***Analytic Approach***

The analysis proceeded in two stages. The first analytic stage examines respondents' likelihood of receiving an OP at the end of school. Logistic regressions were used to analyse this binary outcome (where 0 = Did not receive OP and 1 = Received an OP). Coefficients for these models are presented as odds ratios. These are interpreted as the change in odds associated with a one unit change in the predictor, net of all other variables in the model. The second analytic stage examines differences in rankings of those who received an OP. For ease of interpretation, the original OP measure has been mirrored and rescaled to create a new academic achievement variable ranging 0-100, where a higher score indicates higher achievement. We use ordinary least squares (OLS) regression to estimate the each of the models, and each regression coefficient represents the expected increase or decrease in a respondents' achievement ranking (as a percentage) resulting from a one unit change in the predictor, net of all other variables in the model.

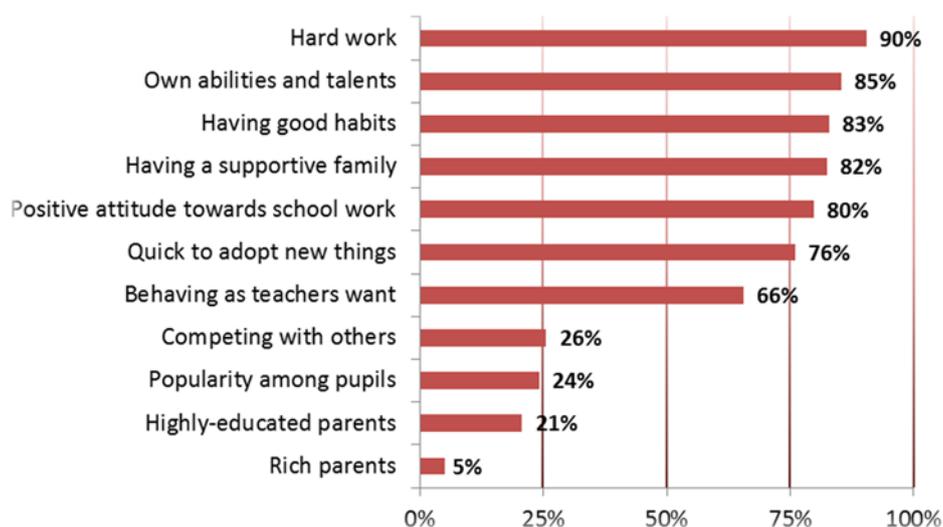
In both stages, three regression models are estimated. Using backwards stepwise regression, the first model identifies the combination of attributional beliefs which best predicted each educational outcome at the end of school, after controlling for prior self-assessed intelligence at the beginning of school. In this automated procedure, all attributional belief measures were first entered into the model, and then eliminated individually until only those with associations beyond the chosen significance threshold ( $p < 0.1$ ) remained. The second model provided a more rigorous test of these associations by incorporating a range of socio-demographic controls. Lastly, interaction tests were conducted to identify whether any of the effects of attributional beliefs varied by socio-demographic background. Significant interactions are included in a third and final model. All models included an option to account for within-school clustering when calculating standard errors, allowing for more robust tests of significance. All analyses were run using Stata 12.

## Results

### Overall distribution of attributional beliefs

Figure 1 shows the percentages of respondents who rated each factor as either ‘Important’ or ‘Very important’ for academic success. Self-attributions for academic success were generally more common than attributions citing extrinsic factors. As in Cooper’s (2001) study of a similar population more than a decade ago, ‘hard work’ was the most highly rated factor, whilst ‘popularity with pupils’ and ‘having highly-educated/rich parents’ were the lowest rated factors. However, not all external attributions were relatively uncommon: for instance, the sample as whole placed more importance on ‘having a supportive family’ than they did on having a ‘positive attitude towards schoolwork’ or being ‘quick to adopt new things’.

**Figure 1: Attributions for academic success (% ‘Important’ or ‘Very important’)**



## Receiving an Overall Position (OP) Ranking

Table 2 displays the results for the logistic regression models analysing the odds of receiving an Overall Position at the end of school. Model 1 (column 1) displays the three attributions for academic success which remained correlated with receiving an OP, after controlling for prior self-assessed intelligence and performing backwards elimination. The pseudo  $R^2$  value indicates that this model accounts for 10 percent of the overall variation. The odds ratio for the Smart Scale (1.1,  $p < 0.001$ ) indicates that, after controlling for the belief measures in the model, every one point increase in self-assessed intelligence at wave 1 predicted a 10 percent increase in a respondent's odds of receiving an OP five years later.

Of the three remaining attributions for academic success, only two were significantly correlated with receiving an OP: believing in hard work and being quick to adopt new things were both positively associated with outcome measure. Each one level increment in the importance respondents placed on hard work was associated with a 60 percent increase in their odds of receiving an OP, whilst for being quick to adopt new things, it was associated with a 30 percent increase in these odds.

**Table 2: Logistic Regression of Odds of Receiving an Overall Position (OP)**

	(1)		(2)	
	O.R.	95% C.I.	O.R.	95% C.I.
<b><u>Importance of factor (1-5)</u></b>				
Hard work	1.6 <sup>***</sup>	(1.4, 1.9)	1.5 <sup>***</sup>	(1.2, 1.8)
Quick to adopt new things	1.3 <sup>**</sup>	(1.1, 1.6)	1.5 <sup>***</sup>	(1.2, 1.8)
Having a supportive family	0.8	(0.7, 1.0)	0.8 <sup>*</sup>	(0.7, 1.0)
<b><u>Controls</u></b>				
Female			2.0 <sup>***</sup>	(1.5, 2.8)
Other living arrangement			0.6 <sup>**</sup>	(0.5, 0.9)
Rural			0.6 <sup>**</sup>	(0.4, 0.8)
<i>School sector</i>				
State school (Ref.)				
Independent school			1.8 <sup>**</sup>	(1.2, 2.8)
Catholic school			1.2	(0.8, 1.9)
<i>Highest Parental Education</i>				
Bachelor's deg. or higher (ref.)				
Vocational/Trade certificate			0.4 <sup>***</sup>	(0.3, 0.6)
Year 12 or less			0.4 <sup>***</sup>	(0.3, 0.6)
Missing/don't know			0.3 <sup>***</sup>	(0.1, 0.5)
<i>Parental occ. prestige (0-10)</i>				
Parental occ. prestige (0-10)			1.1 <sup>**</sup>	(1.0, 1.2)
W1 Smart Scale (4-36)	1.1 <sup>***</sup>	(1.1, 1.1)	1.1 <sup>***</sup>	(1.1, 1.1)
<b>No. of obs.</b>	<b>1,853</b>		<b>1,853</b>	
<b>Pseudo <math>R^2</math></b>	<b>0.10</b>		<b>0.20</b>	

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Although slightly below significance at the 95 percent confidence level, importance placed on having a supportive family was associated with a lower likelihood of OP-eligibility: every increment in importance predicted a 20 percent decrease in the odds of receiving an OP.

After incorporating the socio-demographic controls in Model 2, the total variance explained rose to 20 percent. Being female, attending an Independent school rather than a State school, and having a parent in a more prestigious occupation, increased one's odds of receiving an OP. Meanwhile, being from a rural area, not living with both parents, and not having at least one tertiary-educated parent decreased these odds. Parental education displayed the strongest association. Compared to those with a tertiary-educated parent, respondents whose parents' highest level of education was vocational or school-level were around 60 percent less likely to receive an OP. Those who were unsure of or missing data on their parent's education were 70 percent less likely to receive an OP. With the inclusion of the socio-demographic measures, the coefficient for 'having a supportive family' became significant, and the coefficient for 'being quick to adopt new things' increased in significance. A third model was not estimated because interaction tests found that the effects of these beliefs did not vary significantly according to any of the socio-demographic control measures.

### **Overall Position (OP) Ranking Achieved**

Table 3 displays the results for the OLS regression models examining the educational performance of those who received an OP at the end of high school. The OP measure has been rescaled to 0-100 so that covariate effects represent a percentage increase or decrease in educational performance. Model 1 shows the seven attributional beliefs that were correlated with respondents' educational performance after accounting for their prior self-assessed intelligence and conducting backwards elimination. This model accounted for 19 percent of the total variation in educational performance.

Three attributional beliefs were positively associated with educational performance, the most notable being 'hard work'. Each increment in importance respondents placed on hard work in Year 10 was correlated with a 6 percent increase in their subsequent educational performance. Respondents who attributed academic success to 'having good habits' and 'competing with others' displayed positive - albeit smaller - increases in educational performance. However, significant decreases in performance were apparent for those who attributed academic success to having a supportive family and behaving as teachers wanted. Although educational performance increased with importance placed on a 'positive attitude to schoolwork', this association was not significant at the 95 percent confidence level.

**Table 3: OLS Regression of OP Ranking (0-100)**

	(1)		(2)		(3)	
	b	se	b	se	b	se
<b>Importance of factor (1-5)</b>						
Hard work	5.7***	1.1	5.4***	1.1	6.6***	1.3
Behaving as teachers want	-2.9***	0.7	-1.9**	0.7	-2.0**	0.7
Competing with others	1.7**	0.5	1.9**	0.6	1.8**	0.6
Having rich parents	-2.2**	0.7	-2.4**	0.7	-7.2***	1.8
Having supportive family	-3.1***	0.9	-3.0***	0.8	-2.9***	0.8
Having good habits	2.3*	1.0	1.7	0.9	2.7**	1.0
Positive attitude to sch. work	1.8	0.9	1.3	0.9	1.4	0.8
<b>Controls</b>						
Female			1.5	1.4	1.4	1.4
Other living arr.			-2.0	1.6	19.0*	9.3
Rural			-1.4	1.5	22.3*	9.7
<i>School sector</i>						
State school (Ref.)						
Independent school			8.4***	1.5	8.5***	1.4
Catholic school			1.8	1.9	1.7	1.9
<i>Highest Parental Education</i>						
Bachelor's deg. or higher (ref.)						
Vocational/Trade certificate			-5.3***	1.4	-7.5***	1.6
Year 12 or less			-7.3***	1.7	-5.5***	1.4
Missing/don't know			-13.7***	3.4	-13.4***	3.3
<i>Parental occ. prestige (0-10)</i>			1.2***	0.3	-0.1	0.6
<b>Interaction terms</b>						
Rural*Hard work					-5.3*	2.2
Other living arr.*Having good habits					-5.1*	2.2
Parental occ. prestige*Having rich parents					0.6**	0.2
<i>WI Smart Scale (4-36)</i>	1.4***	0.1	1.4***	0.1	1.4***	0.1
<b>No. of obs.</b>	<b>1,580</b>		<b>1,580</b>		<b>1,580</b>	
<b>Adj. R<sup>2</sup></b>	<b>0.19</b>		<b>0.27</b>		<b>0.28</b>	

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Including socio-demographic controls in Model 2 increases the variance explained to 27 percent. Parents' education and occupation, and respondents' schooling sector, were strongly associated with educational performance. Those who had attended Independent schools performed, on average, 8 percent better than those who attended State schools, whilst those with at least one tertiary-educated parent significantly outperformed respondents in each other category. Each increase of 10 percent in parental occupational prestige was correlated with a 1 percent increase in educational performance. With these measures included the association for 'having good habits' disappeared and the association for 'behaving as teachers want' reduced in size and significance.

Next, interaction tests were conducted to determine whether the attribution effects varied by each of the socio-demographic control measures. Model 3 includes the significant interactions from each of these tests. Most notably, placing importance on hard work predicted better performance for respondents living in major cities, but those living outside of these areas appear to have received no such benefit from this belief (i.e. main effect (6.6) - interaction term (5.3) = 1.3 percent increase). The effect of each increment of importance placed on 'having good habits' differed by family type, showing a more negative association with academic performance for those children who did not live with both parents. Finally, the negative effect of attributing success to having rich parents became smaller as respondents' level of parental occupational prestige increased.

## **Discussion & Conclusion**

In this paper I have investigated how young people explain academic success, and the extent to which these attributions predicted their own later educational performance. Addressing claims about a 'social inequality of motivation' (Walther, 2009), I also explored the varying implications of meritocratic beliefs for the educational outcomes of young people from different socio-demographic backgrounds.

Consistent with Cooper (2001), and Hypothesis 1, the descriptive results suggest that intrinsic or self-attributions for academic success are widely held amongst Australian youth, whereas other more extrinsic attributions are less commonplace. However, the one exception was a new item - '*having a supportive family*' - added in this current study. The popularity of this belief is particularly surprising given that it was negatively aligned with both educational outcome measures after accounting for all other factors. Explaining a similar finding in the New Zealand context, McClure et al. (2011) cites the 'Tall Poppy' culture in Australia and New Zealand (whereby successful individuals may attract social disapproval) as one reason why young people may be hesitant to attribute their success to individual ability alone.

Whether or not young people in Queensland receive an OP ranking provides a strong indication as to their longer-term educational and occupational trajectory. The results show that the more Our Lives respondents attributed academic success to hard work and being quick to adopt new things, the greater their chances of receiving an OP. This association remained significant even after accounting for a range of socio-demographic factors and self-perceived intelligence at the start of high school. Hard work was also the strongest influence on OP scores once all other attributions and control measures were accounted for. These findings supported Hypothesis 2, which predicted that intrinsic or self-attributions for success

would be positively associated with educational outcomes. There was more mixed support for Hypothesis 3, which predicted that extrinsic attributions would be negatively associated with these outcomes. On the one hand, those who believed rich parents were important for academic success tended to perform more poorly than those who did not. This finding is consistent with the idea that individuals deflect responsibility for poor academic performance so as to preserve damage to their confidence and self-esteem (Marsh, 1984). However, this did not appear to be the case for those who attributed success to competition with their peers, since these individuals performed better academically in the long-run. One reason for this may be that peer rivalries enable young people to appropriate beneficial discourses about meritocracy without appearing too elitist and attracting social disapproval.

In response to the more exploratory research question posed at the outset, several attributional beliefs were found to vary by socio-demographic background in terms of their associations with young people's subsequent educational performance. The clearest instance of this was the interaction between attributing academic success to hard work and living in a regional or remote area. Put simply, the benefit of holding this most influential meritocratic belief was confined to those living in urban areas. For young people living in regional and remote Queensland, the optimistic belief that hard work would lead to educational opportunities made little if any difference to their educational performance in their final years of secondary schooling. The decreased returns to their academic motivation may help to explain why rural youth are less likely to aspire to university: many have internalised the lesson that hard work is necessary, but often not sufficient, for overcoming the barriers to their longer-term educational participation.

Other attributions also varied in their associations with educational performance. These were instances where respondents' ideas about the benefit of resources and dispositions (which they either possessed or lacked) seemed to prove accurate in their own cases. For instance, respondents who attributed success to having rich parents performed better if they themselves had parents in more prestigious (and more lucrative) occupations. This suggests that students from more privileged backgrounds do not entirely conflate structural advantages with individual effort when accounting for academic success. Meanwhile, those who attributed success to good habits performed better if they lived with both (biological or adoptive) parents than if they did not. One reason for this may be that young people who believe in the academic value of good study habits still need more parental supervision (i.e. both parents within the home rather than one) to cultivate and maintain such

habits. This explanation is consistent with research showing that parents only influence their children's education to the extent that they spend with them (Coleman, 1988).

This research has aimed to provide a more nuanced understanding of the diverse consequences accompanying an emphasis on meritocracy in education. For many school students, such an emphasis may encourage a self-serving bias that supports academic self-esteem and performance. Yet this effect depends on young people reconciling beliefs about success in a way that appears more complex and context-sensitive than the intrinsic/extrinsic dichotomy suggested by attribution theorists. The results presented here show that students can acknowledge advantages they have without compromising their academic motivation - indeed this acknowledgement may even be expected within their peer networks. Similarly, young people recognise the importance of hard work and good study habits even when these are not achievable in their circumstances, or when they are not enough to overcome the structural disadvantages they face. It is these latter scenarios - where embracing meritocratic ideals can offer young people little more than a palliative sense of control over their futures - which should be of most concern to scholars of early life course inequalities.

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<http://artsonline.monash.edu.au/ourlives/>.

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