

Banter, Belonging, and Being Unique: Boys' Experiences of Acceleration in New Zealand

Lindsay Yeo, Tracy Riley, and Vijaya Dharan
Massey University

Abstract

Despite significant evidence indicating its effectiveness in meeting the needs of academically gifted students, academic acceleration is not a popular provision in New Zealand schools. The literature suggests that parents and educators fear that removing students from their same-aged peers will damage their social-emotional development, although the available evidence does not support these concerns. A mixed methods approach was used with 29 male students from a single-sex secondary school to explore the impact of acceleration in this study. All participants were simultaneously enrolled in secondary school and undertaking a variety of first-year courses through a local university. The participants completed the *Piers-Harris Children's Self-Concept Scale 2*. An analysis of the responses indicated no significant differences, other than physical self-concept, with normed mean age equivalent scores. In a follow-up interview with five of the participants, a sense of belonging to the school and the acceleration programme was identified. The questionnaire and interview findings indicated that the accelerated participants generally felt comfortable with their identity as accelerates, while also feeling accepted by their non-accelerated peers. The conclusion was reached that acceleration may be a positive provision for gifted students in New Zealand that does not negatively impact their social-emotional development.

Introduction

The effect of acceleration upon gifted students' achievement has been comprehensively demonstrated in the literature. For example, in a compilation of over 800 meta-analyses of educational interventions, Hattie (2009) found acceleration to be the fifth most powerful contributor to educational achievement out of 138 studied factors. Similarly, in her most recent meta-analysis, Rogers (2015) reported moderate to strong mean academic effects, particularly for subject-based and grade-based acceleration. Other meta-analyses have demonstrated that

accelerated gifted students outperform non-accelerated gifted students of equivalent age by a whole grade year, and at least match the performance of non-accelerated gifted students a year older (Kulik & Kulik, 1984). Accelerated students also outstrip their older, non-accelerated peers in standardised achievement scores, university grades, and other post-school measures (McClarty, 2015; Steenberg-Hu & Moon, 2011). Furthermore, students who experienced early entry to tertiary education appear to achieve higher degrees - and achieve them faster - than older, non-accelerated tertiary students (Brody, Assouline, & Stanley, 1990).

This evidence is recognised by the New Zealand Ministry of Education (2012), which recommends that schools provide acceleration in tandem with enrichment to best meet the needs of gifted students. Acceleration has not always been a popular or preferred provision in New Zealand schools (Wardman, 2009). Although Wardman (2017) reports positive changes in the adoption of accelerative practices in secondary schools, the most recent research evidence shows that 66.1% of New Zealand schools with gifted provisions reported a preference for a combination of acceleration and enrichment (Riley & Bicknell, 2013). However, only 1.8% of these schools provide acceleration only, and many quintessential acceleration provisions (e.g., early entry, dual enrolment, fulltime special class placement) were among the least employed by schools. While the argument is made that "single-subject acceleration is now widespread in our high schools and even full-year acceleration is no longer shunned" (Wardman, 2017, p. 248), there is inadequate evidence to support this claim.

The lack of popularity of acceleration in New Zealand appears to stem largely from a fear of damaging the social-emotional development of gifted students by removing them from their age-cohort (Robinson, 2004; Wardman, 2017; Watts, 2006). This has been found to be a key concern for parents of gifted students in New Zealand (Wardman, 2015). This fear of damaging gifted students' social-emotional development has also

been found in international research with educators and parents (Gallagher, Smith, & Merrotsy, 2011; Lassig, 2009; Hoogeveen, van Hell, & Verhoeven, 2005; Southern, Jones, & Fiscus, 1989).

International research, however, has consistently found that accelerated gifted students do not differ significantly from their non-accelerated same-age peers in social skills or emotional development (Steenbergen-Hu & Moon, 2011; Kulik, 2004); if anything, differences in social and emotional skills tend to favour accelerated students (Robinson, 2004). For example, Gross (2006) noted that exceptionally gifted students who were not accelerated had significantly worse educational, social, emotional, and psychological long-term outcomes than those who were accelerated. Similarly, Rogers (2015) reported moderate-to-strong effect sizes in terms of social and psychological outcomes, and these results “bode well for helping overcome the ‘myths’ of social maladjustment and psychological problems” (p. 27).

The disconnect between research and practice in New Zealand needs to be addressed. Riley and Bicknell (2013) felt that gifted and talented education was at risk of stagnation in New Zealand, emphasising the importance of “...developing an evidence-base of effective practices [in New Zealand]” (p. 16). The study reported in this article sought to contribute new research that investigated the effects of acceleration on the social-emotional development of a cohort of accelerated male adolescents from a single sex secondary school in New Zealand (Yeo, 2016). This article provides a review of the literature, followed by the methods and results used in the study, and concludes with a discussion of the findings (set against the study’s limitations) as well as some recommendations for research and practice.

Literature Review

The literature review explores two key concepts related to acceleration: self-concept and a sense of belonging. Self-concept is “...broadly defined as how a person perceives themselves and how they believe other people perceive them” (Yeo, 2016, p. 11). These perceptions come from an individual’s interpretation of their own experiences, which then inform a specific facet of their self-concept such as academic self-concept or social self-concept (Shavelson, Hubner, & Stanton, 1976). Together, these different facets contribute to the individual’s overall self-concept. Research on children and adolescents appears to have increasingly moved away from general self-concept, and towards a

focus on specific domains, such as academic, physical, or social self-concept.

Gender differences within certain domains are well-documented, particularly within academic self-concept. Male adolescents appear to have higher mathematics self-concepts than female adolescents, while female adolescents typically have higher verbal/language self-concepts than male adolescents (Marsh, Trautwein, Lüdtke, Kölle, & Baumert, 2005; Skaalvik & Skaalvik, 2004; Jacobs, Lanza, Osgood, Eccles & Wigfield, 2002; Marsh & Yeung, 1998). However, while female adolescents have significantly higher English grades or test scores than male adolescents, female adolescents also tend to match male adolescents on mathematics scores and grades (Marsh et al., 2005; Marsh & Yeung, 1998). In comparison, when Cole, Maxwell, Martin, Peeke, Seroczynski, Tram, and Maschman (2001) measured various domains of non-academic self-concept in children in elementary, middle, and secondary school, they found males of all ages rated themselves significantly higher on physical appearance and sports competence than females, while also rating themselves significantly lower than females in behaviour conduct. Similarly, in a study with older adolescents (average age of 17 years), male adolescents rated themselves significantly higher than female adolescents on athletic competence and cognitive competence (Cairns, McWhirter, Duffy, & Barry, 1990).

Self-Concept and Acceleration. Self-concept has been widely studied among gifted students who have experienced acceleration, particularly academic self-concept. The most common finding is that gifted students in high ability settings (e.g., an accelerated class) have lower academic self-concepts than gifted students in settings of lower overall ability - Marsh (1987) named this phenomenon the Big Fish Little Pond Effect (BFLPE). Academic self-concept is positively and reciprocally related to academic achievement (Marsh & Yeung, 1998), which has prompted debates about the dangers of acceleration for achievement. However, some theorists argue that the BFLPE may simply represent a realistic shift in a student’s perception of their academic ability (Colangelo, Assouline, & Marron, 2013), and that not all comparisons with academically superior peers may be negative (Hueget, Marsh, Wheeler, Seaton, Dumas, & Regner, 2009). The BFLPE has been noted in a number of studies investigating accelerated students (Arens & Watermann, 2015; Yeo & Garcés-Bacsal, 2014; Robertson, 2013; Wright & Leroux, 1997).

Research related to accelerated students and non-academic self-concept domains has

consistently found no significant differences between accelerated and non-accelerated students. For example, pre-post studies on various acceleration provisions have generally noted small but positive gains for students on non-academic self-concept domains (van der Muelen, van der Bruggen, Spilt, Verouden, Berkhout, & Bögels, 2014; Shepard, Nicpon, & Doobay, 2009; Wright & Leroux, 1997). Numerous other studies have also found that accelerated students tend to differ little from non-accelerated students (both gifted and non-gifted) on non-academic self-concept domains (Hoozeveen, van Hell, & Verhoeven, 2012; Plucker & Taylor, 1998). Of note, Lee, Olszewski-Kubilius, and Thomson (2012) found similar results, but showed that accelerated males (between 10 and 18 years of age) tended to rate themselves less socially competent than accelerated females.

Generally, the literature suggests that no major evidence exists to support any fears that acceleration may negatively affect the social or emotional development of gifted students. The study reported in this article was an attempt to undertake a similar line of research in a New Zealand context to gain a clearer understanding of the situation in New Zealand.

Sense of Belonging. In comparison to self-concept, belonging has long been regarded as an important element of well-being in the psychological and health literature (Annant, 1967; Maslow, 1943). Mahar, Cobigo, and Stuart (2013) identified five consistent themes in research that defined sense of belonging: subjectivity, groundedness, reciprocity, dynamism, and self-determination. In other words, a sense of belonging is a subjective feeling of being connected. This connection must be to a grounded, identifiable group, and developed through the reciprocal sharing of experiences, beliefs, values, and (to a lesser extent) characteristics. It is dynamic in that various social or environmental enablers and barriers may affect a sense of belonging, and it may be up to the individual to determine whether they feel they can belong to a group (Yeo, 2016).

A strong sense of belonging to the school community has been identified as an essential factor of the positive development of young adolescents (Catalano, Beglund, Ryan, Lonczak, & Hawkins, 2004); strong relationships with peers and teachers are critical in fostering this sense of belonging (Drolet & Arcand, 2013). Belonging and the strength of students' interpersonal relationships have been found to mediate the relationship between motivation and academic achievement (Faircloth & Hamm, 2005;

Goodenow, 1993; Juvonen, 2006; Ostermann, 2000).

Sense of belonging has also been linked to self-concept: higher self-concepts are experienced by individuals who experience a strong sense of belonging with school friends (Tarrant, McKenzie, & Hewitt, 2006). But there is a paucity of literature investigating the sense of belonging of gifted students, let alone accelerated students. There is a need for such research, as being 'different' from one's peers and having to disguise one's giftedness to feel like one belongs has been recognised to be a significant challenge for many gifted children (Gross, 2006; Galbraith, 1985).

This study on boys' experiences of acceleration may be seen as unique, due to its focus on a sense of belonging, and its use of a New Zealand sample of gifted students.

Methodology

This study employed a mixed-methods research design, using techniques from both quantitative and qualitative research to investigate the social-emotional effects of acceleration in a New Zealand context. Specifically, it adopted an explanatory sequential design: quantitative data was initially collected and analysed, with the results providing a contextual base and informing further exploration by qualitative means (Creswell, 2013). The quantitative measure provided an indication of how the social-emotional development of the participants compares to overseas norms, while the qualitative measure allowed for an in-depth investigation into the topic within the sociocultural context of New Zealand.

Participants. The participants were 29 accelerated male students, of 17 or 18 years of age, in their final year of secondary school, at a single sex school in New Zealand's North Island. The participants were dually enrolled in school and at least one first year course at the local university, depending on the subjects they had completed in high school. Five of the participants were purposively sampled for interviews. The sampling was based on the courses they took to allow for a wide coverage of subject areas.

Tools. Self-concept was measured using the *Piers-Harris Children's Self Concept Scale 2nd Edition (Piers-Harris 2)*, a standardised self-report questionnaire consisting of 60 yes-or-no items. The scale derives six domain scores of self-concept (Behavioural Adjustment,

Intellectual and School Status, Physical Appearance and Attributes, Freedom from Anxiety, Popularity, and Happiness), and a Total Self-Concept score.

Semi-structured interviews were used to investigate sense of belonging, and to further discuss self-concept. The questions for the interviews were derived from the literature surrounding sense of belonging, and from some of the responses on the *Piers-Harris 2*. The perceived adequacy of the *Piers-Harris 2* was also investigated.

Procedure. Following ethical review, the 29 participants, who each gave informed consent to participate in the research, completed the *Piers-Harris 2* on a school day in the school library, in approximately 20 minutes. The participants were also given the chance to express their interest for the interview stage. The *Piers-Harris 2* was then scored; some interview questions were based on the response distributions on some of the *Piers-Harris 2* items. The five interviews were held three weeks after the questionnaire was completed. It was spread over a week with each interview taking between 15 to 30 minutes. The interview data was shared with the participating students to ensure accuracy.

Analysis and Results

The raw scores from the *Piers-Harris 2* were transformed into T-scores, which have an average of 50T and a standard deviation of 10T. The cohort's mean T-scores and standard deviation were calculated and compared with the normed mean age equivalent scores. After the score distributions were tested for normality, the differences between the cohort and norm scores were assessed for significance using unpaired t-tests; effect sizes (Hedge's *g*) were also calculated. Other than the Behavioural Adjustment scale, all the cohort scores were lower than their respective norm scores as shown on Table 1; however, all the participants' domain scores were between 45T and 55T (i.e., within the "average" range; Piers & Herzberg, 2002). None of the differences between the participants and the norm group were statistically significant, except for Physical Appearance and Attributes $t(193) = 2.44, p < .05, g = -0.43$, as shown on Table 2.

Along with sense of belonging, the results of the *Piers-Harris 2* were explored in more depth in the interviews. This included the distribution of responses related to particular items, the cohort's "average" academic self-concept and whether it was different in non-accelerated

classes, and the cohort's lower physical self-concept.

Thematic analysis was used to interpret the interview data. Four of the five interviewees felt a sense of belonging to their school; the remaining interviewee noted that he did not take school that seriously, but that he did feel comfortable at school. All of the interviewees credited the acceleration programme as a major enabler for their sense of belonging, citing shared experiences and interests, as well as having a small group throughout secondary school to identify with. One interviewee thought the acceleration class meant that they "couldn't get separated so much from the rest of the people". They also noted having encouraging teachers and achieving highly as enablers to their belonging. The interviewees considered socialising with non-accelerated students as contributing to their sense of belonging. Four of the five interviewees regularly socialised with non-accelerated friends at school, and none of them said they struggled to socialise with others. One interviewee felt the school culture enabled him "...to get along with people you barely know". All of the interviewees could remember moments where they felt separate from the other students in the school; however, they did not consider these moments negatively.

Sport was named as a major enabler of the interviewees' sense of belonging: they all played at least one sport and engaged with a lot of non-accelerated students in this space. Two interviewees mentioned they met many of their non-accelerated friends through extracurricular activities. However, one of the interviewees, when asked about extracurricular activities, said, "[Accelerates] just do a lot of things I suppose...not necessarily sport because obviously..."; he finished this sentence with a laugh, insinuating that accelerated students do not get as involved with sport as did non-accelerated students.

Very few barriers to belonging were identified. Two of the interviewees noted that it could sometimes be difficult talking with non-accelerated students if they have different interests or different levels of understanding. Choosing his words carefully, one interviewee said, "I don't have any - um - stupid friends. Past a certain point, these people get hard to deal with".

None of the interviewees were surprised by their Intellectual and School Status score being "average". As one interviewee put it, "You get used to people being as smart as you or smarter." The four interviewees enrolled in non-

Table 1. Cohort mean scores, standard deviations, and descriptors for each scale of the *Piers-Harris 2*, and age-equivalent norm population mean scores for each scale

Scale	Participants		Descriptor ^a	Mean of Age-equivalent Norm Population
	Mean	Standard Deviation		
Total Self-Concept	45.97	7.81	Average	49.1
Behavioural Adjustment	50.10	8.73	Average	50.1
Intellectual and School Status	46.41	7.73	Average	49.2
Physical Appearance and Attributes	45.28	8.49	Average	49.5
Freedom from Anxiety	47.72	7.71	Average	48.8
Popularity	47.90	8.05	Average	48.6
Happiness	46.10	7.63	Average	48.8

a: Descriptors of the scores are obtained from the *Piers-Harris 2* manual

Table 2. Output t-scores and Hedge's g values from analysis of differences between mean scores of participants and age-equivalent norms on all scales of the *Piers-Harris 2*

Scale	T	g
Total Self-Concept	1.63	-0.32
Behavioural Adjustment	0.00	0.00
Intellectual and School Status	1.45	-0.29
Physical Appearance and Attributes	2.17*	-0.43
Freedom from Anxiety	0.56	-0.11
Popularity	0.36	-0.07
Happiness	1.41	-0.28

Note. Degrees of freedom for all t-tests was 193.

* $p < 0.05$

accelerated Year 13 classes agreed that they felt an increase in their academic self-concept when in these classes. One interviewee noted that “[it] makes you feel more intelligent, honestly”.

Another interviewee noted that the work in his non-accelerated class was undemanding and made him complacent, while a third interviewee noted that his non-accelerated class made him feel “less inspired to do well”. A fourth interviewee felt that his teacher in his non-accelerated class had lower expectations than teachers in his accelerated class, and that the standards were lower.

An item in the questionnaire, “My classmates make fun of me”, inspired an interesting response. Although a third of the participants answered “Yes”, one qualified his answer by adding “But it’s just banter”. When asked about the accuracy of the participant’s explanation, the interviewees were mixed. Two agreed that the banter was not malicious and that they enjoyed it, whereas two other interviewees felt that banter could be harmful and damage some students’ confidence, even if it was intended to be light hearted. One interviewee said that banter can sometimes make the students with less confidence “...think they should not be an accelerate”.

On the item “I am different from other people”, 27 of the 29 participants answered “Yes”. The interviewees were not surprised when this was mentioned, and they all interpreted being different in a positive light. For example, one interviewee said, “[The accelerates have] been removed from the rest of the year group the whole time, they talk differently, they’ve been with each other the whole time so it’s kind of like ‘speciation’”. Another participant said, “I expected 30 people to say yes, because everyone is so unique”.

Discussion and Conclusion

The interview themes, the *Piers-Harris 2* results, and their relation to the literature are discussed in this section.

Self-Concept. Within the non-academic domains of self-concept, all but one of the cohort’s mean scores were not significantly different from the test norm scores. This is consistent with the extant literature that shows academic acceleration to have no significant effects on gifted students’ non-academic self-concept (Kulik, 2004; Robertson, 2013), that accelerated students are at similar (or even less) risk of behavioural issues than non-accelerated students (Hoogeveen, van Hell, & Verhoeven, 2005), and

they have comparable (or possibly more advanced) social skills to non-accelerated students (Lee, Olszewski-Kubilius, & Thomson, 2012; Neihart, 1999; Wright & Leroux, 1997). The interviewees cited few problems socialising with both accelerated and non-accelerated students.

The Physical Appearance and Attributes was the only scale where the cohort scored significantly lower than the norm mean score. This was an interesting finding as Cole et al. (2001) suggest that males’ physical self-concepts are typically higher than females, therefore it may be expected to be above the mean. It is a commonly perpetuated stereotype that academically capable people are not very capable at sport (Cardiel, 2012); the response of one of the interviewees when discussing accelerated students and sport suggested this stereotype is apparent within the school. Despite all interviewees playing at least one sport each, none of them played at a high level. If this is the case for most of the accelerated students, this may negatively affect the students’ perceived physical competency. It must be noted that, although the cohort T score on the Physical Appearance and Attributes scale was significantly lower, it was still within what Piers and Herzberg (2002) label the “average” range.

The cohort’s Intellectual and School Status mean score did not significantly differ from the norm mean score, which reflected the BFLPE phenomenon. None of the interviewees found this surprising as they were used to comparing themselves with other accelerated students. They also experienced an increase in academic self-concept, but a decrease in motivation, in their non-accelerated classes. This could be explained by lower teacher expectations in their non-accelerated classes as teacher expectations have been linked to student motivation (Jasmi & Hin, 2014).

Sense of Belonging and Being Unique. Four of the interviewees felt a strong sense of belonging with the school, while one felt ‘comfortable’. The interviewees placed emphasis on having fellow accelerated students with similar interests to socialise with, reflecting the need for groundedness and reciprocity for a sense of belonging (Mahar et al., 2013). This also became apparent when one of the students discussed difficulties in conversing with students of lower intellectual ability. However, all of the interviewees had no problems in socialising with non-accelerated students. They cited sport as the main arena in which they interacted with and befriended non-accelerated students.

Almost the entire cohort of students who took the survey affirmatively answered the item “I am different from other people”, which, according to the *Piers-Harris 2* manual, contributes to a lower self-concept score (Piers & Herzberg, 2002). However, when the item was probed further in the interviews, all five participants were found to interpret difference in a positive light. Specifically, the interviewees had interpreted the item to refer to a recognition of one’s individuality and strengths, in contrast to a feeling of exclusion. Research has noted that gaining peer acceptance is very important for adolescents (Kreager & Staff, 2009; LaFontana & Cillessen, 2009), and gifted students often feel the need to hide their giftedness to fit in with their peers at school, which can lead to underachievement and long term social-emotional problems (Neihart, Pfeiffer, & Cross, 2015; Gross, 2006). Other research has noted that accelerated students can eventually come to view their giftedness with pride, and that full-time accelerated classes benefit them socially (Wright and Leroux, 1997). The current study’s cohort appeared to feel a sense of belonging with their fellow students and school, while also feeling comfortable as gifted students.

Banter and the Big Fish Little Pond Effect (BFLPE). Banter is defined as teasing that is playful in nature and used to generate rapport, rather than abuse (Mills & Carwile, 2009). The differentiated interpretation of the nature of banter among the interviewees reflected the literature: some studies note that friendly banter may indicate affection and strengthen social relationships (Mills & Carwile, 2009; Dynel, 2008), while others have noted that banter may be interpreted as an attack regardless of the intention (Kruger, Gordon, and Cuban 2006). Mills and Carwile (2009) have also warned that students referring to their teasing as ‘just banter’ may also be trying to disguise genuine bullying.

One of the interviewees stated that some of the banter in the acceleration programme was based on academics, and that the banter could affect the students who were less confident about their place in the acceleration programme. Social comparisons with classmates are at the heart of the BFLPE, but these comparisons may be beneficial or detrimental to academic self-concept; respectively known as assimilation and contrast effects (Hueget et al., 2009). Niederer (2017) suggests that establishing positive peer relationships may mitigate against the BFLPE. The interviewees’ comments suggest that some accelerated students experience contrast effects as a result of some banter; furthermore, these students may experience not only a drop in their

academic self-concept, but in their sense of belonging as well.

Limitations. The study had a number of limitations. First, a true control group was unattainable as it would have required the study of gifted students who were not accelerated. As the school that participated in the study had a practice of accelerating *all* students who score well on their entrance tests, it was not possible to obtain any control participants. Second, the lack of a national definition of giftedness in New Zealand meant that gifted students from different schools may be identified using differing criteria, and therefore may not be comparable. Third, it is noted that the norm population had a roughly even split of females to males, while the cohort for the present study was entirely male. This may have affected the validity of the comparisons (Cole et al., 2001; Marsh & Yeung, 1998; Cairns et al., 1990). Fourth, it is noted that due to New Zealand’s culture of humility, particularly among high achievers (Grant, 2008; Mouly & Sankaran, 2000), the participants in the study may have deliberately “undersold” themselves on some items; this may have been different to the American norm population, as expressing pride in one’s abilities and achievements appears to be more acceptable in the United States (Goddard, 2012). Such a culture may provide some explanation for the fact that nearly all the cohort’s scores were lower than the norms.

Finally, it is noted that ethnicity data was not collected on the participants of the study. Consequently, there was no opportunity to examine self-concept or sense of belonging from different cultural perspectives. It is certainly possible that a sense of belonging - or a similar, more culturally appropriate concept - is a key to understanding gifted students. For example, sense of belonging may be important for Māori, whose perspectives of giftedness differ somewhat from Western perspectives, primarily in how gifts are used and expressed (Bevan-Brown, 2009). A person’s gifts are collectively valued and owned by their entire whānau (family) or iwi (tribe), with an expectation of using these gifts in service to others. An individual’s social and emotional sensitivities are also valued by Māori (Bevan-Brown, 2009). Having a strong sense of belonging to whānau and iwi may be essential to having a positive view of one’s mātauranga (intellect and thinking skills; Mahaki & Mahaki, 2007).

Implications and Future Research. The results of the study reflected positively on academic acceleration, suggesting that it may not have a noticeably negative impact on the self-concepts of gifted male adolescents. The results also

indicated that an acceleration class may contribute to the sense of belonging of gifted male adolescents. This should encourage educators to use single-subject acceleration and dual enrolment of gifted learners, and to have a shared class for this cohort if possible. Ensuring that gifted students have ample opportunities to socialise with non-accelerated students - including through sport or other extracurricular activities - may also contribute to their sense of belonging.

It may be useful for a future study to be undertaken with accelerated female adolescents, as research has indicated that females may experience acceleration differently to males (Wright & Leroux, 1997), and gender differences may exist within and across self-concept domains (Marsh et al., 2005; Lewis & Knight, 2000). It is also noted that the participating school had a large enough student population to have an entire class for accelerated students; many schools do not have this luxury and place their gifted learners in classes of older students to accelerate them. Therefore, the conduct of a similar study with gifted students in other schools within different contexts may be another useful follow-up to this study.

In conclusion, the acceleration programme provided the gifted students in this study with peers of similar interests and values, and an environment where they could confidently consider themselves gifted, while still feeling a sense of belonging with the class and the school. The accelerates experienced ample social interaction with non-accelerates, and most had non-accelerate friends. They often interacted with them through extracurricular activities, especially sport. They also felt that school traditions and culture enabled them to associate with other students easily. The results of this study reflect positively on acceleration, indicating that the practice may have benefits and few disadvantages for gifted male adolescents, especially in light of their social and emotional needs.

References

- Annant, S. S. (1967). Belongingness and mental health: Some research findings. *Acta Psychologica*, 26(4), 391-396.
- Arens, A. K., & Watermann, R. (2015). How an early transition to high-ability secondary school affects students' academic self-concept: Contrast effects, assimilation affects, and differential stability. *Learning and Individual Differences*, 37, 64-71. doi: 10.1016/j.lindif.2014.11.007
- Bevan-Brown, J. (2009). Identifying and providing for gifted and talented Maori students. *APEX: The New Zealand Journal of Gifted Education*, 15(4), 6-20.
- Brody, L. E., Assouline, S. G., & Stanley, J. C. (1990). Five years of early entrants: Predicting successful achievement in college. *Gifted Child Quarterly*, 34(4), 138-142. doi: 10.1177/001698629003400402
- Cairns, E., McWhirter, L., Duffy, U., & Barry, R. (1990). The stability of self-concept in late adolescence: Gender and situational effects. *Personality and Individual Differences*, 11(9), 937-944. doi: 10.1016/0191-8869(90)90275-V
- Cardiel, C. L. (2012). *Are we cool yet? A longitudinal content analysis of nerd and geek representations in popular television* (Master's Thesis, Portland State University, Portland, OR). Retrieved from http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1809&context=open_access_etds
- Catalano, R. F., Berglund, M. L., Ryan, J. A., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programmes. *The ANNALS of the American Academy of Political and Social Science*, 591, 98-124. doi: 10.1177/0002716203260102
- Cole, D. A., Maxwell, S. E., Martin, J. M., Peeke, L. G., Seroczynski, D. A., Tram, J., & Maschman, T. (2001). The development of multiple domains of child and adolescent self-concept: A cohort sequential longitudinal design. *Child Development*, 72(6), 1723-1746. doi: 10.1111/1467-8624.00375
- Colangelo, N., Assouline, S. G., & Marron, M. A. (2013). Evidence trumps beliefs: Academic acceleration is an effective intervention for high-ability students. In C. M. Callahan and H. L. Hertzberg-Davis (Eds.), *Fundamentals of gifted education: Considering multiple perspectives* (pp. 164-175). New York, NY: Routledge.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. (4th ed.). Thousand Oaks, CA: Sage.
- Drolet, M., & Arcand, I. (2013). Positive development, sense of belonging, and support of peers among early adolescents: Perspectives of different actors. *International Education Studies*, 6(4), 29-38. doi: 10.1300/J086v16n03_02
- Dynel, M. (2008). No aggression, only teasing: The pragmatics of teasing and banter. *Lodz Papers in Pragmatics*, 4(2), 241-261. doi: 10.2478/v10016-008-0001-7
- Faircloth, B. S., & Hamm, J. V. (2005). Sense of belonging among high school students

- representing 4 ethnic groups. *Journal of Youth and Adolescence*, 34(4), 293-309. doi: 10.1007/s10964-005-5752-7
- Galbraith, J. (1985). The eight great gripes of gifted kids: Responding to special needs. *Roeper Review*, 8(1), 15-18. doi: 10.1080/02783198509552920
- Gallagher, S., Smith, S. R., & Merrotsky, P. (2011). Teachers perceptions of the socioemotional development of intellectually gifted primary aged students and their attitudes towards ability grouping and acceleration. *Gifted and Talented International*, 26(1-2), 11-24. doi: 10.1080/15332276.2011.11673585
- Goddard, C. (2012). 'Early interactions' in Australian English, American English, and English English: Cultural differences and cultural scripts. *Journal of Pragmatics*, 44, 1038- 1050. doi: 10.1016/j.pragma.2012.04.010
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30(1), 79- 90. doi: 10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X
- Grant, S. (2008). Contextualising social enterprise in New Zealand. *Social Enterprise Journal*, 4(1), 9-23. doi: 10.1108/17508610810877704
- Gross, M. U. (2006). Exceptionally gifted children: Long-term outcomes of academic acceleration and non-acceleration. *Journal for the Education of the Gifted*, 29(4), 404-429. doi: 10.4219/jeg-2006-247
- Hattie, J. (2009). *Visible learning: A synthesis of meta-analyses relating to achievement*. Oxford, England: Routledge.
- Hoogeveen, L., van Hell, J. G., & Verhoeven, L. (2005). Teacher Attitudes Toward Academic Acceleration and Accelerated Students in the Netherlands *Journal for the Education of the Gifted*; Fall 2005; 29(1).
- Hoogeveen, L., van Hell, J. G., & Verhoeven, L. (2012). Social-emotional characteristics of gifted accelerated and non-accelerated adolescents. *British Journal of Educational Psychology*, 82(4), 585-605. doi: 10.1111/j.2044-8279.2011.02047.x
- Hueget, P., Marsh, H., Wheeler, L., Seaton, M., Dumas, F., Regner, I., et al. (2009). Clarifying the role of social comparison in the Big-Fish-Little-Pond-Effect (BFLPE): An integrative study. *Journal of Personality and Social Psychology*, 97(1), 156-170. doi: 10.1037/a0015558
- Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self-competence and values: Gender domain differences across grades one through twelve. *Child Development*, 73(2), 509-527. doi: 10.1111/1467-8624.00421
- Jasmi, A. N., & Hin, L. C. (2014). Student-teacher relationship and student academic motivation. *Journal of Interdisciplinary Research in Education*, 4(1), 75-82. doi: 10.7603/s40933-014-0006-0
- Juvonen, J. (2006). Sense of belonging, social bonds, and school functioning. In P. A. Alexander, & P. H. Winnie (Eds.), *Handbook of Educational Psychology* (2nd ed., pp. 655-674). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kreager, D. A., & Staff, J. (2009). The sexual double standard and adolescent peer acceptance. *Social Psychology Quarterly*, 72(2), 143-164. doi: 10.1177/019027250907200205
- Kruger, J., Gordon, C. L., & Kuban, J. (2006). Intentions in teasing: When "just kidding" isn't enough. *Journal of Personality and Social Psychology*, 90(3), 412-425. doi: 10.1037/0022-3514.90.3.412
- Kulik, J. A. (2004). Meta-analytic studies of acceleration. In N. Colangelo, S. G. Assouline, & M. U. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 13-22). Iowa City, IA: Belin & Blank International Center
- Kulik, J. A., & Kulik, C.-L. C. (1984). Effects of accelerated instruction on students. *Review of Educational Research*, 54(3), 409-425. doi: 10.3102/00346543054003409
- LaFontana, K., & Cillessen, A. (2009). Developmental changes in the priority of perceived status in childhood and adolescence. *Social Development*, 19, 130-147. doi:10.1111/j.1467-9507.2008.00522.x.
- Lassig, C. (2009). Teachers' attitudes towards the gifted: The importance of professional development and school culture. *Australasian Journal of Gifted Education*, 18(2), 32- 42.
- Lee, S.-Y., Olszewski-Kubilius, P., & Thomson, D. T. (2012). Academically gifted students' perceived interpersonal competence and peer relationships. *Gifted Child Quarterly*, 56(2), 90-104. doi: 10.1177/0016986212442568
- Lewis, J. D., & Knight, H. V. (2000). Self-concept in gifted youth: An investigation employing the Piers-Harris subscales. *Gifted Child Quarterly*, 44(1), 45-53. doi: 10.1177/001698620004400105
- Mahaki, P., & Mahaki, C. (2007). *Mana tu, mana ora: Identifying characteristics of Maori giftedness*. Retrieved from <http://gifted.tki.org.nz>
- Mahar, A. L., Cobigo, V., & Stuart, H. (2013). *Conceptualizing belonging. Disability and Rehabilitation*, 35(12), 1026-1032. doi: 10.3109/09638288.2012.717584
- Marsh, H. W. (1987). The big-fish-little-pond effect on academic self-concept. *Journal of*

- Educational Psychology*, 79(3), 280-295. doi: 10.1037/0022-0663.79.3.280
- Marsh, H. W., & Yeung, A. S. (1998). Longitudinal structural equation models of academic self-concept and achievement: Gender differences in the development of math and English constructs. *American Educational Research Journal*, 35(4), 705-738. doi: 10.3102/00028312035004705
- Marsh, H. W., Trautwein, U., Lüdtke, O., Kölle, O., & Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child Development*, 76(2), 397-416. doi: 10.1111/j.1467-8624.2005.00853.x
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396. doi: 10.1037/h0054346
- McClarty, K. L. (2015). Life in the fast lane: Effects of early grade acceleration on high school and college outcomes. *Gifted Child Quarterly*, 59(1), 3-13. doi: 10.1177/0016986214559595
- Mills, C. B., & Carwile, A. M. (2009). The good, the bad and the borderline: Separating teasing from bullying. *Communication Education*, 58, 276-301. doi: 10.1080/03634520902783666
- Ministry of Education. (2012). *Gifted and talented students: Meeting their needs in New Zealand schools*. Wellington, New Zealand: Learning Media
- Mouly, V. S., & Sankaran, J. (2000). The tall poppy syndrome in New Zealand: An exploratory investigation. In M. Sheehan, S. Ramsay, & J. Patrick (Eds.), *Transcending boundaries: Integrating people, processes and systems* (pp. 285-289). Brisbane, Australia: School of Management, Griffith University.
- Niederer, K. (2017). The Big-Fish-Little-Pond-Effect: Self-concepts of gifted students in a part-time gifted programme. In N. Ballam & Moltzen, R. (Eds.), *Giftedness and talent: Australasian perspectives* (pp. 155-178). Singapore: Springer.
- Neihart, M. (1999). The impact of giftedness on psychological well-being: What does the literature say? *Roeper Review*, 22, 10-17. doi: 10.1080/02783199909553989
- Neihart, M., Pfeiffer, S., & Cross, T. (2015). *The social and emotional development of gifted children: What do we know?* (2nd ed.). Naperville, IL: Sourcebooks.
- Ostermann, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367. doi: 10.3102/00346543070003323
- Piers, E. V., & Herzberg, D. S. (2002). *Piers-Harris Children's Self-Concept Scale: Second Edition Manual*. Los Angeles, CA: Western Psychological Services.
- Plucker, J. A., & Taylor, J. W. (1998). Too much too soon? Non-radical advanced grade placement and the self-concept of gifted students. *Gifted Education International*, 13(2), 121-135. doi: 10.1177/026142949801300205
- Riley, T., & Bicknell, B. (2013). Gifted and talented education in New Zealand schools: A decade later. *APEX: The New Zealand Journal of Gifted Education*, 18(1). Retrieved from www.giftedchildren.org.nz/apex
- Riley, T., Bevan-Brown, J., Bicknell, B., Carroll-Lind, J., & Kearney, A. (2004). *The extent, nature and effectiveness of planned approaches in New Zealand schools for providing for gifted and talented students*. Wellington, New Zealand: Ministry of Education.
- Robertson, J. C. (2013). Self-concept, school satisfaction, and other selected correlators of subjective well-being for advanced high school learners enrolled in two challenging academic settings. *Journal for the Education of the Gifted*, 36(4), 461-486. doi: 10.1177/0162353213506068
- Robinson, N. M. (2004). Effects of academic acceleration on the social-emotional status of gifted students. In N. Colangelo, S. Assouline, & M. U. Gross (Eds.), *A nation deceived: How America holds back its brightest students* (Vol. 2, pp. 59-64). Iowa City, IA: Belin-Blank Center.
- Rogers, K. (2015). The academic, socialization, and psychological effects of acceleration: Research synthesis. In S.G. Assouline, N. Colangelo, J. Van Tassel-Baska, & Lupkowski-Shopluk (Eds.), *A nation empowered* (pp. 19-30). Iowa: Belin-Blank Center, University of Iowa.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46(3), 407-441. doi: 10.3102/00346543046003407
- Shepard, S. J., Nicpon, M. F., & Doobay, A. F. (2009). Early entrance to college and self-concept: Comparisons across the first semester of enrolment. *Journal of Advanced Academics*, 21(1), 40-57. doi: 10.1177/1932202X0902100103
- Skaalvik, S., & Skaalvik, E. M. (2004). Gender differences in math and verbal self-concept, performance expectations, and motivation. *Sex Roles*, 50(3), 241-252. doi: 10.1023/B:SERS.0000015555.40976.e6
- Southern, W. T., Jones, E. D., & Fiscus, E. D. (1989). Practitioner objections to the academic acceleration of gifted children. *Gifted Child Quarterly*, 33(1), 29-35. doi: 10.1177/001698628903300105
- Steenbergen-Hu, S., & Moon, S. M. (2011). The effects of acceleration on high-ability

- learners: A meta-analysis. *Gifted Child Quarterly*, 55(1), 39-53. doi: 10.1177/0016986210383155
- Tarrant, M., MacKenzie, L., & Hewitt, L. A. (2006). Friendship group identification, multidimensional self-concept, and experience of developmental tasks in adolescence. *Journal of Adolescence*, 29(4), 627-640. doi: 10.1016/j.adolescence.2005.08.012
- van der Muelen, R. T., van der Bruggen, O. C., Spilt, J. L., Verouden, J., Berkhout, M., & Bögels, S. M. (2014). The pull-out programme Day a Week School for gifted children: Effects on social-emotional and academic functioning. *Child Youth Care Forum*, 43, 287-314. doi: 10.1007/s10566-013-9239-5
- Wardman, J. (2009). Secondary teachers', student teachers', and education students' attitudes to full-year acceleration for gifted students. *Australian Journal of Gifted Education*, 18(1), 25-36.
- Wardman, J. (2015). Full-year acceleration at high school: Parents support the social and emotional challenges of their children. *Gifted and Talented International*, 29(2), 49- 62.
- Wardman, J. (2017). Full-year acceleration of gifted high school students: A 360 degree view. In N. Ballam, & Moltzen, R. (Eds.), *Giftedness and talent: Australasian perspectives* (pp. 227-252). Singapore: Springer.
- Watts, G. (2006). Teacher attitudes to the acceleration of the gifted: A case study of New Zealand. *Gifted and Talented International*, 10(1), 11-19.
- Wright, P. B., & Leroux, J. A. (1997). The self-concept of gifted adolescents in a congregated programme. *Gifted Child Quarterly*, 41(3), 83-94. doi: 10.1177/001698629704100304
- Yeo, L. J. (2016). *Exploring the self-concept and sense of belonging of academically accelerated gifted male adolescents in a New Zealand context* (Unpublished master's thesis, Massey University, Palmerston North, New Zealand). Retrieved from: <http://mro.massey.ac.nz/handle/10179/10416>
- Yeo, M. M., & Garces-Bacsal, R. M. (2014). Factors influencing academic self-concept of high-ability girls in Singapore. *Roeper Review*, 36(4), 235-248. doi: 10.1080/02783193.2014.945222

Contact Details

Lindsay Yeo
Educational Psychologist
Ministry of Education, Palmerston North
Email: ljyeo@live.com

Tracy Riley
Associate Professor
Institute of Education
Massey University
Email: T.L.Riley@massey.ac.nz

Vijaya Dharan
Senior Lecturer
Institute of Education
Massey University
Email: v.m.dharan@massey.ac.nz

and teaching and learning. She is keen that her research activities are centered on being useful to wider communities and support the cause of equity and diversity.

Biographical Notes

Lindsay Yeo is a graduate of the Masters of Educational Psychology programme at Massey University. He is now a practicing educational psychologist with the New Zealand Ministry of Education. Lindsay's Masters' thesis research is the basis of this article and has been shared with audiences at the New Zealand Psychological Society meeting (2016) and giftEDnz: The Professional Association for Gifted Education (2017).

Tracy Riley is Associate Professor and Dean, Research at Massey University in New Zealand. She is the former inaugural Chair of giftEDnz: The Professional Association for Gifted Education and remains a current member of the Board. Tracy is Secretary on the World Council for Gifted and Talented Children and a director for SENG. She is also currently on the editorial boards for APEX: The New Zealand Journal of Gifted Education, Kairaranga, The Australasian Journal of Gifted Education, and Gifted and Talented International. Tracy was the recipient of a National Tertiary Teaching Excellence award in 2007 and the Te Manu Kotuku award for exceptional service and contribution to gifted education in New Zealand in 2017.

Dr. Vijaya Dharan is a Senior Lecturer at Massey University, Institute of Education, where she is involved in coordinating and teaching postgraduate specialist teacher training in ASD and the programme coordinator for the Inclusive Education undergraduate programme. She is a registered psychologist and a teacher. Her research interests are in the field of inclusive education, Autism including twice exceptional children and young people, emotional and behavioural difficulties, student disengagement