

# THE INFLUENCE OF PRIOR SCHOOLING ON SECOND LANGUAGE LEARNING: A LONGITUDINAL STUDY WITH FORMER REFUGEES

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## Abstract

*Notions of ‘best practice’ in English language teaching are fundamentally shaped by the economic clout of large and lucrative markets that invest heavily in education. Consequently, teacher teaching and practice typically assume that adult learners will be accustomed to formal classroom education, thereby overlooking the distinctive characteristics of many learners in community ESOL programmes. In Aotearoa New Zealand, this oversight is reflected in the funding mechanisms for supporting adult former refugees, where no distinction is made between those with higher education and those entering a classroom for the first time. To address this gap, this paper reports longitudinal quantitative data on the performance of low-level English learners over 18 months, comparing the progress of learners with limited schooling of 0-2 years (LS) and those with 8+ years’ prior schooling in their first language (SL1). Overall, the latter group made substantially greater progress. Indeed, while each of the SL1s made demonstrable gains, this was true for fewer than half of the LS group. The paper considers avenues for further research and implications of the findings.*

*Keywords:* schooling, literacy, community education, LNAAT, refugee

## Introduction

In this study we focus on a category of learner that has been greatly underrepresented in the SLA literature: adult learners of English who received little or no schooling in their childhood. As such, their educational experiences are vastly removed from the cohorts of university and college students that account for an estimated 67% of SLA studies (Plonsky, 2016, as cited in Andringa & Godfroid, 2019). Their scarce representation in the SLA literature is disquieting given the population figures involved: globally 19% of adults are estimated to have received less than a year of schooling (Pew Research Center, 2016), and this is reflected in a conservative estimate of at least 781 million adults being unable to read and write (UNESCO, 2015). Even when schooling is available, the learning environment in middle- and low-income countries may be impoverished, with “at least 53% ... not able to read proficiently by age 10” (The

World Bank, 2019, p. 16), compared to 10% in Aotearoa New Zealand (NZ), and just 2% in Finland and 1% in Hong Kong (China).

In an anglophone context, students with limited schooling (LS) are almost exclusively former refugees, as the collapse of education systems is symptomatic of failed or failing states (Estes, 2012). To cite one example, in Afghanistan, which is a major source of new refugee arrivals in NZ (Bellamy, 2020), the mean years of schooling is only 2.8 years for men and just 0.6 years for women (Pew Research Centre, 2016). Acknowledging the distinctive characteristics of such LS learners has both theoretical value for the field of Second Language Acquisition (SLA) and practical value for the profession of English Language Teaching (ELT). For SLA, the universalist assumptions of the field cannot be maintained unless a much greater range of circumstances of L2 learning are investigated (Tarone & Bigelow, 2005), and for ELT, the desire for equity indicates a need to explore how best to support students from rarely studied populations.

This paper therefore explores the variable of schooling in SLA by providing a longitudinal view of two groups of learners from a variety of refugee backgrounds studying at the same NZ-based community provider of English, one group with little or no schooling and the other with at least eight years of schooling.

### **Schooling, L1 literacy and second language learning**

Though seldom discussed in the literature, there is evidence to suggest that adult students with limited schooling (LS) face additional hurdles in classroom-based second language study which inhibit their progress. Evidence of the cumulative effect of these challenges is provided by Browder (2015), whose participants made substantially slower progress in second language (L2) learning than other students, and in earlier research on children's academic achievement in an L2, as summarised by Collier (1989). In the NZ context, this resonates with the teachers interviewed by Benseman (2014), among whom "one very experienced teacher" estimated that adult former refugee students "took four to five times longer to consolidate their new skills" (2014, p. 99). In what follows, we focus particularly on why the social and cognitive impacts of limited schooling may form a substantial barrier to classroom-based L2 learning, before highlighting more briefly the often-intertwined influences of literacy and trauma.

Adults who have completed primary and secondary schooling are typically highly-attuned to the ways of being that are expected of a student. On entering primary school, they did not simply become a student, but learnt to be one through "a complex process, involving the learning of knowledge, behavior, and expectations appropriate to participate in the social and academic life of classrooms" (Ferne et al., 1988, p. 2). Socialisation will have occurred both at

the macro level of teachers and institutions moulding student behaviour and in terms of the micro level of students themselves learning to accomplish routine social actions in a school context (Fernie, 1988, p. 4). As children, they will have been socialised into such fundamental classroom behaviours as knowing when to talk and when to listen, when to look at the board, when to take notes, when and where to sit and when to move, and how to interact with the teacher and other students (e.g., Benseman, 2014). They will be accustomed to the class as a unit of time and as a rule-governed event directed by the teacher and bounded by the clock. They will be skilled in using a pen, and in reading and writing. For an adult becoming a student for the first time, all of this may be alien. They enter a social context where the rules are largely unstated and opaque, and where their goal of language learning will require first developing the “fundamental skills” of using a pen, engaging in classroom discourse, and collaborating on pedagogical activities (Benseman, 2014, p. 101).

In addition to these social dimensions of schooling, decades of research also point to cognitive impacts of schooling, as summarised in a number of comprehensive reviews (e.g. Ceci, 1991; Christian et al., 2001; Ritchie & Tucker-Drob, 2018). Among the variables that have been examined are completed years of schooling, absenteeism and intermittent schooling, and age at schooling commencement. The general thrust of the findings is that schooling provides extensive practice in the types of activity and skills mandated under the local education system, resulting in corresponding gains in subsequent performance. Importantly, guidance and repetition are provided in the types of cognitive processing that are often naively assumed to be indicators of ‘natural intelligence’, but which 1) can be enhanced through practice and 2) are less often rehearsed in non-schooling environments. For instance, evidence suggests a strong causal relationship between schooling and the ability to utilise previously acquired knowledge and skills (crystalised intelligence), which is often measured in tests of verbal skills and applying technical knowledge, but not between schooling and spatial and logical reasoning (fluid intelligence), which is often measured through puzzle solving, abstract reasoning and pattern recognition (Carlsson et al., 2015). Strikingly, it also appears that disadvantages from delayed, interrupted or impoverished schooling have an impact that lasts into adulthood (Campbell et al., 2002).

A recent study by the present authors (Ryan, et al., 2022) suggests one way that the combination of social and cognitive aspects of schooling may impact L2 learning. This study, a partial replication of Foster and Skehan (1996), was intended to explore the interaction of L1 literacy, task planning time, task complexity and speaking performance “consistent with a limited capacity view of attention” (Skehan, 2009, p. 520). Unlike the initial study, which had well-educated participants (Foster & Skehan, 1996), the results revealed that those

with low-L1 literacy performed no better after 10 minutes planning time on measures of fluency, accuracy or complexity. Though literacy-related metalinguistic knowledge may indeed be at play, we have suggested that a more convincing explanation may be the participants' limited experience of classroom-based education, which may impact how they oriented to this pedagogically-motivated task and made use of pre-task planning time (Ryan, et al., 2022).

As such studies suggest, the specific role of LS on second language acquisition is often difficult to disentangle from limited literacy; indeed, illiteracy is often taken as evidence of a lack of schooling (e.g., Browder, 2015). However, the two should not be conflated as a matter of course: schooling may be available but ineffective in supporting literacy, and individuals with no experience of formal schooling may be taught to read and write by siblings or parents. The seminal work exploring the impact of L1 literacy in L2 acquisition is that of Tarone et al. (2009), who conclude that a learner's level of alphabetic literacy is significantly related to the level of difficulty they experience in processing spoken language. They argue that literacy enhances metalinguistic awareness, which facilitates noticing of linguistic elements (e.g. word class; tense) (Tarone et al., 2009). Further, since metalinguistic knowledge is the basis for many mainstream approaches to language teaching, they suggest that certain pedagogical techniques may be disadvantageous for adults acquiring literacy for the first time, while more suitable alternatives may be under-utilised (Tarone & Bigelow, 2012).

It seems certain, then, that both LS and literacy have a substantial impact on classroom-based L2 development. Though not directly addressing SLA, a unique natural experiment in disentangling the two was explored by Scribner and Cole (1981) in their work on the Vai people of Liberia. Amongst the Vai, some receive no schooling and remain illiterate; some attend school and become literate in Arabic; a third group (a minority of men) receive no schooling but are taught in the home to use the indigenous Vai writing system. Over several years, Scribner and Cole's team engaged participants in all three groups across a wide range of psychological measures. A key finding was that it was schooling that had the most impact on performance in meta-task discussion (1981, p. 242), a category under which the authors included a variety of activities relevant to conventional ELT pedagogical practice, including explaining grammatical rules, explaining sorting decisions, and providing game instructions.

Beyond schooling and literacy, a third factor which may impact the learning progression of LS learners, most of whom are former refugees, is the impact of the often-traumatic experiences that initially led to dislocation and refuge-seeking, as well as the subsequent migratory experience. In class, trauma may present as anxiety, distraction and ill health affecting attendance rates (Benseman,

2014), and is known to “cause cognitive, emotional, and behavioural changes that affect learning” (Kaplan, et al. 2016, p. 84), including lower-than-expected scores on foreign language aptitude tests (Lambelet, in press). In the case of Post-Traumatic Stress Disorder, this has been found to inhibit memory formation and to account for up to 25% of variance in refugees’ attained L2 levels (Søndergaard, 2017, p. 17).

There are, therefore, strong grounds to expect that learners with limited schooling will face hurdles in classroom-based second language that are not shared by other learners. This is certainly the impression of the teachers that Benseman (2014) spoke to a decade ago, yet there has been little empirical research to confirm this, particularly at the early stages of English learning. Numerous questions remain around the magnitude of the challenge and there is little available data to inform pedagogical interventions and policy decisions. Perhaps for this reason, in private communication we have encountered industry figures who remain dismissive of the suggestion that LS and literacy may be meaningfully relevant to expectations of progress in spoken English. With such issues in mind, the present study is part of a wider project that has sought to provide a longitudinal perspective on English language development among such learners.

### **The present study**

The present study reports quantitative data from a broader project conducted from 2017-2019, in which 76 English language learners participated in some capacity. The present focus is a longitudinal perspective on the language gains made by the 46 participants who completed four assessments of English proficiency at 6-monthly intervals. The first assessment provided an initial baseline score of their level at the beginning of the study, and the following three tracked progress over the following 18 months. In the wider study, to be reported at a later stage, qualitative data was collected through interviews conducted in their first language and a series of classroom observations.

Two research questions were initially posed for the study, followed by a post hoc analysis resulting in RQ3. The Literacy and Numeracy for Adults Assessment Tool (LNAAT) is discussed in the following section, and this is followed by the rationale for RQ3:

- RQ1. For learners receiving classroom-based instruction, is prior experience of schooling associated with more rapid gains in English (as measured by the LNAAT assessment)?

RQ2. What are the learning trajectories of LS learners (as measured by LNAAT) and how do these compare to peers with more schooling experience?

RQ3. Among the participants with schooling experience, is there evidence of an advantage for L1 speakers of Spanish?

## **Methodology**

### **Data collection**

In New Zealand, initial English language instruction for former refugees is provided by community organisations such as English Language Partners New Zealand, and thereafter by polytechnics and a network of approved private training establishments. Participation in such classes is supported by the Intensive Literacy and Numeracy fund (ILN) through the state Tertiary Education Commission (TEC). This and similar funds provide fees-free targeted classes for citizens and permanent residents of New Zealand to improve their literacy and numeracy skills.

Accountability to TEC involves reporting assessment data generated by the Literacy and Numeracy Adult Assessment Tool (LNAAT). LNAAT is an online, adaptive assessment tool, with a range of options for assessing adult and youth reading, writing, and numeracy based on a nationwide framework of skills (Tertiary Education Commission, 2017). The option that is appropriate to adult English learners is called Starting Points, which is “intended to be accessible for learners with limited language, reading, and computer skills” (Literacy and Numeracy for Adults Assessment Tool, 2019, n.p.). Within Starting Points, there are two options. The Listening Option is “suitable for learners who are at very early to early stages of learning English”, and is followed by the Reading Option, which focuses on the early stages of reading, such as letter-sound relationships, and recognising and decoding vocabulary. The participants in the present study were all assessed using the Listening Option, with none scoring high enough to make the recommended transition to the Reading Option. At the time of the study, Starting Points was available in a trial version that existed for several years prior to some modifications for the current 2019 version.

For working with LS learners at beginning levels, there are two key advantages of collecting data through the LNAAT Listening Option. Firstly, the tool has been designed specifically to avoid providing instructions and other clues in print, and thus usefully controls for between-group differences in literacy. Secondly, although the tool is narrowly focused on listening to words and identifying their meaning, vocabulary knowledge is itself “a powerful predictor of learners’

language proficiency” and requisite to all other language use (Qian & Lin, 2020, p. 66).

The Listening Option assessment tool was administered at the beginning of the study, providing baseline data on learners’ overall English competency. It was then conducted a further three times, once every six months. This was done during class time with students working individually on a computer and with headphones. There are 30 items in each assessment. Each question involves listening to an audio recording of a basic word used in the community, family or other familiar setting. The learner is presented with four pictorial images on their screen and is tasked with selecting the one which matches the meaning of the word. Each of the four options is related to the correct answer, usually conceptually and sometimes phonologically. For instance, on hearing the word ‘train’, students were presented with pictures of four vehicles (a train, boat, bus etc.). In another type of task, pictures were presented that included a whale and wheel and students asked to identify which one they had heard.

The results of the 30 items are shown immediately with a record of correct and incorrect answers. As an adaptive tool, providing correct answers to the more basic items leads to the presentation of more advanced items, while incorrect answers are followed by ‘easier’ items. Scores can range from 0 to 1000, within which there are three ‘steps’. At Step 1, encompassing scores up to 500, learners can recognize in listening “some common nouns relating to everyday life in Aotearoa New Zealand” (Literacy and Numeracy for Adults Assessment Tool, 2019, n.p.). At Step 2, approximately 500-700, they also recognise common verbs and adjectives. At Step 3, this repertoire is expanded to a wider range of common nouns, verbs and adjectives relating to life in NZ.

For present purposes, the Listening Option assessment has two features warranting additional comment. Firstly, it focuses on a narrow range of linguistic phenomena: aural decoding of words and matching the words to meanings. On the plus side is that recognising common vocabulary is indisputably a fundamental measure of a basic command of English. Conversely, it represents a very limited view of a learner’s overall language acquisition, entirely omitting oral production. This undoubtedly circumscribes the scope of the research but does generate reliable numeric data. A second feature of the tool is that it is used extensively throughout the community education sector in NZ, where its use is obligatory under the relevant funding initiative. It has thus been used and evaluated within the sector by a relatively large number of professionals in recent years. Furthermore, the development of the online assessment tools appears to have been well-resourced and is both the outcome and the object of extensive research (e.g. Lane, 2014; Tertiary Education Commission, 2010, 2017), thereby providing considerable confidence in the data it generates.

## **Data analysis**

Scores on the LNAAT were grouped by LS and non-LS and analysed for means and in-group variation. The first score provided a baseline for measuring progress over the following 18 months, and scores were subsequently tracked for each six-monthly assessment. To assess overall progress of a student, the initial score was subtracted from their final score, and from these, an independent samples *t*-test was conducted to gauge statistical significance. Visual examination was then conducted to explore trends among clusters of individual cases.

## **Participants and recruitment**

Participants were mainly recruited from one large national organisation which supports the language learning needs of new migrants and former refugees, with the remainder being enrolled in a parallel programme offered by a second provider. Candidates were invited to volunteer their participation through an approach made by a first language intermediary. Most had lived in NZ less than three years (and all less than five years) and most were aged between 40-60. Of the 30 participants from the LS group, 22 were from Afghanistan (Dari and Pashto speakers), with one or two each from Cambodia, Colombia, the Democratic Republic of Congo, Eritrea, Pakistan and Somalia. Among the 16 from the comparison group, 6 were from Afghanistan, 5 from Colombia, and one each from Cambodia, the Democratic Republic of Congo, Pakistan and Somalia.

For present purposes, the 46 participants were divided into two groups based on schooling experience. The first group comprised 26 learners who reported receiving no prior schooling at all, and a further four who reported 1-2 years schooling. These participants have been grouped together as representing the LS category; visual examination of the assessment data suggests the results were essentially indistinguishable between those with 0 and those with 1-2 years schooling. In the second group were the remaining 16 participants, who had each been schooled in their first language (SL1s) for at least eight years. Of these, five had received 10-13 years of education and one had received 15 years. Following this natural clustering of cases, limited schooling is operationalised in this study as 0-2 years of primary education and contrasted with a full primary education or more.

## **Participant L1s as a confounding factor**

The L1 and additional languages of participants may be a confounding factor, particularly if they are closely related to English. The most significant issue here is that nearly one-third of the comparison group were Colombian and spoke Spanish as a first language, compared to just two of the 30 LS group. A great deal

of English and Spanish vocabulary shares a common Latin origin. This would be particularly problematic for studies involving academic reading or involving print-based academic word lists, which are dominated by words derived from Latin or Greek. However, there are at least three main reasons why this appears much less problematic for assessing Spanish speakers at beginner levels. Firstly, the most frequent words in English are mainly of Germanic origins (Nation, 2001), and these are heavily represented in the words tested by LNAAT. This can be seen in English-Spanish pairs such as boy-chico, son-hijo, book-libro, shop-tienda, milk-leche, shirt-camisa, skirt-falda, teacher-maestro, house-casa and so on. Secondly, even in cases where an English word has Latin origins, it may not have a modern Spanish cognate (i.e. shared meaning and orthography), and this is particularly the case for high-frequency general vocabulary (Lubliner & Hiebert, 2011). This occurs, for instance, where the English word is a borrowing from French, such as arrive-arriver-llegar, army-armée-ejército, beef-bœuf-carne de res, blond-blond-rubio, and butcher-bouchère-carnicero. Thirdly, studies also indicate that when reading, both adult (Agustin Llach, 2016) and child learners (Hancin-Bhatt & Nagy, 1994) have considerable difficulty drawing connections between even relatively close cognates. If this is so in reading, where there are orthographic similarities, then it is likely to be considerably more difficult in listening, given the significant phonological contrasts between English and Spanish, including patterns of stress-timing and different phonemes.

This background suggests that any advantage posed by a language transfer effect for Colombian participations on the LNAAT is likely to be modest. Nevertheless, even a small number of aurally recognisable cognates (e.g. 5-10% of items) could result in a commensurate advantage for the Spanish-speaking participants which would influence the overall findings for the SL1 group. Given the overrepresentation of Colombian participants in the SL1 group, this therefore needs to be considered when interpreting the findings. In response, additional post-hoc analysis was conducted to compare the findings from the Colombian and non-Colombian learners in the SL1 group, as formalised in RQ3 above.

## Findings

In this section we compare the gains that participants in the two groups made on three successive six-monthly LNAAT measurements (see above). The first assessment provided a benchmark for measuring gains over the following 18 months. As presented in Table 1, results from this initial assessment showed that the mean English scores for the LS (limited schooling) group were substantially higher overall ( $M = 659.8$ ) than those of the Schooled-in-L1 group (SL1) ( $M = 605.7$ ). To be clear, these results merely indicate the different starting points for participants at the beginning of the 18-month tracking period. The in-group variations were modest ( $CV = 0.18$  for LS and  $0.16$  for SL1) and all participants

were below the level of aural-vocabulary skills recommended by TEC for beginning to learn to read, based on the assumption that “phonological awareness is a vital first step in ‘cracking the code’ of written language” (Tertiary Education Commission, 2016, p. 2).

**Table 1. LNAAT scores at the beginning and after 18 months**

	<i>N</i>	Start		End		Gain	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
LS	30	659.8	119.6	697.1	117.6	37.3	60.0
SL1	16	605.7	99.4	707.9	77.1	102.3	86.6

LS = participants with limited schooling; SL1 = participants schooled in their L1; Start = LNAAT scores at the beginning of the study; End = scores after 18 months; Gain = difference between the start and end scores

After 18 months of further English tuition, the final assessment reveals that the mean score of the SL1 group ( $M = 707.9$ ) had surpassed that of the LS group ( $M = 697.1$ ). This points to the key finding of this study, in which the SL1 group made far larger gains ( $M = 102.3$ ,  $SD = 86.6$ ) than the LSs ( $M = 37.3$ ,  $SD = 60.0$ ). An independent samples *t*-test confirms the statistical significance of these gains  $t(44) = -2.987$ ,  $p = .002$  with Cohen’s *d* indicating a large effect size ( $d = .925$ ). Also, notable here is the contrasting degrees of in-group variation within the two groups, with the coefficient of variation being far greater among the LSs ( $CV = 1.61$ ) than the SL1s ( $CV = 0.84$ ). With such variation and the presence of outliers, median scores are informative, though also support the finding of greater gains among the SL1s  $Mdn = 73$  ( $IQR = 56.3$ ) than the LSs  $Mdn = 16$  ( $IQR = 65.5$ ). In the following subsection we explore this variation.

## Cases

Although the aggregated results present a strong contrast between the two groups, further trends in the LS data become apparent when examining individual cases and how they cluster. As suggested by the coefficient of variation, the SL1 group was relatively homogenous. This is despite two individuals making exceptionally large gains (348 and 249), which proved far higher than the highest LS (164) and the third highest SL1 (152). Conversely, the LS group is characterised by a rather striking division between two clusters of cases: those who made substantial gains and those who made little if any gain.

For each of the SL1s, scores in the LNAAT trended upwards over the 18 months, as would be expected, with 14 of the 16 (88%) making gains of at least 50 points. Among the LSs, such performance was mirrored in the gains of fewer than half the participants (43%). As a general observation, then, we note that a minority of LSs made gains that were on par with what was true of nearly every SL1. Standing

in stark contrast to this group, a further 46.7% made gains of 15 points or less, which is lower than the gain of *any* SL1. Six of the LSs (20%) made either no discernible gain or a negligible one (-2 to 6) and – rather strikingly – four (13%) recorded a substantial decrease in score (-20 to -92) between the first and last assessments.

An intriguing case is that of Fartun, who recorded the second highest score of all participants in the first test (771), but thereafter scored almost identically on each subsequent 6-monthly test (770, 772, 771). Ultimately, her first and final scores were the same and by the 18-month test she had been overtaken by nine students. These figures suggest that her English (as measured by the LNAAT) had plateaued or become fossilised, and this appears generally true of many of the LSs. Fossilisation describes a premature interruption or cessation of development and can be conceived in terms of a process (i.e. a tendency) or a product (i.e. an outcome) (Fidler, 2006). In contrast to the LS participants, there was no obvious case of fossilisation among the SL1s. Indeed, even the SL1 participant with the least overall progress, Cheunn, had a higher overall gain (+16) than nearly half (46.7%) of the LSs. The slightness of her overall gain was largely due to a substantial drop in her final score (-49), following steady progress in the first two tests (+30 and +35).

Another intriguing case is that of Aisha, a LS. In many ways, Aisha's profile mirrors that of Fartun: she too had one of the highest overall scores at the start of the study (9<sup>th</sup> of 46), with subsequent scores remaining virtually identical for the first 12 months (728, 728, 727), again suggesting fossilisation. However, in the final test, her score dropped dramatically (-91) for an overall decrease of 92 over 18 months. Given the strong evidence of fossilisation, although a decline in language level is possible, perhaps the most reasonable explanation may be the performance variable of 'having a bad day' in assessment, as can occur through tiredness, stress and other factors. A similar though less pronounced pattern is discernible in the case of Sahra.

Among other LSs with little or no advance in scores, there is evidence of another, more frequently occurring pattern. In such cases, there was an overall consistency across three of the four tests, representing gradual incremental gains or a stable level. One of the four assessment results, however, would involve a notable increase or decrease, which would then be followed by a return to the established pattern. For instance, Shamso had a sequence of scores of 675, 671, 710 and 673, whereby the span of scores across the 0-, 6- and 18-month marks was just 4 points, interceded by a jump of 39 at the 12-month mark. Similarly, Nam showed consistent improvement across scores of 708, 727 and 746 (two increases of 19) followed by a regression to 713 (a decrease of 33). Such fluctuations were relatively common across both participant groups and could be an artefact of the

assessment tool (i.e. an unfortunate sequence of difficult questions). However, they were particularly characteristic of the LSs who made small to negligible overall gains. Indeed, all 20 of the LSs with an overall gain of less than 60 had a regression in at least one assessment, compared to 30% of those gaining 60 and above. Such results suggest a fragility of some learning: hard won gains are subject to attrition if there is a waning of motivation or opportunities for use, or due to changes in the learning environment or life circumstances (Mehotcheva & Mytara, 2019).

Although our focus has been on those LSs who had little or no overall gains, there is an important minority whose results appear much the same as those of the SL1s. This appears to be the case for 13 individuals (43.3%). Examples include Paulo, who made successive gains of 28, 23 and 58, and Qamar, who made gains of 35, 23 and 85. Their overall gains of 109 and 143 respectively were above the average and well above the median gains for the SL1s. Even bigger overall gains were accrued by Saleema (162) and Sahra (164), both of whom were boosted by a final assessment score of over 100 (129 and 126 respectively) (in comparison, 7 of the 16 SL1s scored one or more gains of 100+).

Research Question 3 was motivated by the suggestion that analytical caution was warranted regarding the Spanish-speaking participants, particularly as they were overrepresented in the SL1 group. It was hypothesised that the Colombian SL1 participants would have a slight advantage over their non-Colombian peers. However, this is not supported by the data. Although the participant with the greatest overall gain was a Colombian (Lucia), the next five highest scoring SL1s were of other nationalities. The four remaining Colombians had scores (25, 54, 61, 74) that were very much like those of the lowest scoring SL1s (16, 50, 59, 72, 74). Given the small number of participants involved, very little can be stated about these findings beyond concluding that the Colombian data appears much like that of the other SL1s and that no evidence is detected here of an advantage to Spanish-speakers in the LNAAT.

## **Discussion and conclusion**

The present study explores an existing gap in the literature by investigating the impact of prior schooling on classroom-based adult second language learning in NZ, and more specifically by adopting a longitudinal research design. The key finding (RQ. 1) is confirmation that childhood experience of schooling can provide a substantial advantage to adult second language learners. Among those whose first significant encounter with schooling occurred in adulthood, although some appeared to progress at a similar rate to peers with 8+ years schooling, about half appeared to experience long periods of plateaued or even fossilised performance (RQ. 2). This finding resonates with our professional experience, as

we suspect it will for many other teachers of LS students; however, there has previously been little empirical data to support these suspicions. Our hypothesis (RQ. 3) that Colombian learners would have an advantage over other SL1s was not supported by the analyses.

While we are wary of potentially stigmatising categorisation, the distinction between plateauing and advancing LS learners is of practical utility and perhaps also of theoretical value. Practically, it highlights the importance of recognising, firstly, that many of these learners face additional barriers to language acquisition arising from their limited experience of schooling, and yet secondly, that for any individual student the presence of such barriers cannot be determined *a priori* from biographical data. It suggests that provision should be made for longer periods of language support for students from LS backgrounds, while also acknowledging that some will progress more rapidly than their peers. Language programmes for LS students should be flexible enough to accommodate the additional time required by the plateauing learner while remaining responsive to the progress of the advancing learner. At a policy level, it suggests grounds for a more nuanced funding model than currently operates in NZ. Specifically, the 'one size fits all' model assumes broadly uniform progress in language acquisition, taking little if any account of the additional needs of LS students.

From a theoretical perspective, the present findings identify a phenomenon but are only suggestive of the ultimate causes: it remains unclear what aspects of schooling provide benefits to subsequent learning. One possibility that warrants further exploration is that the *institutional nature* of community English classes builds on prior socialisation to schooling, thereby creating unnecessary barriers to some LS students. In perhaps a majority of cases, those with limited schooling are multilingual. That is, most have previously been successful in learning additional languages in non-classroom settings, even as adults, yet are evidently struggling to make headway as language learners in formal schooling. The barriers could, for example, include the implicit expectations associated with formal teacher/student roles, the design of classroom spaces, or as discussed by Tarone et al. (2009), teaching approaches that employ metalinguistic strategies associated with literacy. This prompts a challenge to teachers and teacher educators to develop new ways of working with LS students to build on their undoubted strengths and life experiences, as also advocated for by Tarone et al. (2009). Another possibility resides in broader social factors and the differing ways these affect educated and LS learners. It seems possible, for instance, that a student who has received substantial schooling, and is therefore almost certainly numerate and literate in their L1, may be better prepared to handle the myriad challenges of adjusting to life in a very different society. In relieving at least some of these difficulties, perhaps such learners tend to have more time and energy to apply to their English language learning.

More generally, the present study contributes towards a recent push for a broader and more inclusive SLA (e.g. Andringa & Godfroid, 2019), in which the research agenda aims to identify and address issues relevant to a wider range of stakeholders. Learners with limited schooling are seldom found within the reach of major research institutions, and as a market they lack the financial incentives to attract investment from the private ELT sector (e.g. publishers). Such underrepresentation reinforces and validates an ELT infrastructure – textbook content, assessment practices, accredited teacher education – that is already powerfully configured by the economic clout of middle- and upper-income learners from industrialised societies. This in turn shapes national, regional and institutional policy and funding decisions. From a perspective of equity, there is thus a moral imperative to ensure that SLA research becomes more inclusive in design and participation, generating theory and practice which is more broadly representative of human diversity.

In bringing attention to the findings of this study, we also acknowledge its limitations. The most obvious limitation is the modest number of participants who completed the 18 months of study: 30 LSs and a comparison group of 16 non-LSs from an overall pool of 76 participants in the wider study. As is very often the case in longitudinal studies within community education, there was a high attrition rate (39%), with students leaving for a variety of reasons, including health, work, relocation, and family. A second limitation lies in the narrow focus of the data collected and examined here. For instance, we have no data about student attendance rates over the 18 months nor qualitative data about other health circumstances that may have impacted performance.

For future research, for us a burning question is whether the plateaus detected amongst many of the LSs represent a temporary phase that will be followed by more rapid gains. Such questions can only be resolved by longitudinal designs with much longer timeframes, yet these are prone to much higher attrition rates and self-selection phenomena (e.g. that the most successful learners reach their goals and leave; that the least successful learners get frustrated and leave). Important theoretical and practical work also remains to be done in disentangling the effects of literacy and schooling in a second language learning context. In another vein, despite the paucity of empirical research on these matters, there are likely to be excellent examples of teaching practice and institutional policies that are highly attuned to working with LS learners. The language teaching community would greatly benefit from studies with ethnographic and reflective practice designs examining what successful teachers do. In NZ, this is especially topical, as a recent policy shift sees refugee families being resettled in smaller population centres and away from the traditional hubs where extensive expertise and experience has been concentrated.

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