Can speech stream segmentation instruction improve listening comprehension and listening self-efficacy in lower intermediate learners?

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Abstract

This study investigated the effects on listening comprehension and self-efficacy of teaching speech stream segmentation to a group of Grade 11 learners of French over a period of 15 weeks. Participants (N=45) came from two intact groups of French as a second language at a school in the south east of England. In the experimental group (n=24), learners undertook a variety of listening exercises aimed at improving their ability to segment the speech stream. The comparison group (n=21), taught by the same teacher in the previous academic year, followed a syllabus which included the same amount of listening work, but with no specific work on speech stream segmentation. Listening proficiency was measured at the beginning and the end, and in addition the experimental group completed a self-efficacy questionnaire. As hypothesised, the experimental group outperformed the comparison group on the final control measure ($p<0.5$) for comprehension. The hypothesis that confidence levels would increase was also verified. Ten participants in the intervention group were interviewed and data from the transcripts provided evidence as to why speech stream segmentation work appeared to be a successful intervention to boost the listening skills and self-efficacy of this group of lower intermediate learners of French.

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1 Introduction

Language teaching in the classroom setting is often broken down into the 'four skills': reading, writing, listening and speaking. And while public examinations often aim to give equal or roughly equal weighting to each of the four in when assessing a learner's proficiency, listening is often the 'Cinderella skill' (Vandergrift, 1997) in the classroom. That is to say, it is neglected: it is unusual for specific work on listening to occupy a quarter of classroom time. Second language (henceforth L2) listening in a classroom is often approached unidirectionally – there is no interaction – and a 'comprehension approach' is taken: the whole class listens to a recording, then answers questions on it, after which the teacher assesses the extent to which understanding has been achieved. As learners' language proficiency increases, so too does the difficulty of the listenings to which they are exposed, and comprehension questions tend to become more challenging, sometimes including deliberate traps aimed at catching out the less proficient listener.

L2 listeners usually do not understand every word that they are hearing, yet, unlike with reading, the ephemeral nature of listening means that it is impossible to review areas which have presented problems. Even words which in theory should be understood can present challenges as the listener struggles to rapidly recall their meaning or to understand them automatically. Furthermore, the spaces which occur between written words in many languages do not exist in the spoken form; instead, spoken words run into each other, with pauses often occurring only at the ends of clauses. As a result, the very nature of unidirectional listening presents a range of specific challenges to the L2 learner.

Listening to French poses additional specific problems for native speakers of English, as the prosodies of the two languages are so different. The syllable-timed nature of French in continuous speech, combined with the peculiarities of French phoneme-grapheme correspondence, result in a speech stream that can prove particularly challenging for the beginner or intermediate English learner of French to segment. Such difficulties in listening, resulting in anxiety and demoralisation, mean that levels of self-efficacy in listening have the potential to be low.

This is the setting in which the present study was based. It was born out of a hypothesis that even intermediate learners of French struggle to hear the gaps between words in French – that is, they cannot always segment the speech stream effectively. Therefore this study asked: at intermediate level, can an approach of teaching about the sounds of the French language, providing learners with specific skills in order to better segment the speech stream, result in better listening comprehension? A further initial hypothesis was that, should listening skills improve, so too should listeners' sense of self-efficacy and positivity about learning. The study also aimed, through semi-structured interviews, to investigate the reasons for any change in comprehension scores or self-efficacy.

Much of the previous research into the challenges of L2 listening (be they for English-speaking learners of French, or other language combinations) has focussed on strategy use in order to bring about improvements in listening comprehension and self-efficacy. In contrast, rather than focussing on strategy use as a way to cope with the challenges of listening comprehension, or even on strategy clusters which might include strategies to segment speech, the present study aimed to fill a gap in the literature by experimenting with a much more narrow focus. It adopts a quasi-experimental design with an intervention group, whose outcomes are compared with a very similar group who were taught in the preceding academic year.

2 Literature review

This chapter provides an overview of the literature on listening in order to contextualise the current state of the field as well as to demonstrate how the research questions were reached.

2.1 How listening works

2.1.1 Theoretical framework

At the outset, clarity is needed about the mechanisms inherent in the process of listening, be it in the first language (L1) or second (L2). While there is some disagreement in the literature about both the stages of the process and the order in which they occur, it is accepted that the underlying framework involves an acoustic signal in the form of soundwaves reaching the ear, and then travelling to the brain, where it is decoded and given meaning. Anderson (1990) proposes a three phase model consisting of 'perceptual processing', (hearing the sound, recognising it as a familiar language,) 'parsing' (splitting the syllables into words and chunks), and 'utilisation' (attaching meaning to them). Cutler and Clifton (1999) divide the same process into four types of operation: 'decode' and 'segment', which broadly match 'perceptual processing' and 'parsing', and separating 'utilisation' into two sections: 'recognise' and 'integrate'.

Grosjean (1985), however, points out that listening is not a linear process. Instead, the listener is constantly receiving more input, revising hypotheses of what has been and is being said, adjusting meaning, and anticipating what might come next. Misunderstandings or breakdowns in understanding might occur at any stage in the process (Field, 2003). This more tentative picture of listening as one of parallel processes and persistent revision is preferred by some researchers (e.g. Graham & Macaro, 2008; Vandergrift, 2015).

Given the recursive nature of listening, Field (2013) claims that the individual processes involved should not therefore be called 'stages', which suggests a logical and linear progression from one to the next, but 'levels of analysis' (Field, 2013:94). Field's framework is rich in detail and as a result lends itself well to the purpose of a conceptual framework upon which the present study will be based. It is illustrated in Figure 1.

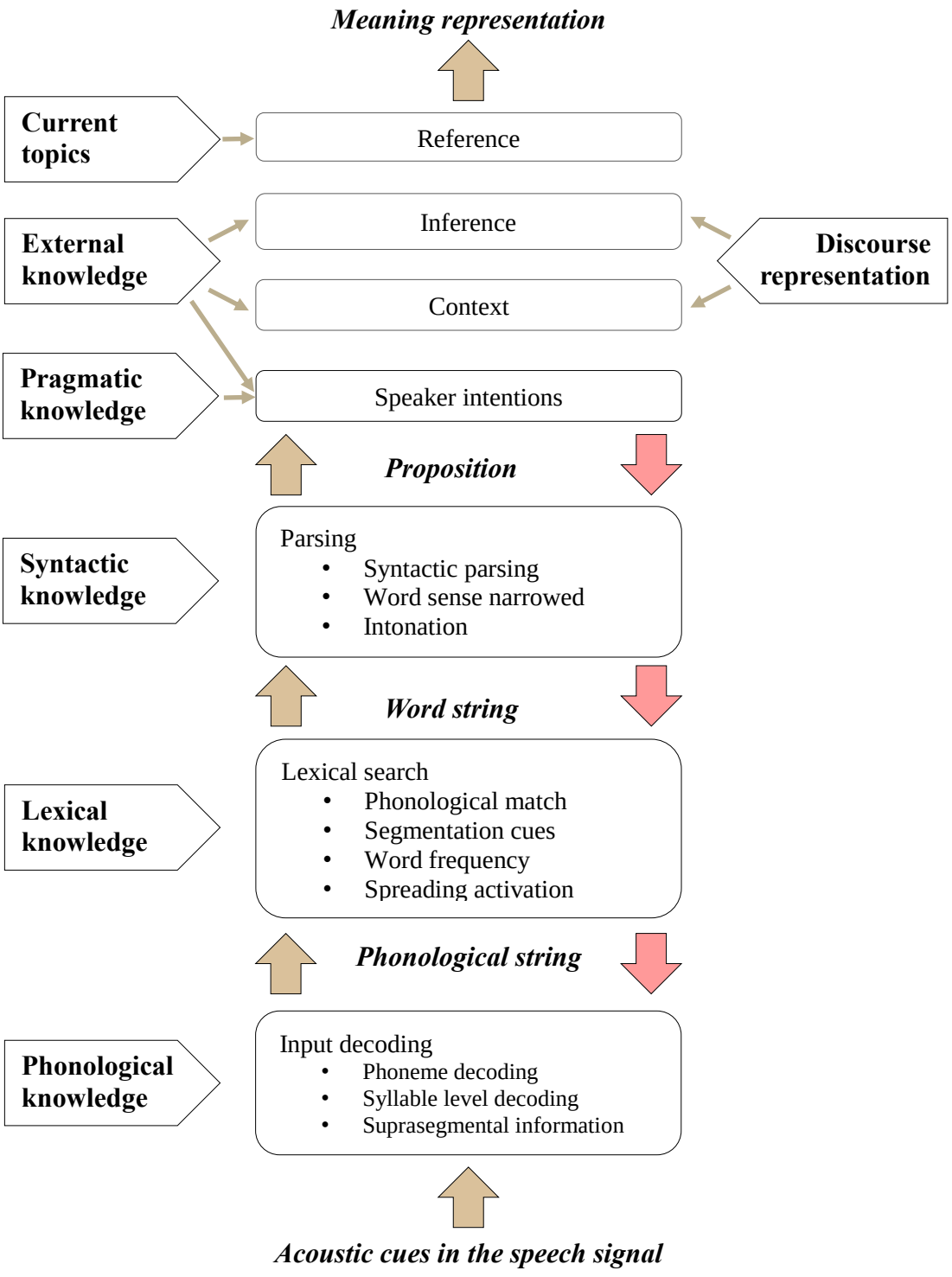


Figure 1. Field's model of listening (2013:97; 2013:101)

The listener receives acoustic cues and transforms them into groups of syllables. The syllabic input and the listener's knowledge about word boundaries informs the next process, which is a search of the mental lexicon to find matches at word level. This

information is then put into context, which narrows down the possible word matches and imposes a best grammatical fit onto what has been heard. It is only at this point that meaning can be attached to the message, and the listener weighs up what has gone before to match his/her developing hypotheses of what is being said.

Although this framework was designed for first language listening, there is no reason to believe that listening in a second language would follow a different framework, (Buck, 2001). However, the L2 listener's automatised skills and knowledge about the language are inferior to those used when listening in their L1, and as a result, potential for the process to break down at any of the levels of analysis is increased. A lack of automatised oral understanding also means that the L2 listener might also be inclined to mentally translate into their L1.

2.1.2 The role of speech stream segmentation in listening

A skilled listener might believe they can hear gaps between words, but this is an illusion. Instead, the stream of speech comes at the listener with a pause every 12 words or so (Field, 2003), and segmentation of this stream of speech into smaller units (e.g. words and clauses) takes place inside the listener's mind. And while language teachers might assume that breakdowns in understanding are due to a lack of vocabulary (Field, 2003), many listening problems begin with difficulties in segmenting the incoming acoustic signal into words (Goh, 2000). Goh asked 40 Chinese students of English to write commentaries in their exercise books regarding the listening problems they encountered: these were categorised and the problems linked to Anderson's (1990) listening model of perception, parsing and utilisation. Of the ten broad problems reported, five, including 'cannot chunk streams of speech' (p59), come under the heading of 'perception', three under 'parsing' and only two under 'utilisation'. Unfortunately Goh makes no mention of an interrater who could have double-checked her categorisation, and the data came from self-report, which is subject to limitations regarding its reliability (Rose, 2015). Despite these limitations, it remains striking that perceptual problems outweigh the other two categories.

This process of finding word boundaries is at the bottom of Field's (2013) framework, implying that this is one of the very foundations of giving meaning to the acoustic signal (Rost, 2006). Less successful listeners tend to be preoccupied with every word

(Osada, 2001), and the ability to segment the speech stream successfully can remain a problem for L2 listeners even at intermediate level (Graham & Macaro, 2008).

2.1.3 Listening and vocabulary

In order to understand the spoken word, the listener must be able to transform the syllables and phonemes they hear into words, and the theoretical frameworks of vocabulary knowledge states that a coverage of between 95% (Van Zeeland & Schmitt, 2013) and 98% (Nation, 2013) is needed for good aural understanding. In other words, in order for a listener to be able to understand a text, they need to be able to pick out and understand at least 19 words in every 20. For example, Bonk (2000) reported to have found a modest association between vocabulary knowledge and listening comprehension, and Stæhr (2009) concluded that vocabulary knowledge correlates with L2 listening proficiency. However, both these researchers tested vocabulary knowledge through a written, rather than an aural medium.

Furthermore, there is a mismatch between vocabulary knowledge, which can be demonstrated to be high when tested as individual words, be they written or spoken, (where the individual words can be identified due to the spaces between them), and the listener being able to pick out these words in the stream of speech. The implication of this is that, although it is clear that vocabulary is crucial to listening success, great care must be taken before teachers or learners of an L2 attempt to resolve listening problems by increasing vocabulary size; inadequate phonological knowledge and inability to deploy segmentation cues (Figure 1) might prevent this approach being successful.

2.1.4 Bottom-up and top-down processes

L2 listeners' skills are inferior to those of L1 listeners: the skills are less automatic, their vocabulary and syntactic knowledge is smaller, and interference from L1 habits is possible – for example, because 85 to 90% of English words start with a stressed syllable, native speakers of English instinctively understand a stressed syllable to indicate the beginning of a word, (Cutler & Carter, 1987).

Inferior L2 listening skills oblige the listener to adopt a range of approaches to deal with incomplete comprehension. We can divide these into top-down processes – that is to say, ones that deal with the context and meaning of what is being heard (Field, 2013) – the processes closer to the top of Figure 1 – and bottom-up processes, which

deal with comprehension at a syllabic or lexical level, and are represented at the bottom of Figure 1. In terms of how listening works, there is debate in the literature as to whether listeners favour one approach or the other, and what implications this might have for comprehension.

Use of visual cues and the activation of schemata and background knowledge are common ways to enhance comprehension. Both facilitate top-down processing (Rost, 2006): this is common text-book and classroom practice (Graham, Santos & Francis-Brophy, 2014).

Goh (2000) suggests that listeners favour top-down approaches, as these help with comprehension if the listener has not managed to understand every word. And in their study of the results of 20,000 Hong Kong exam candidates, Tsui and Fullilove (1998) claim that less-skilled listeners are forced to exploit top-down processes to *compensate* for their weakness in the bottom-up. It is possible, however, that there are methodological reasons for this claim: crucially, that Tsui and Fullilove focussed only on a single form of lower-level processing, which was to do with disconfirming an initial schema activated when 'trick questions' were given.

Scholars have attempted to assess whether one approach might be superior to the other, and to that end Yeldham (2016a), after an intervention study, concluded that top-down approaches yielded better comprehension scores than bottom-up approaches. However, criticisms levelled at this research include a lack of control group, interventions which 'taught to the test', and an unclear dichotomisation between the two intervention groups: one group was simply focussed on top-down strategies, whereas the other group mixed both top-down strategies and bottom-up skills. However, Yeldham (2016b) also reports qualitative research, which suggests that the usefulness of these approaches varies with the proficiency of the listener, where less proficient listeners favoured bottom-up approaches.

Yeldham's work must be contrasted with that of Zoghlami (2016), which draws a very strong conclusion in favour of bottom-up approaches to listening in her research on 226 French- and Tunisian-Arabic-speaking learners of English at first year undergraduate level. As counter-evidence for the view that top-down approaches are the recipe for listening success, she cites her regression analysis which shows that the

single strongest predictor for successful listening was the ability to segment the speech stream, and the main problem faced by listeners was word recognition. Her findings are consistent with those of Andringa, Olsthoorn, van Beuningen, Schoonen and Hulstijn (2012), who compared the listening skills of 121 native and 113 non-native speakers of Dutch. The non-native speakers came from a wide variety of L1 backgrounds and a range of ability from intermediate to near-native. Like Zoghlami, (2016) Andringa *et al* (2012) used regression analysis, and they found vocabulary, grammatical processing accuracy, and segmentation accuracy, to be the crucial factors for successful L2 listening comprehension.

These findings are, to an extent, at odds with those of O'Malley, Chamot and Küpper (1989) suggest that ineffective listeners *overuse* bottom-up processes – a finding also reported by Osada (2001), who asserts that top-down skills simply cannot be activated until lower-level skills have reached a certain threshold; the implication being from both of these studies that top-down approaches to listening are in some way preferable.

Field's (2004) research suggested a listener's choice of top-down or bottom-up approach might actually be highly variable dependent both on the listener and the task, although his experiments were highly constrained and the language used to test his hypothesis was not representative of typical speech. It is important to acknowledge that, for a listener, taking a top-down or bottom-up approach to coping with listening comprehension does not have to be a one-or-the-other decision: the two approaches can also operate in tandem (Field, 2004; Graham & Macaro, 2008) and do not have to be mutually exclusive.

Yet it is reasonable to assume that higher-level processes are more easily self-taught, focussing as they do on common sense, world knowledge and inference. Lower-level processes, by contrast, are by definition highly language-dependent, revolving around such issues as vocabulary and syntactic knowledge, and the prosody of the language in question, and as a result are more likely to rely on needing a teacher, unless the learner is very autonomous.

2.1.5 Listening and working memory

Working memory keeps track of information on a very short term basis and has a phonological element – the phonological loop –which briefly holds information in speech-based form (Baddeley & Hitch, 1974). Listening places large demands on the listener's working memory: an individual must simultaneously store information while processing new, incoming information. What is heard rapidly enters the short-term storage space of the phonological loop where it is held for approximately two seconds, after which it decays (Baddeley, 2012). Working memory can be enhanced – for example bringing a listener's attention to what they are about to hear might boost working memory slightly. However, it can be disrupted by a variety of environmental or affective factors, such as background noise or irrelevant sound (Jones, Macken & Murray, 1993). When listening to an L2, additional demands are placed on working memory as the brain must work harder to undertake all the processes in Figure 1, as the language knowledge is less automatic.

The literature examining the relationship between working memory and L2 listening comprehension is scanty, although a few scholars have shown correlations between the strength of a listener's working memory and their L2 listening ability (e.g. McDonald, 2006; Brunfaut & Revesz, 2015). Other scholars (e.g. Andringa *et al*, 2012; Vandergrift & Baker, 2015) have failed to find such a relationship; it is possible that this contradiction is due to the differing ways in which working memory was measured. The lack of evidenced relationship between L2 listening and working memory might also be due to the fact that anxiety negatively affects working memory, and by extension, on L2 listening performance (Elkhafaifi, 2005; Lund, 1991; Vogely, 1998).

I hypothesised above that a key difference between the top-down and bottom-up processes was that, whereas bottom-up processes depend on knowledge and teaching, top-down are more easily self-initiated and are less language-specific. This could mean that the L2 listener naturally deploys top-down processes more frequently and they become more automatic than bottom-up processes. By extension, then, it might also be reasonable to hypothesise that working memory will impact disproportionately on these non-automatised bottom-up processes.

Less proficient listeners must then be a significant risk of a vicious circle where working memory is already pushed to its limits, inhibiting comprehension, which leads to anxiety, which leads to further compromise of working memory. To take this hypothesis to a logical conclusion, a way to break the cycle might be to improve the listener's performance in the bottom-up processes.

2.2 Listening to French as a second language, with English L1

Pike (1945) attempted to classify all languages into one of two categories: stress-timed, and syllable-timed. If a language is said to be stress-timed, some syllables are emphasised at the expense of others, resulting in a wide variation of length of syllables, and a common use of the schwa (an unstressed, neutral vowel represented by the symbol /ə/). In a syllable-timed language, each spoken syllable has roughly equal weight and vowels tend not to be reduced to schwas (Shoemaker & Rast, 2013).

This classification has gained credence among scholars, although such a neat and easy categorisation has also been questioned, with some literature now proposing a continuum-style model, in which an individual language can *tend* more towards stress-timing or syllable-timing (Lidji, Palmer, Peretz & Morningstar, 2011; Meisenburg, 2013). Nonetheless, whether we place French and English on a continuum or in discrete categories, standard British English and standard French would be placed into separate rhythmic classes or at some significant distance apart on the continuum, with standard British English tending towards segmentation by stress unit and standard French preferring segmentation by syllabic unit (Gabriel, Stanke & Thulke, 2014; Lidji *et al*, 2011; Tranel, 1987).

Where two languages have such significant prosodic differences, then, this can create significant pitfalls for the L2 listener. Segmentation strategies are laid down in infancy, based on the prosody of a listener's first language (Mehler & Christophe, 1992; Cutler, Mehler, Norris & Segui 1992), and even experienced users of an L2 show little flexibility in applying segmentation strategies which might resemble those of a native speaker, unless they are trained to do so (Cutler, 2001; Field, 2003). While Nishibayashi, Goyet and Nazzi (2015) found that as early as six months old, French infants were establishing syllabic segmentation strategies, native speakers of English use the stress of syllables as a cue to notice boundaries between words. Given that such stress is largely absent from continuous speech in French, it is futile for the

English listener of French to adopt such a strategy, rendering the speech stream even less segmentable than it might otherwise be (Lidji *et al*, 2011).

There is now potential for untrained English-speaking learners of French to become trapped in a vicious circle. If 'segmentation is the first step in acquiring vocabulary' (Carroll, 2004:249), yet vocabulary is necessary to recognise speech (Mehler & Christophe, 1992), the English-speaking learner of French is in a 'Catch-22' situation. Here, we can see that segmentation skills lead to vocabulary learning, but it is vocabulary knowledge which facilitates segmentation. The native-English listener of French will be using English segmentation strategies, which are based on stress, to attempt to extract vocabulary items from a syllable-based speech stream. These items might well be recognisable in isolation. But in continuous speech many items of vocabulary risk becoming 'lost' within the French speech stream thanks to its syllable-timed nature, and new items of vocabulary are unlikely to be salient to an English listener who is primed to notice stress as the key indicator of the start of a new word.

The impact of these prosodic differences is not limited to a cross-linguistic comparison between French and English. Research also exists in which German monolinguals and German/Mandarin bilinguals were taught the prosody of French, where it was found that the bilingual participants were more successful due to both French and Mandarin being syllable timed (Gabriel *et al*, 2014). However Tremblay Broersma, Coughlin and Choi (2016) propose that prosodic similarity might actually cause a problem: when comparing advanced learners of French whose L1 was either Korean or English, it was found that the English native speakers better segmented the French speech stream. The authors hypothesise that the differences in word boundary cues are so subtle between French and Korean, that it deceives the Korean learners more than the English, whose native word-boundary cues are vastly different from French. It is possible that the reason for the apparent contradiction between these two pieces of research lies in the fact that Gabriel *et al* (2014) were tapping into productive skills, whereas Tremblay *et al* (2016) focussed on receptive skills.

2.3 The Pedagogy of Listening in an L2

Teaching and learning listening as a distinct L2 skill dates from the 1950s, coinciding with the availability of recordings (Howatt, 2004). Previously, although exercises

such as dictation were popular, their aim was grammatical and orthographical rather than to facilitate learners' extraction of meaning from a spoken stream of L2 (Field, 2008). With the advent of recorded material in the classroom, procedures grew up quite organically where listening comprehension work tended to be an aural reproduction of reading comprehension work (Mehler & Christophe, 1992).

2.3.1 Product and process

Treating listening skills as no more than an aural version of reading comprehension meant that a 'Comprehension Approach' to listening took hold (Field, 2008): learners would be given a recording to listen to, with a series of questions to answer either during the listening or after. Variations on this theme tended to be about how many times the learners might be allowed to listen, and the stage in the process at which the listeners would be allowed to see the questions that they had to answer. It is commonplace in language classrooms for learners to listen once or twice to a recording, answer the questions, go over the answers in class, and then move on (White, 2006; Field, 2008). The *product* of listening – answers to a comprehension test – is what is valued in many classrooms.

This Comprehension Approach has been criticised (Field, 2008; Macaro, Graham & Woore, 2016; Graham, 2017) because, while both the level of language (speed, complexity of grammar and vocabulary) and the types of questions might become increasingly difficult as the course progresses, it is rare for the teacher to analyse in any great depth how the learner reached their answers – and given that listening takes place in the listener's mind, it is indeed difficult to make such an analysis. In other words, the *process* of listening is overlooked. Listening work simply becomes increasingly difficult, without learners being taught how to listen.

To arrive at a more process-based approach to listening in the language classroom, Field (2003) advises that teachers should follow up the answers to a comprehension task, in order to understand how learners arrived at those answers, addressing perceptual or grammatical problems that have arisen. That is, they should probe and boost learners' phonological, lexical and syntactic knowledge as well as their meaning representation (Figure 1). Yet such follow-up rarely happens in the classroom (*ibid*).

Graham *et al* (2014) present a picture of the listening lesson with even less pedagogical value than that of the product-orientated Comprehension Approach. Textbooks tend to favour a product-based approach (Nguyen & Abbott, 2017), and in English classrooms, there is so great a focus on task completion that listening tasks are scaffolded to an extent that it is almost impossible for the learner to go wrong, with 'almost ritualised procedures to ensure predictability, maximum correct answers and to shield learners from any challenge and uncertainty' (Graham *et al*, 2014: 54). In 1998 Field suggested that focus in the language classroom was on listening should shift from product to process; Graham *et al*'s bleak picture suggests that in 15 years, this has not yet occurred.

This failure to shift the listening comprehension paradigm might not be serving learners well, and therefore there is a clear argument in favour of the flipside: further research is needed into pedagogical approaches into listening whose focus is more on the process of listening than the product.

One area research into a more process-based approach is taking place is that of listening with transcripts. In some cases, this is operationalised as same-language sub-title use in videos, (e.g. Mitterer & McQueen, 2009; Yang & Chang, 2014; Winke, Gass & Sydorenko, 2010), where the literature suggests that same-language sub-titles aid listening comprehension. However, it is likely that the contextual information provided by the video might also be a factor in aiding comprehension. Nevertheless, Chang and Millett (2014) also provided evidence that listening with transcripts was effective. Unfortunately, though, none of these authors carried out delayed post-tests, so it is unknown whether the positive effect of simultaneous reading and listening is a durable one.

2.3.2 Skills and strategies

We saw in section 2.1.4 that literature on learning to listen includes much debate on whether learners are taking top-down approaches, bottom-up approaches, or a combination of the two, and whether one approach might enable the listener to achieve superior results or increase their listening proficiency. Closely related to this is the field of research into strategy use in listening, where the prevailing themes are the relationship between strategy use and either listening success, or listening proficiency.

The Comprehension Approach as defined in section 2.3.1 lends itself naturally to the use of metacognitive and top-down strategies. And although the importance of metacognition is somewhat of a recurring theme in the conclusions of research into strategy use in listening (e.g. Cross, 2010, Birjandi & Rahimi, 2012, Bozorgian, 2012, Goh & Taib, 2006, Vandergrift & Tafaghodtari, 2010), Graham, Santos and Vanderplank (2010) suggest that care should be taken before classroom teachers conclude that strategy instruction is the only way to improve L2 listening. Here, the process-product issue again rears its head; if instruments used in research into listening are testing the *product*, rather than the *process* of listening, the strategies deployed inevitably become biased towards test-taking strategies as much as (or more than) decoding strategies (Field, 2016).

However, the deployment of bottom-up strategies and skills also feature in strategy research. We have seen earlier that there is an argument for an increased emphasis on lower-level processes for beginner and intermediate learners, and in particular on those processes which enable listeners to segment the stream of speech with greater ease. Teachers can help learners to recognise word boundaries via a range of 'ear-training' activities (Graham & Macaro, 2007, 2008) such as anticipating the written form of the words heard, reading while listening, and raising awareness of patterns of intonation of the language in question, but knowledge about the language must precede the use of strategies (Macaro, 2006). Yet Goh (2000) asserts that real-time parsing is difficult to teach and Vandergrift and Goh (2012) counsel against encouraging learners to pay attention to every word, expressing concern that this risks fostering a translation approach to listening, and we return to a suggestion that metacognitive strategy use would circumvent the problems.

Still, gaps in both knowledge and understanding are inevitable for L2 listeners, and as a result, a certain level of strategy use is needed in order to fill these gaps as well as possible (Field 2012). Graham *et al* (2010) call for an improvement in the way listening is taught in foreign language classrooms in England, acknowledging a role for strategy use, but also for skill enhancement, without which strategies cannot be deployed (Macaro, 2006; Graham & Macaro, 2008).

2.4 Listening and learner self-efficacy

Self-efficacy – where an individual believes in their own ability to accomplish a task (Bandura, 1993) – is a sub-theory of motivation (Dörnyei & Ryan 2105). Levels of self-efficacy demonstrated by a learner have been linked to their persistence, anxiety levels and their flexibility in strategy use as well as their willingness to exert effort and to undertake challenging tasks, (Mills, Pajares & Herron, 2006). A meta-analysis of self-efficacy in educational contexts found that it accounted for 14% of the variance in academic performance (Multon, Brown & Lent, 1991). Graham (e.g. 2006; 2011; Graham & Macaro 2007; 2008) in particular has argued that the difficulties inherent in L2 listening – its ephemeral nature, the lack of control listeners have over the input, and the predominance of the product-oriented Comprehension Approach – all mean that it is an academic skill which might be subject to particularly low levels of self-efficacy. This can result in anxiety (Xu, 2011), which in turn compromises working memory (Arnold, 2000), further exacerbating the problems with listening.

Strategy instruction in listening attempts to break this cycle. Graham and Macaro (2008) found that self-efficacy increased with strategy use or strategy instruction, and Mills, Pajares and Herron (2007) attempted to correlate use of metacognitive strategies with academic success in French using regression analysis, but found that self-efficacy only predicted levels of self-regulation and did not predict achievement in their participants. Vandergrift (2008) found some evidence of increased self-determination as a result of metacognitive strategy instruction for listening, among 57 Canadian teenage learners of French as a foreign language. Siegel and Siegel (2013), aimed to correlate explicit bottom-up activities with ‘confidence’ (their term) among Japanese first year university students, and found that 18 of their 33 participants felt more confident, but did not report any statistical significance of these findings.

However, these studies examine self-efficacy and strategy clusters. Graham (2007) suggests that learners’ views of themselves might also be affected by teaching methods, so it would be interesting to discover whether the use of a single approach – speech stream segmentation – could have an effect on self-efficacy.

2.5 Summary of literature review

From the general discussion above on listening processes, it appears, then, that there is an emphasis in the current literature on the use of top-down processes and strategies to deal with the challenges posed by unidirectional listening. These are encouraged in order to plug gaps which are created by an inability to adequately perform the bottom-up processes in Figure 1, and this inability is exacerbated by assertions such as Goh's (2000) that parsing is difficult to teach, and teachers' assumptions that it is lexical gaps that hinder their learners' aural understanding, rather than a lack of phonological knowledge.

However, it could be that there are other solutions to the problem of L2 listening for beginners and intermediates, other than resorting to metacognitive strategies. A different approach to listening, in which attention is paid to every word that is spoken, might solve these problems. Listeners could be taught to segment the speech stream with greater ease, thus enabling them to extract far more meaning from the acoustic input. This would do away with the sticking-plaster of needing to employ approaches which gloss over the fact that thorough comprehension has not been achieved.

In summary, the above review of the existing literature suggests that listening can pose a particular challenge for learners for a variety of reasons. The oft-used Comprehension Approach and its emphasis on product over process often fails to teach learners *how* to listen. Where strategy instruction has attempted to redress this problem, there is often a focus on metacognitive strategy, and on strategy clusters (in which top-down and bottom-up processes are combined), leaving us none the wiser on the balance between the two. Furthermore, the literature suggests that French listening might be particularly problematic for English learners due to the prosodic differences between the two languages.

This review leads us to ask whether a pendulum-swing is warranted away from listening for gist, and the associated emphasis on 'top-down' and test-wise strategy use, to which the Comprehension Approach panders.

2.6 Research questions

Taking into account the problematic nature of the Comprehension Approach, the lack of clarity that research into strategy instruction has provided, and the importance of a

strong foundation in the phonological knowledge needed for listening, the researcher has identified a gap in the literature relating specifically to speech stream segmentation and its ability to bring about an improvement in listening comprehension and self-efficacy. The following research questions have been devised:

1. Can the listening comprehension of grade 11 learners of French be improved by speech stream segmentation training?
2. Can the self-efficacy of grade 11 learners of French be improved by speech stream segmentation training?
3. What factors are reported by the participants as being crucial to the success or failure of the intervention?

3 Methodology

This chapter describes the procedure and participants involved in the study. The design of the study will be set out and justified and the procedures involved will be described.

3.1 Research design

The research followed a mixed methodology, in which both quantitative and qualitative data were collected and analysed. Mixed methods were chosen in in order to draw on the strengths of both quantitative and qualitative research methods (Teddie & Sammons, 2010), attempting to provide a multi-dimensional perspective on the research questions (Mackey & Gass, 2016): the qualitative data collected was used to contextualise the quantitative. While the quantitative data could provide insight as to whether or not the strategy was effective, and to what extent, one aim of the research was to better understand *why* speech segmentation strategies might improve listening results and self-efficacy. When discussing the 'why', it was of particular interest to discover whether different learners felt that there were different reasons for the success of the intervention, and this would not have been possible taking a wholly quantitative approach. Examination of the data from multiple vantage points aimed to provide the most complete possible picture (Boeji, 2010) of the multiple roles of speech stream segmentation strategy teaching in improvement in listening comprehension and self-efficacy.

3.2 Procedure

As soon as the appropriate permissions were secured (see section 3.5), the present study began. It took the form of a quasi-experimental intervention study, that is to say, the present study was an empirical study which aimed to assess the effect of an intervention on a target population, but did so without random assignment of participants to the two conditions (Gass, 2015). Instead, pre-formed classes were used. The comparison group and the experimental group each took a pretest and a posttest at the same time interval (henceforth Time 1 and Time 2), with 15 hour-long French lessons between Time 1 and Time 2. In each lesson, ten to 15 minutes was devoted to listening skills.

3.3 Population and sample

The target population was year 11 students in England, studying French as a foreign language. Year 11 is the final year of compulsory education, at the end of which public exams, GCSEs (General Certificate of Secondary Education) are taken. Modern Languages are optional in the UK and as such approximately half of all GCSE candidates study at least one (Department for Education, 2016). Year 11 students are 15-16 years old and have usually been studying French at secondary school for nearly five years when they take their public exam, although many have done some French at primary school.

The sampling frame was narrow – a single school in the south east of England – and a convenience sampling frame was selected. The comparison group and the experimental group were made up of pre-formed groups in consecutive year groups at the same school. Both were in year 11, aged 15 and 16, and had been studying French for four and a half years at secondary school at the time of the time of the pretest, with some having done some French at primary. The comparison group consisted of 21 students – 18 girls and three boys – and were taught in the academic year 2014-2015. The experimental group consisted of 24 students, of which three were boys, and were taught in the academic year 2015-2016. The researcher in the present study was the classroom teacher, having taught the comparison group for one and a half academic years at the time of pretest, and the experimental group for half an academic year.

All members of the experimental group chose to participate in the study. For the comparison group, pretest and posttest data collected formed part of the ordinary day-to-day teaching and can be used in compliance with 'Group A' protocol in Curec protocol 15.

While it is recognised that a non-random convenience sample inevitably risks a level of selection bias due to the pre-existing differences between the groups (Dörnyei, 2007), checks were carried out to ensure that this risk was minimal. As can be seen in Table 1, below, proficiency in each group was comparable, roughly equating to Common European Framework level A1, with predicted GCSE grades ranging between a grade E and a grade A*. The fact that the intervention group and the comparison group came from two separate academic years presented a disadvantage in that it was not possible to randomise participants into groups (Dörnyei, 2007), but

the same teacher (the researcher) taught both groups, which minimised the effect of potentially confounding variables. It is acknowledged that teachers relate differently to different classes (Cross & Vandergrift, 2014), and best practice would have been to organise observations of both groups in order to attempt to eliminate this as a confounding variable, as well as to ensure fidelity to condition, but practical in-school considerations made this impossible. However, despite these issues, it was felt that having two groups taught by the same teacher was the optimal approach; the alternative would have been to study two groups taught by different teachers, or to even approach a second school. The researcher was satisfied that having a different teacher in the previous academic year had not positively affected the listening proficiency of the experimental group.

Table 1. Comparison between Comparison Group and Experimental Group

	Comparison Group	**Experimental group**
Number of students	21 students	24 students
Gender split	3 boys, 18 girls	3 boys, 21 girls
Age of students	15-16 years	15-16 years
Number of lessons between pre- and posttest	15	15
Average Key Stage 2 SATS scores	13.28 (=5c) (SD 1.23)	13.20 (=5c) (SD 1.06)
Average pre-test listening score	41.19 (SD 10.34)	41.38 (SD 11.18)
Vocabulary scores[1]	1361 (SD 267.11)	1363 (SD 575.26)

Table 1 compares the two groups in detail. As well as sharing a teacher, both groups had five hour-long lessons of French per fortnight, in the same classroom, and until the intervention of the present study began, had followed the same syllabus. Furthermore, results from both groups' Standardised Assessment Tests (SATs) in year 6 (at age 11) were comparable (Comparison group mean 13.28; SD=1.23 / Experimental group mean 13.20; SD=1.06. This equates to a mean score of 5c for

[1] Vocabulary scores reached by testing meaning in both French to English, and English to French, of individual lexical items. Testing was undertaken in a written medium only.

both groups, with standard deviations from 4a to 5b.) In the English secondary schools system it is standard practice to use year 6 SATs scores as a measure of potential in year 11 (Sammons, Sylva, Melhuish, Siraj, Taggart, Toth, & Smees, 2014).

3.3.1 The instruments

3.3.1.1 Listening proficiency tests

Both groups were given two listening proficiency tests fifteen lessons apart (approximately eight weeks). These took the form of a past GCSE listening paper at 'higher' level (Edexcel, 2012), which took place in the classroom (see Appendix 8.1 for question paper, and Appendix 8.2 for transcript, but in examination conditions. It consisted of a thirty-five-minute exam with ten listening questions at a range of levels. The test was then double-marked to ensure reliability of results.

At the end of the series of 15 lessons, both groups completed a posttest in the same conditions as the pretest. Like the pretest, it was double marked to ensure reliability of results. The posttest was another GCSE higher listening paper (Edexcel, 2013). (See Appendices 8.4 and 8.5 for test paper and transcript respectively.) By using two GCSE past papers from the same examination board, the researcher could be confident that, although the pretest and posttest were not the same test, they were pitched at the same level and made the same syntactic, lexical and cognitive demands of the participants.

This pretest posttest design aimed to address the first research question.

Testing listening is not straightforward. As discussed in section 2.3.1, because what is heard exists only in the mind of the listener (Field, 2008), for pragmatic reasons, testing listening in the classroom often focuses on comprehension questions (Vandergrift, 2015). As such, it is difficult for the teacher to separate out whether errors are due to failure of understanding the spoken foreign language, or failure to cope with the question, and reading and writing ability can be confounding variables. It was therefore helpful that, as part of normal day-to-day teaching, the comparison group had received some informal strategy instruction on ways to address comprehension issues, and on test strategy. By contrast, the experimental group received instruction not on dealing with the comprehension questions, but on understanding the input *per se*, and in-class activities did not resemble the types of

tasks to be undertaken in either the pretest or the posttest (Cross & Vandergrift, 2014). As a way of improving the score on a listening *comprehension* test this intervention might appear counter-intuitive. However, as the starting premise was that an ability to segment the speech stream is a fundamental element of decoding aural input (see Figure 1), it was hypothesised that segmentation training would be necessary before instruction on higher-level processes to tackle comprehension questions could be effective.

A test's construct validity assesses the extent to which it really measures the construct it sets out to measure. If the aim of the RQ1 is simply to ask: does this intervention improve *GCSE* listening comprehension scores, then discussion of the construct validity of the GCSE is irrelevant. However, if the aim is to dig deeper and ask whether the intervention improves listening comprehension as a wider construct, it is necessary to be satisfied that the GCSE listening paper does indeed have construct validity. Unfortunately neither the examination board nor the English Office for Qualifications and Examinations Regulations (Ofqual) have published any literature to this end. Instead, it is necessary to refer back to Figure 1 which presents a theoretical framework for the mechanisms of listening, and reflect on the extent to which the GCSE (i.e. the pretest and posttest) tests the elements listed in all the levels of analysis (Field, 2013). This then brings us to a subtle difference between listening comprehension and more general listening skills; the literature on language assessment accepts that, while the two overlap, not all of the Field's levels of analysis (or indeed alternative ways to define the construct of listening) are readily assessed within the framework of typical listening comprehension tests (Brown & Abewickrama, 2010; Rost, 2013; Field 2013; Harding, Alderson & Brunfaut, 2015). However, the types of issues that present difficulties in testing listening – for example dividing the listener's attention by asking him / her to read questions, or the imposition of 'check and match' activities (Field, 2013) – are accepted to be sound from a testing point of view (Lim & Khalifa, 2013, Geranpayeh, 2013), and these are the typical types of activities present in the pretest and posttest of the present study as well as other public listening examinations (Field, 2013). Furthermore, the present study's pretest and posttest also consists of a majority of multiple choice questions which are have been found to be a more reliable method of testing than open-ended

questions (In'nami & Koizumi, 2009). Therefore the researcher was satisfied that the choice of GCSE pretest and posttest was both ecologically valid and ethically justified, as the participants would be due to take the very same exam shortly after the end of the intervention.

3.3.1.2 Questionnaires

The experimental group also completed a short questionnaire in English (the L1 of all participants) at Time 1 and Time 2. The questionnaire aimed to address Research Questions 2 and 3, and to give insights into the participants' own perspectives on their progress in listening during the present study. All members of the experimental group completed the questionnaire at both times. All questions asked at Time 1 were repeated at Time 2, with a series of additional questions posed at Time 2 which aimed to explore participants' feelings towards the outcomes of the study itself.

The practical constraints of the research setting meant that it was not possible to also give this questionnaire to the comparison group. It is recognised that is presents a limitation in terms of the ability to state whether the specific intervention resulted in greater self-efficacy scores than would ordinarily have been the case during natural progression in year 11. However, while recognising that this impedes generalisability beyond the present study, it was nonetheless felt that conducting an investigation into the intervention group's self-efficacy before-and-after scores remained a useful endeavour which was likely to yield interesting results.

Piloting of the questionnaires was carried out, and at both Time 1 and Time 2, the questionnaire was completed in class time with the teacher-researcher present, meaning that any queries could be addressed immediately, and in the presence of the whole group. The wording on each item was short (Dörnyei, 2007) and each question only contained one thought. Copies of the two questionnaires can be found in Appendices 8.5 and 8.6.

Self-report measures such as questionnaires can be viewed as problematic for a variety of reasons: the learner might struggle to describe the processes being researched (Rose, 2015), or might, consciously or not, answer the questions according how they would like to be viewed, how they would like to see themselves or how they feel the researcher would like them to answer (Woodrow, 2015). As such, the picture they provide is not complete (Mackey & Gass, 2016) and is likely to be superficial

(Dörnyei, 2007). Nonetheless, the data they provide can be useful to triangulate data collected elsewhere (Mackey & Gass, 2016; Cross & Vandergrift, 2014), as was the aim in the present study.

3.3.1.3 Interviews

A list of interview questions designed to address all three research questions was drawn up and checked by the researcher's supervisor. They were improved upon and the order of questions were modified (Mackey & Gass, 2016). A pilot interview was carried out, at which point questions were further refined. In order to collect the most pertinent data possible it was decided to personalise each interview by further probing comments that had been written by the interviewee in his/her exercise book, and indeed to have the exercise book present at the interview in order for both the researcher and the interviewee to be able to present as complete a picture as possible of each individual experience of the intervention. The set of guiding interview questions are to be found in Appendix 8.7 and a sample interview transcript can be found in Appendix 8.8. A semi-structured approach to interviewing was chosen in order to facilitate the comparison of answers between interviewees by means of the predetermined questions (Dörnyei, 2007) yet also permitted the researcher to probe interviewees where it was felt that pertinent issues had arisen and warranted further investigation. (Mackey & Gass, 2016; Clandinin & Burke Johnson, 2014).

Finally, ten participants from the experimental group were interviewed. A purposeful sample was chosen (Clandinin & Burke Johnson, 2014): these ten participants represented the widest possible cross-section of proficiency in French listening, as measured by pre-test and post-test score. In order to decide which experimental group participants to select from each proficiency level, the four participants who had made the least progress according to the quantitative data were interviewed, as well as the six participants who had made the most progress. There was a ceiling effect with the pretest and posttest, meaning some of those who had made little progress did so because they had already scored very highly at pretest, and for this reason a fifth experimental group participant with little progress was not chosen, making the split four-six, not five-five. (See Appendix 8.9 for more information about the interviewees.) When the questions were delivered, care was taken to avoid leading questions, and opportunities for reflection, revision and further input were provided to

the interviewees by such techniques as mirroring or paraphrasing the interviewee's responses (Mackey & Gass, 2016) and giving 'carry-on' and clarification feedback (Dörnyei, 2007:142).

It is acknowledged that collecting data through interview can be problematic in the sense that participants might not remember fully what they want to say, or might distort their reporting in order to present a specific impression to the interviewer. However, it was felt that these disadvantages were outweighed by their potential for providing rich qualitative data. Furthermore, given that the researcher and the interviewees were well known to each other, the researcher would have often been able to notice where self-report might have been distorted. In practice this issue did not appear to arise and it is felt that therefore the long relationship that the researcher had with the interviewees lends the data further credibility. The researcher was confident that the interviewees were behaving naturally during both the intervention and the interviews (Mackey & Gass, 2016).

3.3.2 The intervention

The researcher confirmed the hypothesis that segmentation of the French speech stream was indeed posing a problem to the participants by giving them two segmentation tasks (see Appendix 8.10) written and aural, and found that the participants had many more difficulties when aurally segmenting French, in contrast with segmentation in writing.

For the comparison group, Time 1 was simply past-paper exam practice, after which the group continued with the planned syllabus, which consisted of work in the four skills of listening, reading, writing and speaking and included some informal metacognitive strategy instruction to dealing with listening and reading comprehension, and exam strategy instruction. The comparison group's Time 2 took place after 15 lessons.

A year later, after the experimental group's Time 1, they began a series of fifteen lessons (see Appendix 8.11 for detailed scheme of work, lesson plans and specific activities) taught by the researcher in which the listening element focussed specifically on activities to facilitate segmentation of the speech stream. These included work on recognising liaisons, minimal pairs, dictation and prosodic clues.

Care was taken to ensure that the amount of time spent on listening activities in class was the same as that spent by the comparison group; it was simply the nature of the activities that were different. Similarly, for both groups, more general language-learning opportunities were very similar (Cross & Vandergrift, 2014).

3.3.2.1 Liaison work

Experimental group students were introduced to the concept of speech stream segmentation and attention was focussed on the fact that words run into each other, occasionally leaving the impression that the final phoneme of the previous word is actually the initial phoneme of the next. This is a common issue in French.

3.3.2.2 Dictation

Although dictation has been out of fashion in British modern languages classrooms since the 1980s, its use can facilitate sound-symbol correspondence and speech stream segmentation. Therefore a series of dictation exercises were used. They varied from two-word speech streams to full paragraphs, and were read aloud by the teacher or sometimes listened to on recordings. The texts were all taken from a variety of GCSE past papers to ensure that the level of difficulty was similar to the pretest and posttest.

Later in the intervention dictogloss activities (Wajnryb, 1990) also took place, in which the students heard the text many times, but with fewer pauses, and worked in groups to reproduce it. This proved a very popular activity. (See Appendix 8.12 for worksheet.)

3.3.2.3 Listening with transcripts

As discussed in section 2.3.1, there is evidence to suggest that reading while listening improves listening comprehension. Initially listening exercises were reviewed by listening again with the transcript to hand, in order to boost the ability to segment the speech stream. Later in the intervention, transcripts were provided in which the teacher-researcher had deliberately introduced errors. In some places these errors were in the form of minimal pairs. Errors sometimes also comprised of changing key words such as adverbs of time, in order to indicate to students that the crucial words for understanding a text are not always nouns and verbs. Students had to identify the errors in the transcript and ideally correct them. Sometimes there were also gaps in the transcripts, which the students had to fill, although this proved both less effective and less popular.

3.4 Data Analysis

After data collection, quantitative and qualitative data were analysed concurrently. Table 2, below, identifies the methodology of the analysis.

Table 2. Data analysis methods

Research question	Data collection	Data analysis
Can the listening comprehension of grade 11 learners of French be improved by speech stream segmentation training?	Pretest post test	Descriptive stats, ANCOVA
Can the self-efficacy of grade 11 learners of French be improved by speech stream segmentation training?	Questionnaire, interview	Descriptive stats, T-tests, chi squared, Cronbach's alpha
What factors are reported by the participants as being crucial to the success or failure of the intervention?	Questionnaire, interview	Qualitative analysis

Qualitative data analysis of the interviews was inductive: themes were allowed to emerge from the transcripts of the interviews, and were analysed according to grounded theory, that is to say, the data was gathered and then analysed systematically. Due to time constraints it was not possible for the participants to read and validate or correct the transcripts of their interviews. The transcripts were read and analysed carefully by the researcher and a colleague, with the aim of exploring themes and recurring sentiments within the data. Both parties independently coded the transcripts before holding a discussion in order compare findings and to resolve any differences. Together 20,000 words were boiled down to 167 key remarks in three categories and 14 categories, which are given in Figure 2. A summary of the discussion with the interrater can be found in Appendix 8.13.

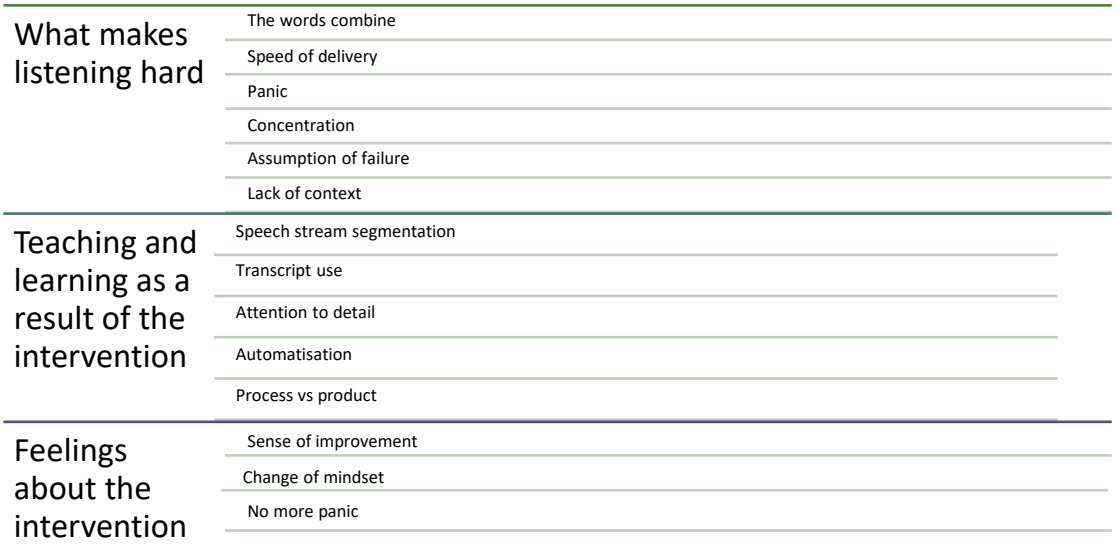


Figure 2. Final coding scheme

3.5 Ethics

This study received approval from the University of Oxford's CUREC Central University Research and Ethics Committee (all documentation in Appendices 8.14). Upon receipt of approval, the head of the school was contacted and permission subject to parental consent was sought. The teacher-researcher provided documents to all potential participants and their parents, outlining the nature of the study as well as its objectives and procedures. It was made clear that all data would be dealt with anonymously and that participants had the right to withdraw. Participation was arranged on an opt-out basis, that is to say, it was assumed that all members of the experimental group class would be happy to participate unless they or their parents expressly informed the teacher-researcher, the school, or the university otherwise. This arrangement was very clearly conveyed to participants and their parents, and no class members withdrew. During the intervention period, participants were repeatedly reminded that they could opt out if they wanted to. Those who were invited for interview were also given the opportunity to opt out, but none did so.

At the time of beginning the intervention and obtaining ethical approval, the comparison group class had already left the school. Permission from the comparison group to use their data was not sought, as this falls into 'Group A' in Protocol 15 of

CUREC, that is: ‘agreed curriculum-related non-invasive normal activities such as paper, verbal, computer tasks set by the teacher as part of the curriculum.’ This was noted on the CUREC application.

4 Findings

This chapter reports on the findings of the experiment, and is structured to reflect the order of the research questions. Therefore, it first reports on whether the intervention made a significant difference to listening comprehension by comparing the results of the experimental group and the comparison group. It then reports on the findings of the questionnaire data in order to address whether the intervention also impacted experimental group participants' sense of self-efficacy. Finally it reports on the findings of the semi-structured interviews in order to allow us to delve more deeply into the factors which might have caused the quantitative results reported.

4.1 RQ1: Can the listening comprehension of grade 11 learners of French be improved by speech stream segmentation training?

4.1.1 Descriptive statistics

Descriptive statistics for the results of the pretest and posttest for both groups are given in Table 3 and are also illustrated graphically in Figure 3. Two participants in the comparison group took the pretest, but not the posttest, and all participants in the experimental group were present at both tests. The mean score at pretest for the comparison group was 41.19 (sd=10.34) and 41.37 (sd=11.18). At Time 2, the mean posttest scores were 47.79 (sd=6.92) for the comparison group, and 52.00 (sd=6.16) for the experimental group.

Table 3. Descriptive statistics for the listening comprehension tests

	Time 1 (N=45)					Time 2 (N=43)				
Condition	Mean	SD	Range	Max	n	Mean	SD	Range	Max	n
Comparison	41.19	10.34	31	58	21	47.79	6.92	27	59	19
Experimental	41.37	11.18	38	60	24	52.00	6.16	22	60	24

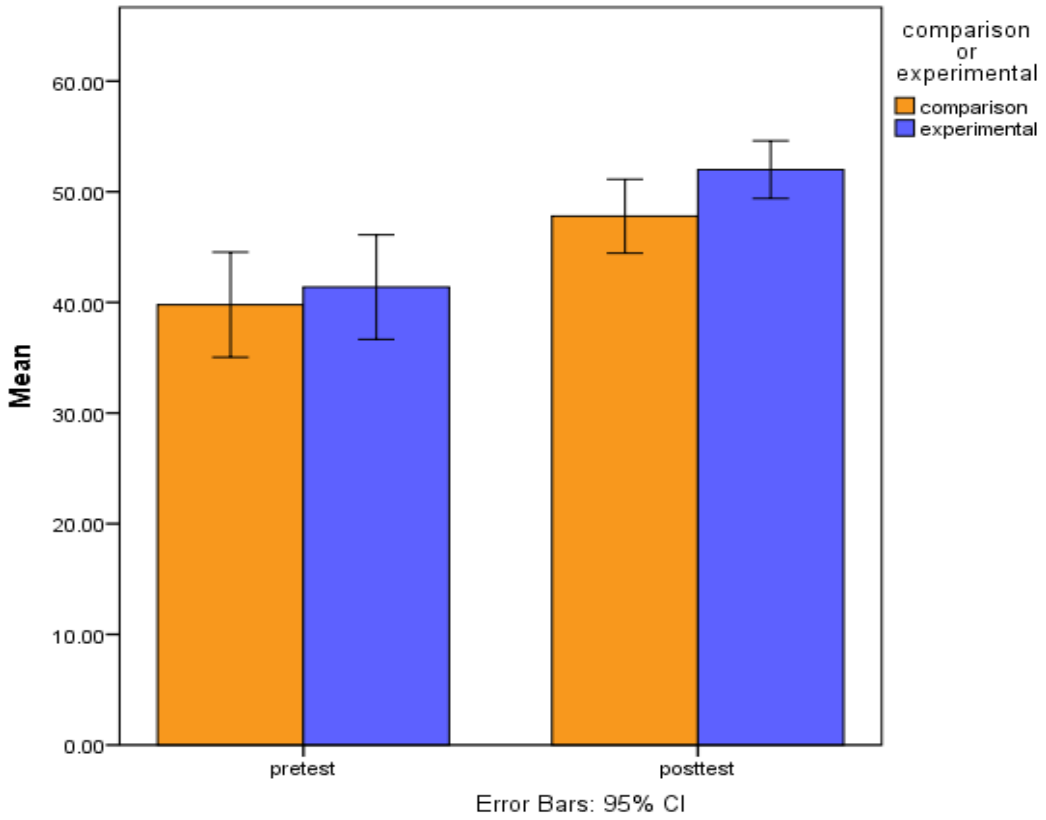


Figure 3. Descriptive graph for the listening comprehension tests

Therefore we can see that results suggest that the intervention experienced by the experimental group appeared to be effective. Statistical analysis using SPSS (version 24) was carried out.

The means of all four test scores (pretest / posttest for comparison / experimental groups) were tested for normality. See Appendix 8.15.1 for full table and histograms.

The non-significant Shapiro-Wilk scores (see Appendix 8.15.2) suggested that the means were normally distributed for three of the four sets of results, with the comparison group's pre-test showing some skew. There were no outliers. These results were confirmed by P-P plots, and z score calculations (see Appendix 8.15.3).

Kolmogorov-Smirnov tests were also performed in order to make an informed decision about the extent of the non-normality, and in this context, the scores for all four tests appeared normal: comparison pretest $D(19) = 0.154$, $p=0.2$; comparison posttest $D(19) = 0.152$, $p=0.2$; experimental pretest $D(24) = 0.106$, $p=0.2$; experimental posttest $D(24) = 0.167$, $p=0.083$.

Table 4. Tests of normality for the listening comprehension tests

Tests of Normality							
Comparison or Experimental		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Comparison	pretest	.154	19	.200*	.919	19	.108
	posttest	.152	19	.200*	.967	19	.722
Experimental	pretest	.106	24	.200*	.964	24	.520
	posttest	.167	24	.083	.935	24	.123

*. This is a lower bound of the true significance.

4.1.2 Inferential statistics

The very slight difference in scores at Time 1 meant that in order to test the whether the intervention had been successful, an analysis of covariance (ANCOVA) was carried out. Using ANCOVA meant that it was possible to control for the slight difference in scores between the two groups at Time 1.

Preliminary assumptions had to be checked in order to ensure that the ANCOVA's results would be reliable. Firstly, it was important to check that the pretest scores of the intervention group and the control group were not significantly different, and in order to do this, an analysis of variance (ANOVA) was run (Appendix 8.15.4), in which it was found that there was indeed no statistically significant difference between the two groups at pretest ($p = 0.955$). Therefore the data passed this assumption.

Next, the assumption of homogeneity of regression was tested – that is, that for each independent variable, there was a linear relationship between the dependent variable and the covariate. SPSS output for this assumption can be found in Appendix 8.15.4. For the present data, the assumption was met ($p = 0.974$).

Meeting these two assumptions meant that an ANCOVA could be carried out at Time 2. In this test, the covariate was 'Time 1' and the independent variable was the 'group'. When the pretest was controlled for, it was found that the intervention group

displayed a statistically significant advantage over the comparison group, with a medium effect size: F (1, 41) 1.43, p = 0.02, partial $\eta^2 = 0.13$.

4.1.3 Summary of findings for RQ1

The ANCOVA test showed a significant difference between the comparison group and the experimental group at Time 2, with a medium effect size, and a 98% probability that this result was not down to chance.

4.2 RQ 2: Can the self-efficacy of grade 11 learners of French be improved by speech stream segmentation training?

4.2.1 Descriptive statistics for questions asked both at Time 1 and Time 2

A short questionnaire was administered to the experimental group only at Time 1 and Time 2. At Time 1, experimental group participants were asked to rate three statements against a seven-point Likert scale, and answer statement four with the option of listening, reading, speaking or writing. The four statements were:

1. I am no good at listening
2. Improvement in listening is within my control
3. Listening confidence level
4. My weakest skill is…

At Time 2 these questions were repeated, and another six were added, so that the following statements were given, with a similar seven-point scale, except for statement 4. See Appendices 8.5 and 8.6 for the questionnaire.

1. I am no good at listening
2. Improvement in listening is within my control
3. Listening confidence level
4. My weakest skill is…
5. The project improved my listening ability
6. The project made me feel more confident about listening
7. The project made me feel more confident about French more generally
8. The project changed how I felt about French lessons
9. I tried to use what I learned in my actual exam
10. The exam would have been even harder if it had not been for the project

A Cronbach's alpha test was run on the full questionnaire at Time 1 and Time 2 (Wagner 2015) in order to test the internal reliability of the questionnaire, that is, the extent to which it measures a single construct (here, self-efficacy). A score of between 0.7 and 0.8 is deemed acceptable; over 0.8 is good or excellent, and under 0.7 is

questionable, poor, or unacceptable. Reliability was found to be 0.752. For full statistical outputs, see Appendix 8.15.5.

Descriptive statistics for the questionnaire data at Time 1 and Time 2 are given in Table 5. Those questions which were asked at Time 1 and Time 2 are also illustrated graphically in Figures 4 and 5.

The statements given to experimental group participants at Time 1 and Time 2 required responses on a seven-point Likert Scale where 1 indicated 'strongly agree' and 7 indicated 'strongly disagree', with 4 indicating 'neither agree nor disagree'. In response to the statement 'I am no good at listening' (N = 24), the mean response moved from 2.33 (SD=1.37) to 2.83 (SD=1.24), indicating a perception of a slight improvement in listening skills. The mean score for the statement 'Improvement in listening is within my control' (N = 24) was 4.58 (SD=2.0) at Time 1 and 2.42 (SD=1.06), indicating a perception that participants feel that improvement in listening was more within their control by the end of the intervention.

Experimental group participants were also asked to rate their confidence level in listening on a seven-point scale, where 1 was 'extremely unconfident' and 7 was 'extremely confident'. Response to this item moved from a Time 1 mean score of 2.96 (N = 24, SD=1.12) to a Time 2 mean score of 4.33, (N = 24, SD=1.01). In the final question appearing both at Time 1 and Time 2, experimental group participants were asked to state which they felt was their weakest skill, choosing from listening, reading, writing or speaking. At Time 1, 13 of the 24 chose listening; this fell to nine out of 24 at Time 2.

Table 5. Questionnaire scores at Times 1 and 2

Statements 1 and 2: 1=definitely agree / 7 = definitely disagree
Statement 3 1=extremely unconfident / 7 = extremely confident

	Time 1 (N = 24)					Time 2 (N = 24)				
Statement	Mean	SD	Range	Max	n	Mean	SD	Range	Max	n
1. I am no good at listening	2.33	1.37	4	5	24	2.83	1.24	4	5	24
2. Improvement at listening is within my control	4.58	2.00	6	7	24	2.42	1.06	4	5	24
3. Listening confidence level	2.96	1.12	5	6	24	4.33	1.01	4	7	24

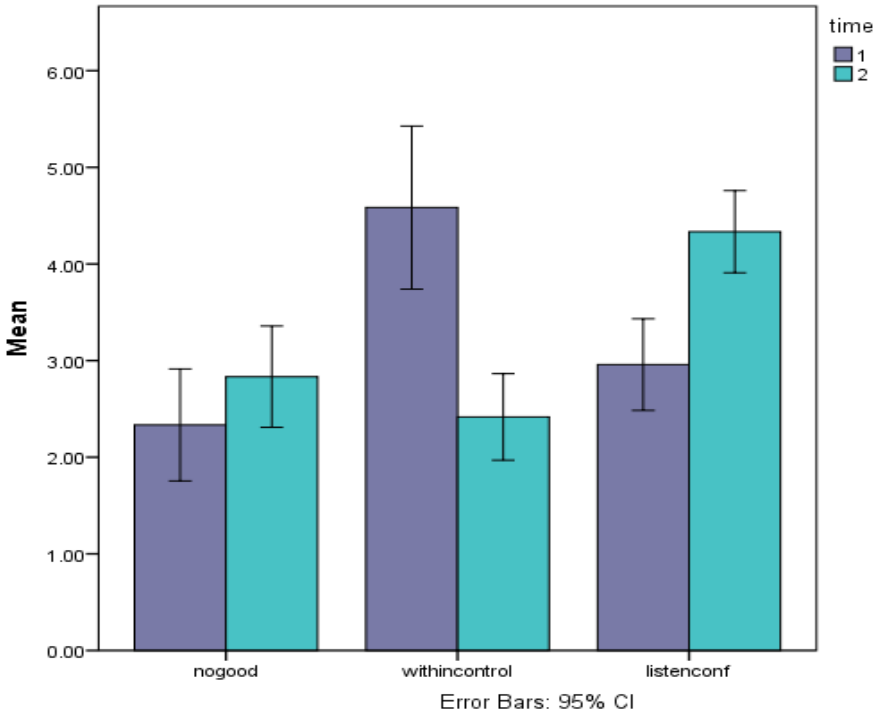
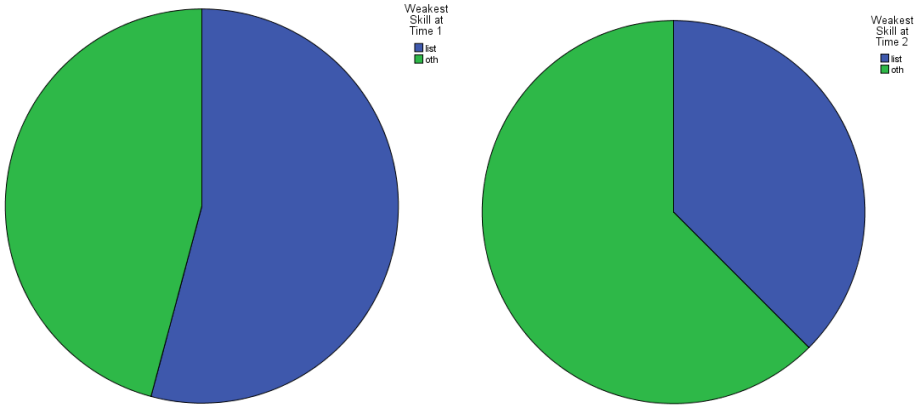


Figure 4. Questionnaire scores at Time 1 and Time 2



Time 1: Listening = 13/24; Time 2: Listening = 9/24

Figure 5. Answers to the question 'which is your weakest skill' at Time 1 and Time 2

Three of the questionnaire points which appeared at both Time 1 and Time 2 elicited numerical results on a scale; the Time 1 and Time 2 responses were then compared.

The means of all six test scores (Time 1 and Time 2 for the three questions cited above) were tested for normality. See Appendix 8.13.6 for full table and histograms. The non-significant Shapiro-Wilk and Kolmogorov-Smirnov scores showed that the means were not normally distributed for any of the six groups.

Table 6.Tests of normality for the questionnaire statements given at Time 1 and Time 2

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Time 1	'I am no good at listening'	.263	24	.000	.830	24	.001
	'Improvement at listening is within my control'	.177	24	.049	.892	24	.014
	Listening confidence level	.235	24	.001	.891	24	.014
Time 2	'I am no good at listening'	.166	24	.086	.917	24	.050
	'Improvement at listening is within my control'	.278	24	.000	.881	24	.009
	Listening confidence level	.213	24	.006	.881	24	.009
	a. Lilliefors Significance Correction						

None of the scores for any of the six tests appeared normal: Time 1 'I am no good at listening' D(24) = 0.263, p=0.000; Time 2 'no good' D(2) = 0.166, p=0.086; Time 1 'Improvement in listening is within my control' D(24) = 0.177, p=0.49; Time 2 D(24) = 0.278, p=0.000; Time 1 'listening confidence level' D(24) = 0.235, p=0.01; Time 2 D(24) = 0.213, p=0.06. However, z scores were also calculated for these data – see Appendix 8.13.7 for calculations. None of these z scores are greater than 1.96, so from this perspective, the data could be construed as normal.

4.2.2 Inferential statistics for questions asked at Time 1 and Time 2

Given the confusion about normality in these data, to be on the safe side, both matched pairs t-tests, and Wilcoxon signed rank tests were run, in order to ascertain whether the difference in scores at Time 1 and Time 2 were significant.

Based on the assumption that the z scores of the two posttests suggest normal distribution, dependent samples t-tests were run on the scores at Time 1 and Time 2, the results of which are given in Table 7, below.

Table 7. T-test results for statements 1-3

Statement	CI	t(23)	p	r
1. I am no good at listening	[-1.37, 0.37]	-1.19	0.25	0.49
2. Improvement at listening is within my control	[1.42, 2.91]	6.03	0.00	0.49
3. Listening confidence level	[-1.94, -0.81]	-5.01	0.00	0.49

The statement 'I am no good at listening' at Time 1 (M = 2.33, SE = 0.28), and Time 2 (M = 2.83, SE = 0.25) did not produce a significant difference. This is contrasted both with the statement 'improvement in listening is beyond my control' at Time 1 (M = 4.58, SE = 0.41), and Time 2 (M =2.42, SE = 0.22), where a significant difference was found, and the listening confidence level rating at Time 1 (M = 2.96, SE = 0.23), and Time 2 (M = 4.33, SE = 0.21) where a significant difference was also found. A post-hoc comparison procedure such as Bonferroni correction can sometimes be needed at this juncture to ensure that a Type 1 Error has not been made when a series of t-tests have been run, although with only three tests, this is not necessary (Field, A., 2013).

Analysing the data in this way reflects the findings of the Wilcoxon signed rank scores (see Table 8), which also shows no significant difference between Time 1 and Time 2 for the statement 'I am no good at listening', but significant improvements noted for the statements 'Improvement at listening is beyond my control' and the 'listening confidence level'.

Table 8. Wilcoxon signed rank results for statements 1-3

Statement	Mdn	T	p	r
1. I am no good at listening		148	2.53	0.16
2. Improvement at listening is within my control		3	0.00	0.54
3. Listening confidence level		249.5	0.01	0.50

To compare the change in experimental group participants' perceptions of their weakest skills at Time 1 and Time 2, a chi square test was run, as both variables were

nominal. First the data, in which participants had been asked to name their weakest skill (from listening, reading, writing or speaking), were transformed to identify either 'listening' or 'other', as the aim of this question was to understand whether *listening* was still felt to be the weakest skill, rather than to find out which one was the weakest skill. There was not found to be a significant association between participants' perception of weakest skill from Time 1 to Time 2: χ^2 (1) = 3.23, p = 0.72 (Appendix 8.13.8).

4.2.3 Summary of the findings of the self-efficacy questionnaire asked at both Time 1 and Time 2

There was no significant difference between the choice of 'weakest skill' between Time 1 and Time 2, nor was a significant difference found in the statement 'I am no good at listening' between Time 1 and Time 2. However, there was a significant increase in the experimental group participants' reported confidence levels between Time 1 and Time 2. There was also a significant difference in the response to the statement 'Listening improvement is within my control', with these participants stating that listening improvement was more within their control at Time 2.

4.2.4 Descriptive statistics for the questions asked at Time 2 only

The remainder of questions asked at Time 2 were also scored on a seven-point Likert scale where 1 indicated 'definitely agree' and 7 indicated 'definitely disagree'. Descriptive statistics are given in Table 9.

As can be seen from Table 9, all statements met with a high level of agreement. The highest level of agreement was given in response to the statement 'the project improved my listening ability'. The project was widely accepted to have been very useful and been instrumental in increasing confidence levels. However, despite its usefulness and the increase in confidence, the scores for 'I tried to use what I learned in my exam' and 'the exam would have been harder had it not been for the project' tended relatively closer to the middle of the Likert scale. The statement which met with the least agreement was 'The project changed how I felt about French lessons', although the mean scores for even this statement resulted in a slight agreement.

Table 9. Questionnaire scores for the statements given at Time 2 only

Statement	Mean	SD	Range	Max	n
The project was useful	2.16	1.36	5	6	24
The project improved my listening ability	1.96	0.90	3	4	24
The project made me feel more confident about listening	2.00	1.06	3	4	24
The project made me feel more confident about French more generally	2.21	0.88	3	4	24
The project changed how I felt about French lessons	2.92	1.10	3	4	24
I tried to use what I learned in my exam	2.38	1.13	4	5	24
The exam would have been harder had it not been for the project	2.48	1.56	5	6	24

1=definitely agree / 7 = definitely disagree

4.3 RQ3: What factors are reported by the participants as being crucial to the success or failure of the intervention?

Ten of the experimental group participants were interviewed (see section 3.3.1.3 for selection process). The data collected from these interviews was analysed qualitatively, using emergent codes (Strauss & Corbin, 1990). For the questions asked in the interview see Appendix 8.7. For a sample transcript of an interview, see Appendix 8.8. Section 3.4 in the Methodology chapter explained the way in which the researcher arrived at these codes, with Figure 2 in the same section illustrating the categories and sub-categories. Appendix 8.9 gives additional background information about the interviewees.

4.3.1 What makes listening hard

When discussing the experience and perceived success of the intervention, many interviewees reflected on the contrast between their experiences of French listening before and after the intervention, identifying difficulties they had had when listening. For this reason, a key coding category became ‘what makes listening hard’. However, it should be noted that all these interviews took place after the intervention had ended and that the interviewees are speaking with the benefit of hindsight.

4.3.1.1 The words combine

All the participants, from the least to most proficient, spoke of an inability to segment the speech stream to their satisfaction before the intervention, with a range of vivid imagery to illustrate this, such as '*a big mush*' (student S), '*a big monster*' (student Y), '*just blublublublu*' (student R). Student N summed this up as:

> '*I couldn't distinguish words – well, I could, but it wasn't accurate. So I could kind-of get the gist of what they were saying but I couldn't really separate the words very easily,'*

and student Y reported,

> *'You would hear a couple of key words and then you would try to infer what the whole thing was about which didn't really get you very far.'*

Even students D, and E, the most proficient listeners in the experimental group at Time 1 and Time 2, found speech stream segmentation a problem, with D referring to, '*just a big chunk of French coming my way*,', and E stating, '*I found it difficult to differentiate when words started and stopped.*'

4.3.1.2 Speed of delivery

The speed of delivery of French was also cited as a problem by five of the interviewees from a range of abilities. Student D said,

> '*It wasn't that I didn't understand the words they were saying, it's that it took a while* [to form a representation of the meaning].'

Student L highlighted the way in which speed, combined with poor speech stream segmentation skills, creates processing problems:

> '*You're trying to pick out what they're saying. But because they talk so quick, you're trying to go back over what they've just said; but now you're trying to listen to what's being said now. So it's hard to unpick'*.

4.3.1.3 Panic and loss of concentration

These problems – the speed of delivery and the inability to segment – would often cause both a loss of concentration and a panic in the listener:

> '*I found myself [zoning out] a bit because it's so fast*' (Student B).

Student R, who scored highly at Time 1 and Time 2, discussed a loss of concentration due to her inability to segment,

> Researcher: *And are there any feelings involved with that zoning out?*

R: *Panic*.

Researcher: *And then you zone back in and you're not quite sure where you are?*

R: *Yes, and then I think, 'Oh my goodness,' and then it just makes it worse*.

And later:

'I often found that if I didn't understand a word or a phrase, I'd go into a panic, try to work out what it would mean, then miss everything else.'

However, other comments regarding panic and loss of concentration were made by those whose scores at Time 1 and Time 2 were in the middle or towards the bottom of the cohort, such as student L, who stated that she would panic the moment the teacher so much as said that a listening task was coming up. Student M also made a connection between her inability to segment the speech stream and a loss of concentration, stating,

'*Because I wasn't getting some of the words I was just kind of lost. I lost concentration by the end of it. It was just kind of... gone.*'

4.3.1.4 Assumption of failure

Loss of concentration, in particular, appeared also to be connected with a sense of disempowerment when doing listening comprehension. Many participants linked this disempowerment to giving answers which they knew were wrong. Student N's comments sum this up:

'*During it* [the mock exam] *I felt like I was winging it a little bit. Just, kind of, I'd get a bit of it, and then lose concentration and think, "oh, I'll put that, because that's what I heard," not actually thinking what it meant.'*

Student M's response was similar: '*the big wordy question... I just make it up.'*

However, an assumption of failure was not simply linked with a loss of concentration. Other factors relating to an assumption of failure included a lack of motivation or an assumed lack of proficiency. All but one of the seven middle and least proficient listeners made comments which were put in the 'assumption of failure' sub-category. Some, such as student B, identified a lack of motivation due to a perceived lack of proficiency:

'*I really struggled, my motivation was low, and I had the attitude that if I didn't understand there was no point really.'*

Student Y also commented,

> '*I just accepted that I wasn't going to do very well and I didn't want to do it any more*.'

Student N's feelings were similar:

> '*I didn't get it, so that made me not want to try to figure it out. I just thought – either I'll get it or I won't. I wasn't really worried.'*

4.3.1.5 Lack of context

The manner in which the material is delivered in the GCSE listening exam was also identified by interviewees as a factor which made listening difficult. One interviewee, student Y, suggested that the style of speech being provided was not natural, describing it as '*some French people reading things'*. Two others identified the lack paralinguistic cues in the GCSE listening context. Others discussed the 'tricks' inherent in the GCSE examining style, in particular with regard to correctly identifying positive and negative statements and opinions.

4.3.2 Teaching and learning as a result of the intervention

Understanding the listening problems experienced by the interviewees enables us to contextualise the factors identified by them that contributed to the success of the intervention. These were split into four sub-categories: specific segmentation skills, transcript use when listening, attention to detail more broadly, and growing automatisation of aural understanding.

4.3.2.1 Segmentation skills

Student D sums up her experience of the intervention in these words:

> *'Back then, it was like a big chunk of French coming my way and it was quite a stress to decode it. But I'm now I'm just kind of like, "I can separate it, I can hear the sentences." I think the stuff on listening to the intonation and the chunks – that was really good because now I can take a step back and hear phrases, and understand meaning from that.'*

Student M commented,

> *'I learned how to break up the words I'm hearing, so they're not all one big giant word, they're separate words.'*

Student L went one step further, saying, in contrast with her comment in Section 4.3.1.2,

> *'I'm understanding it a little bit more now. I've actually realised that, because you're unpicking the words, you're not just sitting there thinking, "They're talking really quick*."'

Much of the discussion about segmentation work focussed on the identification of liaisons, which had proven to be an impediment to comprehension before the intervention. Eight of the interviewees from all proficiency levels declared the liaison work especially pertinent,

> '*because it allowed you to break down words […] to actually understand it and see what it's saying instead of that it's just a load of words*.' (student L)

Other adjectives used to describe the liaison work included '*useful'* (student D), '*the most important'* (student S), and '*massively helpful'* (student Y).

4.3.2.2 Transcript use

The work in which participants listened and read at the same time was also deemed particularly helpful. Student N made the connection with liaisons here, stating:

> '*When there was a liaison*, [reading] *helped me visualise it because it's visualising what I hear, and then separating that – that was a really good one*.'

Student E, whose pretest scores were very high, found that the task of correcting the errors in faulty transcripts had a variety of advantages:

> '*I liked the ones where we had to correct the things that weren't right, so we were having to follow what they were saying in the text and be able to recognise when they were saying the words differently... I think it's because I sometimes found it difficult to differentiate when words started and stopped, and some of the words were so similar between what was written in the text and what was actually right, you had to really focus on working it out.*'

However, student Y, who had very low pretest scores, also benefitted from the transcript activities, stating,

> '*This helped me because... when I hear French, I kind of imagine the words in my head because that just helps me process what I'm doing. And hearing the*

listening and then reading at the same time, it got you to listen more, and notice what they were saying.'

4.3.2.3 Attention to detail

Interviewees of all abilities often also mentioned attention to detail. Six interviewees reported that, as their ability to segment the speech stream increased, so did their ability to pay attention to more details in the tracks they were listening to. For some, this ability to hear more detail (and confidence that they would hear more detail), removed the urgency to cling onto individual words that they had been able to recognise and understand, and allowed them to experience the track as a whole. For example, proficient listener student R said,

'Before, I felt like I was picking a phrase here and there which didn't really help me to understand the question. But now I feel I will be able to understand most of it, because, instead of focussing on a tiny little bit, I can focus on the whole thing.'

However, this change was not limited to the most proficient: student N also said,

'*I've learnt from this not to focus on every single word.'*

4.3.2.4 Automatisation

A growing automatisation of understanding was touched upon by the most proficient listeners, although not exclusively. D said,

'It's got to the point where I understand it. Like, I know what they're saying, and it's that thing in your head... and there's this wall that you get past, where it's between hearing it and having to stop and think and translate it, and just hearing it and knowing the meaning.'

Y, who made 28 points' progress from pre-test to post-test, said,

'I just know that I know them. Just on auto-pilot.'

4.3.3 Positive feelings about the intervention

Positive feelings about the intervention were split into three sub-categories: a sense of improvement in listening skills, a change of mindset when approaching listening tasks, and no more panic about listening.

4.3.3.1 Sense of improvement

Seventeen comments within the data were identified which specifically mentioned interviewees' sense of improvement in listening skills as a direct result of the intervention. Student B's comment sums them up:

> *'I think it's been awesome, to be honest. Genuinely. Because from where everyone has been, to where they are now, it's obviously been so effective. I never thought I'd get past maybe 15 out of 40 in one of these listenings... and then I got 29 in the test we did recently and I was absolutely buzzing about that.*'

4.3.3.2 Change of mindset

As the practical usefulness of the intervention dawned on her, Student Y directly linked her improvement to an increased sense of calm during listening work:

> '*I felt like, OK, this knowledge is all good, but it's not going to help me. Then I realised how much of it I could actually apply... 'cos I sat there and did it. And I didn't panic.'*

There were 26 comments in the data which were coded as 'change of mindset', of which eight, across the range of proficiency, directly mentioned an increase in confidence levels. Others discussed no longer being prepared to give up: '*Keep going,*' (student S); *'rather than just, "oh that'll do," I'm really trying to listen out,'* (student N); instead, she talked of a newfound determination to succeed,

> *'[before] I didn't get it, so that made me not want to try to figure it out. But now I've been taught these different skills and it's helped me want to improve,'*

Similarly student Y said,

> *'I used to hear the first question, not quite get it, and think, "I can't do this." But now I've got strategies and things that I know I can do.'*

And student B reported,

> *'Instead of going, "oh, the test is over now," it's, "let's check through my answers, check I haven't done anything stupid." I know there's a repeat of the question coming and I'm more positive to this situation.'*

4.3.3.3 No more panic

Finally, four comments were counted in which an increased sense of empowerment was identified, replacing a sense of panic with student R stating, '*I'm more in control,'* student Y saying, '*now I think I can pass,'* and student M saying, *'I feel like I can actually complete all the questions in time.'*

4.3.4 Summary of qualitative findings

The interviewees were overwhelmingly positive about the intervention, and their comments in many cases reflected the quantitative findings that listening comprehension and self-efficacy improved. The three categories summed up how progress was made as a result of the intervention, and that interviewees found that their ability to segment the speech stream improved. This had a knock-on effect both on their ability to succeed at GCSE-style listening comprehension exercises, and on their confidence when approaching such tasks.

5 Discussion

This chapter will discuss the findings, attempting to contextualise them within similar bodies of work, and discussing the extent to which the factors cited by the participants might align with other research. It will first briefly reiterate the findings, then return to the research questions for deeper analysis. Given that RQ3 discusses the factors cited by the participants as being crucial for the success of the intervention, RQ1 will be discussed together with pertinent elements of RQ3, and this process will be repeated for RQ2.

5.1 Review of the findings

The data have been analysed and presented within the cognitive framework of listening presented by Field (2013) (Figure 1). It is helpful to discuss the findings through this lens as it can highlight where and how problems occur and therefore lead us to solutions.

RQ1 asked whether an intervention which aimed to aid learners' ability to segment the French speech stream could have an effect on listening comprehension scores. The intervention was found to be successful: a significant difference was found ($p = 0.02$), between the posttest results of the experimental group and the comparison group, with the experimental group's scores on listening comprehension test significantly higher. There was a medium-sized effect (partial $\eta^2 = 0.13$).

RQ2 examined whether the intervention would impact on the experimental group participants' self-efficacy levels. Here, the findings were less clear-cut. At Time 1 and Time 2 participants were asked to comment on their weakest skill (listening, reading, writing or speaking), and to rate themselves on a seven-point Likert scale on the statements 'I am no good at listening', 'Listening improvement is beyond my control' and a listening confidence rating. All four questions resulted in an improvement in the experimental group participants' perception of listening, but only confidence levels and sense of control improved to statistically significant proportions.

RQ3 used qualitative methods to investigate the experimental group participants' experience of the intervention, and the extent to which they could account for changes in their listening comprehension scores and their self-efficacy scores. Ten participants were interviewed and the feedback was overwhelmingly positive, with interviewees

reporting that they were now better able to hear individual words within the speech stream, and that they felt better about listening in French.

5.2 Improvement in listening comprehension

To the best of my knowledge, there is no other research to suggest that an intervention as specific as speech stream segmentation instruction could have a direct result on listening comprehension scores. However, this section will endeavour to draw parallels with other research into listening comprehension as well as investigating the elements of RQ3 which relate to improvement in listening *per se*.

The findings of the present study suggest that although the participants were at lower intermediate level in French, having studied French in secondary school for four and a half years (with some having also done some basic French at primary school), speech stream segmentation was still posing challenges to their listening, even for those who presented with high proficiency within the group.

5.2.1 Accessing vocabulary knowledge

It is possible to argue that the positive results for this part of the present study were obtained because, by actually being able to identify the individual words within the speech stream, participants could better activate their vocabulary knowledge while listening (Graham *et al*, 2010; Goh, 2000). In other words, better access to the 'phonological knowledge' element of the listening framework led to easier use of the processes higher up the framework.

This activation of vocabulary knowledge could have in part been due to an increase in the ability to visualise the orthographic form of what learners were hearing (Field, 2004) – several of the interviewees said as much. Looked at from this angle, findings are consistent with those where comprehension is measured after exposure to a text in several modalities (e.g. Guichon & McLornan, 2008), and after the watching of videos with same-language sub-titles. For example listening while reading subtitles appears to improve listening proficiency (Chang & Read, 2006; Chang, 20009; Mitterer & McQueen, 2009). Concern was expressed by Winke *et al* (2010) that listeners might use such captions as a 'crutch', but, to take this analogy further, in the present study, the crutch was necessary and welcome while the participants overcame their disability. It gave them confidence to undertake challenges despite their

disability and strengthened them enough so that they needed the crutch less. Without the use of the crutch, less would have been achieved and less progress would have been made; this is consistent with the findings of Hummel and French (2010) who conclude that text-supported oral input appears to enhance L2 learning. However, the present study goes beyond the findings of the research cited in this paragraph, as in the present study, transcript use was not permitted in the posttest, suggesting therefore that transcript use while learning to listen can impact on future listening comprehension.

Work on liaisons was also mentioned very frequently by the interviewees in the present study. Kennedy, Guénette, Murphy and Allard (2015), however, in their research on the role of pronunciation in comprehension, found that liaisons were the least frequently cited issue to impede comprehension. This discrepancy in findings might be due to the fact that the participants in the present study were significantly less experienced learners of French than those in Kennedy *et al* (2015). It is feasible that liaison work in the present study enabled experimental group participants to access their vocabulary knowledge as it provided clues to the edges of words, which previously they lacked: it provided a segmentation cue as per the 'lexical knowledge' element of the listening framework in Figure 1. This is consistent with Carroll's (2004) finding. Nonetheless, Carroll suggests that problems associated with segmentation are grammatical rather than perceptual, and here contrast must be drawn with the work of Al-Jasser (2008), where the teaching of English phonotactics – a perceptual rather than grammatical approach – was also found to significantly aid segmentation skills. Kennedy *et al* (2015) also infer that the comprehension problems experienced by their participants are perceptual, citing in particular segmentation issues when several multi-syllabic words occur in succession. There was no suggestion among the interviewees in the present study that segmentation problems were anything other than perceptual.

5.2.2 Working memory

When a listener is struggling to form a mental representation of what is being heard – because phonological, lexical or syntactic knowledge is inadequate – Goh (2000) hypothesises that this makes excessive demands on working memory. The message is only partially understood and what *is* understood is quickly forgotten because

working memory is overloaded – the struggle causes working memory to attempt too much. It is possible that due to the intervention in the present study, experimental group listeners were better able to rapidly form a mental representation of what was being heard. As a result, content was remembered rather than quickly forgotten, and working memory was therefore better able to turn itself to other demands, such as the comprehension questions.

5.2.3 Activating higher-level processing

It appeared that when experimental group participants were better able to segment speech – and therefore understand better what they had heard – they were freed up to implement their own strategies to deal with the remaining challenges imposed by listening comprehension.

Although the intervention was very clearly focussed at word level and sometimes even syllable level, several interviewees claimed that it changed their listening practice in that they no longer tried to hone in on individual words and instead began to listen to the track as a whole. On the face of it, this might appear to be a counter-intuitive finding; indeed, previous literature (e.g. Vandergrift & Goh, 2012; Yeldham, 2016b) has tended towards suggesting less focus on interventions involving bottom-up processes, such as the present study, precisely because of the risks that listeners will become overly concentrated on individual words, to the detriment of more global meaning.

However, it is possible that the participants in the experimental group were able to engage with the global meaning of listening tracks precisely *because of* their training specifically concentrating on individual words. Their decoding skills had become more rapid and accurate (Field, 2013; Tsui & Fullilove, 1993). This allowed them to 'hear' the bigger picture, and as a result, quite instinctively implement self-initiated higher-level processing strategies which previously would have been beyond their reach.

Nonetheless, Goh (2000:70) states that 'listeners who struggle with low-level perception problems probably do not engage sufficiently with top-down processing.' In other words, she suggests that listeners such as those in the present study, with lower-level perception problems, should simply attempt more higher-level processing,

using contexts and activating schemata in order to build a discourse representation, and implies that this can compensate for shortcomings in the lower-level processes. The findings of the present study could be interpreted to suggest that Goh's suggestion is actually not cognitively possible: because listeners were struggling to segment the speech stream (therefore struggling with lower-level perception problems), their higher-level processing and strategy use was already working overtime in order to glean any sense they could from what they were hearing – this was what must have given both the groups adequate scores at pretest, and the comparison group an improvement at posttest. It was the *addition* of an improvement in lower-level processes that appeared to make the difference in listening comprehension among the intervention group in the present study.

5.2.4 Summary for the discussion of RQ1+3

Therefore, a possible explanation for the results of RQ1, consistent both with previous literature and with the element of RQ3 which relates to listening comprehension, can be summarised in graphical form as in Figure 5:

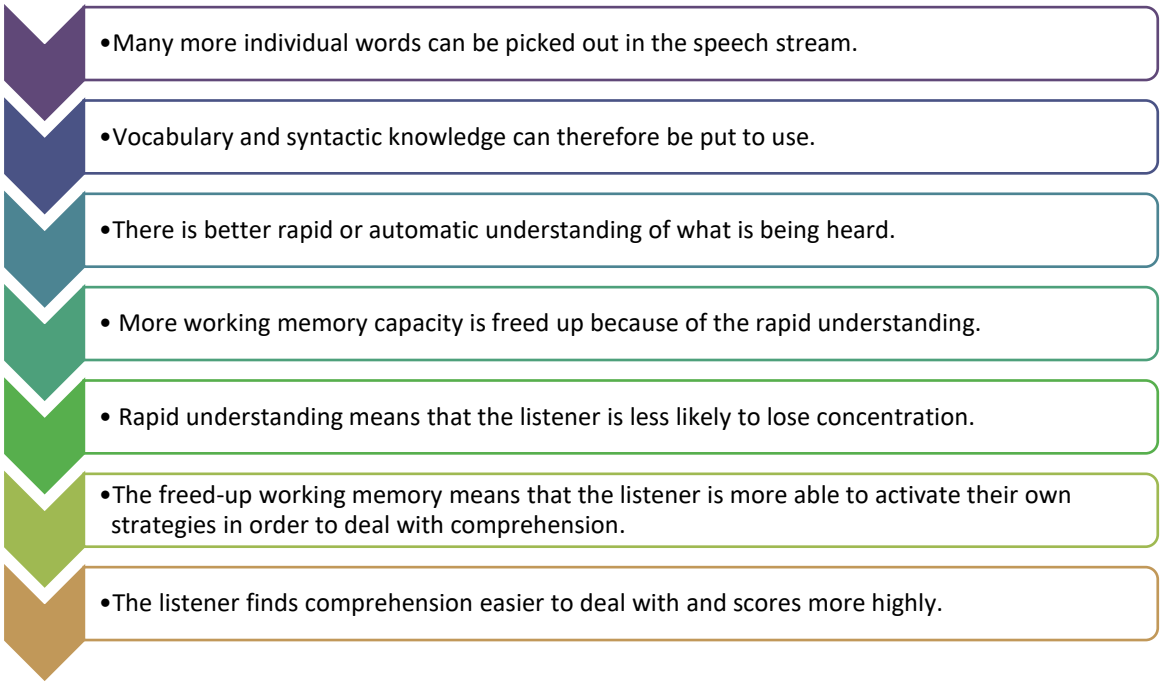


Figure 6. The effect of the intervention on listening comprehension

We can say, then, that the present study reinforces the finding of Tsui and Fullilove (1998) which suggested that the role of lower-level processes in listening is generally underestimated. Its findings are inconsistent with Goh's assertion that 'perception

practice alone is not sufficient for preparing learners to deal with listening for meaning' (2000:71), although perhaps the word 'alone' is crucial here, as some participants suggested that the intervention enabled them to use self-initiated strategies which would not have been available to them without the additional comprehension brought about by improved speech stream segmentation.

5.2.5 Practice effect

Results for RQ1 cannot be attributed to test effects or practice effects for two reasons. Firstly both comparison and intervention group received the same amount of listening training: only the content of the listening training differed. Secondly, the nature of the training received by the intervention group bore no resemblance to the nature of the tests given in either the pretest or the posttest. (And by contrast, the comparison group's teaching involved extensive practice in types of questions given in the pretest and posttest, so were 'taught to the test' in a way that the intervention group were not.)

5.3 Improvement in self-efficacy

5.3.1 Mismatched findings

As discussed above, improvements in self-efficacy as a result of the intervention are less clear-cut than those in listening comprehension. The confidence rating of those in the experimental group showed a statistically significant improvement from Time 1 to Time 2, as did their sense that improvement in listening was within their control.

Although fewer participants claimed that listening was their weakest skill, this was not to a statistically significant degree. Similarly, although there was a positive change from Time 1 to Time 2 in response to the statement, 'I am no good at listening', this, too, was not statistically significant; it is possible that improvements shown in the descriptive statistics with these two questions is down to chance.

Therefore, there is an apparent mismatch between a statistically significant improvement in confidence level and an insignificant improvement in response to the statement 'I am no good at listening'. This is worthy of some discussion. It is possible that this finding hints at the fact that a learner can perceive that they have made progress can be in a skill or subject, while still self-identifying as not very good at it; in other words, they are just less bad at it than they were before. Those in the experimental group might have sensed that becoming 'good' at listening is a much

longer process than the intervention allowed for, and although things had begun to change, they had not yet changed enough for a difference to be significant. It is also possible, in hindsight, that this question could have been worded more clearly – 'good at listening' is a subjective term which could have been interpreted differently by each participant. It is a question which attempts to investigate the broader construct of 'self-concept', in comparison to the statistically significant ones which speak more to concepts of self-efficacy, which is defined as task-specific (Graham, 2011).

5.3.2 Boosted confidence

Where the findings were statistically significant, positive results might have been obtained because a virtuous circle was set up due to better understanding of what experimental group participants were hearing. Bandura (1995) discusses the importance of self-efficacy in maintaining motivation in the face of difficulty; it appears that this is what happened here: experimental group participants no longer felt obliged to '*wing it*', in the words of student N, and instead could engage in listening tasks with confidence, achieve more highly, which in turn would engender further confidence in future tasks.

This possibility is consistent with Graham's (2011) assertions that self-efficacy and good listening go hand-in-hand: in the case of the present study, the increased ability to segment the speech stream, and therefore understand better what was being heard, might have set in train a gradual increase in self-efficacy, which then began a virtuous circle where there was more engagement with listening tracks, more success, *et cetera*. Siegel and Siegel (2013) had similar findings. The intervention study undertaken by Graham and Macaro (2008), which included speech stream segmentation instruction within its cluster of strategies taught, also resulted in improved proficiency and self-efficacy.

Although the present study did not attempt to correlate listening proficiency and listening self-efficacy, both improved as a result of the intervention, and in this sense the findings are consistent with those found by Mills *et al* (2006).

5.3.3 Anxiety and working memory

The word 'panic' appeared with great frequency in the interviews, and the qualitative finding that levels of 'panic' appeared to diminish at the end of the study is relevant.

Foreign language listening anxiety affects listening performance (Zhang, 2013) and the qualitative findings of the present study appear to bear this out.

It is possible that working memory plays a role here: that anxiety or panic is a moderating variable on working memory capacity (Bandura, 1993, 1997; Baddeley, 2012), diminishing it, and therefore also diminishing a listener's ability to process adequately what they have heard. As self-efficacy builds, anxiety diminishes (*ibid*), and working memory is less compromised and can perform better, and the vicious circle of 'panic → lack of understanding → further panic' is broken.

It is also possible that the intervention's emphasis on the *process* of listening, rather than the *product* of listening comprehension (as defined by test papers) played a role in lessening experimental group participants' anxiety, and is consistent with Xu's (2011) work. With the focus on the process in the present study, the stress involved with 'getting the right answer' would have been removed, and by doing this over a period of fifteen lessons, participants had the chance to begin reset their affective responses to listening. This is reflected in the qualitative findings of five interviewees and has some parallels with Arnold's (2000) findings that, where candidates worry during listening exams, their attention is deflected from the product. Similarly, the findings of the present study resonate with Graham's (2007) assertion that the ways in which listening is taught might alter learner's views of themselves.

5.3.4 Summary for the discussion of results relating to RQ2+3

Therefore, a possible explanation for the results of RQ2, consistent both with previous literature and with the element of RQ3 which relates to listening self-efficacy, can be summarised with a virtuous circle as illustrated in Figure 7:

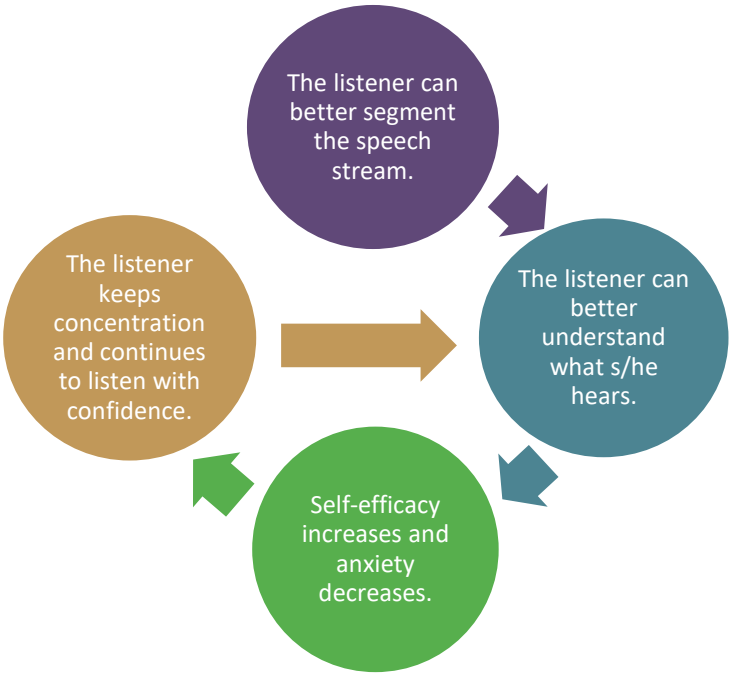


Figure 7. The effect of the intervention on listening self-efficacy

5.4 Should the present study be situated within the area of Strategy Research?

It is not immediately obvious whether the present study could be situated within the area of strategy research. While it draws on the strategy literature in places, and in particular the work of Graham and Macaro (2008) with regard to listening strategy, what was taught in this intervention was not strategy *per se*, but listening skills and knowledge about the French language. The intervention directed the experimental group participants' awareness to the very specific issues of segmenting the French speech stream and enhanced their phonological awareness through work on liaisons, near-homophones and the grapheme-phoneme connection. That said, it could also be argued that such elements of the intervention as teaching the participants to listen carefully to intonation, visualising the orthographic forms of what they heard, and exploiting liaisons to cue the beginnings and ends of words were also bottom-up strategies.

In order to activate a strategy, a language user first needs knowledge (Macaro, 2006), and with regard to the present study, it could be argued that providing the participants with this knowledge facilitated the deployment of strategies; indeed this is what participant R stated in her interview:

'I often found that if I didn't understand a word or a phrase, I'd go into panic, try and work out what it would mean, then miss everything else. But now, if I miss something, just ignore it, and continue. Because otherwise you're just wasting time trying to work out what something means that may be completely irrelevant.'

And,

'So before, I felt like I was picking a phrase here and there which didn't really help me to answer the question, but now I feel I will be able to understand most of it because instead of focussing on a tiny little bit, I can focus on the whole thing.'

R's comments illustrate the fact that once knowledge about the language has been acquired, a strategy or cluster of strategies can be deployed: as her language processing became more automatic, she was able to consciously activate strategies such as 'ignore it and continue' and 'searching for global meaning'. (Macaro, 2006; Oxford 2011).

5.5 Growing automatisation: an additional finding

The present study did not test participants' level of automatisation at Time 1 or Time 2: this would have been very difficult to do. However, in hindsight, not attempting it might have been a mistake, as, in their interviews, several participants alluded to a growing automatisation of listening. Given the relatively short length of the intervention – fifteen fifteen-minute sessions over a period of about eight weeks – compared with the extended length of time necessary for automatisation of language skills (DeKeyser, 1997), it seems unlikely that the intervention enabled the participants to achieve automatisation of understanding. However, it is possible that the various activities undertaken during the intervention facilitated the process of automatisation to some degree. As cited in section 2.3.2, Vandergrift and Goh (2012) discourage encouraging listeners to focus on individual words for fear of fostering a translation approach to listening, yet the present study suggests that a translation approach did not happen: seven of the interviewees remarked on an increased sense of being able to '*just hear it and know the meaning*' (Participant D).

5.6 Limitations

The present study concentrated on lower intermediate learners of French. As set out in the literature review, the prosody of French is very specific and poses particular problems to the English-native listener. As a result, the findings of the present study should not be extended to learners of other languages or indeed to speakers of languages other languages who are learning French. However, more research is now needed not only to replicate the present study, but also to partially replicate it, changing the language combinations and the proficiency levels of the learners.

This was a small-scale school-based study with only 45 participants in total, of which 24 were in the experimental group. By necessity the experimental and comparison groups were both pre-formed. The study's generalisability and transferability is inevitably limited by these small numbers and by the fact that the groups were pre-formed and not randomised. Those in the experimental group knew they were part of an intervention.

Longer and more in-depth questionnaires might have been preferable, in order to probe the mechanisms behind the success (or lack of it) of the intervention.

Before embarking on the experiment, it might also have been prudent to check the participants for hearing impairments which might have interfered with their listening ability in class. The teacher-researcher had information about any special educational needs which the participants might have had, and no hearing impairments were registered. However, it is always possible that some undiagnosed hearing impairments were present in one group or the other, and that this could have confounded the results.

The ceiling effect in the tests is a further limitation: in both groups, there were students who achieved very highly in the pretest and therefore it was going to be difficult to demonstrate any significant progress in the posttest. However, the alternative to this would have been to use a test-type with which the participants were not familiar, or to have created an original test for the study, which would have risked compromising validity. Some attempts to mitigate against the ceiling effect were made by interviewing two of the very-high-scoring participants in the experimental

group, in order to attempt to understand qualitatively any effects of the intervention which might not have been possible to show quantitatively.

While the Hawthorne effect is an ever-present issue in social science research, attempts were made to assess its extent in the present study by asking in interview whether the participants felt that the study had affected their behaviour. The prevailing sense in the qualitative interviews was one of 'business as usual' during the intervention: the teacher-researcher was well known to all participants, and many pointed out that this enabled the students to see the lessons as quite normal. However, although some participants agreed that their effort and attitude to learning had improved as a result of participation. Nonetheless, it must be noted that the Hawthorne effect relates to whether observation changes outcomes (Merrett 2006), and in this intervention, the explicit aim was to alter the outcome. Any future replications of the present study might usefully not tell either group which condition they are allocated to, and might also significantly increase participant numbers to include a wide variety of teachers, in order to control for teaching style or a class's relationship with a teacher.

Yet in the present small-scale study, the optimum situation was reached, in that both groups were taught by the same teacher (the researcher), and using the previous year's group as the comparison group removed the risk of leakage either on behalf of the teacher-researcher, who otherwise might have inadvertently used experimental-group techniques with the comparison group, or on behalf of the students in the two groups, who might have discussed strategy and learned from each other.

Section 3.3.1 of the Methodology chapter discussed the validity of the pretest and posttest, and made the point that there is no independent research to state the extent to which the French listening GCSE has construct validity: that is to say, whether it genuinely tests L2 listening skills. However, it also argued that when compared with other listening tests given by public exam boards, it appears to be valid. Nonetheless, the use of the GCSE as pretest and posttest might present a limitation in terms of transferability: it is not known whether the same results would occur if a different test were used. One might hypothesise that this would be the case, particularly given the fact that great care was taken to ensure that the intervention did not 'teach to the test', but this would remain nothing more than a hypothesis.

5.7 Implications for teaching and learning

The positive findings from RQ1 have shown that in the present study, explicit teaching of speech stream segmentation has a moderate but significant effect on listening comprehension scores. This raises the questions whether explicit teaching of segmentation would be better undertaken right from the outset – or whether the necessary focus on each individual word with this approach would have unintended consequences for learners with particularly small vocabularies (e.g. overly simple, uninspiring and inauthentic texts to listen to, frustration when not every word is understood, setting listeners up for unrealistically high expectations). Should a range of listening approaches be taken from the beginning, which would include a segmentation approach, but not exclusively so? Further longitudinal research addressing this question would be very helpful.

Whenever, and to whichever extent a segmentation approach is adopted, the findings of the present study suggest a clear benefit for a classroom emphasis on the *process* of listening over the *product*. The findings are consistent with those of Goh and Taib (2006) which found that a process-based approach was most likely to benefit less proficient listeners.

If, then, the present study appears to suggest that the Comprehension Approach as laid out in section 2.3.1 is neither an effective pedagogical or motivational tool, a further implication of the present study becomes the extent to which it would be feasible for existing teachers to change their practice. It is not easy for busy classroom teachers to change their practice (Macaro *et al*, 2016), and further research is also needed into what might encourage them to do so. Allied to this implication is one of initial teacher training and the extent to which process-teaching of listening, rather than product, can or should be taught.

In the present study, much of the teaching about the prosody of French took place in English, rather than in target language, and extensive use of English in the foreign language classroom is not seen as best practice. The use of English in the French-language classroom also brings us to the question of the cost of the intervention – that is, what were the experimental group participants missing out on in order to make the progress they did in listening? The most obvious answer to this is further exposure to target language, and therefore further research could usefully ask whether similar

progress could be made by participants if the intervention were carried out using largely target language rather than English, which was used in the present study for delivering knowledge about the prosody of French.

It is also undeniable that, although both comparison and experimental group had the same amount of time devoted to listening during the experiment, the energy and excitement surrounding listening was qualitatively different in the experimental group, and there is a possibility that this could have come at the cost of enthusiasm for the other three skills. This, however, was not measured.

Great care must be taken when considering the implications of the present study to bear in mind that there are differences between listening comprehension as tested by a GCSE paper, and listening skills in a naturalistic setting. This research suggests that the approach taken in the experimental group helped those participants score more highly on the posttest, but did not test whether this improvement in listening comprehension could be carried over to outside the classroom. One might reasonably hypothesise that it would, particularly given the fact that confidence levels also increased (which, one could also hypothesise, would lead to a more willing and positive approach when tackling interactive listening), but the present study does not demonstrate this empirically.

5.8 Summary of discussion

With regard to RQ1 – whether speech stream segmentation instruction can improve listening comprehension – the present study appears to suggest that when a listener's access to one part of the theoretical framework of listening (in this case, the phonological and / or lexical knowledge elements) is improved, access is enhanced to all other parts of it.

The present study also accepts that the intermediate L2 learners who participated in this study were able to understand a reasonable amount of spoken French while lacking good segmentation skills – this is evidenced by both groups' scores on the pretest. It therefore demonstrates that, to a certain extent, the English learner of French appear to acquire some segmentation skills without explicit teaching. However it also suggests that even at low-intermediate level, these skills are not as good as they

could be. This focussed intervention made a significant and relatively rapid improvement to listening comprehension scores and to self-efficacy.

The present study asked whether the intervention might improve listening comprehension and self-efficacy, but did not set out to understand the relationship between the two constructs. That said, at this juncture, it is interesting to reflect on whether there might have been a causal or correlational relationship between the two constructs, and if a causal relationship, the direction in which the causation might lie. That is to say: whether the intervention simply caused an improvement in listening comprehension and self-efficacy (Figure 8a); whether the improvement in self-efficacy caused the improvement in listening comprehension (Figure 8b); whether the improvement in listening comprehension caused the improvement in self-efficacy (Figure 8c); or whether the intervention's improvement in both set in train a virtuous circle where the improvements in listening comprehension and self-efficacy fed off each other (figure 8d). In diagrammatic terms, these questions can be stated thus:

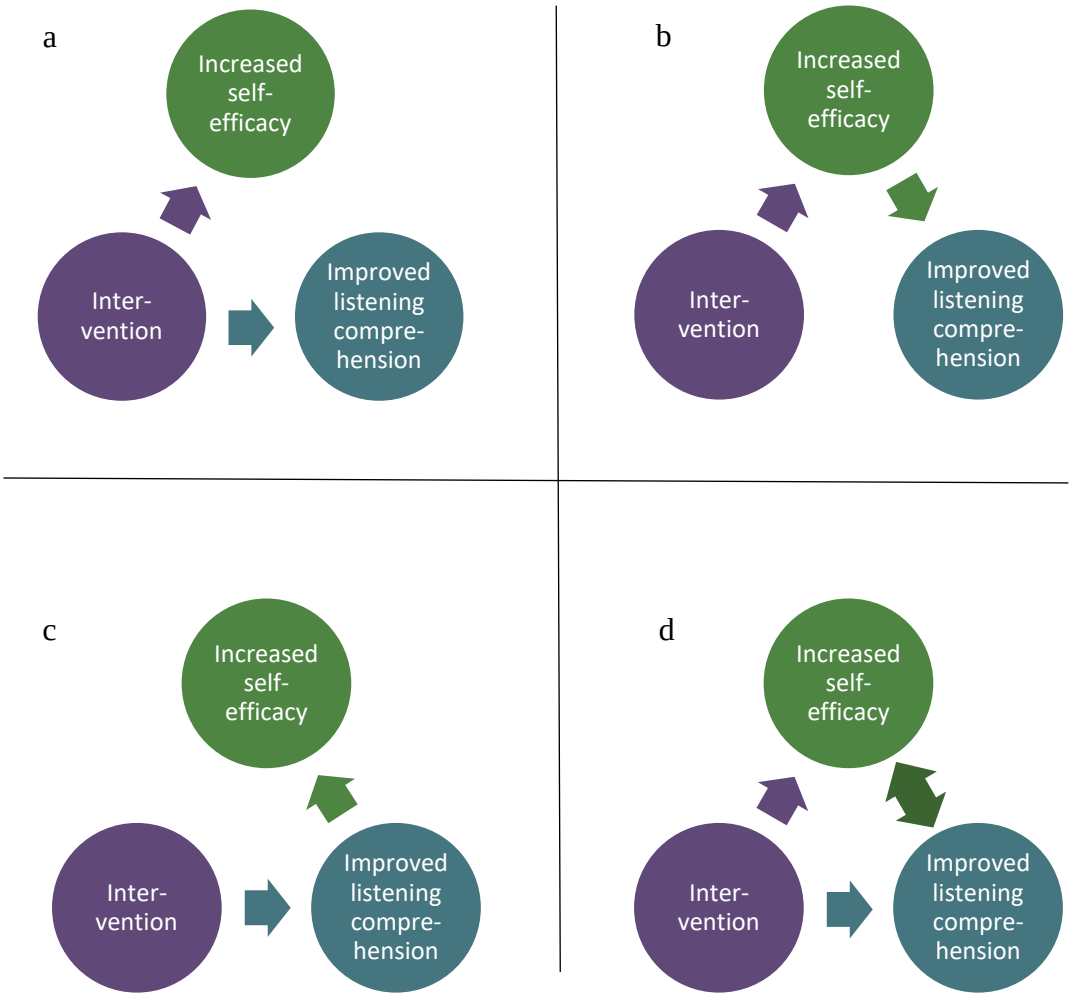


Figure 8 Possible relationships between the intervention, self-efficacy and improved listening comprehension

One might hypothetically rule out 8b, given that it makes logical sense that in order that self-efficacy would start to increase as a listener begins to sense an improvement in their ability. Most likely is 8d, and this is reflected in the qualitative findings of the present study.

6 Conclusion

The present study aimed to discover whether a specific intervention aimed solely at improving segmentation skills might improve listening comprehension scores and participants' perception of self-efficacy. It took a quasi-experimental approach, with two comparable classes of English learners of French, aged 15 to 16, who had been studying French at school for about four and a half years at the start of the intervention. The comparison group was taught an academic year before the experimental group.

The present study found that the intervention had a significant impact on listening comprehension scores as tested by past GCSE papers. The experimental group's self-efficacy scores were also tested before and after the intervention, and although these results were not as clear-cut as the listening comprehension scores, all four measures of self-efficacy improved between Time 1 and Time 2, with two of them improving significantly. Because the comparison group had been taught in the previous academic year, no self-efficacy measures were taken with them.

The present study also aimed to investigate why comprehension scores and self-efficacy scores might be impacted by the intervention, and to that end ten members of the experimental group were interviewed. Interviewees reported the intervention to be highly beneficial, with many of them stating that they were now able to identify vocabulary items within a stream of text, which had been hitherto impossible. The qualitative findings also suggested that the increased ability to segment the speech stream, and therefore make sense of what was being heard, caused some participants to better activate self-initiated strategies in order to maximise success in the comprehension questions.

The study did not aim to investigate the relationship between self-efficacy and listening comprehension scores, but does report that both improved. Further research into causes and correlations between these two factors would go some way towards confirming the implications for teaching given in section 5.6.

The study argues that native speakers of English find French particularly difficult to listen to, for a variety of reasons set out in the literature review and reinforced in the findings. At this juncture, further research is also needed to explore whether similar

results would ensue if the language combinations were altered, and in particular the extent to which the dichotomisation between syllable-timed and stress-timed languages plays a significant role in learners' ability to segment L2 speech streams.

A vast proportion of applied linguistics research is undertaken with learners of English as a foreign language, and for this reason the present study is important, as the participants were learners of French. Furthermore, listening remains relatively under-researched despite its importance in second language acquisition (Rost 2013). It is for these reasons as well as those cited in the preceding paragraphs of this conclusion, that the present study makes an important contribution to the field of applied linguistics and second language acquisition.

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8 Appendices

8.1 Pretest question paper (Edexcel 2012)

Pocket money

2 Who spends their money on these things?

Put a cross ☒ in the correct box.

	A Gaëlle	B Yannick	C Elsa
Example: video games	☒	☐	☐
(i) clothes	☐	☐	☐
(ii) credit for mobile phone	☐	☐	☐
(iii) music downloads	☐	☐	☐
(iv) school equipment	☐	☐	☐

(Total for Question 2 = 4 marks)

Answer ALL questions.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

My work

1 Patrick is talking about his work. What are the advantages and disadvantages?

A the hours
B the people he works with
C the work he does
D the journey to work
E the holidays
F the salary

Write the **four** correct letters in the table below.

Advantages		**Disadvantages**	
Example:	C		

(Total for Question 1 = 4 marks)

A weekend away

3 Mr and Mrs Guémy are deciding where to go.

A	B	C
 Nice	 Dijon	 Annecy

(I) Where do they decide to go?

Put a cross ☒ in the correct box.

A	☐
B	☐
C	☐

(II) Why?

Put a cross ☒ in the **three** correct boxes.

A There are lots of museums.	☐
B The restaurants are very good.	☐
C There are things to do in the evening.	☐
D The hotels are quite cheap.	☐
E There are nice shops.	☐
F There are lots of sporting activities.	☐

(Total for Question 3 = 4 marks)

Mobile phones in school

4 What do Samir, Nolwenne and Gad think?

Write the name of the correct person.

Samir **Nolwenne** **Gad**

Example: Who says it's stupid to ban mobile phones in school? Samir

(I) Who says pupils in his/her school don't use mobile phones in lessons?

(II) Who uses his/her mobile phone in lessons?

(III) Who says pupils are allowed to have mobile phones in his/her school?

(IV) Who says that the teachers know the pupils break the rules?

(Total for Question 4 = 4 marks)

All about me

5 Anne-Sophie is talking about herself.

What does she mention?

Put a cross ☒ in the **four** correct boxes.

Example: her Ipod	☒
A pocket money	☐
B her mobile	☐
C shopping	☐
D what she likes reading	☐
E which sport she does	☐
F her favourite type of film	☐
G using the Internet	☐
H her best friend	☐

(Total for Question 5 = 4 marks)

Hypermarkets

6 What do these young people think?

A They are not welcoming.
B You can buy everything you want.
C Items are sometimes more expensive.
D The shop assistants are bad tempered.
E They are very practical.
F They are hard to get to.
G Items are cheaper.

Write the correct letter in the box.

Example: Bruno	**E**
(I) Noélie	
(II) Pascal	
(III) Aïcha	
(IV) Gaspard	

(Total for Question 6 = 4 marks)

Holidays

8 What does Dalida say about her holidays?

Put a cross ☒ in the correct box.

Example: This summer, she went to...

☐	**A** the north of France
☐	**B** the east of France
☒	**C** the south of France

(I) She stayed...

☐	**A** at a campsite
☐	**B** with her aunt
☐	**C** in a rented house

(II) This summer, on holiday she went...

☐	**A** cycling
☐	**B** walking
☐	**C** horse riding

(III) She really liked...

☐	**A** the shopping
☐	**B** the area
☐	**C** the food

(IV) Next year, she is going to...

☐	**A** Portugal
☐	**B** Spain
☐	**C** Italy

(Total for Question 8 = 4 marks)

Family relationships

7 Mathieu, Chloë and Frank are talking about their families. Who says the following?

Put a cross ☒ in the correct box.

	A Mathieu	**B** Chloë	**C** Frank
Example: We always eat together in the evening.	☒	☐	☐
(I) Everyone does jobs in the house.	☐	☐	☐
(II) We often go out together as a family.	☐	☐	☐
(III) I tell my parents everything.	☐	☐	☐
(IV) We never argue.	☐	☐	☐

(Total for Question 7 = 4 marks)

E-readers (Part 2)

10 (a) What does the presenter like about the e-reader?

(1)

(b) Why might parents want to buy it?

(1)

(c) What does the presenter think?

(1)

(Total for Questions 9 and 10 = 8 marks)

TOTAL FOR PAPER = 40 MARKS

E-readers

There are 2 parts to this report on E-readers.

Answer questions **9 and 10 in English**.

E-readers (Part 1)

9 (a) List **two** advantages of e-readers.

(2)

(b) What question do some people ask?

(1)

(c) What points does the presenter make about the recycling of e-readers?

(2)

8.2 Pretest transcript (Edexcel 2012)

MY WORK
QUESTION 1
Je travaille dans un bureau et j'adore mon travail. J'habite assez près, donc je vais au bureau à pied. C'est rapide, ce qui est bien. Je commence à 9h et je finis vers 18h, quelquefois 19h. C'est très long, et le soir je suis trop fatigué pour sortir. Je travaille avec trois autres personnes et on s'entend bien, on rigole beaucoup. Mon travail n'est pas bien payé et j'aimerais gagner un peu plus.

POCKET MONEY
QUESTION 2
Écoutons d'abord Gaëlle.
J'achète des jeux vidéo. Ma passion c'est la musique et j'achète souvent des CD. Chaque semaine, je mets de l'argent sur mon portable. Ma mère m'achète des trucs pour l'école.
Maintenant Yannick. J'adore les magasins de mode et mes parents m'achètent souvent des vêtements. Avec mon argent, j'achète des applications pour mon portable mais je n'ai pas le droit de télécharger des chansons. J'achète souvent des stylos et du papier pour l'école.
Finalement Elisa.
Chaque mois, j'achète de nouveaux vêtements avec mon argent. Mes parents me paient mon portable mais c'est moi qui dois payer pour télécharger des chansons sur mon iPod.

A WEEKEND AWAY
QUESTION 3
M1 : Alors Nice est une ville très intéressante, il y a plein de musées.
F1 : Mais les enfants vont s'ennuyer. Moi j'aimerais aller à Dijon, dans le centre, il y a beaucoup de petites boutiques qui sont très jolies.
M1 : Ah oui les enfants vont aimer ça. Par contre, à Annecy, il y a un grand choix d'activités sportives.
F1 : Mais les hôtels sont chers, et les restaurants aussi.
M1 : Oui mais ils sont excellents et on y mange bien. Mais c'est vrai qu'à Dijon les hôtels sont moins chers.
F1 : Mais il n'y a pas de grand choix de restaurants et il n'y a pas beaucoup à faire le soir.
M1 : À Nice, c'est pareil mais, à Annecy, il y a des concerts et quelquefois des feux d'artifice – les enfants vont adorer ça.
F1 : Génial, on va y aller.

MOBILE PHONES IN SCHOOL
QUESTION 4
Qu'en penses–tu Samir ?
Les portables sont interdits dans mon école mais c'est bête. Beaucoup d'élèves ne respectent pas la règle, j'ai des copains qui utilisent leur portable en classe, moi je ne le fais pas. Les profs le savent et ils ne disent rien.
Et toi, Nolwenne ?

Les enfants devraient avoir le droit d'avoir un portable à l'école. Moi et mes copains, nous avons tous notre portable en classe. On s'envoie des textes, c'est rigolo, les profs ne le remarquent même pas.
Et Gad ?
Dans mon collège, c'est toléré. Beaucoup de profs sont contre parce qu'ils pensent que les élèves vont les utiliser en classe mais on ne le fait pas.

ALL ABOUT ME
QUESTION 5
J'écoute mon iPod tout le temps. Je n'aime pas la lecture et je vais rarement au cinéma. Je passe beaucoup de temps à l'ordinateur, j'ai ma page personnelle et j'aime tchatter avec mes amis. Je fais de la natation et je vais souvent à la piscine, j'adore ça ! J'aime aussi faire les magasins avec mes copines. Mes parents me donnent 20 € par semaine, ce n'est pas assez.

HYPERMARKETS
QUESTION 6
Example : Écoutons d'abord Bruno…
Ils sont très pratiques.
Et Noélie ?
C'est très facile d'y aller en bus et on y trouve de tout mais faire mes courses là- bas, ça me met de mauvaise humeur.
Pascal ?
Il y a toujours beaucoup de monde mais ça manque d'ambiance, c'est froid et triste.
Aïcha ?
Là où j'habite, l'hypermarché est à l'extérieur de la ville et il y a seulement un bus toutes les deux heures.
Gaspard ?
On dit que tout est moins cher ; mais ce n'est pas vrai, certains produits sont plus chers.

FAMILY RELATIONSHIPS QUESTION 7
Écoutons d'abord Mathieu
Chaque soir on dîne ensemble. On s'entend bien mais mon frère m'énerve parce qu'il ne fait rien pour aider. Parfois il y a des disputes mais mes parents sont raisonnables et il n'y a pas de secrets entre nous. Mais on fait rarement des sorties ensemble.
Et maintenant Chloé
Mes parents sont assez libéraux et chez moi on ne se dispute jamais. Mes parents travaillent beaucoup, donc tout le monde donne un coup de main, pour aider. J'aime bien ma famille, mais je préfère être avec mes amis, on se dit tout.
Et Frank
Mes parents font tout à la maison. Tous les week-ends on va visiter quelque chose ensemble. C'est bien, j'aime passer du temps avec eux. Mais à vrai dire, mes parents sont un peu rétro et ne me comprennent pas trop, alors quelquefois ça explose. Si j'ai un problème, j'en parle à ma sœur.

HOLIDAYS QUESTION 8
Cet été nous sommes restés en France ; nous sommes allés dans le sud. D'habitude, nous faisons du camping mais les campings étaient complets. On allait rester chez ma

tante mais on a décidé de louer une petite maison. D'habitude, nous faisons beaucoup de vélo mais cet été on a décidé de faire des randonnées à pied, c'était fantastique. Ma sœur adore faire du cheval mais c'était trop cher. La région était très belle, mais il n'y avait pas beaucoup de magasins et moi j'adore le shopping. On est allés au restaurant tous les soirs. La spécialité de la région, c'est le poisson et les fruits de mer. Moi, je déteste ça donc je n'ai pas apprécié la nourriture ! L'année prochaine, on va aller à l'étranger, au Portugal. Nous avons déjà visité l'Espagne et on va régulièrement en Italie.

E-READERS
There are two parts to this report on E-readers.
Answer questions 9 and 10 in English.
E-readers, part 1 - Question number 9

Les e-readers sont le nouveau gadget électronique. Un e-reader est léger, on peut le mettre dans sa poche, on peut télécharger des livres partout, et bien sûr, ils n'utilisent pas de papier. Certains posent la question : est-ce que les e-readers sont une solution écologique aux problèmes de l'environnement, et est-ce qu'ils vont nous aider à sauver la planète ? Pas si on considère que seulement 12% des gadgets électroniques comme des e-readers sont recyclés, donc les vieux e-readers peuvent causer plus de mal à l'environnement qu'un vieux livre !
E-readers, part 2 - Question number 10
Je suis fan des e-readers. On peut télécharger plus de 7,000 livres sur une machine. Beaucoup de parents croient qu'un e-reader va encourager leurs enfants à lire mais, à mon avis, les enfants vont toujours préférer un jeu vidéo à un livre.

8.3 Posttest question paper (Edexcel 2013)

Being healthy

1 Mylène, Cyril and Laetitia are talking about healthy lifestyles.

Who says what? Write the name of the correct person.

Mylène	Cyril	Laetitia

Example: I try to eat healthily ..... Mylène .....

(i) I never eat sweet things .....

(ii) I eat lots of fruit and vegetables .....

(iii) I drink a lot of water .....

(iv) I go to bed early .....

(Total for Question 1 = 4 marks)

My town

2 Elsa is talking about her town. What does she mention?

Put a cross ☒ next to the **four** correct boxes.

Example: where her town is	☒
A transport facilities	☐
B sports facilities	☐
C museums and monuments	☐
D shopping facilities	☐
E places to eat	☐
F accommodation	☐
G the weather	☐
H activities for young people	☐

(Total for Question 2 = 4 marks)

Electronic games

3 What do these young people think?

Write the correct letter.

Electronic games …

A can be educational

B stop young people playing sport

~~**C** are too violent~~

D are addictive

E can make young people isolated

F can require physical effort

Write the correct letter.

Example	Ludovic	***C***
(i)	Madeleine	
(ii)	Samir	
(iii)	Charlotte	
(iv)	Guillaume	

(Total for Question 3 = 4 marks)

Views on school

4 Some students are talking about their schools.

(a) What do Mireille and Joachim say?

Put a cross ☒ in the **four** correct boxes.

	Mireille	**Joachim**
Example: There are good relationships between the teachers and the pupils.	☒	☐
A The teachers' explanations are not clear.	☐	☐
B Lessons aren't interesting.	☐	☐
C My favourite lesson is IT.	☐	☐
D There are never any trips.	☐	☐
E Discipline is not good in my school.	☐	☐
F I don't enjoy school.	☐	☐
G There are too many rules.	☐	☐
H Parents are invited into the school.	☐	☐

(b) What do Serge and Nolwenne say?

Put a cross ☒ in the **four** correct boxes.

	Serge	**Nolwenne**
A There is a sports ground for us to use.	☐	☐
B We need more posters on the walls.	☐	☐
C My school is nicely decorated.	☐	☐
D I can't wait to go to 6th form college.	☐	☐
E My school is not well equipped.	☐	☐
F The teachers treat us like children.	☐	☐
G I always go home at lunch time.	☐	☐
H The food in the canteen is not good.	☐	☐

(Total for Question 4 = 8 marks)

Shopping

5 What does Xavier like and dislike about shopping?

Write the correct letters in the table below.

A Going shopping on Saturday afternoons
B The sports shops
C ~~The new shopping centre~~
D Going shopping with his parents
E The clothes shops
F The book shop

LIKES	DISLIKES
Example: C	
(i) _____	(i) _____
(ii) _____	(ii) _____

(Total for Question 5 = 4 marks)

Holidays

7 Khaled, Adèle and Jérémy are talking about holidays.

Who makes the following points?

Put a cross ☒ in the correct box.

	Khaled	Adèle	Jérémy
Example: I go on holiday every summer.	☒	☐	☐
(i) I like going on holiday with my family.	☐	☐	☐
(ii) I do not like going to hot places.	☐	☐	☐
(iii) I like going to different countries.	☐	☐	☐
(iv) I do not like active holidays.	☐	☐	☐

Looking for a job

6 Sacha is looking for work.

Complete these statements by putting a cross ☒ in the correct box.

Example: In October he is going …

☐	**A** to start work
☐	**B** to travel
☒	**C** to go to university

(i) He wants to work …

☐	**A** part time
☐	**B** in the summer
☐	**C** weekends

(ii) He is very good at …

☐	**A** I.T.
☐	**B** English
☐	**C** maths

(iii) Previously he has worked in …

☐	**A** a hotel
☐	**B** a shop
☐	**C** a restaurant

(iv) In the future he would like to …

☐	**A** own his own company
☐	**B** be rich
☐	**C** work abroad

Young French people and sport

There are two parts which relate to this report on young French people and sport.

Young French people and sport (Part 1)

Answer these questions **in English**.

8 (a) What are the **two** main findings of the report?

(2)

.....

.....

(b) What does the figure 20% refer to?

(1)

.....

(c) What **exactly** does the government want for all young people in five years' time?

(1)

.....

(d) Give **one** reason why young people do not do enough physical exercise.

(1)

.....

Young French people and sport (Part 2)

Answer these questions **in English**.

9 (a) What **exactly** is the effect of technology on the daily life of young people?

(1)

.....

(b) Give **two** of the reasons, apart from improved health, why it is good to do sport.

(2)

.....

.....

8.4 Posttest transcript (Edexcel 2013)

BEING HEALTHY
QUESTION 1
M1 : Ecoutons d'abord Mylène.
F1 : J'essaie de manger sainement mais je n'aime pas les légumes ! En plus j'aime le chocolat. Par contre je bois beaucoup d'eau et j'évite les boissons sucrées. J'aimerais me coucher tôt mais ce n'est pas toujours possible.
M1 : Et Cyril ?
M2 : Je mange au moins cinq portions de fruits et de légumes par jour, souvent plus. Et je mange des choses sucrées de temps en temps. Par contre je ne bois pas assez d'eau. Il faut se coucher tôt mais j'aime regarder la télé la nuit.
M1 : Finalement Laetitia.
F2 : Je ne mange pas assez de fruits et de légumes et je dois boire plus d'eau. Je suis allergique au sucre donc je n'en mange jamais. Le soir j'aime aller sur Facebook mais je suis toujours au lit de bonne heure !

MY TOWN
QUESTION 2
F1
Ma ville est située dans l'est de la France. En général il fait beau mais l'hiver il fait très froid. C'est une petite ville mais c'est joli. Chaque année beaucoup de gens la visitent et il y a un bon choix d'hôtels. Le centre-ville est assez grand et c'est bien pour ceux qui aiment faire les magasins. Pour se déplacer il y a des trains, des bus et un nouveau tramway.

ELECTRONIC GAMES
EXAMPLE :
M1 : Qu'en penses-tu Ludovic ?
M2 : Ils sont trop violents.
QUESTION 3
M1 : Et Madeleine ?
F1 : On dit qu'ils rendent les jeunes paresseux mais ce n'est pas vrai ! Il faut participer physiquement à certains jeux.
M1 : Samir ?
M1 : Beaucoup de jeunes passent trop de temps à y jouer même la nuit, ils ne peuvent pas arrêter.
M1 : Charlotte ?
F2 : Pas tous les jeux sont bêtes. Il y a plein de jeux maintenant où on peut apprendre quelque chose et qui demandent un effort intellectuel.
M1 : Finalement Guillaume ?
M2 : C'est bien d'être entre amis. Trop de jeunes passent leur temps seuls dans leur chambre à y jouer, ils doivent sortir, rencontrer des gens.

VIEWS ON SCHOOL
QUESTION 4
Part (a)
M1 : Ecoutons d'abord Mireille.
F1 : Dans mon collège il y a de bons rapports entre les profs et les élèves, et les élèves se comportent bien. Les professeurs expliquent bien mais les cours ne sont pas très

stimulants ; me concentrer en classe n'est pas facile ! On fait beaucoup d'informatique mais pas beaucoup de sport ; c'est dommage parce que c'est ma matière préférée. Au collège je pense que les règles sont importantes mais il y en a trop. Bien sûr mes parents sont d'accord avec l'école ! Mais en gros je m'amuse bien au collège et en plus on peut aussi participer à plein d'excursions.
M1 : Et Joachim ?
M1 : En général les profs sont gentils et les cours sont bien mais beaucoup d'élèves ne respectent pas les règles et les profs ne font rien donc il est difficile d'apprendre. Il y a plein de clubs de sport et d'informatique, ils sont très populaires et beaucoup d'élèves aiment y aller. On organise aussi des soirées pour les parents. Par contre on ne fait pas beaucoup d'excursions. J'aime bien mon collège parce que j'ai plein d'amis et on s'amuse bien.
Part (b)
M1 : Écoutons maintenant Serge.
M2 : On a une nouvelle cantine et on y mange bien, donc je ne rentre pas à la maison pendant l'heure du déjeuner. On a un petit terrain de sport et j'aime jouer au foot avec mes amis ! Mon collège est moderne mais tout est gris, même s'il y a des posters aux murs. Ce n'est pas accueillant pour les parents ou les élèves. En plus il manque d'équipement sportif et d'ordinateurs mais j'aime bien mon collège, on a assez de liberté et les profs nous traitent comme des adultes. Je vais être triste de le quitter pour aller au lycée.
M1 : Et finalement Nolwenne.
F2 : Je crois qu'on devrait avoir un terrain de sport parce que pendant l'heure du déjeuner il n'y a pas beaucoup à faire pour les enfants qui ne rentrent pas à la maison. Moi je bavarde avec mes copines. Les bâtiments sont vieux mais il y a des posters et des tableaux partout **;** c'est plein de couleurs, c'est très agréable surtout la cantine. Les repas ne sont pas chers mais ils ne sont pas bons. Je vais bientôt quitter mon collège pour aller au lycée, à vrai dire ça me fait peur !

SHOPPING
QUESTION 5
M2 : J'aime le nouveau centre commercial. Je n'aime pas y aller le samedi après-midi parce qu'il y a trop de gens. J'y vais souvent le jeudi soir avec mes parents, ils m'achètent toujours quelque chose, ce qui est très bien. Quand j'y vais avec mes amis, ils aiment passer des heures dans les magasins de vêtements et c'est ennuyeux comme tout. Il n'y a pas de magasins de sport, alors je préfère aller dans la librairie où il y a un grand rayon de jeux-vidéo !

LOOKING FOR A JOB
QUESTION 6
M1
En octobre je vais aller à l'université. Je voudrais travailler à plein temps pendant l'été à partir du week-end du premier juillet. Je suis fort en informatique mais nul en maths. Je suis assez faible en langues, je sais que l'anglais est important donc l'année prochaine je ferai un stage d'anglais. J'aimerais travailler dans un hôtel. J'ai déjà travaillé dans un magasin, c'était ennuyeux. Travailler dans un restaurant serait très fatigant. Après l'université je voudrais travailler à l'étranger. Mon frère voudrait créer sa propre compagnie et être très riche. Ça ne m'intéresse pas, je préfère être heureux.

HOLIDAYS
QUESTION 7
M1 : Écoutons d'abord Khaled.
M1 : Je pars chaque été avec ma famille. Je me dispute tout le temps avec mon frère, c'est agaçant. On passe toujours nos vacances en France et je fais plein d'activités. Je ne supporte pas le soleil et je n'aime pas visiter les pays chauds.
M1 : Et Adèle ?
F1: J'adore des vacances actives en plein air. Ça me fait toujours du bien d'être au soleil. On aime voyager et visiter des pays différents. Mes amies partiront ensemble cette année, elles vont dans le sud mais moi j'aime bien être avec ma famille.
M1 : Et Jérémy ?
M2 : Mon père voyage beaucoup à l'étranger pour son travail, donc on reste en France. Moi j'aime bien la plage et bronzer. En vacances j'aime bien ne rien faire ! Ma famille est importante pour moi mais partir 15 jours avec eux c'est l'horreur.

YOUNG FRENCH PEOPLE AND SPORT
There are two parts to this report on young French people and sport.
Answer questions 8 and 9 in English.
QUESTION 8
F2 : En général les jeunes ne sont pas en forme, seulement 43 % des jeunes font régulièrement du sport. 20 % ne font pas de sport du tout. Donc le gouvernement a un nouvel objectif : dans 5 ans tous les jeunes feront au moins une heure d'activité physique par jour. Deux raisons citées pour cette inactivité sont l'argent, car le sport est parfois cher, et le fait que de nos jours beaucoup de jeunes ne vont plus à l'école en vélo. Ils préfèrent la voiture.
QUESTION 9
F2 : Grâce aux nouvelles technologies un adolescent passe en moyenne trois heures devant l'écran chaque jour. Le sport n'est pas seulement bon pour la santé. Faire du sport réduit le stress, aide les jeunes à dormir et peut les aider à mieux travailler à l'école.

8.5 Time 1 Questionnaire

Dear Student,
Thank you for agreeing to take part in my study. As you know, I am investigating French listening, and more specifically, whether a certain type of teaching can help with learners' comprehension and their sense of confidence about listening.

This questionnaire will be repeated at the end of the experiment.

Please answer the questions really honestly. There are no right and wrong answers and your responses will remain anonymous. Circle the answer which you would like to give.

For example:
'Chose an answer between 1 and 7 for each question, with 1 meaning 'definitely agree' and 7 meaning 'definitely disagree'. 4 means 'neither agree nor disagree'
Statement 'I really like school'

1 2 (3) 4 5 6 7

Here, by choosing the response '3', the respondent has suggested that they feel a bit positive about school, but they could be more positive.

OVER TO YOU:

1. I am no good at listening (1=definitely agree, 7 = definitely disagree)
   1 2 3 4 5 6 7

2. Improvement in listening is beyond my control (1=definitely agree, 7 = definitely disagree)
   1 2 3 4 5 6 7

3. Listening confidence level (1= very unconfident, 7 = supremely confident)
   1 2 3 4 5 6 7

4. My weakest skill is (circle one)
   Listening Reading Speaking Writing

5. Your initials _____

If you have any queries or concerns about the study, please see me at any time. You can withdraw from the study at any time and this will not affect you in any way.

8.6 Time 2 Questionnaire

Dear Student,
Thank you for agreeing to take part in my study. As you know, I am investigating French listening, and more specifically, whether a certain type of teaching can help with learners' comprehension and their sense of confidence about listening.

This questionnaire is similar to the one that you completed at the beginning of the study.

Please answer the questions really honestly. There are no right and wrong answers and your responses will remain anonymous. Circle the answer which you would like to give.

For example:
'Chose an answer between 1 and 7 for each question, with 1 meaning 'definitely agree' and 7 meaning 'definitely disagree'. 4 means 'neither agree nor disagree'
Statement 'I really like school'
1 2 (3) 4 5 6 7
Here, by choosing the response '3', the respondent has suggested that they feel a bit positive about school, but they could be more positive.

OVER TO YOU:

1. I am no good at listening (1=definitely agree, 7 = definitely disagree)

1 2 3 4 5 6 7

2. Improvement in listening is beyond my control (1=definitely agree, 7 = definitely disagree)

1 2 3 4 5 6 7

3. Listening confidence level (1= very unconfident, 7 = supremely confident)

1 2 3 4 5 6 7

4. My weakest skill is (circle one)

Listening Reading Speaking Writing

5. The project was useful (1=definitely agree, 7 = definitely disagree)
   1 2 3 4 5 6 7

6. The project improved my listening ability (1=definitely agree, 7 = definitely disagree)
   1 2 3 4 5 6 7

7. The project made me feel more confident about listening (1=def agree, 7=def disagree)
   1 2 3 4 5 6 7

8. The project made me more confident about French generally (1=def agree, 7=def disagree)
   1 2 3 4 5 6 7

9. The project changed how I felt about French lessons (1=def agree, 7 = def disagree)
   1 2 3 4 5 6 7

10. I tried to use what I learned in my actual exam (1=def agree, 7 = def disagree)
    1 2 3 4 5 6 7

11. The exam would have been even harder if it had not been for the project
    1 2 3 4 5 6 7

Your initials _____

If you have any queries or concerns about the study, please see me at any time. You can withdraw from the study at any time and this will not affect you in any way.

8.7 Interview questions for the semi-structured interviews

1. Tell me the story of your experience of listening comprehension.
2. Tell me the story of your experience of this intervention.
3. Do you find listening difficult?
4. What was it about listening that you find difficult (give examples if interviewee needs it, eg keeping concentration, hearing words within the stream of noise, coping with the comprehension questions. Refer to participant's individual dictogloss work.).
5. Do you see the relevance of listening – not just in terms of passing the exam, but also in terms of a life skill?
6. Up to, say, the mocks, how did you feel about listening skills in lessons? How did you feel about their mock listening exam? How do you feel during a listening exam? Or a listening comprehension exercise? See also questionnaire data
7. Can you summarise what you've learned during this intervention?
8. Can you talk about the impact it's had on you academically, with listening?
9. Can you talk about the impact it's had on your feelings about listening? What about French more generally? Do you feel it's impacted on any of the other skills needed for the exam – and if so, how?
10. How do you feel now about listening?
11. When we did the interventions, we deliberately did exercises that were very different from the exam-style questions. Did you notice that? Which type of exercise do you prefer, and why?
12. How did you feel about participating in a study? Do you think that knowing you were participating in the study made you try extra hard – because you wanted to please me / help me? Ie do you recognise that you might be prone to a type of hawthorn effect?
13. Have you done any extra listening work at home apart from what I've set you?

8.8 Transcript from sample interview

Can you tell me the story of what listening in French has been like for you?

Y: In the younger years – I've been doing it since primary school and we always did really basic listening, you know, sentences and then translating them. KS3 was more basic listening but I was always pretty good at it. I went downhill a lot in year 10, very badly – a lot of people did – I didn't get along with who was teaching us, to be quite honest. It wasn't… we would listen to stuff and we would mark it, but that's as far as we would go. We wouldn't go into actually trying to understand the French. It was more about understanding the general gist of things as opposed to understanding what they were actually saying. It was just a big, massive kind of pile of French, and you would hear a couple of key words and then you would try to infer what the whole thing was about which didn't really get you very far. Then year 11, again, I didn't really understand a lot but I think that's because I'd lost a lot of faith in my French ability. I generally just wasn't interested in it any more. I just accepted that I wasn't going to do very well and I didn't want to do it any more. But then I had a realisation a couple of months ago that I had to do it and I don't want to have one grade on my results that's a lot worse than the others…

So you pulled your finger out.

Y: Yes.

And what about this intervention? What's your take on the work that we've done on that?

Y: Definitely helpful but it was a bit of a blur. Some things, I think, at the time I thought I didn't understand, but they really came in handy. It still looked a bit of a dim prospect because I only had a couple of months to do everything, but it did help, and I found myself understanding more. Instead of just hearing a massive blob of French, I actually heard proper sentences.

And from the pre-test to the post-test you improved by 24 points. From an F to an A. What was that all about?

Y: I think it was just mentality. Because a lot of the time I just sat there. I was unfocussed, thinking about other things. But a lot of it was actually being able to understand it, and how to go about it, and not panicking. I used to hear the first question, not quite get it, and think, 'I can't do this'. But now that I've got strategies and things that I know I can do, I've got better knowledge of how to go about listening. You've made it a lot easier and I've focussed a lot more.

So what sort of strategies do you think you've been using?

Y: I don't really know. I don't know how to describe them as such. I just know that I know them. Just an auto-pilot – this is what I've been taught to do – and try and apply it. You still panic a little bit…

Cos Mr Astley [colleague who observed a lesson] used the phrase to me the other day, something about 'you can tell that they've been trained to listen' and I hadn't thought about what I was doing as 'training' you, but I don't know, maybe it is.

Y: In a way it kind of is. It's not necessarily that kind of 'grilling', because it is very much you *want* to know how to do it – it is you're taking it in and you're learning it at your own pace, but it is kind of training. But also I think you need to train a little bit – French listening isn't exactly the sort of thing you'd really want to do – it's not something that.. You don't go home and think 'oh, I think I'll listen to some French people reading things'. But when you can understand it – I listen to a lot more French music than I ever did before – half of my music is French.

So that brings me to the question – do you see the relevance of listening, then?

Y: Yes, because that's one of the biggest parts of the language. It's alright being able to write something, with a dictionary, but it's being able to hear the language like you would if you were in the country.

So for you it's not just passing the exam?

Y: Not so much. Originally it was and to an extent it still is because I won't go on to do A level, but I do enjoy having that knowledge and that ability to be able to go out to France or even here when there are multicultural festivals and being able to understand what people are asking you, and it's just useful.

In the past can you identify what it was about listening that you found difficult?

Y: Just being able to, kind of, identify words in sentences, because it would just be a long stream of sound and a couple of key words, and then I'd forget completely what had been said because it didn't go through.

And what about keeping concentration, was that an issue as well?

Y: Definitely. Because I panicked. No I don't want to do this any more!

So, say up to the mocks, how did you feel about when we did listening in lessons?

Y: It was just a French lesson. It didn't matter what we were doing. And whether it went in or not, and I would probably go home and forget most of it.

And say, during the mock exam, how did you feel about that exam?

Y: I felt that I knew a little bit more, but not a lot, and listening was one of my worst.

Can you summarise what you think you've learned in this series of lessons that we've done?

Y: Identifying tone and using that to secure your suspicions of what the answer may be, especially positive and negative questions. Liaisons – that's helped me massively, because I used to think it as 'what on earth was that word' but now I hear it as two words and I'm like 'ah, that's a liaison' and I can think about it quickly and I'm like 'now I know what that means', and that definitely helps because French people do speak like that, they don't speak monotone, without expression, and just generally, segmenting the speech stream, that helps as well. Just breaking it all down and taking it as a component and not as a big monster that you have to go for. Just breaking it down.

And do you think, that then what we've done has had an impact on you academically?

Y: Yeh, definitely. Just confidence as well.

Yes, I was going to say, has it impacted on your feelings?

Y: Yes, definitely. It's just skills I think I needed to know and tackling things.

One thing that R [another pupil / participant] said was that because we were all doing it together, he felt there was a sense of a team and a sense of being carried along on a 'hey we can do this' sort of feeling.

Y: Definitely. Because a lot of the time it's always the high people in the class always get it and I always don't and that's off-putting. And especially last year when we were all sat in ability groups and you were never expected to do more than your group and for me I wasn't expected to pass – I was told I would be lucky to pass – so I was sat in the corner of the room not expecting to do anything. I didn't want to do French after the second week, I tried to drop it, and I wasn't allowed, but now I think I can pass, I thought I could get a B.

So how do you feel now about listening in French?

Y: I felt a lot more confident about it. Before the [post-test] I felt like, 'OK, this knowledge is all good, but it's not going to help me'. Then I realised how much of it I could actually apply, because there's a difference between understanding the knowledge and then applying it to the exam, but I realised how much of it I could actually apply, cos I sat there and I did it. And I didn't panic.

And it sort of happened.

Y: Yeh

When we did the exercises in class, did you notice that the exercises we did were very different from the exam-style questions?

Y: They were not typical of what I thought a French GCSE would include. But I think part of that was really useful because the majority of people in our class, outside French and languages are very much high set English, did more essays and more logical type things like history and law and all of that. And it was quite useful instead of being taught the basic syllabus, being taught something that was more interesting to us from a learning point of view. It was more of a life skill. It was more advanced and it was more logical than just being told this is what this means. And it definitely helped a lot.

Were there types of activities that you preferred?

Y: The mistakes. That definitely helped because – I don't kind of know why, but when I hear French, I kind of imagine the words in my head because that just helps me process what I'm doing. And hearing the listening and then reading at the same time, it got you to listen more, and notice what they were saying as opposed to the general.

Do you think, then, that the interventions that we did had an impact on other elements of your French learning as well?

Y: Definitely. Definitely reading, if not writing as well. Not that writing is really anything to do with listening, but generally being able to write without mistakes, because you realise how stupid your mistakes are. And definitely reading – knowing not to quite trust exactly what you read, being able to analyse – being about to

understand what it means as well because hearing it as well as reading it. I don't know how it helped, but it does.

Do you think that knowing you were participating in a study made you behave differently to how you would have done normally in class?

Y: No. Cos I forgot about it. Not in an insulting way, but just because there are so many exams, and I was just kind of here's Miss, here's what we're doing, it's helpful.

And during the time we were doing this study, did you do any extra listening of French outside of the work that I set you?

Y: Yes, which is not normal for me, not at all. Because normally I'm at work, then I'm doing subjects that I enjoy and I want to get high grades in because I want to do them at A level. But I did. A lot of songs, I listened to French radio, I've got a friend that lives in Birmingham that does French, and so we were just having French conversations back and forth, that was for my speaking as well, I had people asking questions all the time, I made a deal of it to answer everything in French.

So you say you didn't try extra hard but something was happening that really motivated you…

Y: Yes, because I was starting to understand and started to feel more confident, and thinking 'actually, you know, I probably can do this' and I was just saying everything in French, which is really odd, it probably wasn't the best of French, but it was more exciting.

8.9 Additional background information about the experimental participants who participated in interviews.

Initial	Gender	Proficiency level pretest	Pretest score	Post test score	Increase in score	KS2 score	Vocab score
E	f	Upper	56 (A*)	57 (A*)	1	5a (15)	2109
L	f	Middle	38 (C)	53 (A)	15	5c (13)	1590
D	f	Upper	60 (A*)	60 (A*)	0	5a (15)	1264
M	f	Lower	29 (E)	53 (A)	24	5b (14)	1134
N	f	Lower	22 (E)	40 (C)	18	5c (13)	1812
R	f	Upper	52 (A)	57 (A*)	5	4a (12)	804
B	m	Middle	30 (D)	48 (A)	18	5c (13)	1746
S	m	Middle	42 (B)	47 (B)	5	5b (14)	1294
T	f	Middle	36 (C)	53 (A)	17	4a (12)	1945
Y	f	Lower	22 (F)	50 (A)	28	5c (13)	126

8.10 Segmentation tasks

Written segmentation task

Put lines where you think the spaces between the words should go.

Where you can, insert full stops, commas and apostrophes. Underline letters which you think should be capitals.

NOTE – words might or might not finish at the end of a line. Put a hyphen at the end of the line if you think the word carries on until the next line, or a line if you think it's the end of the word.

Jean:

Aucollègeoncommenceàhuitheuresetàmonavislajournéeesttroplonguecaronaseptcours duneheureparjourjefaisdesprogrèsendessinetenmathsmaisjesuisfaibleenanglaislesoirje naipasdetempspourmamuserparcequejedoisfairemesdevoirs

Marcus :

Majournéecommencetôtcarjedoisprendrelecarderamassagepourarriveraucollègeavanth uitheuresquandlescourscommencentaprèsdeuxcoursonaunerécréationquiduredixminut esmaisonaencoredeuxcoursavantlapausedéjeunerchaquecoursdurecinquanteminutesm oij'attendslesgrandesvacancesavecimpatience.

Thibault :

Jevaisaucollègeenvoitureavecmonpèrequiestprofàmonécolejenefaispasdeprogrèsenmat hscequiménervecarjetravaillebienenclassemaisjenecomprendspasmonprofesseurquine xpliquepasbienleschoseslajournéenestpastroplongueparcequonfinitatroisheuresdelaprè smidi.

Oral speech stream segmentation task – dictation.

Les nouveaux bâtiments sont excellents mais à mon avis les vieux sont démodés.

Je trouve la journée scolaire très intéressante, et pas trop longue.

Les repas qu'on sert à la cantine sont variables. Hier, j'ai pris un repas délicieux mais un jour, le repas était vraiment désagréable.

Je pense que tous mes profs sont travailleurs et doués, sans exception.

Selon moi, nous recevons trop de devoirs. Je travaille bien en classe et je ne comprends pas du tout pourquoi nous devons continuer à travailler pendant deux ou trois heures le soir. C'est inutile.

Je suis forte dans tous les sports, sauf la natation, que je n'aime pas. Mais je trouve le club de danse et de gym formidable.

J'ai toujours de mauvaises notes en français, et je trouve cette matière difficile.

[highlights refer to where the recording appeared to run words together]

8.11 Intervention Scheme of work

Lesson #	Listening intervention
1	Introduce concepts / segmentation task
2	Concept of liaison – poss some mwb dictation
3	Predicting the liaison
4	Reading, listening, saying it back
5	Identifying known words within a speech stream – model lone pronunciation of a group of words, then listen to recording containing those words in a larger passage. Ps to identify changes that occur when the words are used in a sentence rather than on their own.
6	Read a transcript before listening. Work in pairs, identifying the words from the script that have different pronunciations depending on whether they are pronounced in isolation, or within a sentence or phrase. Refer to notes on liaison while doing this. Listen to recording to check predictions.
7	Faulty listening and identifying silent letters
8	Dictogloss work
9	Find the mistakes: content words and function words
10	Dictation
11	Listening - advanced listening – revise schema, listen, see what happens
12	Listening– gapfill minimal pairs
13	Raising awareness of intonation – predictions re: opinions (pos neg neutral)
14	Correct the mistakes with focus on function words
15	Another dictogloss

8.12 Dictogloss worksheet

Dictogloss activity worksheet (Wajnryb 1990)

1. First listen: How much of the meaning to do you think you understood?
   ❑ Almost nothing ❑ Less than 40% ❑ About 50% ❑ More than 60% ❑ Almost all

2. Second Listen: Make notes of key words

3. Third listen: add more notes

4. In your group, try to write the sentences completely. They don't have to be perfect, but try to make the meaning as similar to the original as possible:

5. What problems did you have?
   Circle the problem words above (q4) and write a b c d e or f beside them
   a. I couldn't hear which sound it was
   b. I couldn't separate the sounds into words
   c. I heard the words but couldn't remember their meaning quickly enough
   d. This word was new to me
   e. I heard and understood the words but not the meaning of that part of the sentence
   f. Other problems (write on back of page)

6. Which of these words (or phrases) caused you most difficulty in understanding the general or overall **meaning**?

7. When you read the transcript of the listening, did you have any trouble understanding it?
   ❑ no ❑ yes

8. Final listen: can you hear and understand more clearly now?
   ❑ Almost nothing ❑ Less than 40% ❑ About 50% ❑ More than 60% ❑ Almost all

8.13 Summary of conversation with interrater– resolving coding issues.

Initially I proposed to code the data into two categories: feelings about listening, and feelings during listening. I also considered dichotomising the data as before / after or process / product.

My interrater took a different perspective on it – she began by considering positive and negative statements, and finally broke the data into four themes which were 'improvement', 'liaisons / unpicking', 'motivation' and 'feelings'.

Together we ruled out dichotomising the data into feelings DURING and feelings ABOUT because of the potential for a lack of clarity when categorising some of the statements, which might fall into both categories, and the fact that sub-categories could be unclear and risked being duplicated.

We discussed whether 'teaching' and 'learning' would therefore be good categories, with various sub-categories, including 'one about 'before the intervention' and another focussed on the 'positivity' or 'improvement' reported by many of the participants. It felt unclear whether the interrater's categories of 'motivation' and 'feelings' would fall into teaching or learning, and as a result 'positivity' became a fully-fledged category in its own right, along with a category of 'before the intervention'. It was felt that these four categories felt clearer in that they were more mutually exclusive, and the inclusion of 'teaching' and 'learning' were quite concrete. Concern was expressed that, in real terms, the sub-categories within the 'positivity' category could simply be results of the teaching and learning, but it was felt that this did not preclude it from existing as a coding category and that this debate was best raised in the discussion section of the dissertation.

Research question three ('what factors reported by the participants are relevant to the success or failure of the intervention') was repeatedly born in mind while attempting to categorise the data, and categories or sub-categories which failed to focus on this were rejected.

Through extensive discussion, therefore, the following categories and subcategories were formed:

1. Before
    a. Panic
    b. Loss of concentration
    c. Passivity

2. Positivity
    a. Team work / peer support
    b. Excitement
    c. Self-efficacy (as contrasted with 1c, passivity)
    d. Reduced panic
    e. Empowerment

3. Teaching
    a. Process versus product
    b. Bringing attention to detail
    c. Use of transcripts

d. Interesting activities

4. Learning
    a. Unpicking / separating the speech stream
    b. Automatization
    c. Visualising the transcript
    d. Paying attention to detail
    e. Links to other learning
    f. Keeping concentration

After the first attempt at coding, the codes were streamlined somewhat in order to clarify the areas further and ensure there was no overlapping of constructs. The following coding scheme was arrived at.

1. What makes listening hard
    a. The words combine
    b. Speed of delivery and processing issues
    c. Panic
    d. Concentration
    e. Assumption of failure (including lack of motivation, making up answers, 'winging it')
    f. Lack of context / non-linguistic cues

2. Teaching and learning as a result of the intervention
    a. Unpicking / segmenting the speech stream
    b. Transcript use (including visualising or imagining a transcript when listening)
    c. Attention to detail
    d. Automatization versus mental translation
    e. Process vs product, or gist vs detail

3. Feelings about the intervention
    a. Sense of improvement
    b. Change of mindset (more confident / more willing to try / more motivated)
    c. No more panic

8.14 Curec documentation

8.14.1 Curec approval

Email

To: [redacted]

Cc: Education Research Office ;Ernesto Macaro

Inbox

23 March 2016 08:52

Dear [redacted]

Improving listening skills among lower intermediate learners of French: specific intervention for segmenting the speech stream

The above application has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

If your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse

http://www.nspcc.org.uk/globalassets/documents/information-service/factsheet-child-abuse-reporting-requirements-professionals.pdf

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

Good luck with your research study.

Yours sincerely,

Nigel

_____

Dr Nigel Fancourt

Department of Education

15 Norham Gardens, Oxford OX2 6PY

01865 274259

www.education.ox.ac.uk

8.14.2 Letter to head teacher requesting permission

University of Oxford
Department of Education
15 Norham Gardens, Oxford OX2 6PY
Tel: +44 (0)1865 274024

Dr [redacted]
The [redacted] School

Dear Dr [redacted]

I am writing formally to enquire about conducting some research at The Warriner School. As you know I am a Masters student at Oxford University, supervised by [redacted]. In my research project, I will explore a specific intervention aimed at improving listening comprehension in French.

The research will take place with my Year 11 French group. I am not aiming to change what or how I will teach; instead my focus will be on quantitative and qualitative analysis of my own teaching in order to assess its efficacy.

By participating in the research, [redacted] would be contributing to a project that will deepen our understanding of French learning for students who struggle with listening comprehension so contribute towards developing ways of improving attainment for similar students in the future.

The commitment from the school would be negligible. I would simply manipulate a past paper to use as a pre-test, conduct the interventions as my planned teaching, and give the students another past paper as a post-test shortly before the exam. I would like to audio-record some small groups of students in a focus-group type exercise, and photocopy some of the students' written work.

Oxford University has strict ethical procedures on conducting ethical research with teachers and young people, consistent with current British Educational Research Association guidelines. Before beginning the research, I would inform parents and guardians about the research and offer the students, parents and guardians an opt-out. Throughout the research students, parents and guardians will be able to refuse to participate at any time.

All participants, including students, teacher and the school, would be made anonymous in all research reports. The data collected would be kept strictly confidential, available only to my supervisor and myself, and not used other than specified without the further consent of all involved being obtained. All audio recordings and data would be destroyed at the end of the research period, and kept in password-protected conditions until then. I have enclosed copies of the leaflets for parents and students with this letter.

If you feel able to grant me permission to use my classroom in this way, please let me know as soon as possible. I enclose provisional documents which could be sent to parents and participants in order to give them information about my planned research.

Thank you for your time and attention. I look forward to hearing from you.

Yours sincerely,

8.14.3 Consent form for participants

Department of Education
University of Oxford
15 Norham Gardens
Oxford OX2 6PY
phone +44 (0)1865 274024

Consent Form

STUDY TITLE...Improving Listening Comprehension by Segmenting the Speech Stream
RESEARCHER DETAILS[redacted], MSc Applied Linguistics and Second Language Acquisition
Student email:[redacted]@[redacted].ox.ac.uk.....
PURPOSE OF STUDY:...to investigate whether specific instruction on speech stream segmentation will improve listening comprehension and will in turn therefore improve listening exam scores.

		Participant tick	Parent / carer / guardian tick
1	I have read the study information sheet and had the opportunity to ask questions		
2	I understand that this project has been reviewed by, and received ethics clearance through the University of Oxford Central University Research Ethics Committee		
3.	I understand that my participation is voluntary and that I am free to withdraw myself or my data at any time, without giving any reason, and without any academic penalty		
4.	I understand who will have access to personal data provided		
5.	I understand how personal data will be stored – eg according to the Data Protection Act – and what will happen to the data at the end of the project		
6.	I understand how the research will be written up and published		
7.	I understand how to raise concerns to make a complaint		
8.	I consent to being audio-recorded		
9.	I understand that audio recordings will be used in research output		
10.	I agree to take part in the study		

Name of Participant: _____

Signature: _____ Date: _____

Name of researcher: [redacted]

Signature: _____ Date: _____

8.14.4 Consent form: parental opt-out

University of Oxford
Department of Education
15 Norham Gardens, Oxford OX2 6PY
Tel: +44 (0)1865 274024

Project: Improving listening comprehension by segmenting the speech stream

Researcher: [redacted]

Parent/guardian consent form

Please circle as appropriate

- I have read the information contained in the leaflet
- I would like more information about the research, please contact me (give phone or email)
- I do not want my child to take part in this research
- I understand I can change my mind later

Child's name (block capitals)…….. ……

Parent/guardian name (block capitals) …….

Parent/Guardian signature: ……Date: ……

Researcher name: ……..

Researcher signature……..……Date: ……

Thank you for your help.

Please return this form to Mrs [redacted] via the year 11 French group.

8.14.5 Information leaflet for parents

Improving listening comprehension in French by segmenting the speech stream

Oxford University
Department of Education

Dear Parent or Guardian,

I am writing to invite your child to take part in my research study, with the rest of his or her French GCSE class. You may be aware that your child's school has agreed to take part in a research study.

Listening comprehension constitutes 25% of the GCSE exam and is consistently found to be the weakest skill among students. French is a language where intonation is very different from English and there is much evidence to suggest that students of French find it very difficult to break up the French they hear into individual words. This then makes listening comprehension very difficult.

I am investigating the extent to which a series of lessons very specifically targeted to this skill will improve listening comprehension, and, in turn, scores in listening exams. There is research evidence to suggest that such an approach can be successful among year 12 students, and I am investigating whether students in year 11 will benefit from the same teaching methods. I believe that they will, and also that there may be secondary positive effects in reading, speaking and vocabulary skills.

I have chosen to work with your child's French group because from the class's PPE results, they need more work now on listening skills than they do on anything else; therefore I am simply carrying out academic analysis on the teaching that I would have been doing anyway. The research will help to improve understanding of the development of French listening comprehension with similar groups of students.

I hope that your child will want to take part in the research, but before you decide, it is important that you understand what it will involve. Please take some time to read through the information on this pamphlet.

[redacted]
Teacher of [redacted], [redacted] /
Oxford University Department of Education

What do you do now?

If for any reason you do not want your child to be included in the research, please return the form stating this and I shall not contact you again. You can also withdraw your child from the research at any stage.

If you have any questions about the research, please contact me. Please also discuss the research with your child.

Thank you for your help.

6

What do you need to do now?

If you would like to ask any questions about the project before or during the study, please contact me. I will be happy to talk with you in more detail.

Contact details:

[redacted]
Department of Education
15 Norham Gardens
Oxford OX2 6PY

[redacted]@[redacted].sch.uk
[redacted].[redacted]@[redacted].ox.ac.uk

3

What will your child be asked to do?

I will continue to run normal French lessons up until the end of the GCSE course. As determined by the class's PPE results, these will have a disproportionate emphasis on listening skills. I have created a series of lessons which aim to focus very specifically on teaching the students to break down the 'speech stream' in order that they can better hear individual words, and therefore better understand what is being said in listening comprehension tests. At the end of the series of lessons, I will give the students another listening past paper in order to assess their progress with listening comprehension.
During the course of lessons, I hope also to pick a few small groups of students and interview them about how they feel about listening comprehension and the style of teaching that I have chosen. These interviews will be audio-recorded I will run qualitative analysis on the data collected in these interviews.

4

Who is running the research?

I am your child's French teacher and also a part-time research student at the Department of Education, University of Oxford. I am studying for a Master's degree in Applied Linguistics and Second Language Acquisition. A more experienced researcher, [redacted], who is [redacted] of Applied Linguistics, [redacted], and a former French teacher, supervises my research.

Ethics

Any research with young people needs to be conducted with care and sensitivity. Some students might feel shy about knowing I am conducting research, and they might feel concerned about being audio-taped.

My research will be consistent with the strict guidelines required by Oxford University. Your child's school has agreed to participate in the research. Taking part in this research is completely voluntary. You and your child are free to say you do not want to participate.

5

Your child will be free to withdraw from the research at any point, without giving any reason. This would not affect your child's education in any way.

I will make the data I collect in the study anonymous. Audiotapes, my notes, and all other data will be stored in password-protected documents. I will also maintain confidentiality consistent with current UK law. Your child's school will not have access to the analysed data, and no one other than me, and my supervisor, will see the data. If I wanted to use the data for any other purpose, I would have to contact you and obtain your permission. At the end of the study, the tapes will be erased and personal data destroyed.

I will give a brief report on the research to [redacted] at the end of the project, and you are welcome to see this. It will be submitted to the University of Oxford in August 2017. I will not identify the school or any students in any reports of the research.

This study has received ethics clearance through the University of Oxford's ethical approval process for research involving human participants.

8.14.6 Information leaflet for participants

2

Dear Student,

As well as being your French teacher, I am a research student at Oxford University. The topic I research is how listening comprehension can be improved in French when you are able to break up the sounds into individual words.

I would like to study your class, because you are Year 11 students studying for GCSE. If you and your parents or guardians are unhappy about this, you must let me know.

This leaflet will explain my work for you. If you have any other questions, please talk to me.

3

Please read this leaflet carefully so you know what the research is about. I hope you will agree to be part of my study when you have read it.

I have written to your parents and guardians to tell them about it and think about whether you should be included. Please talk to your parents about what you would like to do.

Thank you for your help.

Best wishes,

[redacted]

4

Will it change my French lessons?
Not at all. We all know that we need to do quite a lot of targeted work on listening comprehension to prepare for the GCSE. All I plan to do is some official academic analysis on the types of teaching and learning that is taking place. Most of that will involve some serious number crunching of past papers we are using for practice, although in due course I would like to interview a few of you to get an idea of whether you feel this way of working is helping, and if so, how.

Will it affect my education?
Not at all. I will run lessons in the normal way and you will continue to prepare for your GCSE in the way that previous classes have done, although with extra emphasis on listening skills, which is what you as a class need.

5

Do I have to do this?
Well, you have to take part in the lessons as it's part of school. However, you have the right to tell me not to use your past paper scores in my research – ie, you can opt out of the research. You could also change your mind later. This would not affect your French education in any way.

Who will be allowed to read the information?
Only my supervisor and I will be allowed to read the information I collect. I will change your names and the name of the school, when I write up my thesis.

I will keep all the information on password-protected documents. If I want to use the information for anything else, I will ask your permission.

6

At the end of my research, in August 2017, I will write to school about what I found out in my study. You are welcome to read this if you are interested.

What do I do now?
Please tell your parents, guardians and teacher whether you are happy to take part.

I hope you will agree to take part in my study. The information I collect will help us to understand how best to prepare students for listening exams. This will help other students to learn French in the future.

Thanks for reading this.

Improving listening comprehension by segmenting the speech stream

Oxford University
Department of Education

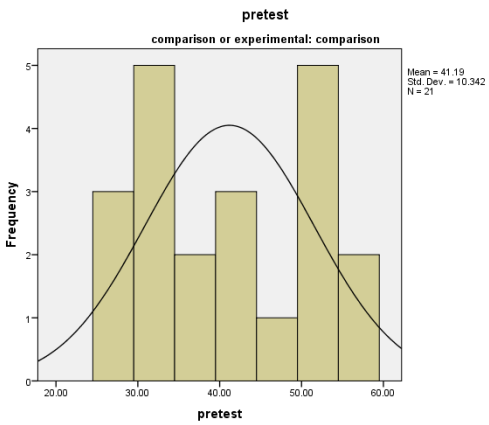
8.15 Documentation relating to SPSS outputs

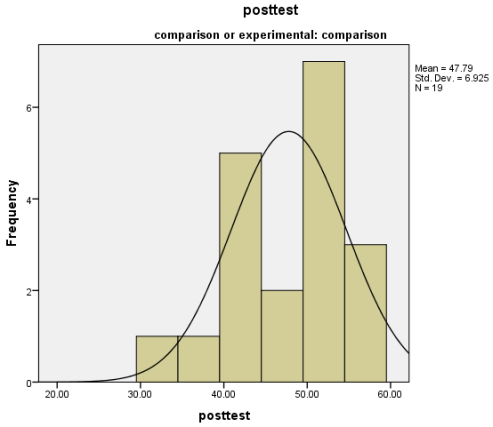
8.15.1 Full descriptive statistics table and histograms for pretests and posttests

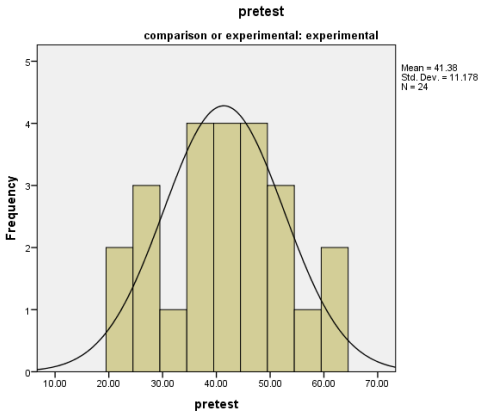
Statistics

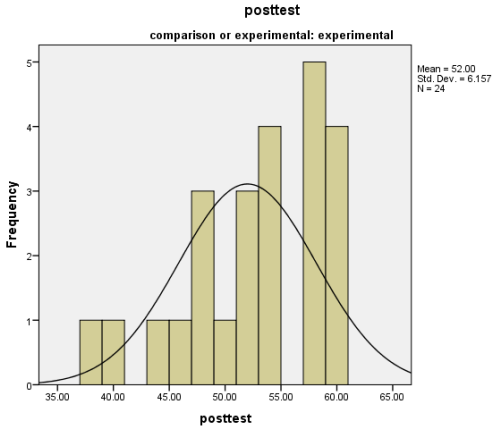
comparison or experimental			comp or exp	pretest	posttest	vocab	ks2sats
.	N	Valid	0	0	0	0	0
		Missing	1	1	1	1	1
comparison	N	Valid	21	21	19	21	21
		Missing	0	0	2	0	0
	Mean		.00	41.1905	47.7895	1369.1905	13.2857
	Std. Error of Mean		.000	2.25686	1.58866	58.28888	.26853
	Median		.00	42.0000	50.0000	1422.0000	13.0000
	Mode		0	42.00	50.00	751.00[a]	13.00[a]
	Std. Deviation		.000	10.34224	6.92483	267.11320	1.23056
	Variance		.000	106.962	47.953	71349.462	1.514
	Std. Error of Skewness		.501	.501	.524	.501	.501
	Std. Error of Kurtosis		.972	.972	1.014	.972	.972
	Range		0	31.00	27.00	1094.00	4.00
	Minimum		0	27.00	32.00	751.00	11.00
	Maximum		0	58.00	59.00	1845.00	15.00
	Percentiles	25	.00	31.0000	42.0000	1190.0000	13.0000
		50	.00	42.0000	50.0000	1422.0000	13.0000
		75	.00	52.0000	53.0000	1540.0000	14.0000
	Skewness			.177	-.533	-.545	-.606
	Kurtosis			-1.515	-.027	.407	-.198
experimental	N	Valid	24	24	24	24	24
		Missing	0	0	0	0	0
	Mean		1.00	41.3750	52.0000	1362.9583	13.2083
	Std. Error of Mean		.000	2.28163	1.25687	117.42542	.21685
	Median		1.00	42.0000	53.0000	1275.5000	13.0000
	Mode		1	42.00	57.00	2109.00	13.00
	Std. Deviation		.000	11.17767	6.15736	575.26474	1.06237
	Variance		.000	124.940	37.913	330929.520	1.129
	Std. Error of Skewness		.472	.472	.472	.472	.472
	Std. Error of Kurtosis		.918	.918	.918	.918	.918
	Range		0	38.00	22.00	1983.00	4.00
	Minimum		1	22.00	38.00	126.00	11.00
	Maximum		1	60.00	60.00	2109.00	15.00
	Percentiles	25	1.00	31.5000	48.0000	1080.0000	13.0000
		50	1.00	42.0000	53.0000	1275.5000	13.0000
		75	1.00	49.5000	57.0000	1911.7500	14.0000
	Skewness			-.148	-.661	-.294	-.453
	Kurtosis			-.789	-.177	-.609	.011

a. Multiple modes exist. The smallest value is shown


pretest
comparison or experimental: comparison
Mean = 41.19
Std. Dev. = 10.342
N = 21
Frequency
pretest


posttest
comparison or experimental: comparison
Mean = 47.79
Std. Dev. = 6.925
N = 19
Frequency
posttest


pretest
comparison or experimental: experimental
Mean = 41.38
Std. Dev. = 11.178
N = 24
Frequency
pretest


posttest
comparison or experimental: experimental
Mean = 52.00
Std. Dev. = 6.157
N = 24
Frequency
posttest

8.15.2 Shapiro Wilk scores on Listening Comprehension statistics

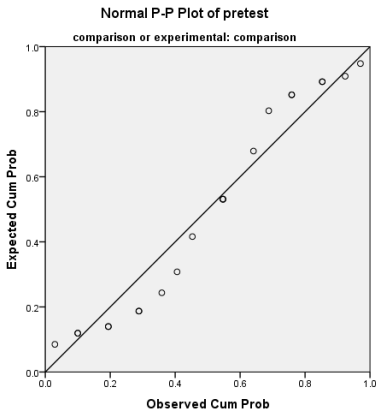
Tests of Normality

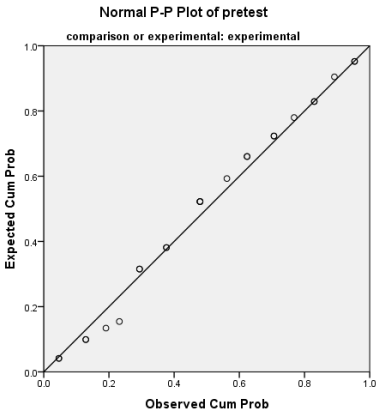
comparison or experimental		Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
comparison	pretest	.154	19	.200*	.919	19	.108
	posttest	.152	19	.200*	.967	19	.722
experimental	pretest	.106	24	.200*	.964	24	.520
	posttest	.167	24	.083	.935	24	.123

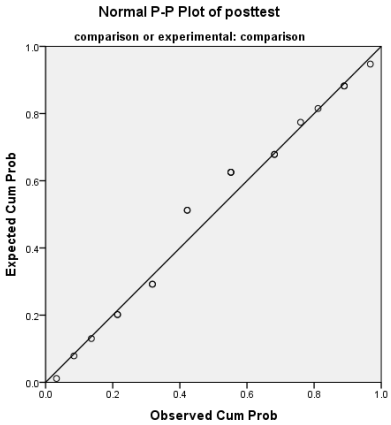
*. This is a lower bound of the true significance.

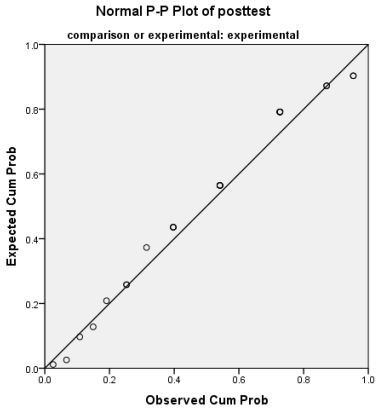
a. Lilliefors Significance Correction

8.15.3 P-P plots and z-score calcualations for listening comprehension statistics









Z score calculations:
Z = skewness / SE of skewness
Z= kurtosis / SE of kurtosis

Comparison group pretest
Skewness Z = 0.177/0.501 = 0.353
Kurtosis Z = -1.515/0.972 = -1.559

Comparison group posttest
Skewness Z = -0.533/0.524 = -1.017
Kurtosis Z = -0.27/1.014 = -0.266

Experimental group pretest
Skewness Z = -0.148/0.472 = -0.297
Kurtosis Z = -0.789/0.918 = -0.86

Experimental group posttest
Skewness Z = -0.661/0.472 = -1.4
Kurtosis Z = -0.177/0.918 = -0.193

8.15.4 SPSS output for ANOVA and ANCOVA – inferential statistics on RQ1.

ANOVA to ensure non-significant difference in pretest for comparison and experimental groups

Tests of Between-Subjects Effects

Dependent Variable: pretest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.381[a]	1	.381	.003	.955
Intercept	76351.048	1	76351.048	654.934	.000
Group	.381	1	.381	.003	.955
Error	5012.863	43	116.578		
Total	81728.000	45			
Corrected Total	5013.244	44			

a. R Squared = .000 (Adjusted R Squared = -.023)

Test for homogeneity of regression in order to prepare for ANCOVA

Tests of Between-Subjects Effects

Dependent Variable: posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1030.603[a]	3	343.534	15.011	.000
Intercept	2654.125	1	2654.125	115.971	.000
Group	8.682	1	8.682	.379	.542
pretest	794.621	1	794.621	34.721	.000
Group * pretest	.024	1	.024	.001	.974
Error	892.560	39	22.886		
Total	110024.000	43			
Corrected Total	1923.163	42			

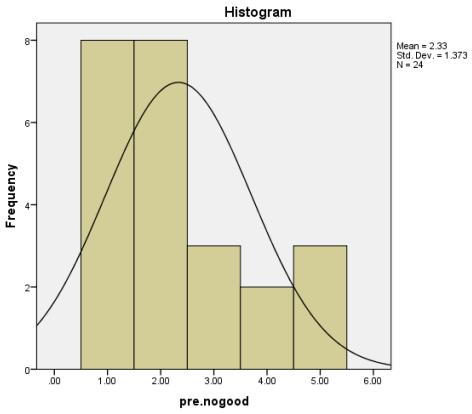
a. R Squared = .536 (Adjusted R Squared = .500)

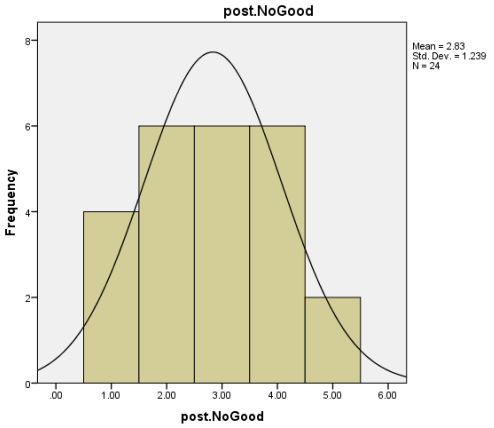
8.15.5 Statistical outputs for questionnaire

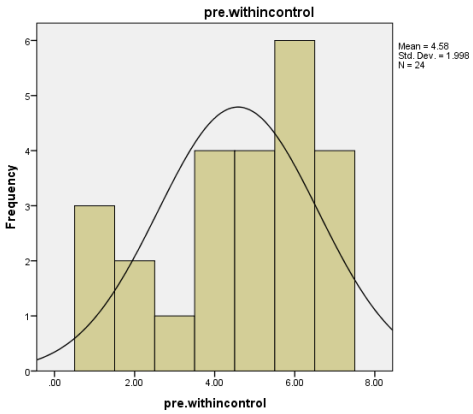
Descriptive Statistics

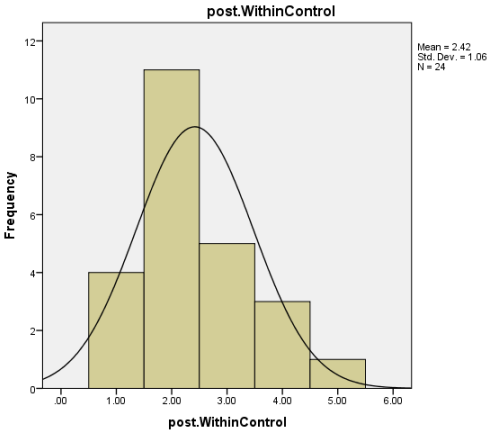
	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
pre.nogood	24	1.00	5.00	2.3333	.28018	1.37261	.876	.472	-.363	.918
pre.beyondcontrol	24	1.00	7.00	3.4167	.40788	1.99819	.615	.472	-.775	.918
pre.withincontrol	24	1.00	7.00	4.5833	.40788	1.99819	-.615	.472	-.775	.918
pre.listenconf	24	1.00	6.00	2.9583	.22904	1.12208	.894	.472	1.165	.918
post.Useful	24	1.00	6.00	2.1250	.27788	1.36135	1.447	.472	1.900	.918
post.NoGood	24	1.00	5.00	2.8333	.25300	1.23945	.044	.472	-.964	.918
post.WithinControl	24	1.00	5.00	2.4167	.21633	1.05981	.716	.472	.164	.918
post.ListenConf	24	3.00	7.00	4.3333	.20560	1.00722	.640	.472	.722	.918
post.ImprovedAbility	24	1.00	4.00	1.9583	.18286	.89584	.829	.472	.425	.918
post.ImprovedListConf	24	1.00	4.00	2.0000	.21703	1.06322	.710	.472	-.695	.918
post.improvedFrConf	24	1.00	4.00	2.2083	.18037	.88363	-.030	.472	-.967	.918
post.ChangedFeelings	24	1.00	4.00	2.9167	.22455	1.10007	-.464	.472	-1.180	.918
Valid N (listwise)	24									

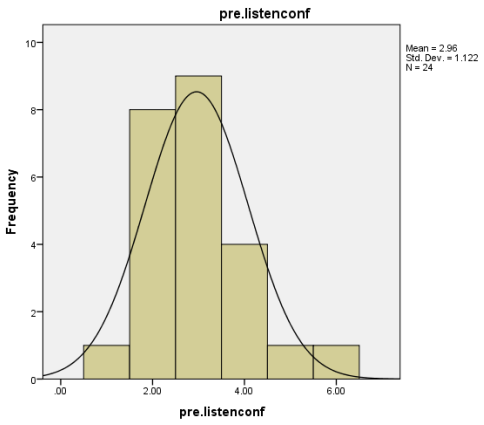
8.15.6 Histograms for questionnaire statistics

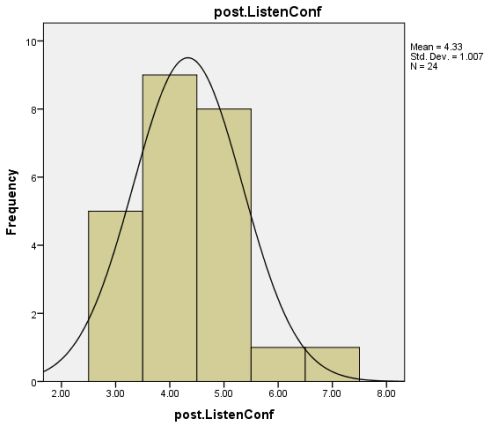


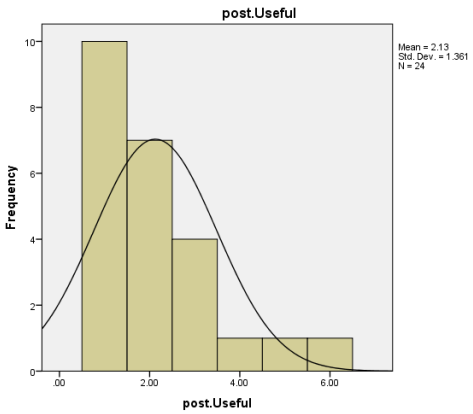


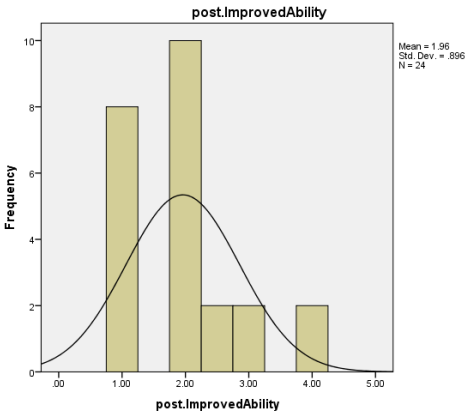


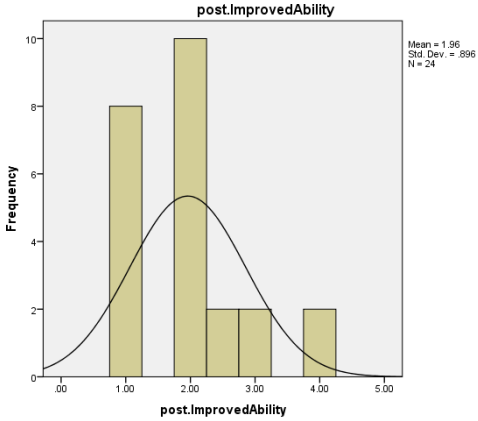


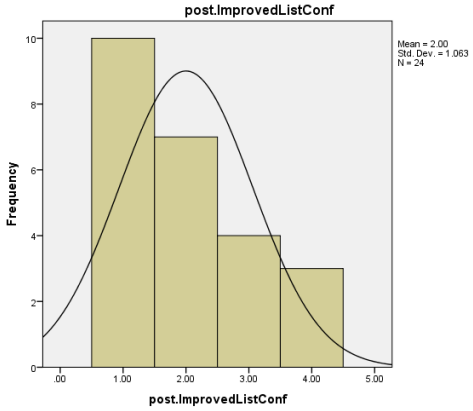


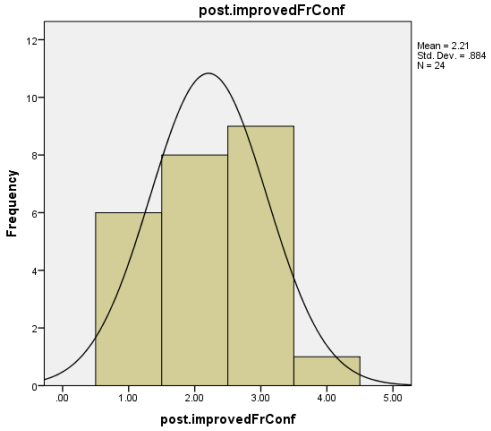


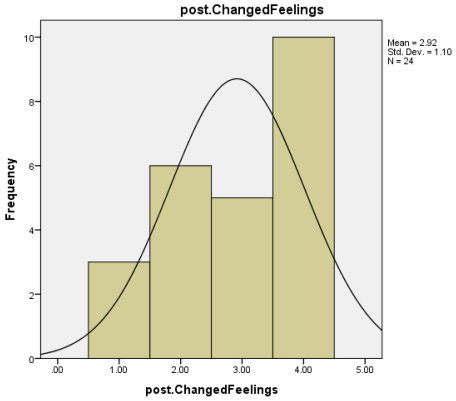

post.Useful
Mean = 2.13
Std. Dev. = 1.361
N = 24
Frequency
post.Useful

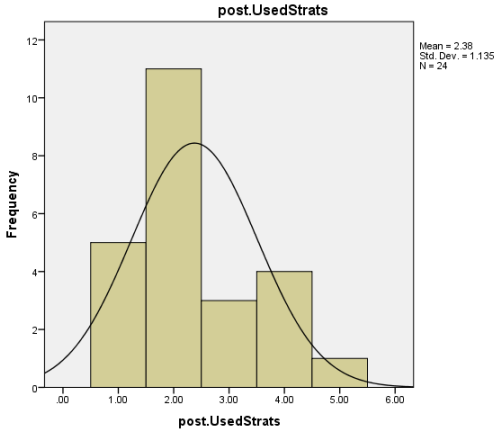

post.ImprovedAbility
Mean = 1.96
Std. Dev. = .896
N = 24
Frequency
post.ImprovedAbility

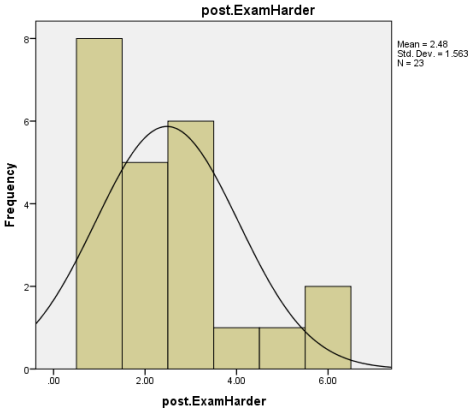

post.ImprovedAbility
Mean = 1.96
Std. Dev. = .896
N = 24
Frequency
post.ImprovedAbility


post.ImprovedListConf
Mean = 2.00
Std. Dev. = 1.063
N = 24
Frequency
post.ImprovedListConf


post.improvedFrConf
Mean = 2.21
Std. Dev. = .884
N = 24
Frequency
post.improvedFrConf


post.ChangedFeelings
Mean = 2.92
Std. Dev. = 1.10
N = 24
Frequency
post.ChangedFeelings


post.UsedStrats
Mean = 2.38
Std. Dev. = 1.135
N = 24
Frequency
post.UsedStrats


post.ExamHarder
Mean = 2.48
Std. Dev. = 1.563
N = 23
Frequency
post.ExamHarder

8.15.7 Z scores for questionnaire statistics

Z score calculations:
Z = skewness / SE of skewness
Z= kurtosis / SE of kurtosis

Time 1 'I am no good at listening'
Skewness Z = 0.876/0.0.472 = 1.86
Kurtosis Z = -0.363/0.918 = -0.40

Time 2 'I am no good at listening'
Skewness Z = 0.44/0.0.472 = 0.93
Kurtosis Z = -0.94/0.918 = 1.02

Time 1 'Improvement in listening is within my control'
Skewness Z = 0.615/0.0.472 = 1.30
Kurtosis Z = -0.775/0.918 = -0.84

Time 2 'Improvement in listening is within my control'
Skewness Z = 0.716/0.0.472 = 1.52
Kurtosis Z = 0.164/0.918 = -0.18

Time 1 Listening confidence level
Skewness Z = 0.894/0.0.472 = 1.89
Kurtosis Z = 1.165/0.918 = 1.27

Time 2 Listening confidence level
Skewness Z = 0.640/0.0.472 = 1.36
Kurtosis Z = 0.722/0.918 = 0.79

8.15.8 Chi square table on weakest skill

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.234[a]	1	.072	.105	.084
Continuity Correction[b]	1.891	1	.169		
Likelihood Ratio	3.379	1	.066	.105	.084
Fisher's Exact Test				.105	.084
N of Valid Cases	24				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.13.

b. Computed only for a 2x2 table