What learners do as they read words and what this means for teachers?

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JM: when you look at a word, do you think about whether you know the word?... is that how you read a word? **Participant:** Yeah.

JM: But what about a word like this, which you haven't seen before. What do you do then? **Participant:** Go over it….

JM: …do you know when a teacher tells you to 'sound a word out', what they mean? **Participant:** (silence)…shakes head.

JM: But, can you remember a teacher telling you to sound the word out? **Participant:** (silence)… nods head.

JM: … you know what they wanted you to do? **Participant:** no….

JM: …what would you do to sound out that word? **Participant:** ummm…break it…

JM: … what do teachers mean when they'd tell you to break it down? **Participant:** It would be…easier to sound it out...

At the end of this session we will have:

- revisited some background, research-informed ideas about adult reading and word-level components of reading

- visited some key findings of my research project on single word reading

- discussed some implications of the findings for us as practitioners

To build reading skill adult reading teachers must have a clear understanding of the processes whereby adults learn to read and the range of practices used by individual readers (National Research Council, 2012)

…but there is very little research on difficulties of adult readers and how to address reading issues (e.g. MacArthur, Konold, Glutting, & Alamprese, 2012)

- reading is a complex cognitive skill (Binder & Borecki, 2008)

- no theory or model of cognitive processing is complex enough to account for all that is going on

- a range of valid perspectives or lenses from which to examine the reading process exists

- …each perspective provides different, sound suggestions for methods of assessment and instruction (Tracey & Morrow, 2012)

- not just one correct way to teach reading or to address a reading difficulty (Greenberg et al., 2011; Tracey & Morrow, 2012)

- however, to be effective, adult reading teachers must be informed about reading, flexible in approach, and instruction must focus on individual learner needs (Condelli, Kirshstein, Silver-Pacuilla, Reder, & Spruck Wrigley, 2010; National Research Council, 2012)

- agreement that skilled reading involves coordinating components of reading including decoding, word recognition, fluency, vocabulary, and reading comprehension (National Research Council, 2012; Sabatini, Sawaki, Shore, & Scarborough, 2010)

- components not sequential and may develop simultaneously

- all are important, reinforce each other and contribute to the ultimate goal of reading which is getting meaning from print (McShane, 2005)

- cognitive processes and knowledge contribute to mastery of the reading components (Binder & Borecki, 2008; Wang, Castles, Nickels, & Nation, 2011)

- individuals may be skilled in some reading components but can have difficulties with one, or more other components, leading to a breakdown in the reading process (e.g. MacArthur et al., 2012)

- … different kinds of reading efforts have been observed taking place at different reading ability levels …individuals have different patterns of skills…
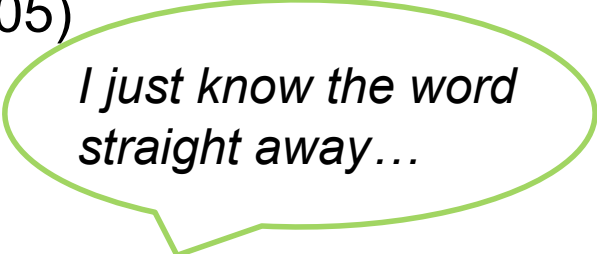
- my study focuses at word level-specifically on decoding and word recognition

- WHY?...less-skilled adult readers commonly have limitations at word level (Macaruso & Shankweiler, 2010) and evidence supports that inability to develop fast automatic word recognition is a primary cause in the breakdown of reading skill development (Roberts, Christo, & Shefelbine, 2011)

- where assessment shows it to be necessary, word-reading skills must be included in instruction and a range of skills and strategies for quickly and accurately recognizing printed words must be taught (Sabatini et al., 2010)

Words might be read in different ways: Skilled readers recognise words so quickly and automatically that it is difficult to observe what is happening in the process (Castles & Lee, 2008)

- words that are unknown may be **decoded** by sounding out and blending letters into pronunciations that are recognised as words (phonological processing)

- words may be **recognised** using analogy to known words or they may be predicted by using some letters (orthographic processing) (Ehri, Satlow, & Gaskins, 2009)

- **context** may be used but it is thought that less-skilled readers over-rely on context to mask deficits in phonological and orthographical processing (Binder & Borecki, 2008)
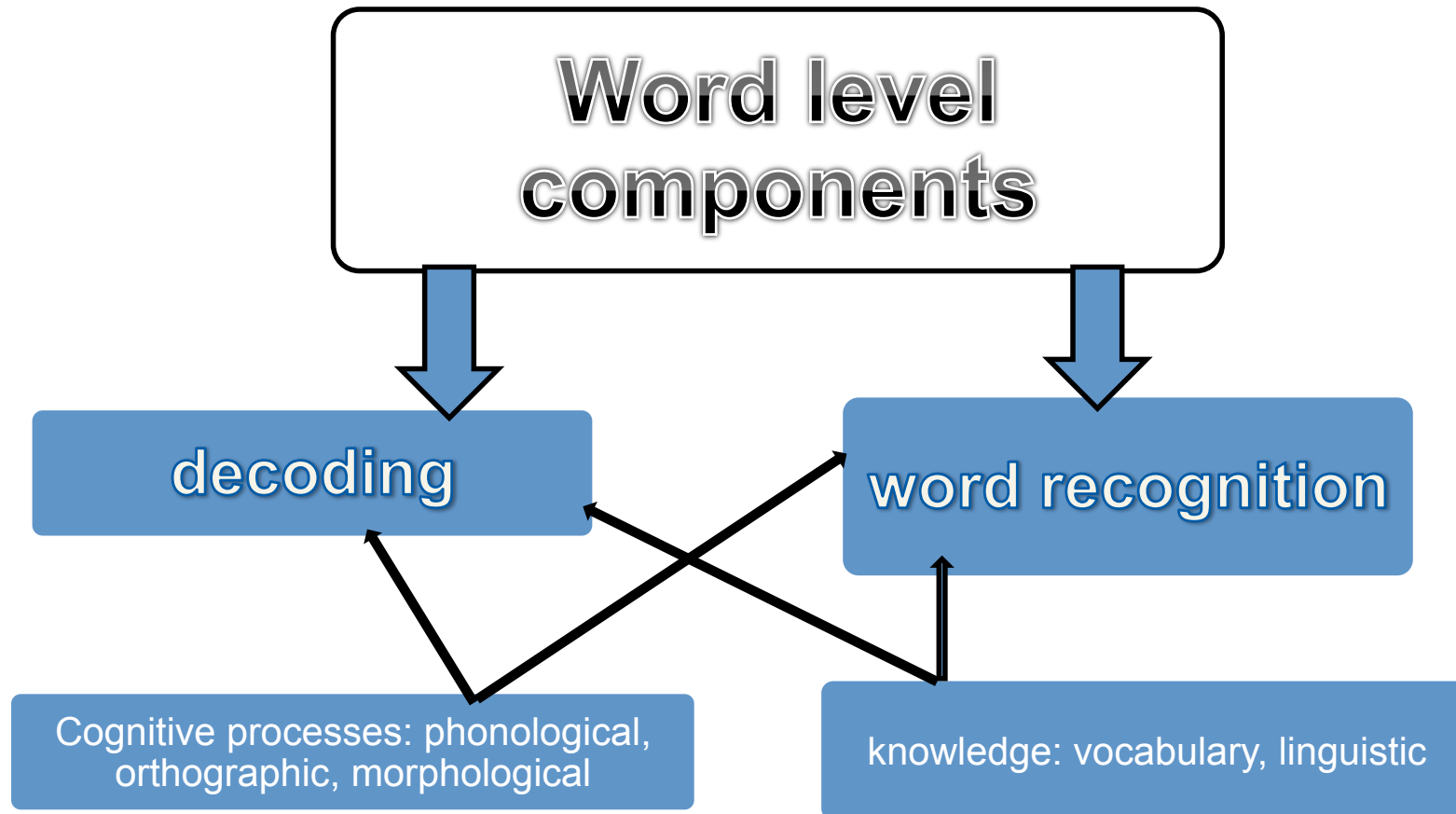
- words that have been read before and stored in memory are **sight words** (Ehri, 2005)
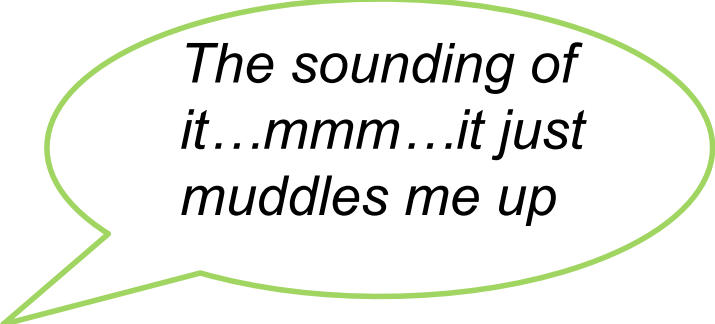
  I just know the word straight away…

- to read a word by sight generally needs knowledge of phonological and orthographic processes…then readers need to apply this knowledge to hold words in memory… although words may just be **memorised** from frequent exposure

- stored words are retrieved from memory when they are encountered in print

…learning to recognise words relies on learning to coordinate cognitive and linguistic skills into an effective, fast system
(Roberts et al., 2011)

Word level components

decoding

word recognition

Cognitive processes: phonological, orthographic, morphological
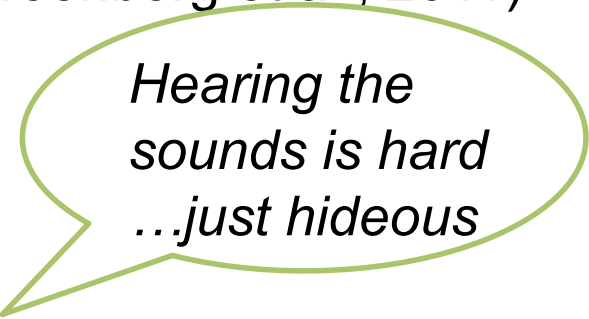
knowledge: vocabulary, linguistic

- accurate recognition of words and word parts is associated with sound phonological and orthographic processes (MacArthur, Konold, Glutting, & Alamprese, 2010)

The sounding of it…mmm…it just muddles me up

- many studies have confirmed low levels of phonological skill in less-skilled adult readers (e.g. Greenberg et al., 2011)

Hearing the sounds is hard …just hideous

- the way a reader attempts to read a word appears dependent on the particular word

- orthographic processing is important for identifying irregular words in English because so many words cannot be decoded through regular letter-to-sound rules (Mesman & Kibby, 2011; Wang et al., 2011)

- less-skilled adult readers have poor integration of these processing skills (Greenberg et al., 2011)

- less-skilled adult readers focus on remembering particular words and remember patterns and apply similarities of words they know rather than decode words (Thompkins & Binder, 2003)

- …fell back on looking at the first syllable of a word and attempting the rest of it based on that syllable (Davidson and Strucker, 2002)

- …some basic decoding knowledge but appeared to have made an incomplete transition to orthographic processing

- …appear to struggle with word reading and draw on memory with no apparent reliance on their familiarity with language structures (Mellard & Fall, 2012)

JM:…what did you do in your mind to read that word *sleek* to me correctly.

Participant: *Sl* and then *eek*.

JM: So you sounded … Worked out the sounds?

Participant: Yeah.

JM: And is that something that you have always known how to do? Or is that …?

Participant: No no...because (*tutor*) has taught me that way. Cos the es roll on you know...…I've had four teachers… and four teachers ago I couldn't do, I couldn't learn the vowels at all.

**JM:** And what do you think that (*tutor)* has done differently that has been helpful?

Participant: (*tutor)* has put the words, you know…ph makes the f word, you know, and that stuff. It's made it a lot easier...the vowels …(and if) it doesn't work out, try…
[something else]

This study seeks to examine the practices less-skilled adult readers use as they engage in word level processing:
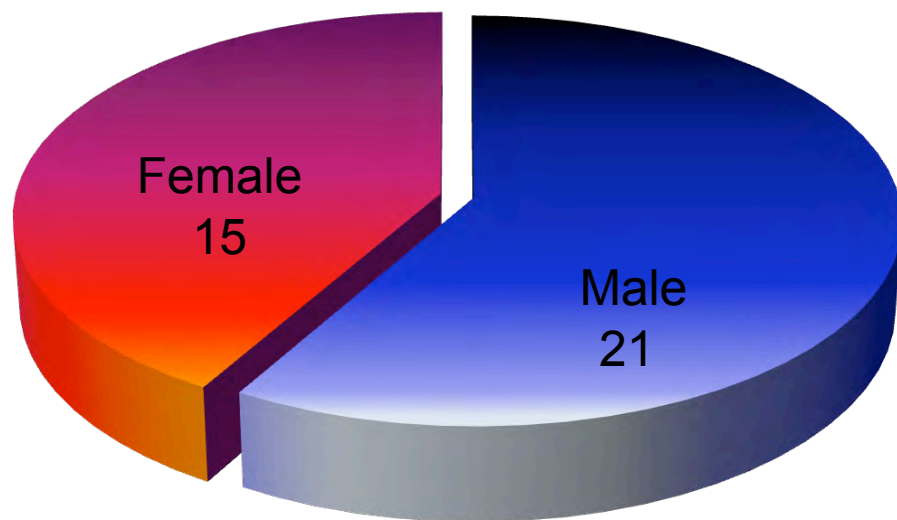
- by asking learners to complete set word-level tasks   (what they can do)

- by asking learners what they are doing as they read words (how they do it)

- by observing attempts to read words

Measures used:
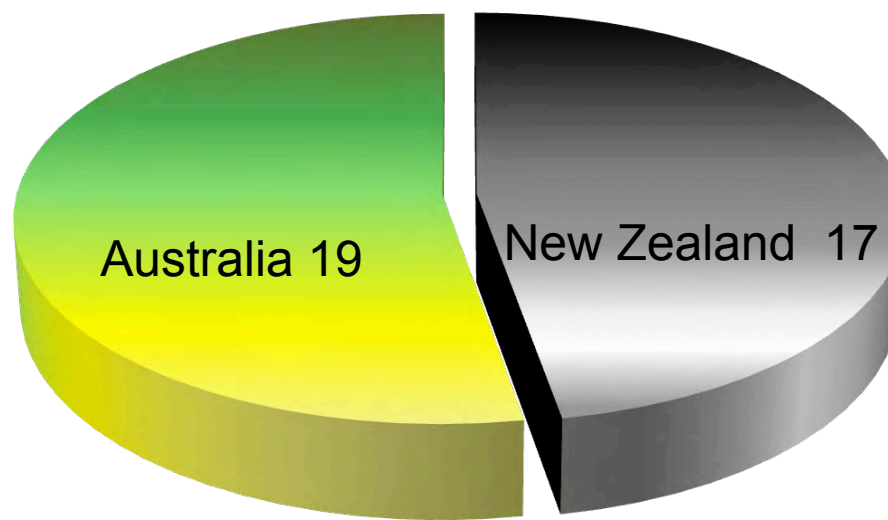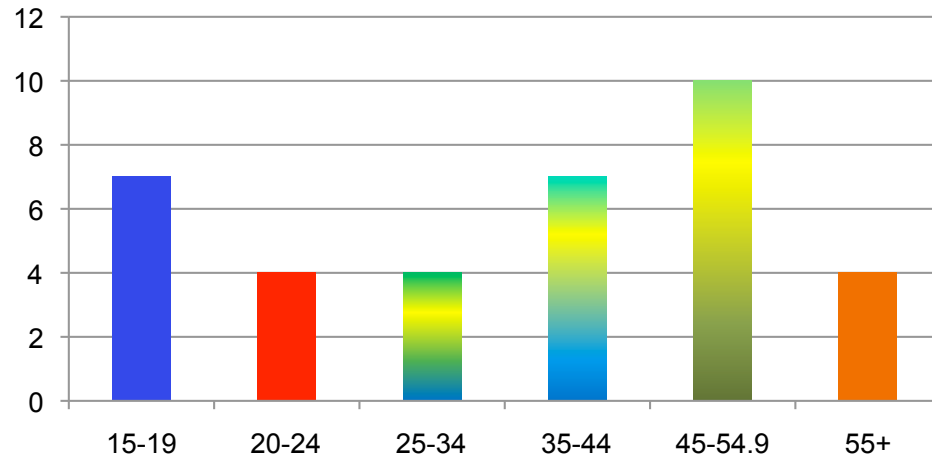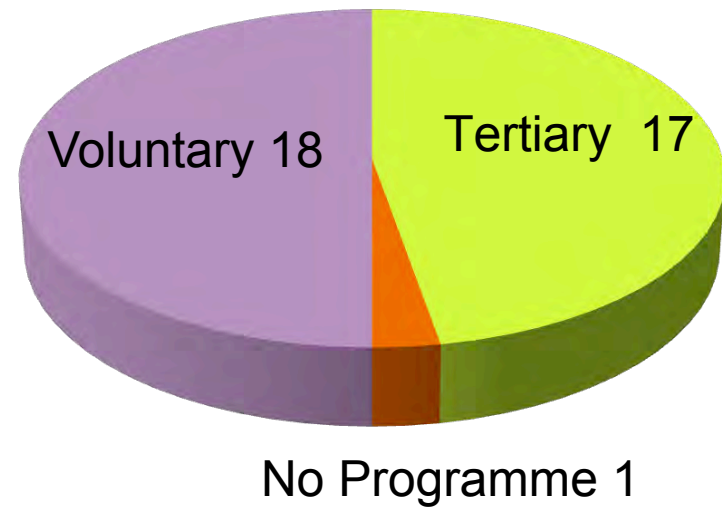

J McH

N=36

Gender

Female
15

Male
21

Nationality

Australia 19

New Zealand 17
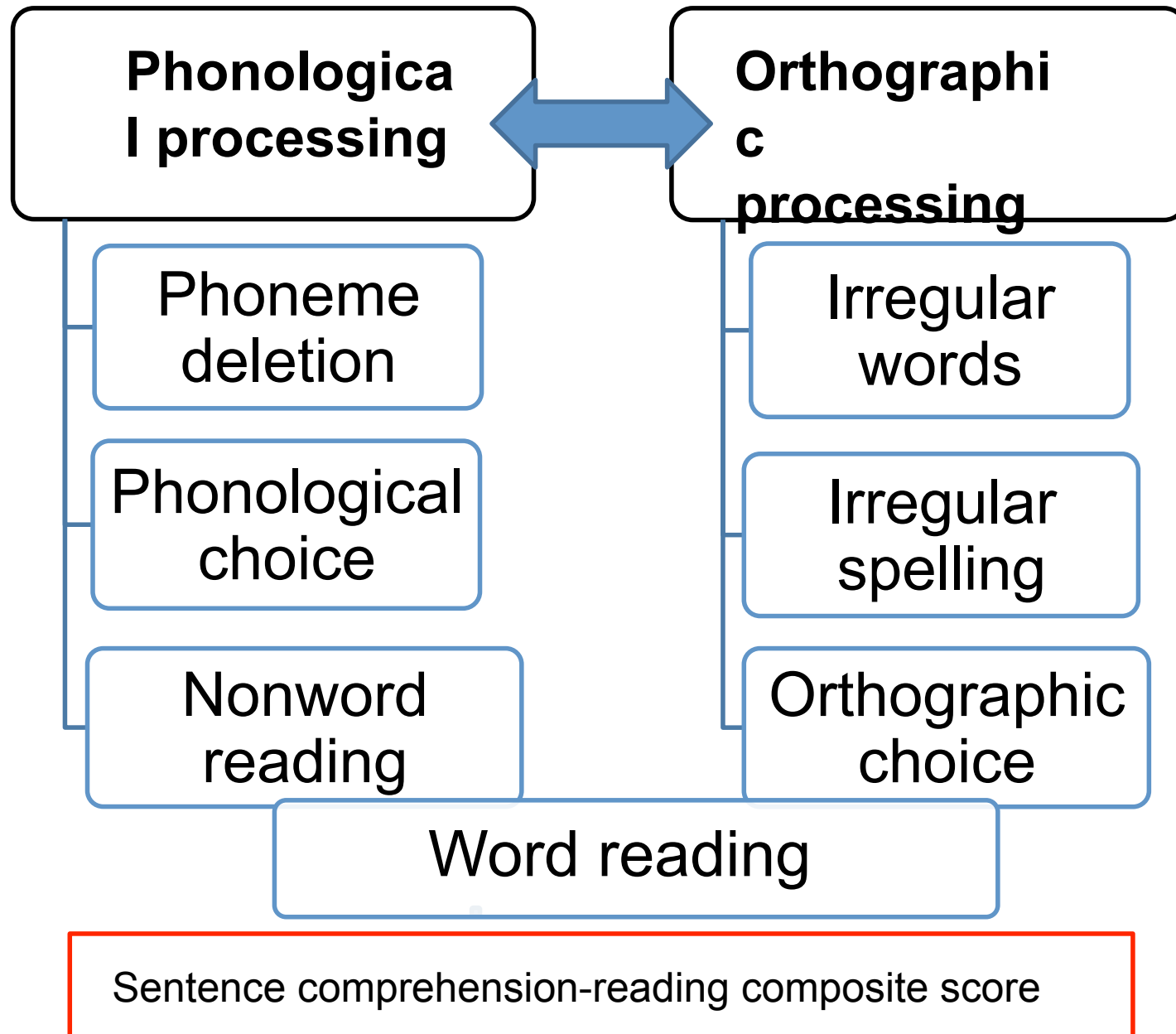
Age Distribution

Programme Type

Voluntary 18 | Tertiary 17

No Programme 1

SOME FINDINGS: The Memoriser:

- Small bank of sight words: "I just…know the word straight away" …"too many words I don't know" …"I just try to put something I know in there"… "seen the word a lot"… "I have seen this before"

- Will readily 'leave' a word if unknown or too hard…want to stop immediately it is "too hard"…no attempt to try and decode an unknown word="I don't know" straight away… talk of sounding out /breaking it up but don't

- **JM:** What's one of the hardest things about a word to read? What's hard about this (regular/2 syllable) word…**Participant:** Well, I haven't seen it before… sometimes the words confuse me because I'm not exactly sure what it was.

- **JM:**…*free*. Why did you know that word? **Participant:** Oh, I seen that word quite a lot, everywhere I go. Really…is the only reason why I knew that word, cos I see it.

- That's how I try to learn stuff… off by heart...type of thing… "my memory has got me through"

- **JM:** and so the words you were not able to sound out are words that you didn't know. **Participant:** … don't know, haven't seen before

The partial processor: phonological

- Relies on first letter…and then guesses…may give a 'nonsense' guess e.g. problick for privilege…

- "Tried to split it up but it still didn't make a word I knew…I couldn't recognise the sounds coming together"

- Inability to blend sounds e.g. *(weasel)…we-sel=whistle,* (stench)…*st-en-ch =such*

- "damn those double vowel things"

- Inserting extra sounds 'beft'=befit…or leaving sounds out 'bittern' = bitter

- "no I can't work that one out"

The partial processor: orthographical

- Not recognising irregular words and trying to treat them as regular e.g. cello=sello, depot=depo**t**

- Saying they are sounding but using analogy *(stench-"I see the ten in there")*

- Rely strongly on being able to rhyme it with a known word- *(middle)"I would try to pick out like I'd put a 'd' on it…would be did, so I'd try to take that 'd' put an 'm'...".*
  OR (ten) "I did put a B on it too, to make sure I was right: Ben"

- "I just try to put something I know in there"

- ….. scans the whole word…….recognising letter patterns

Incomplete and incorrect understanding

- **Participant:** Well *'ceiling',* how I know, Cos *seal* and, you know *ling* LING- *ceiling.* That's how I broke it up.

- **JM:** What do you do to figure it out if you don't know a word?
  Participant: Sound it out.
  JM: What about if you can't sound it out? What about ...?
  Participant: Well, if you can't sound it out: break it down.

- *Sleek*…"I don't know…it would be all right if there was a p"

- **Participant:** I look down the middle…to see if, I like, look at the whole word and see if I can split it right down the middle.
  JM: OK, why do you do that?
  Participant: Because it makes it easier for me to understand

Other emerging ideas

- <u>confusion:</u> letters /sounds/words/syllables

- <u>limited receptive vocabularies</u>:

"wow is that really…even a real word?"

"then I'm going mag-nate. No I didn't think magnate was a word, you see, so I   thought… the closest word to mag-nate to me was magnet... perhaps if I'd known the word and its use, I would have said it"

- <u>widely different levels of perseverance:</u> attempt to decode an unknown word and keep persevering with it, or stop immediately and not go on, or *"just skip the word"*

- <u>awareness:</u> knowing what practice to use or when a practice is not working and there is a need to try another one

What has helped?

Readin g aloud

…finding the holes…

things like that I haven't been taught. So it's just going back… knowing ...getting familiar...

you can ask, you are taught better, you... it's simplified, or (tutor) simplifies it, and I can understand it

I just…have these gaps which is stopping me completing the word. … I don't even know where they are, for some people its basic knowledge but for me it's never been taught to me.
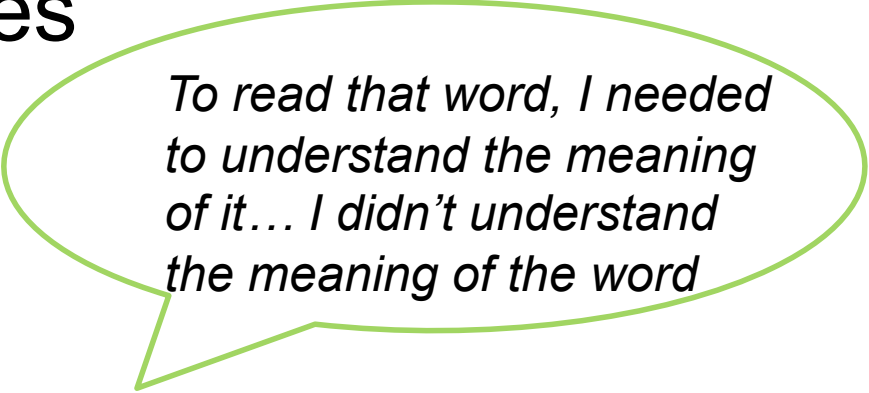
have tried to keep reading…

Implications for practice:

- …subgroups of adult literacy learners require different instructional approaches and programme content… to provide this range of targeted programmes practitioners must have abilities and tools to diagnose skills and needs

- …diagnostic assessment of each of the crucial components of reading is critical and must occur (e.g. MacArthur et al., 2012) [assessment that is used to inform teaching rather than that which is used to support policy and strategic planning]

Implications for practice:

- vocabulary and reading experience: learners may have limited lexical and background knowledge from their lack of reading experiences

To read that word, I needed to understand the meaning of it… I didn't understand the meaning of the word

- even if learners develop word recognition skills they will still have to overcome language experience limitations (Wang et al., 2011)

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References

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