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# Test anxiety in adult learners

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## CONTENTS

- 
- |   |              |
|---|--------------|
| 2 | Introduction |
|---|--------------|
- 
- |   |                       |
|---|-----------------------|
| 3 | What is test anxiety? |
|---|-----------------------|
- 
- |   |                        |
|---|------------------------|
| 6 | Why do we get anxious? |
|---|------------------------|
- 
- |   |  |
|---|--|
| 8 | Practical implications for students and teachers |
|---|--|
- 
- |    |                                     |
|----|-------------------------------------|
| 13 | Recommendations for further reading |
|----|-------------------------------------|
- 
- |    |              |
|----|--------------|
| 14 | Bibliography |
|----|--------------|

# Introduction

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The world of education is experiencing an increase in the use of high-stakes testing across all levels of study (e.g. primary/secondary schools, universities, language exams for certification; Cheng, 2008; Stobart, 2003). Each of these tests has its purposes – and its consequences too. It should be acknowledged that although tests are administered and often used as indicators of performance, they are not always accurate representations of a student's true performance and can sometimes conceal it (Meijer, 2001) due to factors that are both within and beyond a student's control. One such pervasive factor is test anxiety, which stems from evaluative situations such as taking a test and can, in turn, cause underperformance and even attrition among students (Nichols & Berliner, 2007; Zeidner, 1998).

Despite its detrimental effects on test performance and longer term achievement, test anxiety associated with language learning is significantly under-researched. The potential fallout of general language anxiety – and not specifically related to language tests – has been well documented in the literature to date (see e.g. Gkonou, Daubney & Dewaele, 2017), yet language test anxiety is a concept that is difficult to grasp and unpack because it manifests in different ways among learners and can be highly subjective (MacIntyre, 2017). Drawing heavily on general education and psychology, this white paper addresses how test anxiety influences adult learners, how it potentially differs from retest anxiety, what we can learn from previous research and theorisation on test anxiety, how students can cope with it, what the role of the teacher is in this process and what implications can be drawn for teaching and materials design.



# What is test anxiety?

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Test anxiety is a specific form of anxiety which manifests when an individual knows that their performance is being evaluated through a test. It is, therefore, a type of performance anxiety about a future outcome, such as passing an exam, as a result of preparing for the outcome (Pekrun, 2006). Simply put, in situations where there is some pressure and a good performance matters, individuals can be so anxious that they cannot perform at their best, even though they were doing well when preparing for those situations. Think, for instance, of a pianist who gets extremely nervous before a music show and during the actual performance confuses the notes and flubs their act.

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The severity of test anxiety can vary among people. The well-known distinction within psychology between **trait** and **state** anxiety (Spielberger, 1983) is applicable to test anxiety too. For trait anxious individuals, anxiety is a stable personality trait and, thus, task-independent. By contrast, state anxiety occurs when anxiety is caused by a very specific trigger, for example a language test. Test anxiety could, therefore, be primarily thought of as a form of state anxiety, although recent research has shown that anxiety

encompasses both aspects of the trait (i.e. stable) and state (i.e. dynamic) dichotomy in classrooms, thus demonstrating how complex test anxiety can be (Dewaele, 2012; Dewaele & Al-Saraj, 2015; Gregersen, MacIntyre & Meza 2014).

Test anxiety is also included in Bachman and Palmer's (1996) theorisation of language test performance. In particular, they attribute language test performance to **test taker** and **test task** characteristics, which work in tandem towards shaping students' performance as well as their differential levels of test anxiety. **Test taker** characteristics comprise of:

- knowledge of the topic
- knowledge about the language
- personal characteristics which encompass proneness to anxiety (see definition of trait anxiety above)
- knowledge of test-taking and language learning strategies
- affective schemata (this will be discussed in more detail in connection with retest anxiety below)

**Test task** characteristics pertain to the level of difficulty or complexity of a task that learners are asked to complete as part of the test.

Irrespective of whether it is a trait or a state or both, test anxiety is likely to lead students to experience extensive worry (Zeidner, 2007), have intrusive and irrelevant thoughts (i.e. thoughts unrelated to the actual tasks included in the test; Cassady, 2004), have low self-belief and form more negative thoughts about themselves and their performance (Zeidner & Schleyer, 1999) and, overall, feel

more emotionally unstable (von der Embse, Jester, Roy & Post, 2018). It also often weakens students' ability to retrieve information from memory (Eysenck, 2010) in that students blank out the answers to questions to which they know the answers, decreases students' intrinsic motivation for the subject (Pekrun, Goetz, Titz & Perry, 2002) and discourages them from making use of deep level learning strategies during test preparation such as evaluating and/or questioning the study material. On the contrary, it mainly leads to the use of more surface level learning strategies (e.g. simple rehearsal of the study material) (Oxford, 2017).

are often similar to language anxiety experienced during classroom lessons (see e.g. Gkonou et al., 2017). Despite debates on the exact contribution of anxiety to learning and/or test performance, high anxiety levels impact on a test taker's ability to process information and perform. It should, however, be acknowledged that a moderate – and manageable – level of anxiety can encourage individuals to complete a task (e.g. study towards a test and do well in the test) and perhaps also make them feel ready to tackle challenges that may arise during the testing situation. Hence, anxiety can be facilitative when there is a drive. For instance, within sports psychology, competitive anxiety can 'push' athletes to work hard and perform well because their drive to compete and win is aroused (Hanton & Mellalieu, 2006; Lane, 2016).

TEST ANXIETY CAN LEAD TO...	
Experiencing extensive worry	Having intrusive or irrelevant thoughts
Having low self-belief	Feeling emotionally unstable
Weakened ability to retrieve information from memory	Decrease in motivation
Discouragement of using deep level learning strategies	Use of more surface level learning strategies

Language classrooms are inherently stressful and anxiety-inducing environments for many students, who are often expected to juggle a number of different tasks at the same time and develop a specific skillset, which differs considerably from learning other subjects (Horwitz, 2017; Williams & Burden, 1997). It soon becomes apparent that if tests used in language learning require learners to retain a lot of information, while also being high-stakes, higher levels of anxiety are likely to appear, which then becomes debilitating and affects performance.

Test anxiety manifests across all levels of education but reaches its peak in higher education (Quinn & Peters, 2017). In fact, increased levels of test anxiety among university students have led to burnout and high drop-out rates, thus significantly influencing their psychological wellbeing (Chae, 2015; Duty, Christian, Loftus & Zappi, 2016).

Within second language acquisition (SLA), the very limited research into test anxiety has revealed contrasting results, with test anxiety not always affecting performance in the same way. For example, In'nami (2006) examined the extent to which test anxiety might impact on listening test performance. The study showed that listening test performance did not correlate with general test worry, test-irrelevant thinking and emotion, which were used as the three main components of test anxiety. Liu (2007) and Huang and Hung (2013) found that anxiety about English oral tests was significantly and negatively associated with oral test performance. In addition, within SLA, test anxiety has played an important role in how we understand learners' anxiety over learning a foreign language given that the symptoms experienced when one is taking a test



## What is retest anxiety?

Retest anxiety happens when students are anxious over having to sit the same test or exam again, because they failed it in previous attempts. Affective (emotion-related) schemata are activated in retest settings, either consciously or unconsciously. In other words, a history of test failures and/or poor testing outcomes, which caused past negative emotional experiences in similar contexts, influences students' anxiety and performance every time they have to take another test or the exact same test (Bachman & Palmer, 1996). Previous failed test-taking attempts are normally due to two main sources: subject mastery (i.e. a student did not study well enough) and a trait-/state-anxious personality.

Nonetheless, retest anxiety is not always bad for all students but can instead be facilitative. Just because students have gone through the same experience before, they tend to use that experience positively. Although they are not presented with the exact same test content and

questions as the previous time, the format of the test is normally identical and students are already familiar with it. Additionally, students acquire a set of skills that they would not have otherwise acquired while preparing for the retest: they learn to focus their effort on content and those test items that gave them the greatest difficulty last time, refocus their priorities, manage their time more effectively and take better care of themselves. We could therefore surmise that it can be beneficial to provide students with practice material for a test that prepares them for the types of questions and content they might encounter.

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# Why do we get anxious?

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In conceptualising test anxiety in previous research, three dimensions have been highlighted: **autonomic reactivity**, **behavioural responses** and the **cognitive dimension** of test anxiety. Autonomic reactivity refers to somatic or physical manifestations of test anxiety such as sweating, trembling, fidgeting, fast heartbeat, fainting and nausea. Milder cases of test anxiety can cause the widely known sense of having 'butterflies' in the stomach, whereas in the most severe cases individuals might even experience a panic attack. Behavioural responses are connected with coping strategies and will be discussed in more detail in the section below on what students can do to cope with test anxiety.

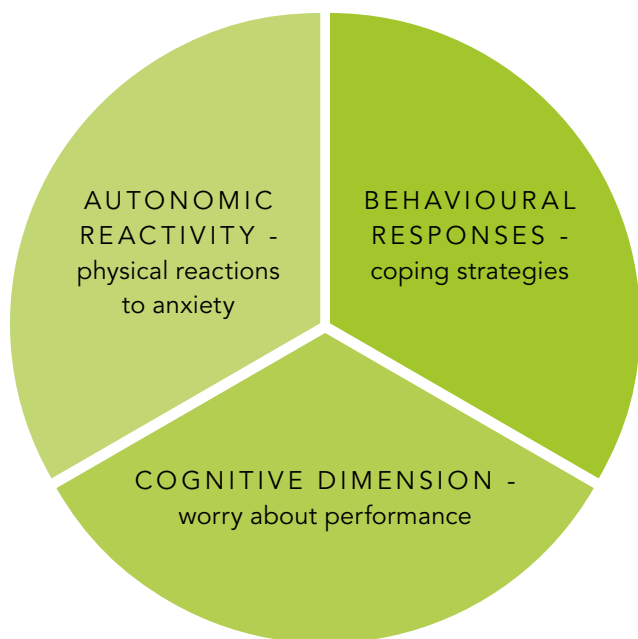


Figure 1. Three dimensions of test anxiety

The cognitive dimension, which has attracted most attention, is associated with worry about performance. Cassady's (2004) research has been quite influential on this front. It showed that test anxious individuals perceive a number of threats during the testing situation, including a sense that the test is too difficult and they are unprepared for it (e.g. 'I haven't studied enough and the test is too difficult, so I will most likely fail'). Such taxing thoughts divert individuals' attention from the content of the test to heightened levels of worry about potential failure, even if previous academic performance was high or satisfactory (Owens, Stevenson, Hadwin & Norgate, 2012).

Worry, in particular, has been investigated in depth in an attempt to better understand how it leads to test anxiety. Zeidner and Matthews (2005) posited that testing situations make test anxious students expect a negative outcome or a potential failure – usually before one knows how they did in the test – and this expectation of failure gives birth to worry. Wells (1995) suggested that beliefs about worry can be both positive and negative. Beliefs are positive when one is convinced about the benefit of worrying about the test (e.g. 'If I worry, I will study more and I will therefore be better prepared'). On the other hand, they are negative when individuals feel that they cannot reduce their worry about the testing situation (e.g. 'No matter how hard I study I cannot control worry') and, therefore, experience even higher levels of test anxiety (O'Carroll & Fisher, 2013; Spada & Moneta, 2014).

As discussed earlier, test anxiety does not affect all students in the same way. For example, some students are of a more nervous disposition and thus more vulnerable to test anxiety than others (i.e. trait anxious students; Dewaele,

2012). A personality trait associated with increased test anxiety is perfectionism (Weiner & Carton, 2012), which refers to an individual's wish for everything to be perfect and correct. Individuals with perfectionism are likely to be concerned about making mistakes, are sensitive to criticism and tend to ruminate on (anxiety-provoking) events (e.g. 'I shouldn't make mistakes. I don't want others to criticise me'; DiBartolo, Li & Frost, 2008; Moroz & Dunkley, 2015). In its more positive form, perfectionism leads individuals to centre on what has been achieved and set clear goals (e.g. 'I did okay. I need to focus on X in order to meet my goal'; Lo & Abbott, 2013; Stoeber & Otto, 2006).

A theory related to the personal determinants of test anxiety is Pekrun's (2006) control-value theory of achievement emotions. In other words, a student might feel anxious if they are unsure if they will have enough time to prepare for the test, a situation over which they might or might not have control. They will also feel anxious if passing the test matters to them because otherwise they will not be able to meet their extrinsic goal or motive, for example getting a high mark or a specific job, or please significant others such as family and their teachers, etc. In this case, they are evaluating the value that the test carries for them and becoming anxious over potentially not being able to meet their goal. From a social-cognitive perspective (Eccles, 2007; Wigfield & Eccles, 2000), unrealistic, distant and ambitious goals – irrespective of how specific they might be – are connected with threat and anxiety in testing situations, because the student might think that their goals exceed their abilities and are, thus, detrimental to their performance (e.g. 'This is too much for me. I cannot reach my goal') (Bandura, 1997; Boekaerts, 2009).

Previous research has also revealed that test anxiety is often contingent upon the importance attached to tests and academic success within a particular sociocultural, educational and family setting (Zeidner, 1998, 2014). Hence, it is not only the objective circumstances of the testing situation (i.e. understanding the test task, retrieving relevant knowledge, feeling pressured to do well), but also the subjective cognitive interpretation of these circumstances that lead to test anxiety (Pekrun, 2006). To put it simply, test performance and success will be more important for some people/families/societies than for others.

Given that tests are gaining more and more prominence in education systems at an international scale, all of the above research findings should lead us to consider: do tests maintain or hinder the accomplishment of educational goals? As far as language tests are concerned, how do they help learners to improve their language skills? What knowledge of aspects of the language is facilitated through tests? Through answering these questions, we can ensure that we are using tests for appropriate reasons and to support students in achieving their learning goals.

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The washback effect of testing on learners' learning has received some attention in recent years (Brookhart & Bronowicz, 2003; Cheng & DeLuca, 2011; Green, 2006; Xie & Andrews, 2012), with studies tapping into how learners' learning is influenced, or even shaped, by testing. Interestingly, the participating learners in the studies cited above were found to focus more on how they went about studying for the test (i.e. test taking strategies) and less on what they learned about the subject matter. When great emphasis is placed on testing, it is only natural that students' levels of anxiety will increase. This has serious implications for how tests are used within education. However, teachers can support test takers by considering how they approach test-focussed lessons, how relevant materials are designed and how to support learners developing strategies for coping with test anxiety.

# Practical implications for students and teachers

## Strategies for coping with test anxiety: What students can do

The following strategies are recommended for adult learners to be able to deal with test anxiety. Teachers should support students by helping to raise awareness of these strategies with their students.

### Test preparation strategies

- Preparing well and sufficiently, such as by the following:
  - a. avoiding procrastination
  - b. joining a study group
  - c. asking the teacher and friends who study regularly for advice
  - d. learning about the format of the test and types of questions in advance
  - e. learning about study skills
- Identifying revision patterns that work for oneself. Some examples of how revision could be done are:
  - a. through the use of past papers
  - b. through the use of practice tests
  - c. through the creation of flash cards which include key information or information that one tends to forget or finds difficult to grasp

- d. drawing mind maps or diagrams to retain information in memory

- For students taking resits:
  - a. reflecting on what did not go well the first time
  - b. making notes on moments during the test that were anxiety-inducing
  - c. considering whether one's revision method is working
  - d. reading more actively by evaluating and questioning the content
  - e. looking over the test already taken
  - f. looking for additional resources that will offer extra test practice

### Becoming mentally and physically prepared

- Practising and modelling positive 'self-talk' to replace negative thinking when performance suffers due to test anxiety with positive, self-encouraging thoughts (Gkonou, 2018). Self-talk is a form of internal dialogue which helps towards increasing self-confidence, solving problems effectively and coping with difficulties and challenges.
- Changing fixed to growth mindsets by avoiding thoughts such as 'I'm thick' and instead believing in yourself and that you are prepared for the test



('I can do this', 'I have revised for the test', 'I have tried so hard throughout the term and I can do well'). Helping students to see their progression against their learning goals will support this.

- Using vision and positive self-imagery (see e.g. Dörnyei & Kubanyiova, 2014) through imagining oneself feeling confident during the test and doing well in it. The teacher could encourage students to:
  - a. reflect on their positive qualities and strengths
  - b. define their goals
  - c. give positive affirmations to themselves that in evaluating the above, they are capable of succeeding in the test
- Using relaxation techniques such as:
  - a. deep breathing
  - b. listening to music
  - c. taking a walk
  - d. engaging in activities that one likes in the days leading up to the test (Oxford, 1990)
- 'Planning' for test anxiety by reflecting and mulling over sources of anxiety and anxiety-provoking moments and looking for ways of turning anxiety into a positive experience.
- Staying healthy by eating nutritious food, sleeping in a regular routine, making time to see friends and giving oneself small breaks.
- Accepting that a certain amount of anxiety can help.

### Test-taking strategies

- Employing strategies while taking the test such as:
  - a. creating outlines before attempting to fully answer a question to help organise one's thinking and add structure to one's answer
  - b. moving to the next question even if the previous one is not fully answered in the interest of time

c. identifying questions that are easy to answer and starting off with those to boost one's confidence

- Staying focused on one's own test and not on what others in the classroom are doing.

## Implications for teaching and creating resources

Knowing the type of strategies that learners should employ is just one step; the following guidance should be followed by teachers and materials designers for creating the right conditions to minimise or deal with test anxiety.

### Teaching

- Consider the potential for explicit strategy training or instruction (Chamot & Harris, 2019) through **language learner strategies**, **test management strategies** and **test wiseness strategies** (Cohen, 2006; 2014).
  - a. **Language learner strategies** refer to ways of managing one's learning and in particular the language skills (reading, listening, speaking, writing) and systems (grammar, vocabulary, pronunciation) as well as regulating emotions through affective/emotional self-regulation strategies.
  - b. **Test management strategies** enable students to approach and respond to test items and tasks in a meaningful way.
  - c. **Test wiseness strategies** encourage students to activate their knowledge of traditional formats of tests and the cognitive and metacognitive skills and processes required when working on a test.

In the classroom, teachers could use past exam papers and practice tests to help students familiarise themselves with their structure and how instructions for different activities are given. Being clear about the instructions and requirements of specific test tasks ahead of the test day will enable students to manage their time more efficiently and reduce the time spent on understanding a task. Additionally, it can boost students' confidence with the format of

the test and make them feel 'prepared' for it. This can also be achieved through classroom activities that simulate the actual test and the testing conditions (e.g. timed tasks, closed book test, etc.).

- Encourage and assist learners with setting SMART (Specific, Measurable, Achievable/Attainable, Realistic, Timely) goals through needs analysis and activities that enable them to become more self-aware of their strengths and weaknesses as well as reasons for learning the language. If these reasons are associated with tests or formal examinations in particular, then knowing what one can achieve and how they can succeed given their capabilities becomes vitally important.



Figure 2. SMART goals

- When classroom teaching targets test preparation, passing the test should not be seen as an end in itself by learners and teachers alike. Tests can be useful indicators of one's performance and failing a test (perhaps one out of many) should not stifle learners' enthusiasm to persist with their language

classes. Understanding that there may be setbacks is something that learners should be told explicitly.

- Implement peer support mechanisms and peer-to-peer coaching (Warner & Budd, 2018) to minimise social comparisons among learners in class and also help learners to understand that they are not on their own and that other students might be experiencing test anxiety too.
- Use positive reinforcement and modify unrealistic beliefs about test taking (Ergene, 2003). Positive reinforcement refers to the process of adding a stimulus to a behaviour which would make the behaviour more likely to reoccur in the future. For instance, in the classroom, positive reinforcement could take the form of teacher praise after a student has completed an exercise or done well in a test (with careful consideration for the type and amount of praise). Additionally, students might hold unrealistic beliefs or expectations about test taking, such as that tests are a bad thing or that their abilities and value as a learner are largely determined by their performance in the test. It is necessary that such beliefs are challenged by or modified with the help of the teacher, by explaining clearly to students what the purpose of the test is and how it will facilitate student learning.
- Help students to foster their self-assessment skills through the use of learning rather than performance criteria (e.g. by articulating how learning could be advanced through a test instead of highlighting the marks students got in the test), understanding of their learning goals (Williams, Mercer & Ryan, 2015), how their learning is assessed and their ability to assess their own and others' work.
- Use testing and assessment as a means of conveying a sense of learning progress to students. In other words, tests, learning tasks, project work, practice tests etc. can be used to increase students' awareness of how much they have learned and what aspects of their learning still require work.
- Praise students for their effort, hard work and persistence (to promote a growth mindset) and

strategies they used to complete the task, and do not dwell on whether they have a talent for learning languages or the outcome or mark in the test (in an effort to overcome a fixed mindset).

- Create a classroom environment that promotes self-regulated learning through cultivating learner autonomy, promoting positive and helpful emotions and encouraging healthy interpersonal relationships among classroom members. This could be achieved through discussions about and/or instruction of anxiety-reducing strategies as well as planning together for a test to foster cooperation and collaboration among peers.

### Materials design

- Provide reflection activities which explicitly ask students to consider what makes them feel anxious about tests. A possible list of options could include:
  - a. not understanding the task
  - b. fear of making mistakes
  - c. new task
  - d. insufficient preparation
  - e. not knowing how to review previous material
  - f. others' or self-expectations to be perfect
  - g. peers' reactions
  - h. teacher's reaction

In a follow-up lesson, ask students to rank these potential sources of test anxiety according to what would make them most anxious or what would matter most for them. Next, engage students in a brainstorming activity during which they consider strategies for addressing each cause and share ideas with the rest of the group.

- Provide reflection activities that encourage students to consider their strengths and weaknesses. In cases where students are resitting a test, provide reflection activities which enable them to consider

which test items and tasks they found particularly difficult last time, what moments they felt comfortable and when during the test they became anxious.

- Introduce anxiety rules (i.e. strategies for coping with test anxiety, such as those outlined for learners) at the start of the course and refer students to these rules when preparing for a test.
- Provide students with opportunities to visualise, describe, write about or draw their own test anxiety and its positive, no-anxiety counterpart. This activity enables students to visualise how high test anxiety and low/no anxiety manifest.
- Introduce a problem-solving or coping-skills wheel such as the one below, or ask students to create one, at the start of the course. Students could refer to it whenever they experience anxiety.



Figure 3. Anxiety coping skills wheel

- Embrace open, candid discussions on anxiety and other emotions in class, or provide activities based on emotion cards. These can encourage students to think about emotions and be more inclined to disclose and articulate them.

happy	confused	frustrated
sad	angry	confident
scared	surprised	excited
worried	bored	loved

nervous about the test' could be reframed into 'Is there a reason to be nervous? I have studied hard and this is my chance to show what I have learned'.

- Provide material such as discussion activities on how learning and improvement can be achieved or lists of coping strategies that help students to cultivate a growth mindset, i.e. that learning depends on effort and hard work, and not just on intelligence and a natural talent for learning languages.
- Provide activities that encourage students to reframe their own statements about test anxiety. For example, an original sentence such as 'I am
- Provide activities that encourage students to create their own action plans, including goals and how to accomplish them or reflections on their strengths and weaknesses, which will help them to perform well in the test.
- Provide activities, in the form of regular checkpoints, that urge students to evaluate their own and their peers' performance, progress and goals, and to make a list of the skills, systems, strategies they have learnt in e.g. the last lesson/week/month. Such activities can enable students to break down their goals into smaller, manageable sets, appreciate the effort required to achieve a goal and eliminate the possibility of becoming overly anxious if a goal is not achieved on time.



# Recommendations

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## for further reading

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Gkonou, C., Daubney, M., & Dewaele, J.-M. (eds.). (2017). *New insights into language anxiety: Theory, research and educational implications*. Bristol: Multilingual Matters.

This book takes a fresh look at the field of language learner anxiety, after a 30-year hiatus since the introduction of the concept by Elaine Horwitz and her team. It discusses anxiety, including test anxiety, from a range of diverse perspectives and acknowledges the highly individualised and context-specific nature of the construct as well as its complexity.

Oxford, R. L. (2017). *Teaching and researching language learning strategies: Self-regulation in context (2nd ed.)*. New York, NY: Routledge.

This book offers a fresh perspective on the field of language learning strategies and synthesises theories from psychology and second language acquisition. It is perhaps the only language learning strategies book which acknowledges the importance of affect and (test) anxiety in language learning and discusses affective strategies in depth, by suggesting innovative ways for understanding language learners' emotions and helping them to manage them.

Williams, M., Mercer, S., & Ryan, S. (2015). *Exploring psychology in language learning and teaching*. Oxford: Oxford University Press.

This book presents everything that language teachers should know about their learners' psychologies and anxieties. It skilfully combines theory and practice, and proposes activities that teachers could use in class to elicit information about their learners' emotions, mindsets, motivation and empathy-related skills.

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**Dr Christina Gkonou** is an Associate Professor in TESOL and MA TESOL Programme Leader in the Department of Language and Linguistics at the University of Essex, UK. She is also Deputy Director of Education in the same department. She convenes postgraduate modules on teacher education and development, psychology for language learning and teaching, and practicum in TESOL. Her research interests are in all psychological areas surrounding the foreign language learning and teaching experience.

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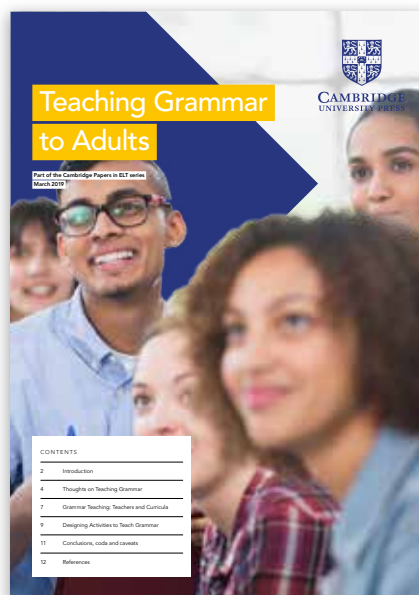
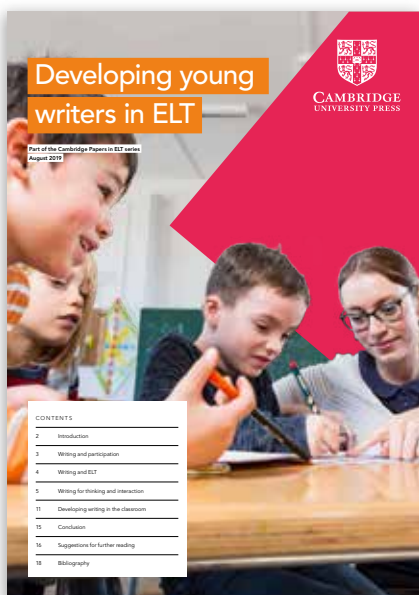
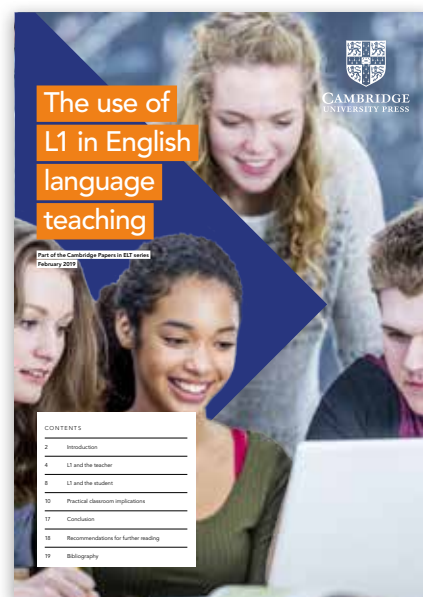
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