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## Positive anxiety as an affective component of shadowing in language learning and use

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### Abstract

*Language anxiety, as an affective component of second/foreign language learning, has been studied since the 1970s. Recognized as a complex phenomenon with a significant impact on language learning and use, this paper explores the effects of positive anxiety in shadowing on language learning and use. Shadowing serves as a technique for simultaneous interpretation and second/foreign language learning. Since the 1990s, successful application of shadowing for language learning purposes has been observed in Japan. However, distinctions exist between shadowing for simultaneous interpretation and language learning, with the former involving unknown authentic audio and audiovisual texts in the student's first language, and the latter utilizing shorter sequences in the student's second/foreign language with known content. This paper presents two ethnographic instances in which the shadowing method for simultaneous interpretation was employed to enhance second language learning for adult learners and public service interpretation students. Additionally, it showcases an ethnographic example of shadowing designed for regular foreign language students—learning German, Spanish, French, English and Italian—and immigrant students learning Norwegian and English at an upper secondary school in Norway. The findings hold significance for researchers, language teachers, and learners, revealing that language learning students improved not only their listening and oral skills, but also achieved deep learning wherein language-dependent discourse, syntax, phraseology, and vocabulary were retained in long-term memory. Moreover, the research indicates that students often experienced symptoms of healthy/positive anxiety, suggesting a vital role of positive anxiety in the foreign language learning process. However, further research in this domain is needed.*

**Keywords:** *second/foreign language learning, shadowing, positive anxiety, deep learning, listening and oral skills*

### Introduction and background

Research on language anxiety began in the 1970s, primarily focusing on the disruptive and inhibiting effects of anxiety on language learning and use. In the 1980s, Horwitz et al. (1986) identified communication apprehension, text anxiety, and fear of negative evaluation as the conceptual foundations of language anxiety (Langford, 2023), differentiating it from general anxiety. MacIntyre and Gardner (1989) supported this view by demonstrating that general anxiety was not a reliable factor in foreign language anxiety.

Contemporary research portrays language-learning anxiety as a multifaceted phenomenon influenced by factors such as learners' linguistic abilities, physiological responses, self-evaluation, interpersonal relationships, and specific topics (MacIntyre 2017, 25). This perspective promotes a dynamic approach to investigating language-learning anxiety (Langford 2023).

Based on my personal experience spanning over thirty years in the fields of simultaneous interpretation, language learning, and language use, I find no need to distinguish between general anxiety and foreign language learning anxiety. Learning a new language inherently places learners outside their comfort zones, naturally inducing distress, akin to encountering unfamiliar situations beyond one's control. This distress need not be pathological; on the contrary, it can facilitate improved performance.

As both a lifelong foreign language learner and user, I resonate with the concept of healthy and positive anxiety, as defined by Norwegian organizational psychologist Paul Moxnes. The anxiety I experienced while in a managerial position was akin to the anxiety I felt during written exams, oral presentations and shadowing exercises when learning Norwegian and Spanish as an adult. My perspective on anxiety in language learning thus centers on the affective component of healthy and positive anxiety, observed both in myself and my students during shadowing exercises integral to their language learning process. This positive anxiety, which surfaced during shadowing practice, aligns with Hattie's (2023) meta-analysis of learning achievements.

Research on shadowing in second/foreign language learning has existed in Asia since the 1990s, primarily concentrating on its effects on learners' listening and pronunciation skills. The Japanese approach to shadowing involves familiar oral texts in the second/foreign language Hamada (2011a). Hamada discovered a positive correlation between students' sense of accomplishment through shadowing and the enhancement of their sound recognition skills (Hamada 2011b). Teeter (2017) confirmed that incorporating shadowing into regular English classes in Japan contributed to anxiety reduction among students.

Applying shadowing to prepare for simultaneous interpretation poses greater demands on language learning students due to various factors. Originally intended to acclimate simultaneous interpretation students to listening and speaking simultaneously, this method requires students to focus on spoken language speed, performed in their A<sup>3</sup> or B language. Personally, experiencing this technique during my simultaneous interpretation studies at the University of Vienna in the late 1980s, where French was my C language, I ventured into shadowing tasks meant for students with French as their A or B language. Despite this being beyond my scope, I found it beneficial, improving my oral and listening skills while deepening my understanding of French. Subsequently, I applied shadowing as a compulsory exercise in a one-semester program for public service interpreters to enhance their Norwegian proficiency. This program was organized by Telemark University College and the Norwegian Directorate for Immigration.

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- <sup>3</sup> A, B, C Languages (<https://aiic.org/site/world/about/profession/abc>)
  - **Interpreters' working languages** are classified according to three categories – **A, B, C**:
  - The '**A**' language is the interpreter's **mother tongue** (or its **strict equivalent**) into which they work from all their other working languages in both consecutive and simultaneous interpretation. It is the language they speak best, and in which they can express even complicated ideas. It is therefore an **active language** for the interpreter.
  - A '**B**' language is a language in which the interpreter is **perfectly fluent**, but which is **not a mother tongue**. An interpreter can work into this language from one or several of their other working languages but may prefer to do so in only one mode of interpretation, either consecutive or simultaneous (often in 'consecutive' because it is not as fast). It is also considered an **active language** for the interpreter.
  - A '**C**' language is one which the interpreter understands perfectly but into which they do not work. They will interpret from this (these) language(s) into their active language. It is therefore a **passive language**.

Later, I devised various shadowing models for language teaching and learning of English, Norwegian, German, French, Spanish and Italian in upper secondary school in Norway.

The impact of shadowing on foreign language anxiety within foreign/second language learning has gained attention in Japan. Current research highlights a positive correlation between shadowing, language anxiety, and language learning, with shadowing diminishing language anxiety while enhancing language-learning outcomes.

However, systematic research on how (positive) anxiety influences shadowing and vice versa remains lacking, warranting further exploration in this area.

## **Theoretical background**

### **Positive anxiety**

In his 2023 meta-analysis of learning achievement, John Hattie (2023) emphasizes the importance of educators perceiving learning from the students' perspective. He advocates for teaching students to become their own teachers and to adopt a student-centered approach where the main goal of education is to help students exceed their perceived potential. Hattie's (2023) analysis focuses on nine domains that influence learning, examining the effect sizes of various factors within each domain. These domains include student, home, school, classroom, teacher, curricula, students' learning strategies, teaching strategies and technology, school environment, and off-school strategies.

Hattie (2023) classifies emotions, alongside perseverance, confidence, student personality, emotional intelligence, well-being, and cognitive dispositions, as essential components in a student's willingness to learn. Emotions fall into four categories of dispositions: positive activating (e.g., hope, curiosity, happiness, enjoyment), positive deactivating (e.g., relief, relaxation), negative activating (e.g., anxiety, depression, stress, boredom, anger, frustration, aggression/violence), and negative deactivating (e.g., boredom, hopelessness).

Norwegian organizational psychologist Paul Moxnes (2018) distinguishes between healthy-warm and cold anxiety and pathological anxiety. Warm anxiety acts as a positive driving force that motivates individuals to tackle challenges, while cold anxiety represents a typical reaction when confronted with new demanding tasks. Cold anxiety, although initially paralyzing, can be harnessed as a positive, energizing force in a secure environment. Moxnes cites the examples of artists and athletes who transform cold anxiety into motivation when performing on stage or competing. Additionally, Moxnes suggests that, at times, increasing anxiety levels can enhance a sense of security and ultimately improve performance.

Applying Moxnes's insights to language learning students practicing shadowing reveals the necessity for a balance between anxiety and security. Students engaging in shadowing tasks must feel secure enough to willingly undertake the demanding exercise while being anxious enough to execute shadowing effectively.

Anxiety constitutes an emotional component, and emotions form one of the essential components in a student's will to learn. Alongside emotions, students also possess distinctive skills and a genuine enthusiasm for learning, both of which significantly influence the ultimate learning outcome (Hattie 2023). Consequently, the effects stemming from these components on learning outcomes manifest within the overarching context of the nine domains highlighted by Hattie. While Hattie's analysis encompasses learning in a broader sense, we deduce its applicability extends to the realm of language learning.

The study of language learning anxiety has developed specialized approaches since the 1980s. Pertinent to exploring the affective component of shadowing is Langford's assertion (2023) that educators must comprehend the interplay between anxiety, learners, learning context, required skills, and tasks. This viewpoint aligns with Hattie's perspective, emphasizing the crucial role of positive teacher-student relationships and teacher authority in empowering students' learning process.

Horwitz et al. (1986) suggest that educators guide anxious students in coping with and reducing language learning-related stress. Langford references Young (1991), who proposes sharing feelings of anxiety with peers, Saito et al. (1999), who suggest positive self-talk, and Dörnyei and Simsek (2017), who advocate constructing a positive personal narrative to reframe anxiety. Additionally, Oxford (2017) recommends repeated exposure to anxiety-inducing situations to develop effective coping strategies and proposes that teachers prioritize modeling over language correction to mitigate anxiety. Combining coping measures with language training is essential to enhance language proficiency (MacIntyre and Gardner 1994).

### **Shadowing**

Shadowing is a method originally designed to test selective attention (Wood and Cowan 1995). It has found applications in speech therapy to overcoming stuttering in speech production (Harbison 1989) and is widely utilized in simultaneous interpretation training worldwide (Hamada 2019). In the context of simultaneous interpretation, students shadow extended speeches in both their A and B languages. The primary objective of this exercise is to expose students to authentic multimodal texts, which last up to 30 minutes and are unfamiliar to them, while training their ability to speak with the same speed and prosody as the speaker. Beyond verbatim shadowing, students engage in "smart shadowing," wherein they analyze the source text, visualize its underlying meaning, and paraphrase it (Setton and Dawrant 2016).

Since the 1990s, various forms of shadowing have been introduced in Japan and other Asian countries to address the dearth of authentic listening and oral practice opportunities in English language learning. In these contexts, students shadow familiar texts in English as a Foreign Language (EFL) to enhance pronunciation, listening, and oral skills. Shadowing is a well-established technique in these regions, with mobile-assisted language learning (MALL) applications specifically designed for shadowing to practice both listening and oral communication skills (Teeter 2017).

Research into shadowing's effectiveness in English language learning began in Asia during the 1990s. Tamai Lamberts (1992) initially defined shadowing as a technique to enhance listening skills (Sumiyoshi and Svetanant, 2017). A study by Devon Arthurson (2019) examined qualitative and quantitative data from student surveys regarding the efficacy of shadowing in Japan. The findings indicated that most students agreed that shadowing positively influenced their English proficiency. Arthurson also reflected on his personal experience with shadowing while learning Japanese, noting a correlation between improved listening, speaking, and reading skills, along with enhanced comprehension and shadowing speed.

Mattys and Baddeley (2019) emphasize the role of the working memory system, responsible for temporarily storing information during complex tasks, in language acquisition. The phonological loop within the working memory is widely implicated in language learning, storing acoustic information that would fade within seconds without subvocal rehearsal. The exact coding process of sounds remains unclear, but scholars concur that articulating sounds following auditory exposure, particularly through overt repetition, enhances retention. Kadota (2007) notes that phoneme perception is often not automatized in Japanese foreign language learners, affecting the phonological loop's function and explaining challenges EFL learners face in word recognition during listening. Shadowing seems to make the process of rehearsing heard information more evident, thereby strengthening the phonological loop's function (Hamada, 2016).

In a recent study on language learning anxiety, Craig Langford (2023) reviews prior research on language anxiety and subsequently investigates how second-year language students at a Japanese university perceived an intensive language shadowing course and the associated anxieties. The findings indicated that shadowing predominantly positively impacted students' listening skills, fostering a sense of achievement and language progression. The utilization of an online forum where students shared recordings and comments describing their experiences appeared to mitigate learning anxiety and

promote group cohesion. This outcome aligns with the effectiveness of Yamauchi's (2014) integrated approach to simultaneously enhance listening skills and alleviate anxiety.

### **Methodology**

The objective of this paper is to present three ethnographic examples that illustrate how positive anxiety among second/foreign language learners during shadowing has a positive impact on their language learning outcomes.

#### **Example 1 - Personal Experience**

During my interpretation studies at the University of Vienna in the late 1980s, as a French C interpretation student, I employed shadowing to enhance my proficiency in French. This exercise involved sitting in an interpretation booth and shadowing unknown debates from the French television channel Antenne 2 for up to thirty minutes. Furthermore, we were required to analyze our performance. I became intrigued by this task, originally intended for language A and B students, as I quickly realized how it significantly enhanced my comprehension of the French language.

This technique not only proved to be useful for simultaneous interpretation but also facilitated my mastery of Norwegian after relocating to Norway in 1995 with limited proficiency in the language. Similarly, I harnessed shadowing to achieve proficiency in Spanish between 2005 and 2006.

#### **Example 2 - Shadowing in a Semester-Program in Public Service Interpreting**

In 2004, I was responsible for a one-year, semester-program for public service interpreters in conjunction with Telemark University College and the Norwegian Directorate of Immigration. This program, comprising on-campus and off-campus online sessions, incorporated shadowing as a compulsory component to improve the students' proficiency of Norwegian.

The compulsory shadowing task involved both shadowing thirty minutes of the Norwegian news program named 'Dagsnytt 18' and writing a log about their experience with and handling of the task. Additionally, students were required to submit a five-minute recording of their shadowing performance. Although initially given three weeks for this assignment, the deadline was extended until shortly before the exams due to complaints from the students, who needed more time to practice in order to speak at the same speed and with the same prosody as the speakers.

The students' logs revealed that most of them went through the same developmental curve. During the first week of practice, they expressed anger, frustration, stress, and cold anxiety as the task seemed impossible to fulfill. Some described physical reactions such as a blushing face, dry mouth, and an accelerated heartbeat. Several mentioned feeling uncomfortable about hearing their own voice and feeling ashamed of their mumbling. As instructors, we conveyed an understanding that their reactions were normal and expected in the light of this challenging task. Students developed their strategies to handle this task by dividing the exercise into several parts, taking breaks, and comparing their performance with the original. They continued practicing and progressively developed a positive attitude towards the task.

A total of twenty-nine students successfully completed this shadowing task. Student logs reflected their journey, showcasing initial frustration and stress followed by a transformative process that improved their pronunciation, vocabulary, and active listening skills.

#### **Example 3 - Shadowing in Educational Settings**

As an educator, I incorporated shadowing exercises into various German, French, Spanish, Italian, English, and Norwegian language classes, covering different proficiency levels in upper secondary school. These exercises were designed based on Vygotsky's (1978) concept of the zone of proximal development. They involved authentic audiovisual content with subtitles in the target language.

However, I was the only teacher practicing shadowing at my school, and I lacked the understanding and support from my colleagues and leaders.

While the outcomes varied based on student motivation, self-discipline, and anxiety levels, this technique consistently enhanced listening, speaking, and comprehension skills. Moreover, it fostered a deeper understanding of the language, particularly among students who demonstrated dedication and discipline. Those who preferred reading aloud instead of shadowing tended to develop lower foreign language proficiency.

### **Aim of the paper**

This paper aims to showcase these three instances that not only illustrate the positive relationship between positive anxiety, motivation, self-discipline, and shadowing but also underscore the improvement of listening, oral skills, and deep learning in second/foreign language acquisition. These examples elucidate how additional factors like a supportive learning environment and group cohesion can significantly influence language-learning outcomes.

### **Discussion**

Example 1 illustrates how, as an adult language learner, I experienced positive anxiety through shadowing authentic audio- and audiovisual texts in a foreign language, each lasting up to thirty minutes. This positive anxiety resembled the sense of accomplishment and exhilaration I felt during long-distance swimming and running. Shadowing facilitated my proficiency in Norwegian and Spanish, both languages acquired from scratch in adulthood. The practice enhanced my self-efficacy as I engaged in the task, scrutinized my recordings, and compared my performance to that of the speakers being shadowed. This comparison provided a realistic assessment of my progress and areas for improvement. Repeatedly practicing shadowing until my rendition matched the speaker's speed and prosody also aided in storing new vocabulary and phraseology in my long-term memory.

Example 2 illustrates how mature public service interpretation students encountered positive anxiety while undertaking a mandatory shadowing task in Norwegian, a foreign language for them. This task required them to submit a five-minute recording of their shadowing using authentic, non-adapted material from the Norwegian news program 'Dagsnytt 18.' Initially, they experienced cold/negative anxiety due to the perceived challenge. Our role as instructors played a pivotal part in alleviating these reactions. We acknowledged that such responses were natural when dealing with the stress of listening and reproducing content in a foreign language. We extended the recording deadline and fostered a secure learning environment to help students transform negative anxiety into positive energy, as explained by Moxnes (2018). By working together, we created a space that encouraged this transformation. Ultimately, twenty-nine students submitted satisfactory recordings, reflecting improved language skills and a determination to continue shadowing independently.

Example 3 highlights that positive anxiety is just one of the components that influence successful outcomes in shadowing. Hattie's (2023) meta-analysis unveils various domains that impact learning results, encompassing students' emotions, perseverance, confidence, personality, emotional intelligence, well-being, cognitive dispositions, skills, and the joy of learning. Furthermore, the mindsets, interpretations, and evaluations of teachers, leaders, parents, and students significantly shape learning outcomes. Learning unfolds within an environment interwoven by students, teachers, parents, and leaders.

While I endeavored to introduce shadowing in German, English, French, Spanish, Italian, and Norwegian language classes, the limited support from colleagues and leaders hindered its full potential. Despite this, implementing various shadowing methods in my language classes yielded diverse results. Offering students preparatory materials, guiding shadowing exercises, and facilitating discussions about their experiences positively contributed to their self-confidence in pronunciation and comprehension.



Students who preferred reading aloud instead of shadowing exhibited minor improvements in their listening, pronunciation skills, and understanding of the foreign language.

### **Limitations**

The limitations of this paper include the lack of quantitative and qualitative studies investigating the effects of positive anxiety in shadowing on language learning and use. Similarly, the absence of research on positive anxiety in shadowing for simultaneous interpretation adapted to language learning and use is noteworthy. The present discussion draws on three examples that highlight the effects of positive anxiety in shadowing for simultaneous interpretation as applied to language learning and use. Future research should delve deeper into the effects of positive anxiety in various forms of shadowing for language learning and use, especially focusing on different language proficiency levels. The limitations of this paper are rooted in the absence of both quantitative and qualitative studies that thoroughly investigate the impacts of positive anxiety within the context of shadowing on language learning and its application. Additionally, the lack of research into the realm of positive anxiety within shadowing for simultaneous interpretation, tailored to language learning and utilization, deserves attention.

The ongoing discourse within this paper is grounded in three distinct examples that illustrate the impact of positive anxiety in the context of shadowing for foreign language learning and use. These examples underscore the intricate interplay between positive anxiety, motivation, and self-discipline, collectively shaping the effectiveness of shadowing as a learning tool. Furthermore, they highlight the significance of collective teacher support when introducing and implementing shadowing in foreign language learning.

As we move forward, it becomes imperative for future research to comprehensively delve into the nuanced effects of positive anxiety across various shadowing modalities used in language learning. Particular attention should be given to exploring diverse language proficiency levels, unraveling how positive anxiety influences learners at different stages of their language journey. Additionally, future research should investigate the intricate interplay between positive anxiety, motivation, self-discipline, and the impact of collective teacher support on shadowing for language learning within the classroom.

### **Conclusion**

While existing research lacks quantitative and qualitative exploration of the effects of positive anxiety in shadowing on language learning and use, there is evidence suggesting its benefits. Positive anxiety in shadowing enhances language skills and learners' self-efficacy. However, positive anxiety is closely interrelated with motivation and self-discipline. Group cohesion, sharing recordings, and reflections within a supportive community can reduce interpersonal anxiety. Additionally, collective teacher support plays a decisive role when introducing shadowing in the language learning classroom.

This paper underscores the need for further research on the effects of positive anxiety in diverse forms of shadowing for language learning and use. It highlights the necessity of studying positive anxiety in shadowing as applied to language learning and use, particularly by exploring the learning outcomes of shadowing when adapted from simultaneous interpretation.

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