Anxiety and Second/Foreign Language Learning Revisited

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Abstract

This article critically reviews the literature that examines the anxiety phenomenon in the field of second/foreign language learning. A major theme that runs through this review is how anxiety comes into play in second/foreign language learning, and whether it is a central construct or only an add-on element that is negligible. Anxiety is defined and described in how it is measured and relates to other affective concepts. Drawing on cognitive, curriculum, and cultural perspectives, the paper examines the possible causes and effects of language anxiety and the relationship between anxiety and second/foreign language learning. Possible educational implications of the anxiety research are indicated.

Introduction

Second/foreign language learning can sometimes be a traumatic experience for many learners. The number of students who report that they are anxious language learners is astonishing. According to Worde (1998), one third to one half of students examined reported experiencing debilitating levels of language anxiety. Although the concept of anxiety is encountered frequently throughout language learning literature, these studies have focused on a bewildering array of aspects of anxiety, and have generated widely varying definitions. Studies of anxiety have also focused on different language outcomes, such as rate of second language acquisition, performance in language classrooms, and performance in high-stakes language testing. The theoretical spectrum of these studies ranged from strictly behavioural to psychodynamic.

The current paper reviews the literature that examined the anxiety phenomenon in the field of second/foreign language learning. A major theme of this review is the interplay of second/foreign language learning and anxiety, regardless of being a central construct or an add-on negligible element. After a discussion on different definitions of anxiety, instruments used to measure anxiety will be described and its interrelationship with other affective factors, and causes and effects of language anxiety. In order to situate and examine the relationship between anxiety and second/foreign language learning in a broader domain, three different yet related perspectives are drawn on when synthesizing the relevant literature: namely, a cognitive

perspective, a curriculum perspective, and a cultural perspective. Understanding this pervasive psychological emotion is a premise for providing necessary help and support to anxious second/foreign language learners.

Anxiety Definitions and Instruments

Anxiety is one of the most well documented psychological phenomena. The definition of anxiety ranges from an amalgam of overt behavioural characteristics that can be studied scientifically to introspective feelings that are epistemologically inaccessible (Casado & Dereshiwsky, 2001). Broadly speaking, anxiety is the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system (Spielberger, 1983). Traditionally, the nature of anxiety has been differentiated into trait anxiety, situational anxiety, and state anxiety. Though no clear delineation between these three categories can be claimed, the differences can roughly be identified on a continuum from stability to transience, with trait anxiety related to a generally stable predisposition to be nervous in a wide range of situations on one end, and a moment-to-moment experience of transient emotional state on the other. Situational anxiety falls in the middle of the continuum, representing the probability of becoming anxious in a particular type of situation.

To recognize language anxiety in a broader context of research on anxiety, MacIntyre (1998) observed that language anxiety is a form of situation-specific anxiety, and research on language anxiety should employ measures of anxiety experienced in particular second/foreign language contexts. He conceived of language anxiety as "the worry and negative emotional reaction aroused when learning or using a second language" (p. 27). Similarly, Horwitz, Horwitz and Cope (1991) conceptualized foreign language anxiety as a "distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 31).

The recent history of studies on anxiety in the language learning area is remarkably influenced by two seminal papers. First, Scovel (1978) identified that early perspectives of anxiety generated very inconsistent results concerning the relationship between anxiety and second language achievement. Scovel attributed the conflicting and mixed results to different anxiety measures and different conceptualizations of anxiety. He claimed that ambiguous experimental results can be resolved if the distinction between facilitating and debilitating anxiety is drawn. Facilitating anxiety occurs when the difficulty level of the task triggers the proper amount of anxiety. However, although a certain level of anxiety may be beneficial, too much anxiety can lead to a debilitating effect, which may lead to avoidance of work or inefficient work performance.

Horwitz, Horwitz and Cope's (1986) paper is also influential. The authors clearly articulated the concept of foreign language anxiety. Placing language anxiety in the framework of related concepts of anxiety, the authors recognized that language anxiety is a situation-specific anxiety construct, largely independent of the other types of anxiety. One major contribution of their paper is it offers a Foreign Language Classroom Anxiety Scale. This self-report instrument, eliciting responses of anxiety specific to foreign language classroom settings, triggered an

avalanche of similar studies. The results of these studies demonstrated that language anxiety exerts a debilitating role in the second/foreign language classroom in different contexts.

The complexity of anxiety is also reflected in the means of its measurement. There are three major ways of measuring anxiety in research, including behavioural observation or rating; physiological assessment such as heart rates or blood pressure tests; and participants' self-reports, in which internal feelings and reactions are measured (Casado & Dereshiwsky, 2001; Daly, 1991). Participants' self-reports are utilized most often in examining the anxiety phenomenon in educational studies. Summarizing the above discussions, it is recognized that language anxiety, a type of situational specific psychological phenomenon bearing its own characteristics from language learning contexts, is a relatively distinctive form of anxiety. Language anxiety is also intricately intertwined with other individual differences such as personality traits, emotion, and motivation.

Relation to Other Affective Factors

Research has shown that affective variables do not operate independently of one another; instead, the causal relationships among them are complicated and warrant further investigation (Gardner, Tremblay, & Masgoret, 1997). It is always intriguing, yet difficult, to determine how these affective variables are interrelated and how they impact on one another. For example, personality traits, such as introversion and extraversion, are associated with anxiety arousal (MacIntyre & Charos, 1996). The underlying assumption is that introverts are more likely to be anxious than extraverts (Brown, Robson, & Rosenkjar, 2001). Introverts usually prefer individual work more than group work, so they may easily become anxious if they are put in more communication-oriented classroom settings. Extraverts, on the contrary, may feel uncomfortable if they are asked to work on their own all the time.

Gregersen and Horwitz (2002) found that some students' language anxiety may stem from their perfectionist tendencies. They concluded that anxious students share many similar manifestations with perfectionists and these similarities have the potential for making language learning unpleasant. Evidences of this conclusion include the fact that anxious learners were not easily satisfied with their accomplishments and had a higher level of concern over the errors they made than non-anxious learners who tended to celebrate small victories accomplished.

Moreover, learners' stylistic preferences may possibly be in conflict with those of their teacher's and therefore result in anxious feelings among certain students. Oxford (1999) elaborated from her case studies on how classroom style conflicts can exacerbate anxiety in the language classroom. She contended that style conflicts can take different forms; examples can include personality conflicts (e.g., introvert vs. extravert), and teaching and learning style conflicts (e.g., global and intuitive-random learning style vs. analytic and concrete-sequential teaching style).

The concept of language anxiety is also closely associated with attitudes and motivation. For example, the instrument used in Gardner's socio-educational model (the Attitude/Motivation Test Battery) includes a classroom anxiety scale that measures students' embarrassment or anxiety level within the paradigm of attitudes and motivation. Chao (2003) found a significant relationship between foreign language anxiety and emotional intelligence skills. Moreover,

Ehrman (1996) maintained that one protects one's emotional equilibrium and self-esteem in a variety of ways, one of which is through what he called "defense mechanism". Anxious manifestations, such as reluctance to participate, avoidance of work, and negative attitude, are all possible defense mechanisms that anxious learners employ to balance their emotional equilibrium. On the contrary, Brown et al. (2001) found that high proficiency language learners were well-balanced, emotionally stable, less instrumentally motivated, and less anxious.

Causes and Effects of Language Anxiety

Language anxiety is attributable to different causes. The primary sources of language anxiety, explicated by Horwitz et al. (1986), are communication apprehension, fear of negative evaluation, and test anxiety. Price (1991) concluded from his case studies that the difficulty level of foreign language classes, personal perception of language aptitude, certain personality variables (e.g., perfectionism and fear of public speaking), and stressful classroom experiences are all possible causes of anxiety. In addition, Young (1991) identified six potential sources of language anxiety from three aspects: the learner, the teacher, and the instructional practice. He claimed that language anxiety is caused by (a) personal and interpersonal anxiety, (b) learner beliefs about language learning, (c) instructor beliefs about language teaching, (d) instructor-learner interactions, (e) classroom procedures, and (f) language testing. Young (1994) further elucidated that these sources of language anxiety are interrelated.

Apart from the above similar viewpoints on the sources of language anxiety caused by the learner, the teacher, and the classroom, or the interaction among the three, a debate on whether language anxiety is central in influencing low language achievement is triggered by the Linguistic Coding Deficit Hypothesis advanced by Sparks and Ganschow (1993). According to this hypothesis, language anxiety is a reflection of a side effect caused by linguistic deficiency in processing language input. Emphasizing the focus on language coding abilities, Sparks and Ganschow discounted anxiety and other affective variables as playing a critical role in language development, and leave only cognitive capacity as the major engine that drives second/foreign language acquisition and development. Sparks and Ganschow's view closely connects second language coding abilities with first language coding abilities, which in a way isolates language development from its social cultural roots. By exclusively emphasizing cognitive capabilities, their hypothesis fails to take into account the striking differences between first language development and second language development, especially the characteristics that are representative of the uniqueness of second/foreign language learning environment.

Researchers like MacIntyre (1995), on the contrary, argued that language anxiety constitutes part of social anxiety, which stems primarily from the social and communicative aspects of language learning. Drawing largely upon the social dimension of anxiety, MacIntyre has long maintained that anxiety plays an essential role in language learning as a social cognitive activity. A recursive relation exists between anxiety, cognition, and behaviour. Moreover, anxiety can interfere in all language acquisition stages: input, process, and output. In other words, understanding the causes and consequences of language anxiety from a contextual point of view is vital in facilitating the language acquisition process and development.

An example to illustrate the critical role of language anxiety is provided by Onwuegbuzie, Bailey and Daley (2000). The results of this study indicated that after controlling for the indicators of native language problems, foreign language anxiety still had a substantial amount of power in explaining language achievement. Therefore, it is reasonable to claim that foreign language anxiety is not solely a consequence of first language coding deficit, but rather an essential emotional state that may interfere with cognitive processing of a language learner. The Sparks and Ganschow (1993) versus MacIntyre (1995) debate manifested contrasting viewpoints of mechanism and contextualism. The central controversy is whether cognitive abilities are independent of other abilities such as affective or emotional factors. Enabling the investigation of differences that stem from social or cultural nuances, MacIntyre's argument is more persuasive because his approach encompasses the potential role that emotion may play in cognition.

Concept clarification and instrument validation greatly help to account for a better understanding of the effects of anxiety on second/foreign language learning and performance (MacIntyre & Gardner, 1991). These kinds of effects are projected on at least five aspects (MacIntyre, 1998). First, academically, language anxiety is one of the best predictors of language proficiency (see Onwuegbuzie et al., 2000). It seems clear that high levels of language anxiety are associated with low levels of academic achievement in second/foreign language learning. Second, socially, learners with higher language anxiety have the tendency to avoid interpersonal communication more often than less anxious learners. This issue becomes even more prominent when the authentic communicative competence is emphasized in current language education. Third, cognitively, anxiety can occur at any stage of language acquisition. Anxiety can become an affective filter that prevents certain information from entering a learner's cognitive processing system (see Sellers, 2000). Anxiety can influence both speed and accuracy of learning. Fourth, anxiety arousal can impact the quality of communication output as the retrieval of information may be interrupted by the "freezing-up" moments that students encounter when they get anxious. Finally, personally, language learning experience could, under some circumstances, become a traumatic experience. This kind of unpleasant experience may deeply disturb one's self-esteem or self-confidence as a learner.

Revisiting Language Anxiety from a Broader Domain

A further review of the studies of language anxiety is presented below from three perspectives, namely, cognitive, curriculum, and cultural. Such an organization helps to promote understandings of this phenomenon by approaching it from different angles.

From a Cognitive Perspective

The cognitive component of anxiety was raised early in the literature (Eysenck, 1979). Eysenck has long believed that worry and emotionality comprise the nature of anxiety. According to him, worry refers to one's concern about performance or other people's evaluation. Emotionality refers to the concomitant negative feelings caused by physiological functioning. He argued that anxious learners are more often engaged in task-irrelevant cognitive processing than their non-anxious counterparts, and the task irrelevant processing activities "preempt some of the available effort and capability of working memory" (p. 378). In other words, anxious learners may be

anxious about their being anxious, thus hampering the capacity of their working memory. To be more specific, anxious learners are usually more distractible, and the defense mechanism evoked by anxiety will interfere with the cognition threshold in learning.

Eysenck (1979) also discussed performance efficiency and processing effectiveness. He demonstrated from a cognitive point of view that most of the empirical studies set performance efficiency (e.g., test scores) as the criterion when examining the influence of anxiety, while it is in fact processing effectiveness that is paralyzed when anxiety comes into play. It may not be legitimate to use performance efficiency as a measure of processing effectiveness if the effort expenditure is not equivalent among highly and lowly anxious learners, as anxious learners tend to be hard working, in some cases, overly hard working. Extra hours spent by anxious learners might, in one way or other, compensate for the performance ineffectiveness caused by anxiety arousal. In addition, Sellers (2000) examined students from the United States who were reading a text in Spanish. He found that highly anxious readers were more distracted by interfering thoughts and were less able to focus on the task at hand, which in turn affected their comprehension of the reading passage. It seems that highly anxious students tended to experience more off-task, interfering thoughts than their less anxious counterparts.

From a Curriculum Perspective

MacIntyre (1998) pointed out that with more emphasis on communication-oriented language competence there is emerging a pressing need to develop anxiety-reducing strategies and programs. The call for amelioration of negative effects of language anxiety is also suggested by Young (1994), who claimed that the unnatural classroom procedures, for example teachers' error correcting methods and the way teachers interact with students, are all ways that may arouse students' anxiety. Therefore, pedagogical considerations in course planning need to consider students' emotional states. Teachers should provide a safe and welcoming classroom environment in which students can feel comfortable volunteering their answers. Teachers should also make clear that language learning entails making mistakes, and mistakes are not a demonstration of failure (Elkhafaifi, 2005). Also, it is necessary for teachers to consider themselves as facilitators instead of evaluators and to avoid turning the language classroom into a testing or competitive environment, but rather create a supportive learning environment where learning can easily occur.

In addition, language anxiety has been mostly associated with spoken language competency. Learners can experience increases in anxiety when they are required to complete oral tasks. However, there is a recent trend to identify more specifically the relationships between anxiety and other language competences (Horwitz, 2001), for example, reading anxiety (Saito, Horwitz, & Garza, 1999; Sellers, 2000) and listening anxiety (Elkhafaifi, 2005). Findings from this branch of studies demonstrated that although general foreign language anxiety has been found to be independent of target language, levels of some specific categories of anxiety (e.g., reading anxiety) are found to vary by target language and seem to be related to the specific writing systems (Saito et al., 1999). Research also indicates that teachers' perception of students' language anxiety may sometimes be incongruent with students' own perception (Levine, 2003). The understanding of this incongruence, and those specific types of language anxieties and their respective coping strategies, should be within the repertoire of every language teacher.

Research results from studies that examined language anxiety and gender provide further information regarding individualized instruction based on the gender differences in school settings. Kitano (2001) investigated students from two U.S. universities who were enrolled in Japanese courses. The results showed that male students' anxiety levels were negatively correlated with their self-perceived ability to perform various tasks in spoken Japanese, whereas female students did not show this tendency. Also, in their study, Campbell and Shaw (1994) revealed a significant interaction between gender and foreign language anxiety: Male students were more anxiety-ridden in using a foreign language in the classroom than their female counterparts after a certain amount of instruction in that foreign language.

From a Cultural and Policy Perspective

Oxford (1999) noted that "behaviors vary across cultures, and what might seem like anxious behavior in one culture might be normal behavior in another culture" (p. 64). Horwitz (2001) contended that when considering the issue of language anxiety and classroom practice, it is important to keep cultural differences in mind. Some practice perceived by one group of learners as comfortable may prove stressful for learners from a different cultural group, who are used to different types of classroom organization. Horwitz further claimed that classroom atmosphere, teacher support, task orientation, and focus of instruction are all elements that influence students' anxiety levels under instructional conditions. Cultural influences, such as the stereotyping of teachers, students, and classroom interactions, can be largely different from culture to culture.

The emotional state relating to learning a second/foreign language also largely relies on the high-stakes contexts of that particular language in the society. For example, learners of English in China might experience remarkably different anxiety levels in learning English as a foreign language, compared to learners of Chinese in Canada. Differences in language anxiety with regard to minority or majority language group are one of the important future directions for language anxiety research (Young, 1994). With the ever-growing political and economic development in China, Chinese is becoming one of the most important languages in the world. The Chinese language is attracting unprecedented large numbers of world-wide learners, including students at the university level. Still, the stake or importance attached to learning Chinese for English-speaking students is incomparable to the significance of learning English for Chinese-speaking students.

In addition to the self-perceived importance in learning a second/foreign language, language policy practices can remarkably impact on language learners and learning. Casado and Dereshiwsky (2004) conducted a study comparing anxiety levels experienced by American students learning Spanish, and Spanish students learning English. The purpose was to seek any possible relationship between second language teaching policies in the two countries (United States and Spain) along with students' perceived levels of language anxiety. Although having language policies, such as imparting a second/foreign language at an early age and having an "articulation framework" of language programs, would be beneficial to Spanish students' progress in English learning, those policies may not result in lower levels of communication apprehension. In contrast, a lack of nationwide compulsory foreign language programs in the

United States did not necessarily lead to higher anxiety levels among American students who were learning Spanish.

Within the trend of internationalization, language tests, especially English as second or foreign language tests, are often used as screening mechanisms for selecting potential candidates. Examples include institutions which use English as foreign language test scores (e.g., Test of English as a Foreign Language scores) as one of the criteria to admit international graduates. This kind of practice creates anxious feelings for language learners. An example is Chinese tertiary-level English learners, who have experienced great stress in acquiring English language competence; this stress dramatically influences anxiety levels in their English classrooms and English tests (Cheng, 2008). Moreover, learning English is an obligation and English competence accreditation is critical in order to matriculate or get a good job. With this pressure, learners are more likely to experience anxiety in the classroom (Liu, 2006). Admittedly, the underlying rationale for studying English in China is essentially economic as it is not freely chosen to be learned. Chinese students are obliged to learn for the purpose of gaining a better position in the global economy where English is the 'lingua franca,' or a common language spoken internationally (Gan, Humphreys & Hamp-Lyons, 2004; Yong & Campbell, 1995).

In addition, social belonging or cultural integration is another issue that needs to be addressed in second/foreign language education. On one hand, the challenge is how individuals feel situated in the target cultural group. Integrative motivation, an important concept in the socio-educational model of motivation in second language learning (Gardner, 1985), stresses not only emotional identification with another cultural group, but a favourable attitude toward the language community and openness to other groups in general (Gardner, 2001). On the other hand, anxiety over losing one's own identity can be a source of culture shock as well. Cross-cultural awareness can be raised only if culture shock is dealt with effectively; otherwise, negative symptoms such as anxiety, emotional regression, and physical illness can occur (Oxford, 1999).

Summary

Language anxiety is a pervasive phenomenon, especially among the second/foreign language learning population. Instead of assuming its generic property as one type of anxiety, it is vital to approach this conceptually complex psychological emotion from diverse angles. Not surprisingly, language anxiety is not merely an add-on element that is negligible in second/foreign language learning. It is indeed a central emotional construct that is essential in influencing second/foreign language learning. Through the realist position lens in cognitive psychology one views individual difference factors, such as affect and motivation, as integral parts in developing cognitive abilities (Smith, 2000). In better understanding the concept of language anxiety, it is necessary to take the social cognitive approach to emphasize the importance of integrating the social and cognitive dimensions (Lewis & Carpendale, 2004).

Bernhardt and Kamil (1995) consolidated the Linguistic Threshold Hypothesis, which implied that a level of second language linguistic ability must be obtained in order to achieve efficiency in the development of a second language. Analogically, language anxiety threshold is a level of language anxiety below which second/foreign language learners feel challenged, yet not

overwhelmingly anxious. An understanding of language anxiety threshold will help learners and teachers to be aware of comfort level of students, so as to avoid harmful feelings of anxiety and carry out interventions (e.g., coping strategies, tailored programs) whenever necessary to maximize learning. However, it is recognized that one's uppermost limit of language anxiety threshold is anything but fixed; it varies from culture to culture, from individual to individual, or even from moment to moment. Therefore, it is important to situate the language learning of individuals while understanding or assessing their language anxiety threshold. It is also important to approach the phenomenon from a contextualistic and historical perspective, as there is evidence to support that previous language learning experiences, other emotional development (e.g., motivation), and pressures from other people are all potential influences of language anxiety on a language learners.

Studies that examined anxiety and language learning may serve as a guide for language teachers in terms of helping them to increase their understanding of language learning from the perspective of the learner (Chao, 2003). Studies of this nature can also provide insights into how educators can develop appropriate interventions to decrease language anxiety among second/foreign language learners. In addition, by understanding the causes and effects of language anxiety and their relationship to language achievement, strategies and interventions to boost the self-confidence of learners and lower their language anxiety can prove beneficial to all stakeholders.

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