

# The Effects of Test Feedback on the Relationship Between Test Anxiety and Test Performance: A Focus on Foreign Language Testing

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**Abstract:** Many people today suffer from test anxiety. In order to reduce the negative effects of test anxiety, experts in both educational and psychological domains have been looking for solutions for a long time. This article aims to examine the role of test feedback in moderating the effects of test anxiety on test performance through a systematic review of the literature. It is suggested that test feedback can affect the subsequent test performance of both high and low test anxious students.

**Keywords:** Test feedback; Test anxiety; Test performance; Language testing

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## Introduction:

Modern people face throughout their life experience with various test situations. Many important opportunities relating to an individual's educational or vocational development are determined by test scores. The importance of test performance has helped evoke anxiety reactions in many individuals (Zeidner, 1998). Test anxiety may result in deficient test performance and limit one's advancement in education or career (Hembree, 1988; Zeidner, 1990). Many examinees with sufficient ability cannot perform well or even fail in the test due to their debilitating levels of anxiety. Therefore, reducing the negative impacts of anxiety on performance is considered as a feasible way to improve the test performance of underachieving examinees (Zeidner, 1998). Indeed, educational psychologists have noticed test feedback as a contextual factor may moderate the effects of anxiety on performance (e.g., Tobias, 1980). However, inadequate effort has been directed toward the moderating functions of test feedback in the domain of test anxiety, and the available research findings are not always consistent.

Compared with anxiety literature in educational psychology area, studies on test anxiety in the field of language testing are too limited (Chen, 2010). Globalization has led to a proliferation of language testing programs. The increase in the number and importance of language tests requires people to pay attention to language testing anxiety so as to optimize their language testing performance. A survey conducted by the 21st Century Education Research Institute in Beijing suggests that a great many Chinese students suffer from anxiety in foreign language tests, but have to face a variety of examinations for entering better schools, studying overseas or finding employment. It is thus meaningful to study how test feedback moderates the influence of test anxiety on test performance in the context of foreign language testing. Furthermore, the author herself is a chronic sufferer of English test anxiety, and is now a non-native English teacher, her own learning experience and working environment are also the motivation for the paper.

## 1. Test Anxiety and Language Test Anxiety

Originally, test anxiety was defined as a sense of inadequacy, helplessness and fear with intensified somatic reactions and implied effort to leave the evaluative situation. Spielberger (1966) distinguished between anxiety as a transitory emotional state and as a relatively stable personality trait based on Cattell and Scheier's (1958) state anxiety and trait anxiety concepts, and eventually conceptualized test anxiety as a situation-specific personality trait. In Liebert and Morris's (1967) view, test anxiety was bidimensional, involving a cognitive (Worry) and an affective (Emotionality) component. Specifically, Worry referred to any cognitive expression of concern about the results of failure, while Emotionality was physiological reactions evoked by examination stress. Although Worry and Emotionality are correlated, a body of research evidence has reached a consensus that test anxiety is primarily a cognitive event

with affective concomitants (e.g., I. G. Sarason & Sarason, 1990). People who often freeze on assessment situations seem overly preoccupied with self-doubt, possible threat and the consequences of failure.

According to exam content and topics, scholars in the field of psychology have classified academic test anxiety into several specific forms, such as math test anxiety, statistics test anxiety and language test anxiety, etc. (Chen, 2010). In the context of foreign language studies, researchers and theorists have also been aware of the association between anxiety and language learning. Horwitz, Horwitz, and Cope (1986) identified 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.128). Language-learning anxiety, consequently, falls under the category of situation-specific anxiety, and consists of three components: communication apprehension, test anxiety, and fear of negative evaluation (Horwitz et al., 1986). Foreign language anxiety frequently appears in testing situations and language test anxiety is a significant variable that affects foreign language learning process.

Test anxiety is an obviously unpleasant experience accompanied by the feeling of nervousness, mental blocking and worry. It is frequently reported to be a meaningful factor impacting on test performance and personal development. Virtually hundreds of studies have conducted to examine the relationship between test anxiety and test performance across a variety of testing and evaluative situations, but the findings are not always consistent (Zeidner, 1998).

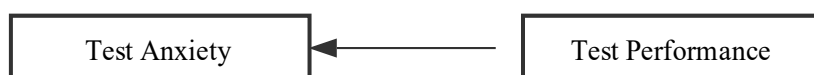
## 2. Test Anxiety-Performance Relationship

Studies in academic settings repeatedly report the existence of a negative relationship between level of test anxiety and performance (Zeidner, 1998). Sarason (1972) and Wine (1971) suggested that highly test-anxious individuals could not perform adequately in exams as their attention was divided between task demands, and ruminations evoked by high anxiety. Generally, the higher the test anxiety the greater the problems emerging in remembering on examinations said Tobias (2013), which was similar to Hembree’s (1990) view that test anxiety could interrupt the recall of prior learning therefore impairing performance. Three empirical researches done by Cassady and Johnson (2002), Hancock (2001), Zamir and Hina (2013) respectively, all found that higher levels of test anxiety were associated with significantly lower test scores. After a meta-analysis of the literature based on 562 North American studies, Hembree (1988) also drew a conclusion that test anxiety caused poor performance.

Whereas most studies show that test anxiety adversely affects test performance, it is sometimes reversed with the existence of anxiety reported to stimulate instead of undermine performance (Alpert & Haber, 1960). In the early 1960s, Alpert and Haber (1960) proposed a distinction between the facilitating and debilitating effects of test anxiety. Accordingly, test anxiety could not only impede performance but also enhance it due to the improved general drive level and motivation. Research presented by Munz et al. (1975) concluded that students with facilitative anxiety performed better on examinations than their debilitating and unaffected counterparts. Furthermore, there also exists research evidence showing no significant correlation between test anxiety and performance.

The relationship between test anxiety and performance may vary for different course content (Zeidner, 1998). In the domain of foreign language test anxiety research, the negative relationship between anxiety and performance has been confirmed in both general and specific aspects involving the four basic language skills: listening, speaking, reading and writing. But in Chastain (1975), MacIntyre and Gardner’s (1989) studies, test anxiety has contradictory (both negative and positive) effects on foreign language course grades, which confirms Brown’s (2000) view that facilitative anxiety exists in language-learning area.

A number of scholars concur that test anxiety is a cause of poor performance, but there is also a belief that poor performance can conversely lead to higher anxiety (e.g., MacIntyre & Gardner, 1989). That is to say, the causal relationship between these two variables may be bidirectional (Zeidner, 1998). Test anxiety may be influenced by the previous performance and influence the subsequent performance as well (Phillips et al., 1980). Some experts, therefore, conclude that the nature of test anxiety-performance relationship would best be regarded as dynamic and reciprocal (Phillips et al., 1980; Zeidner, 1998).



Reciprocal nature of the anxiety-performance relationship.

## 3. Evaluative Feedback as a Moderator Variable

Anxiety researchers have devoted considerable efforts in seeking to explain why the direction and magnitude of test anxiety-performance association are not invariant, and several meaningful moderator variables have been observed to strengthen or weaken the effects of anxiety on performance (Hembree, 1988). Theoretically, the same level of test anxiety affected by different configuration of moderator variables may result in depressed or enhanced performance (Zeidner, 1998). After reviewing the literature on moderating

effects, Zeidner (1998) broadly classified these variables into three categories: task-related variables (e.g., task complexity, item arrangement, test format), situational variables (e.g., test environment, time pressure, external observers, evaluative feedback) and demographic variables (e.g., gender, age, sociocultural background).



Moderating effects in the anxiety-performance relationship.

Evaluative feedback provided in testing situations (test feedback) has been confirmed to interact with test anxiety in affecting test performance. Accordingly, high-test-anxious subjects who are particularly sensitive to the evaluative threat frequently experience raised levels of anxiety but lower levels of performance when receiving negative feedback, while their low-anxiety counterparts may not be influenced by negative or failure feedback or even be motivated to enhance their performance. As Tobias (1980) points out, anxious individuals are characterized by fear of failure in test situations. Failure feedback confirms their worst expectations, triggering their worry and self-preoccupation and finally resulting in a high disruption of performance. By contrast, success feedback for highly anxious individuals can be viewed as a reassurance of successful performance, which can help them improve confidence, get rid of fear and then perform better in following exams (Tobias, 1980). However, in Phillips et al.'s (1980) opinion, individuals high in test anxiety may be adversely influenced by both positive and negative evaluations because either success or failure experience gives a signal that their adequacy of performance is being assessed. Moreover, test feedback in the experiment conducted by Chen (2010) in the field of foreign language testing significantly affected the subsequent test performance of both high and low anxious groups. Negative feedback was a threat for high-test-anxious subjects, but it was also an inspiration for subjects with low trait-test-anxiety.

## Conclusion:

This paper provides scholars and researchers with reliable information about the role of test feedback as a moderator variable, as well as promote the advancement of test anxiety study. School teachers and educators concerned with the impacts of teachers' feedback on students' performance, and counselors and psychologists devoted to the development of therapeutic interventions of adverse test anxiety, will also find the result to be helpful in their work. However, the bulk of the findings discussed above are most developed in a general context, research focusing specifically on the effects of feedback information in the field of foreign language testing is clearly warranted.

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