can occur as a result of uncertainty associated with external or environmental factors as well as internal or cognitive factors.

4. Anxiety typically occurs in conjunction with other reactions to stress.

5. The consequences of anxiety are complex and interactional in nature, and depend on the demands of the situation. Although they are usually negative and debilitating, there are times when anxiety can be helpful, facilitating adaptation, adjustment, and performance. (pp. 410-464)

**Anxiety Measurement**

In anxiety research literature, physiological characteristics have been studied. Sarason (1960) found that no definitive relationship had been identified between these two types of measures. He further noted that

Responses such as blood pressure, pulse rate, respiration rate, galvanic skin response, and muscular action potential have received attention from researchers interested in physiological measures, and have tended to provide information related to A-state, or anxiety associated with activation of the autonomic nervous system. (p. 276)

Psychological measures have concentrated on self-evaluation instruments utilizing questionnaires, scales, and inventories.

Research literature has focused on four major psychological approaches to anxiety measurement (included to provide insight on measurements of computer anxiety). The Taylor Manifest Anxiety Scale (Taylor, 1953) is considered the basic scale of anxiety measurement. This scale was designed by the selection of items from the Minnesota Multiphasic Personality Inventory. The Multiple Affect Adjective Checklist, developed by Zuckerman (1960), allows a subject to check a set of adjectives to describe how he or she feels. This scale is designed to measure both the state and trait nature of anxiety. Cattell and Scheier (1963) developed the IPAT Anxiety Scale based on their earlier factor analytic studies identifying “trait” and “state” anxiety. Spielberger,