1999

The Relationship Between External Locus of Control and Test Anxiety in Late Adolescence

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An Abstract Presented to the Faculty of the Graduate School of Lindenwood University in Partial Fulfillment of the Requirements for the Degree of Master of Arts

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ABSTRACT

This study examines the relationship between external locus of control and test anxiety in late adolescence. Locus of control was measured through the I,P,C scale based on Hanna Levenson's (1974) theory. Test anxiety was assessed through the use of the State Trait Anxiety Scale as developed by Speilberger (1970). The research focused on the state, or situational anxiety experienced as the result of the announcement of a pending test. The hypothesis stated that those exhibiting characteristics of external locus of control (powerful others and chance) will exhibit some form of test anxiety. The sample used for this research was comprised of 41 students from a private, Catholic, Midwest high school. Students were subjected to the announcement of an upcoming examination before taking the instruments, in order to assess the level of anxiety introduced by the experience of test taking. The Pearson r was computed to indicate the degree of a relationship between State anxiety and Powerful Others and State Anxiety and Chance. Results revealed a negative correlation between State Anxiety and both belief in Powerful Others and Chance.

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Acknowledgement

I would like to dedicate this accomplishment to the two people who were consistently supportive of any endeavor I have ever set out to achieve. Their unconditional love and encouragement has enabled me to be successful in every aspect of my life. My parents, Joan and John, are the cornerstones of my existence and the foundation for my future goals. I also would like to dedicate this thesis to Steve, my fiancé, who has been an overwhelming support during the hardest part of this program. His continuous strength will only allow us to strive for the best within our life together.

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Chapter I

Introduction

Test anxiety seems to be an important issue for any student and it has been an area of interest for many past research experiments. Anxiety has been linked to overall academic performance including test ability and learning comprehension (Martuza & Kallstrom, 1974). Students who feel vulnerable in a test-taking situation may be likely to experience some type of anxious response. Perhaps this response is attributed to feelings of incompetence within an academic setting. This creates a negative experience associated with academic performance. Although many past research studies have linked this reaction to the outcome of school related tasks, such as test-taking, it is questionable whether the origin of test anxiety has been thoroughly defined.

Friedman and Bendas-Jacob (1997) offered a revised definition of test anxiety stating, "test anxiety is worry of suffering a reduction in one's self-image and self-efficacy, particularly its reflection in the eyes of significant others, concurrently with obstruction of cognitive processes and outstanding physical and mental discomfort" (p.1044). This research is propelled by the importance of studying these variables of self-perception, which impact test performance. The components of these perceptions include the development of self-concept, which contribute to the production of anxious responses.

Perhaps an implication of the study completed by Friedman and Bendas-Jacob (1997) would reveal that the negative impact of failure in testing ability could be

the deterioration of self-worth and overall confidence, leading to behaviors related to reduction of social support, ineffective coping styles and the perception of locus of control. Therefore, an individual's perception of locus of control could be correlated to an expected outcome, which may or may not produce anxiety.

Rotter (1975) states that locus of control is a prevalent expectancy, or cognitive strategy by which people evaluate situations. This concept is divided into internal and external orientations. Internal locus of control, is defined as the belief that one can control one's own fate, while, external locus of control is the belief that one's fate is controlled by powerful others or luck (Rotter, 1975). Therefore, in relation to test performance, those with an internal locus of control would tend to believe that they could control their own fate. Thus, when they score highly on a test they believe it resulted from sufficient studying. A poor result, on the other hand, might reflect careless mistakes and loss of concentration.

In contrast, individuals who experience external locus of control tend to believe that they lack total control over events in their lives. They attribute doing well on a test to luck and doing poorly is due to the teacher's grading system. Ultimately, this could lead to behaviors related to the deterioration of adaptation and coping styles, which results in the perception of lack of personal control. The individual will correlate the perceived lack of external locus of control with the expected outcome and possibly experience an anxietal reaction. With the anticipation of the loss of control there may be concerns of the adolescent, which

involves the creation of negative perceptions attached to ability in test performance. The involvement of these distorted developmental patterns, coupled with expected outcomes of self, social and academic standards creates undue pressure and may lead to anxious responses. Therefore, the personal perception of control is likely to produce anxiety according to an individual's experiences.

Much research, including deMan's (1981) indicated that people who perceive situations as threatening, who feel inadequate, and who doubt their control greatly, are more likely to suffer from test anxiety. On the other hand, Morris and Carden (1981) found that performance of students on exams show highly test anxious individuals blame themselves, while those with low-test anxiety attribute failure to external factors. Despite the contradictory findings, the importance of this present research is geared towards discovering a valid link between specific locus of control as a predictor of test anxiety.

The purpose of this study is to examine the relationship between the perceived locus of control and test anxiety in late adolescence. The locus of control variable was defined through Hanna Levenson's (1974) I, P, C Scale. The theory of locus of control, as developed by Hanna Levenson (1974), divides locus of control into internal control, belief in control by powerful others (external) and belief in control by chance (external).

Test anxiety is defined by the use of the State-Trait Anxiety inventory, in order to measure anxiety in a situational and contextual comparison (Speilberger, 1970). The focus of this research will focus on the State sub-scale in order to examine

the anxiety of test-taking as a situational response. It is assumed that those displaying characteristics of Trait Anxiety will already exhibit an overall anxious response to every experience and, therefore, would not be affected by anxiety as related to academic performance. It is hypothesized that those students reflecting an internal locus of control will experience little, if any test anxiety, because they perceive control as their own. Those with an external locus of control will not believe the outcome of test performance is within their own power. Therefore, anxiety will be created with the onset, or mention of an upcoming test, because those with external orientations attribute performance to powerful others or chance.

Chapter II

Literature Review

Late Adolescence and Dealing with Anxiety

From the beginning of life, people elicit a number of coping styles which are individualistic (Compas, 1987). These are used in dealing with stress and anxiety provoking situations. "Coping has been further differentiated on the basis of, (a) effortful versus non-effortful responses, (b) copings' function, and (c) a focus on resources, styles or specific responses" (Compas, 1987, p. 393).

In differentiating the strategies of coping most researchers believe that the implementation is intentional, rather than instinctual. A definition taken from Compas (1987) states that coping style hinges on changing the individual life perceptions and reactions in order to match the internal or external demands which cause stress and anxiety. Ultimately, whatever lessens the feelings of anxiety will be what an individual employs in order to survive. Compas (1987), also states that coping style may not be a result of an underlying theme, rather it may be shaped around particular situations and the tendency of labeling the experience controllable or not under the person's influence. "Thus research investigating coping during childhood must account for the environmental context in which the stressful episode occurs (including both the nature of the stressor and the availability of resources for coping), the individuals developmental and personal resources which are brought to the situation, the prior history and the preferred ways of coping responses" (Compas, 1987, p.393).

The components of all life-stress, interpersonal relationships, self concept and transitional life events contribute to these changes and result in the tailoring of coping styles. However, a question arises in how these adaptive strategies are created. Many research findings discussed in Savin-Williams and Demo (1984), revealed that adolescent self-ideation is not purely a result of experiences exclusively from the teenage years, rather an accumulation of adaptive strategies from the beginnings of life. Conversely, other research has determined that the analysis of the self-concept by the adolescent creates anxiety and often produces a lower self-esteem (Savin-Williams & Demo, 1984). The conclusion of this research by Savin-Williams and Demo (1984) is in agreement with the first proposed statement concerning change during development. If an adolescent has a sense of stabilized self-concept, any change that would occur would be gradual. "Thus adolescence is a time of stable or gradual growth in self-esteem levels and stability in self feelings from one moment to the next, from one year to the next" (Savin-Williams & Demo, 1984, p. 1108).

As the child becomes older stability develops into the perception of self and others. In late adolescence it is more likely that the individual will tend to value personal perceptions and components of self-awareness in order to stabilize life experiences (Savin –Williams & Demo, 1984). This may create a system of coping or "buffering strategies" would be used to create this stabilized atmosphere. According to Langfitt and Asbury (1995) there are certain determinations of childhood realized experiences. The first group focuses around

measured and observed behavior, such as intelligence, personality, emotional control and stability, and social interactions. The second grouping consists of the relationship between the formation of internal perceptions and the correlated social interactions. In essence, personal perceptions of control therefore may reflect certain social implications and ultimately a need for stability.

Developmental aspects concerning the onset of stressors caused by instability (focus on major life transitions) bear negative or positive outcomes. In early adolescence, these contributing factors can involve the onset of puberty, parental discord or forced changes in familial roles (Greene, 1988). Adolescence who had experienced stressors related the anxiety and emotional reactions of daily school activities to other maladjusted areas in their lives (Greene, 1988). The exploration of coping styles develops a question concerning students ideation of self-concept and the relation to stressors experienced through school related activities.

This need for adaptation (stability) revolves around the need to survive and adjust to an ever-changing environment. "Humans are the intelligent species, in that we, more than other species adapt ourselves and modify the environment to suit our needs" (Bjorkland & Green, 1992, p.46). A child experiencing difficulties in cognitive functioning may adapt certain perceptions, which equate to matching behaviors that will lead to survival. However, it is questionable whether these adaptive techniques are helpful or hinder the child's developmental process.

Highlights of past research have associated the development of coping styles to maternal attachment and separation, social support, interpersonal relationships, cognitive problem solving, achievement or in practice of repressing and dealing with stressful life events (Compas, 1987). The review by DuBois, Felner, Brand, Adan and Evans (1992) found that many factors associated with maladjustment in children seem to be the result of a confounded pattern rather than separately effecting the individuals state. This cognitive state may result from the formulation of locus of control and personal perceptions of self-awareness, ability and responsibility.

In dealing with anxietal reactions many individuals implement coping styles which are useful in preserving self concept and reducing symptoms of "terror" (Simon, Greenberg, Harmon-Jones, Solomon & Pyszczynski, 1996). The labeled "anxiety buffer" enables an individual to derive meaning from the understanding of her environment. This indicates the attached role of the person as well as the value, which matches the self-awareness of personal value and societal outlook (Simon et al., 1996). Responses in relation to positive and negative affirmations result in a like response for an individual prone to anxiety. This indicates that a positive agreement to an individual perceived condition will strengthen self-concept and weaken anxiety, whereas a negative response will promote an anxietal reaction (Simon et al., 1996). In relation to locus of control, the expectations of positive or negative outcomes may ultimately determine the expectancy of an anxietal reaction.

The confounding aspects of everyday stress, social relationships, family and school, effect the adolescent and her adjustment pattern which, in turn, will lead to similar patterns in adulthood (DuBois et al., 1992). Therefore, as the adolescent takes these confounding factors of stress and interpersonal relationships the adjustment may be correlated by the positive or negative outcomes. The adaptation becomes tailored to the experiences and creates an appropriate "buffer zone" to deal with or define these stressors which may or may not provoke anxiety.

A major contributor to the development of an adolescent is the adaptive behaviors used to cope with the factors of life transitions, which cause anxiety or changes in role relations (DuBois, et al., 1992). The study completed by Felner and Felner (1989), as reviewed by Dubois, et. al, 1992, discovered that any adolescent who experiences negatively altered environments is affected through the adaptation of weak interpersonal relationships and learning or behavior deficiencies.

Another angle reveals a connection between the adaptation of the adolescent and factors, which are perceived as not under the guidance of the individual (DuBois et al., 1992). As a result, life stressors and problems of the child are derived not from the result of individual adjustment, but as influenced by environmental stress caused by parents or teachers. This is the observation of the adolescent who searches for approval and who pushes responsibility to external sources.

To put it in context, a person's beliefs about herself or situations will either provide an escape from anxiety or pave a path to anxietal eruption (Greenburg et al., 1990). Anxiety buffer strategies may be influenced by the continued support of reporting human demise by the mass media. The ever-present changes that society experiences could be associated with individual beliefs, essentially undermining her values and structured understanding (Greenburg et al., 1990). The relation between perceived control and worldviews becomes a determinant of the effectiveness of a coping mechanism. Therefore, the effectiveness of the implemented beliefs and values about oneself add to the effects of the environment and will create the anxious or non-anxious response.

With the lack of research focusing on late adolescence, many studies opt to conduct research involving early adolescence. Compas (1987) failed to relate specific stressful situations to late adolescence. A possible reasoning would include an adaptation strategy implemented by the early adolescent in order to define and create a "buffer-zone" from the contributing factors, which may or may not be controlled. This becomes an established pattern that encompasses an older adolescent's perception of life and environment. Subsequently, the events, which cause stress in younger adolescence, contribute to the emotional and behavioral problems and will reflect upon the outcome applied by the matured adolescent (DuBois et al., 1992). It would then be assumed that these strategies are employed according to the perceptions developed concerning personal control. In this light, the adolescent will implement any adjustment behavior, which will

complement the reinforcement of life experiences and stressors (DuBois et al., 1992).

Locus of Control

The variable known as locus of control has been viewed as a guiding factor in behavior changes resulting from an expected outcome. Initially, beginnings of this concept were derived from Rotter and his colleagues in explaining deficiencies of performance and the behaviors which allowed perceptions to lead to overall change in the individual (Marks, 1998). Based on Social Learning Theory, it is described as the potential of a behavior to occur in any specific psychological situation. It is a function of the expectancy that the behavior will lead to a particular reinforcement in that situation and the value of that reinforcement (Rotter, 1975). Three factors which contribute to social learning theory are expectancies, reinforcement and the psychological situation (Rotter, 1975). It is the psychological situation which incorporates the first two factors and essentially guides the ability to function (Rotter, 1975). The connection to locus of control to this theory incorporates the definition of behavior in order to predict an outcome. This relationship between reinforcement and the resulted outcome determines behavior and therefore represents perception of determined locus of control (Nickels, 1988).

Locus of control is divided into two orientations, internal and external. Internal locus of control represents those who belief that they control their own actions and essentially determine their own fate (Rotter, 1975). Those with an external locus of control, attribute the happenings in their lives to the guidance of

powerful others or to luck (Rotter, 1975). Many studies choose to focus on one or the other and ignore the original reasons for assimilating internal-external orientations in relation to behavioral adaptation. In conceptualizing what locus of control contributes to research it is important to focus on the implementation of control reinforcement. Only this can make a measure truly significant concerning the measurement of perceived control (Rotter, 1975).

"Within Rotter's model, locus of control of reinforcement is conceptualized as a type of learned expectancy that reflects the degree to which individual's perceive connections between their behavior and the reinforcements they experience" (Kalechstein & Nowicki, 1997, p.30). As the environments change and the outcomes coincide with the movement, expectancies therefore, will follow suit, rather than remaining alike for all experiences.

Other Theories

Most past research on the relationship between locus of control and academic achievement is not based solely upon Rotter's definition as derived by social learning theory (Kalechstein & Nowicki, 1997). For Kalechstein and Nowicki (1997) aspects affected by locus of control in late adolescence tend to reveal more fruitful results when monitoring situational experiences. This consideration may help in the determination of behavioral reactions. At this age students are less generalized in academic performance, experience and outcome, whereas younger students have less to compare and, therefore, tend to allow results to encompass belief in overall performance. "Based on this theoretical principle, generalized control expectancies, should predict academic achievement relatively better than

domain-specific experiences in younger as opposed to older children (elementary to junior high school) " (Kalechstein & Nowicki, 1997, p.32). This would be assumed as a result of gaining experience as life and development progress.

The prominent ideas of current research support a combination of internal/external locus of control in each individual, which is strategically implemented according to the situation (Marks, 1998). Other ideas hold that locus of control is a determination of whether an outcome will develop as a result of reinforcement which will lead to the expected end result (Nunn & Nunn, 1993). Further studies have defined locus of control as, "a relatively enduring dispositional characteristic, although certainly modifiable through experience" (Findley & Cooper, 1983, p.419). Gurin (1969) conceptualized locus of control in a different multi-tiered view, in reference to internal locus of control. This research split-differences between personal and societal control as perceived by the individual (Marks, 1998). Wong and Sproule (1984) defined bilocals (those possessing characteristics of internal and external locus of control, which vary per situation) as possessing characteristics of both internal and external perceptions, which resulted in balance and more fruitful coping strategies. Weiz (1984) explained this perception modification as primary control over life events and secondary control, which involves assimilating to the environment.

"Although a generalized expectancy of control beliefs may be stable over time, changing circumstances and continual appraisals by the individual will most likely influence beliefs about locus of control, particularly in specific situations" (Marks, 1998, p.257). The developmental process of childhood to adulthood, as

tailored to anxious or controlled situations, will result in expected outcomes of positive or negative, which are related to perceived internal or external characteristics of the individual. These are reflected by the adaptation of determined coping strategies enabling normal functioning. Internal and external factors of control are implemented when the outcome is determinable and therefore the development of the anxious situation is no longer of importance (Carver, 1997). Essentially, the outcome is assumed through the past experiences, which are associated with the present environment.

Carver's (1997) focus on good and bad outcomes is not necessarily related or matched to the internal = good and external = bad ideation created by past research. He argues that an external individual may have good outcomes if they believe that it will result from luck, chance or powerful others. The relation to internal control forces an idea of weak personal strength and therefore a bad outcome (Carver, 1997). This viewpoint elicits confusion in the definitions of perceived control and the effects or reasoning of implementing these coping strategies.

Levenson

Past research indicates that locus of control focuses on the adaptive behaviors of external/ internal control and the expected outcome. However, there is now reason to dissect these proven theories and not rely on the set boundaries of personal or external control (Carver, 1997).

Although much research has been published using the Rotter I-E Scale, the results have been hard to individualize. Mirels (1970) stated that the Rotter I-E

Scale tended to define external and internal in social context rather than pertinent to the individual's focus. A revision by Levenson (1974) scrutinously examined components originally defined by Rotter (1975). The results created a multi-dimensional picture of external locus of control, which was separated by belief in chance, luck and powerful, others (Levenson, 1974; Marks, 1998). "It was hypothesized that the I-E Scale does not meaningfully differentiate between those who are involved and those who are not involved, because the broad definition of externals as those with expectancies that fate, chance or powerful others will control events. Three new scales (Internal, Powerful others and Chance – I, P, C) were constructed in order to measure belief in chance expectancies as separate from a powerful other orientation" (Levenson, 1974, p. 377). The differences are explained by a defined and undefined society. Essentially those guided by chance live in an undefined world with no guideline except for whatever occurs (Levenson, 1974). Those who live in a defined reality believe that it is guided by powerful others (Levenson, 1974).

Locus of Control and Anxiety

Individuals are unique in their coping styles and an important strategy used is locus of control (Ganellen & Blaney, 1984). This perception allows the individual to believe that she can control everything in their lives or are left to deal with chance or powerful others. This coincides with Petrosky and Birkimer (1991), who found that coping strategy varied according to the environment and expected need for control. Scenarios involving task-oriented projects were viewed as being more controllable by an individual than those involving personal

concerns (Petrosky & Birkimer, 1991). Those situations were viewed as needing a higher level of coping strategies in order to feel comfortable (Petrosky & Birkimer, 1991). Essentially, an individual can judge and implement the amount of control needed to reach the desired outcome. The relation to coping styles for internals and externals is directly related to outcome expectancies. External locus of control (chance) may view an event as having a negative result and not put forth the effort to cope, where as the opposite is assumed for internals (Ganellen & Blaney, 1984).

In attributing external locus of control to the reduction of stress and anxiety, it is viewed as a coping strategy. "Given that subjects who experience stressful events and had external locus of control, reported the highest levels of depression, it seemed most likely that locus of control does not refer to perceived responsibility for past events but instead to perceptions of control in future events" (Ganellen & Blaney, 1984, p.333). In reference to testing anxiety, it is possible to see a connection between locus of control and coping mechanisms, in order to reduce anxious responses.

Vickers, Conway & Haight, (1983) also found that the chance component of external locus of control was a contributing factor in the employment of coping strategies and was correlated to powerful others. However, powerful others was not as strongly correlated with these adaptive behaviors. The overall research by Vickers et al. (1983) correlated locus of control with defense mechanisms and coping style. Therefore it would be assumed that when exposed to an anxious situation an individual would react with the correlated adaptive behavior.

Ganellen & Blaney's (1984) review of locus of control and life stress research concluded that studies involving these components were most significant when matching the manipulated stressful conditions in correlation to the perceived locus of control. Findings in this research supported a definite interaction between the component of chance and stress (Ganellen & Blaney, 1984). These conclusions were based on an assessment of 158 female undergraduate students taking the Life Experience Inventory, the Beck's Depression Scale and Levenson's I, P, C Scale (Ganellen & Blaney, 1984). This reflects the need and importance in studying the components of locus of control and specific stressors and/or anxietal reactions.

Locus of Control Orientation and Perceived Academic Ability

The perceived ability viewed by the child will effect ability and performance in an academic setting (Terry, 1998). For example, children who tend to experience nurturing and supportive relationships are expected to achieve higher academic standards, while those who experiences negative environments are more likely to fail and remain in an unmotivated state (Langfitt & Asbury, 1995). Ability is therefore linked to not only perception of ability but also a perception of self, environment and control. Robinson, Rotter, Fry and Vogel (1992) Found that children fourteen years or older demonstrate fears connected to academic performance, social and familial issues and school related tasks (tests). These fears and issues of anxiety are derived from the development of self-concept and are strongly tied to locus of control orientation, due to the expected outcome as perceived by the individual.

It is assumed that the period of adolescence is ever changing and therefore would promote the same, concerning self-concept and perceptions of control. However, a determined locus of control indicates stability and non-stressful responses due to the implemented management system (Chubb & Fertman, 1997). An individual will maintain composure if their experiences are guided by a constant perception of control. A student would be defined as internal or external in all facets of life and would be forced to generalize characteristics tailored to the event and expected performance (Chubb & Fertman, 1997).

Chubb and Fertman (1997) described two scenarios explaining external and internal locus of control in students. An external orientation would lead adolescence to believe that all failure, success or positive outcomes are due to chance or the influence of powerful others. Those displaying internal locus of control would connect personal contributions to failure and accomplishment. The result of Chubb and Fertman (1997), coincided with the unchanging self-concept theories proven by past research. Also, there was a trend which displayed a decrease in external focus as the adolescent becomes older. The formulation of self-concept and its contribution to academic performance are viewed as being less effective in later adolescence (Chubb & Fertman, 1997). While this is an arguable point, the perceived locus of control may often become a situational reaction. For this research, the proposed outcomes of the adolescent facing an anxietal scenario will be based on Rotter's (1975) description of experiential events, which match the perceptions of the student. This process will only enhance a perceived locus of control according to the present situation.

Perceptions of self have been associated to success, and considered a derivative from the individual's developmental experience (Chubb & Fertman, 1997). In the literature review by Hamchek (1995) the most common theory relating to achievement and self-concept, described success as being an internally controlled feature while failure was attributed to chance. Quite often, those with a lower self-concept seem to set unattainable tasks which is viewed as a possible defense strategy for rejection of ability and control (Hamachek, 1995). For Levenson (1974) the component of self-esteem and external locus of control can be tied to belief in chance and powerful others. These components are hypothesized to be a casual factor in an anxiety-producing situation. If a person can not have faith in society and themselves then the anxietal reaction is inevitable. Research conducted by Greenburg et al., (1996) revealed that authoritative figures were viewed as forceful, demanding and negative. The belief system of an individual who perceive others as having this status often feel threatened and are prone to anxietal reactions. In considering this, it is assumed that those believing that control of their lives and actions are governed by powerful others, will experience a form of anxiety. Conversely, evoking positive affirmations of these factors will enable the individual to formulate plans in obtaining achievement status (Simon et al., 1996).

Locus of Control and Test Anxiety

The relationship between personal perceptions and achievement was first studied by Prescott Lecky in 1945 (Hamachek, 1995). The correlation of locus of control and school functioning is relevant in many studies. Some studies have

indicated that those who experience test anxiety tend to blame themselves for the outcome, while those who externalize the results of a test feel less responsibility and, therefore, have lower anxietal reactions (Morris & Carden, 1981). Conversely, Weist, Freedman, Paskewitz, Proescher and Flaherty (1995), found that students who displayed an external orientation develop a higher anxiety level involving academic tasks than internalized students. The results of this research displayed an inability to cope with anxietal events when implementing an external locus of control.

Factors which have been correlated with the effects of poor academic achievement in urban adolescents include perceived locus of control, interpersonal relationships, self-concept and coping (Weist et al., 1995). Also, current research has unveiled a correlation between external locus of control, lower academic performance and confidence (Weist et al., 1995).

Stipek and Weisz (1981) related locus of control to academic performance including perceived test performance. Those who do well in school would display internal control and those who do poorly would reflect external control characteristics reinforced by repeated failures. In other words, value attached to academic performance is associated with locus of control orientation and past performance outcomes (Stipek &Weisz, 1981; Young & Shorr, 19 ; Rotter, 1975; & Hamachek, 1995). If academic success is linked to internal control, it is hypothesized that fear of unsuccessful completion would be linked to external control and anxiety. According to Rotter (1975), it has been proven that external

control is a result of an expected failure or defensive coping style in fearful reinforced environments.

Manuck, Hinrichsen and Ross (1975) hypothesized that stressful experiences would promote anxietal reactions in both external and internal perceptions. The results were based on situational contexts which proved that those with external orientations were more likely to experience anxiety in low level stress scenarios (Manuck et al, 1975). Possessing the characteristics of an external locus of control, the individual maximizes the potential for an anxietal reaction. It would be assumed that perceived low levels of stress, pertaining to internal locus of control would encompass events controllable to the individual. Events that produced anxiety would possess uncontrollable situations as viewed by an individual with an external orientation. These students (external locus of control) would associate outcomes with chance and powerful others. By projecting blame for failures, the individual claims a victim status and experiences a residual anxiety produced by an unknown result (chance).

The experience of test anxiety has been defined through components which produce concern (worry) or inability to succeed (lack of confidence) which result in some physical or emotive response (Liebert & Morris, 1967). The element of concern is most influential in anxietal reactions when the individual perceives uncontrolled, inevitable failure. The possible outcome of negative results connects an emotional response that could hinder performance (Liebert & Morris, 1967).

Friedman & Bendas-Jacob (1997) connected these concepts not only to academic, but personal failure, which essentially damaged the sense of self. Allen (1970) explained the relationship between anxiety and academic achievement as unfavorable. Many studies of test anxiety fail to identify a characteristic, which associates an implemented coping style. Past research has indicated that anxiety is viewed as encompassing an individual's entire life experiences and not merely a situational reaction (Allen, 1970). For adolescents, test anxiety has been linked to childhood development, locus of control and lower self-esteem (Freidman & Bendas-Jacob, 1997). Also, adolescents with high-test anxiety had tendencies to possess a higher psychopathology, which included the perceptions of failure and anxious responses to social and academic settings (King, Mietz, Tinney, & Ollendick, 1995 & Freidman & Bendas-Jacobs, 1997).

Hypothesis

Students possessing an external locus of control have lower test scores and lower overall performance (Tesiny, Lefkowitz & Gordon, 1980). For Nunn and Nunn (1993) failure was linked to externality in both genders in a 5th through 8th grade experiment. Results revealed that those possessing external perceptions of control tended to be anxietal and develop lower self concepts concerning academic tasks and overall achievement (Nunn & Nunn, 1993).

This study examined the relationship between test-anxiety, assessed through the State-Trait Anxiety Inventory (Speilberger, 1970); in late adolescence and Hanna Levenson's (1974) definition of locus of control. Levenson's I, P, C, Scale

(internal, powerful others and chance) was replicated in order to group the students into two categories. The two categories were: A. External locus of control, represented by those who believed in control by powerful others, and B. External locus of control, represented by those who are subjected to life guided by chance. The individuals displaying low characteristics of chance and powerful others were weeded out from those who had external locus of control. This was done under the assumption that those low in powerful others and chance had an internal locus of control.

The State-Trait Anxiety Inventory was used in order to assess anxiety in a situational context, in relation to anxious responses due to an upcoming test. Trait anxiety was viewed as a constant state implemented over all experiences and therefore would be irrelevant in measuring anxiety due to one aspect of academic performance. In academic settings those students with A-State characteristics displayed higher anxiety than those possessing A-Trait characteristics (Martuza & Kallstrom, 1969, & Joestring, 1975). Those with trait anxious responses would then be expected to respond in an anxious manner consistently pertaining to all aspects of everyday life, while those with state anxious responses would be attributed by the introduction of some stimuli (test taking).

The hypothesis assumed that the two different levels of External locus of control would experience separate levels of situational test anxiety. This was based on Levenson's (1974) differences between those who believed in fate and those who believed in powerful others. It was assumed that the individuals believing in chance would have low-test anxiety and those believing in powerful

others would have high-test anxiety. This hypothesis is based on the assumption that the development of perceived locus of control, along with the demands of an academic setting and authoritative atmosphere, would produce a higher level of test anxiety than merely experiences left to chance.

Chapter III

Method

Subjects

The participants consisted of 41 volunteers from a small private, Catholic high school in the Midwest. All students involved were 12th graders taken from two Theology classes. It was assumed that students at this level would be more aware of the importance of schoolwork because of their impending graduation date. Most adolescent's, at this point, may be contemplating about life after high school and, therefore, would value performance in school-related tasks more than younger students just beginning high school.

Out of these forty-one subjects, 18 were male and 23 were female, with a mean age of 17. Categorization by ethnicity revealed, one Asian American, one African-American, one Hispanic American, 37 Caucasian and one identified by "other." The mean G.P.A. level was 2.94 and the standard deviation was 0.616.

Instrumentation

Hanna Levenson's I, P, C Scale

The Locus of Control Scale, developed by Hanna Levenson (1974), was used to measure the perceived locus of control (see Appendix A). This 24-item scale is a revision of the Rotter Internal-External Scale. The rationalization of this revision was the differentiating of thought into ordered, belief in control by powerful others and unordered, belief in control by chance (Levenson, 1974). The choice of this instrument over the Rotter I-E scale has been affirmed by past research. Carver (1997) stated that the format of the original Rotter I-E Scale contains a forced choice format of

questions, which he believes measures more than locus of control. In other words, he sensed that the answers by the respondents were based solely on expected outcomes rather than actual perceived control.

Levenson's Scale is defined by three categories: Internal, Powerful Others and Chance, which are each represented by an eight item measure. The Internal subscale measures the degree to which individuals believe that they can control their own actions and essentially their own fate (Levenson, 1974). The items, which represent this category are 1,4,5,9,18,19,21 and 23. The Powerful Others subscale refers to the degree to which individuals believe that the world is ordered, yet is controlled by powerful others (Levenson, 1974). Questions 3,8,11,13,15,17,20, and 22 represent this category. Finally, the Chance subscale reveals the tendency to believe that the world is unordered and that life is left to chance (Levenson, 1974). The items which represent this scale are 2,6,7,10,12,14,16, and 24.

The I,P,C Scale uses a 6-point Likert scale format. Within this structure 1= strongly agree, 2 = agree, 3 = somewhat agree, 4 = somewhat disagree, 5 = disagree and 6 = strongly disagree. This scale focuses how a person feels about her own control, according to their personal lives, rather than what she can generalize about how the larger population handles the same or similar scenarios (Levenson, 1974). "The Internal consistency is favorable to that of the Rotter I-E Scale. Kuder-Richardson reliabilities reveal a (coefficient alpha) r= .64 for the Internal Scale, r= .77 for the Powerful Others scale and r= .78 for the Chance

scale. Split-half reliability (Spearman Brown) reveal an r= .62 for Internal, r= .66 for Powerful Others and r= .64 for Chance. The test-retest reliabilities for a l week period reveal .64 for Internal, .74 for Powerful Others and .78 for Chance." (Levenson, 1974, p.378-379). The I, P, and C scale has also proven to have face validity in measuring locus of control constructs (Levenson, 1974).

The State-Trait Anxiety Inventory

The State-Trait Anxiety Inventory (STAI) is a 40-item scale which is used to determine the level of anxiety in students (see Appendix B). Items on the STAI instruct individuals to answer a general response towards trait anxietal statements and a current response to state anxietal statements (Bartsch, 1976). State anxiety is represented by items 1 to 20 and Trait anxiety is represented by items 21 to 40. The STAI is a self-report inventory; which takes 15-20 minutes in administration and completion. The statements on the inventory indicate the presence of anxiety through statements such as, "I feel upset," or the lack of anxiety, represented by statements, like, "I feel calm" (D'Andrea & D'Andrea, 1996). Four responses are indicated by 1 = not at all, 2 = somewhat, 3 = moderately and 4 = very much so (D'Andrea & D'Andrea, 1996). Developed by Speilberger (1968), this inventory views anxiety as being divided by situational (state) or overall environmental contexts (trait). "State anxiety refers to an individual's emotional response to the threat he perceives to be inherent in particular stimulus situation. Trait anxiety refers to an individual's tendency to perceive threatening elements across the board of stimulus condition" (Martuza & Kallstrom, 1974, p363). State refers to

a situational attachment while trait is an overall perception of the individual's environment.

A study by Martuza and Kallstrom (1974) assessed further validity of the STAI and the dichotomous interpretation of anxiety, which was measured using the Campbell-Fiske multi-trait multi-method methodology. Using a sample of college students reflecting high and low stress conditions, the internal consistency was measured using coefficient alpha. The results were similar to the findings in the technical manual of Speilberger, Gorsuch, Lushene, Vagg and Jacobs (1970). Validity for the STAI was conducted by the correlation of stress with state and trait anxiety. The results conformed to the convergent and discriminant validity criterion derived from Campbell and Fiske (1969). Results of the A-Trait validity coefficients were .82 and the A-State validity coefficient was .55. The average for the heterotrait-heteromethod coefficient equaled .42 and the average for the heterotrait-monomethod validity coefficient was .45 (Martuza & Kallstrom, 1974, p. 365).

The study by Joestring (1975) also assessed the validity of the STAI. The research consisted of 124 undergraduate students who were administered the STAI before and after the announcement of an examination. A t-test revealed a difference in the two administrations of 6.46 for the A-State, with a significance of p= .01, whereas for A-Trait there was no significance. Only moderate positive correlations were found between the test announcement and the level of anxiety (Martuza & Kallestrom, 1974, p.365).

For this research, the focus was placed on situational perceptions concerning locus of control and test anxiety. Only state anxiety was reported. In academic settings those students with A-State characteristics (responses due to situational anxiety) display higher anxiety than those possessing A-Trait (consistent anxious response attached to all experiences) characteristics (Martuza & Kallstrom, 1969, & Joestring, 1975). Test anxiety is not representative of the characteristics of trait, or constant anxiety, which encompasses entire life experiences. The situational experience of test performance is associated to a "state" of anxiety, which is employed, only with the onset of a test.

Procedure

Initial permission for conducting the data collection was obtained from the high school principal and school counselor. Upon accepting the research proposal, the principal assigned two classrooms which would meet the requirements and request of the researcher.

During the initial contact with the potential subjects, the purpose of the study was explained without revealing the specific components measured by the instruments. The students of two theology classes were informed that this was a self-evaluation exercise in which questions would pertain to how they perceived themselves and their environment.

Both classes consisted of a total of 60 students. All potential participants were informed that participation was voluntary and those who chose to participate would receive extra credit from their teacher.

Out of 60 students 41 decided to participate. Since the average age was 17 years old, students were issued a permission slip, which needed to be signed by a parent or legal guardian and the student (Appendix C). Students were informed that participation would be denied if the permission slips were not completed. All volunteers were instructed to return the permission slip in one week. After the distribution of the permission slips, the teacher announced the upcoming scheduled test to be taken in a week and a half.

The following week the teacher collected the permission slips from all 41 students. After receiving all of the completed forms, the teacher once again announced the test scheduled for the end of that week. It was believed that the level of anxiety would increase with the mention of a test, therefore measuring test-anxiety in its natural state. At this point, a packet containing a demographic sheet (see Appendix D), the I, P, C Scale and the STAI was handed to the students participating in the study. Before starting on the contents of each packet, students were asked to read each question and answer to the best of their abilities. Students were then instructed to place the completed questionnaires back into the packets and return it to the teacher. Afterward the instructor placed all completed packets in a box, which would be given to the researcher. At the end of that school day the researcher confirmed the teacher's procedure and gathered all completed questionnaire packets.

The data was then computed revealing means, standard deviations and ranges for each variable. The relationship between the components of chance and

powerful others in connection to test anxiety was computed through the use of a Pearson r correlation.

Chapter IV

Results

The descriptive statistics for the variables of State anxiety, Powerful others and chance are displayed in Table I.

Table I

Descriptive Statistics

(N=41)

Descriptives	Mean	Std. Deviation	Range	Variance
State Anx.	44.9024	5.1856	19.0	26.8902
Pow. Others	31.5854	5.1574	24.0	26.5988
Chance	30.4390	5.4911	22.0	30.1524

The mean for State Anxiety was 44.9, for Powerful Others 31.58 and for Chance 30.4. Overall, the means reflect slightly skewed distributions for each variable. The standard deviations for each variable were close in comparison. State anxiety resulted in a 5.18 standard deviation, Powerful Others revealed 5.15 and Chance yielded 5.49. The range and variance for the tested components also corresponded to the previous descriptive statistics. State anxiety displayed a range of 19.0 with a variance of 26.89, the range for Powerful Others was 24.0, revealing a 26.59 variance; while the range for chance was 22.0 with a 30.15 variance. These values representing the standard deviation and the variance are proportionate to the moderate range of scores.

The relationship between the variables was computed through a Pearson r correlation. Each variable of determined locus of control was correlated with the scores of state anxiety. These statistics are displayed in Table 2.

Table 2

Pearson r Correlation

(N=41)

Pearson r	Powerful Others	Chance
State Anxiety	-.072	-.211
Sig. (2-tailed)	.654	.186

** p <.01

The alpha value of .05 is used in the explanation of these results pertaining to the hypothesis testing. The correlation between State Anxiety and Powerful Others revealed r= -.072 and for State Anxiety and Chance, r= -.211. All correlations reflect a negative relationship between the variables and state anxiety. The 2 tailed significance between State Anxiety and Powerful Others resulted in sig.= .654 and sig.= .186 for State Anxiety and Chance. The closest significant value was the correlation between State Anxiety and Powerful Others, sig.= .186; however, it is still represented by a negative correlation.

The value r represents the strength of a correlation due to the strength of a linear relationship between two variables. The range of this correlation falls between 1 and –1, subsequently reflecting a positive or negative association. Those scores closest to 0 reflect a weak linear relationship and a low correlation

between variables. The following scatterplots display further the non-significant results between each variable of external locus of control and state anxiety.

Scatterplot Of State Anxiety With Powerful Others

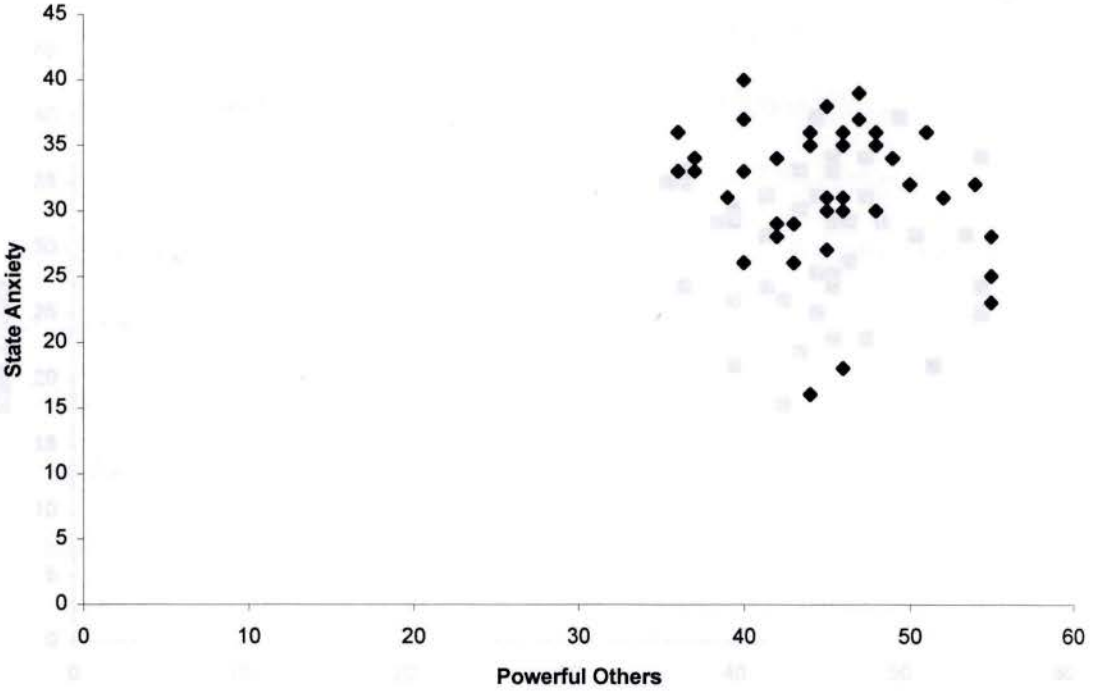

Figure 1: In this plot the array of data points are grouped in the middle of the graph displaying the non-linear correlation of r= -.211.

Scatterplot Of State Anxiety And Chance

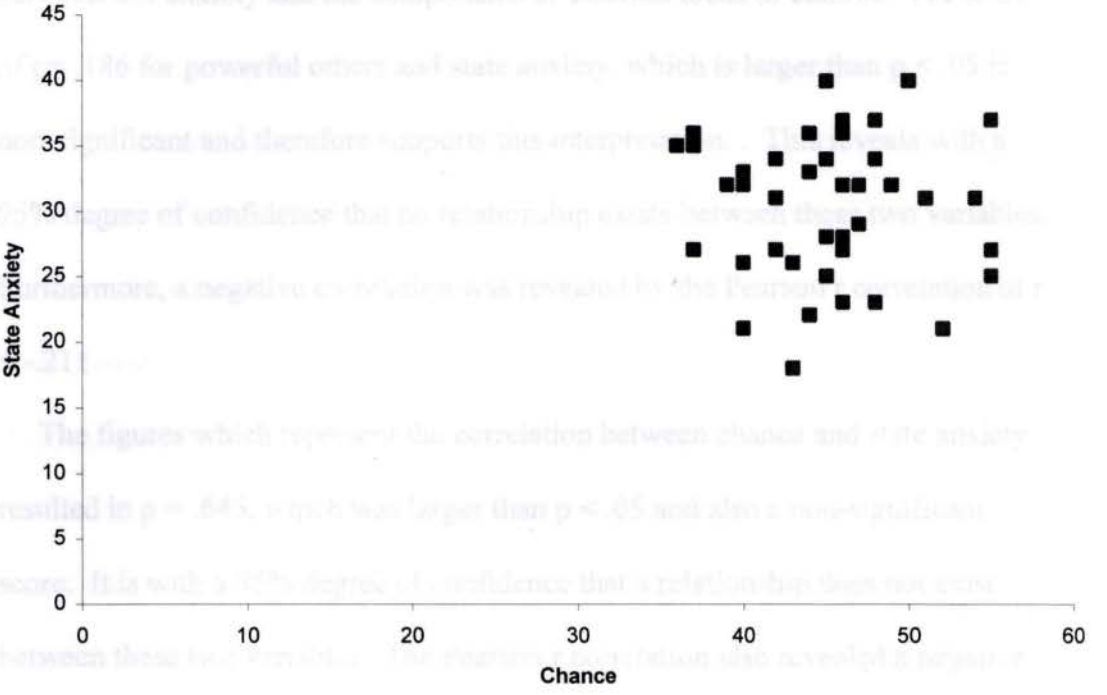

Figure 2: This scatterplot, also displays the array of data points as grouped in the middle of the graph, illustrating a non-linear correlation of r= -.072.

These results support the conclusion that there is no significant relationship between test anxiety and the components of external locus of control. The score of p= .186 for powerful others and state anxiety, which is larger than $p < .05$ is non-significant and therefore supports this interpretation. . This reveals with a 95% degree of confidence that no relationship exists between these two variables. Furthermore, a negative correlation was revealed by the Pearson r correlation of r = -.211.

The figures which represent the correlation between chance and state anxiety resulted in p = .645, which was larger than $p < .05$ and also a non-significant score. It is with a 95% degree of confidence that a relationship does not exist between these two variables. The Pearson r correlation also revealed a negative relationship between these two variables with r= -.072.

Chapter V

Discussion

The results of this research require the failure to reject the null hypothesis. As stated in Chapter IV, there is no significant relationship between the variables of test anxiety and the components of Powerful Others and Chance. This conclusion is assumed by the resulted negative correlation revealed through r= -.211 between State Anxiety and Powerful Others; and the correlation of r= -.072 between State Anxiety and Chance.

Table 1 illustrates the descriptives for the variables assessed in this research. The moderate means, standard deviations and range of scores reveal that the non-significant results are not due to a restricted range of scores. In Table 2 the correlations reflect a negative relationship between the components of Powerful Others and Chance (external locus of control) and State Anxiety (situational enhanced through the announcement of an upcoming exam). The lack of a linear relationship as viewed in Plot 1 and 2 further displayed the non-significant trends between these variables of locus of control and anxiety. Also, the results indicate a slight inverse relationship, although this is not a strong association because the scores are closer to r = 0, or no correlation.

These results are best explained through the interpretation of past research. Findings by Joestring (1975) associate A-State anxiety with the onset of an announced examination. Although locus of control orientation was not attributed to this reaction, Marks (1998) defines this lack of specification as the missing

influential factor in the reinforcement of behavior. Therefore, those internally guided apply value to the experience in order to control the situation, while those externally oriented do not believe their efforts could influence any outcome. Those who experience state anxiety will be affected by a specific event, subsequently creating a severe effect on those externally oriented. An anxious response would typically become enhanced with the lack of control experienced by these individuals (Marks, 1998).

This research hypothesis was based on the assumption that the lack of control predicted by the belief in powerful others would invoke more testing anxiety than those who experience belief in chance. According to Levenson (1974), those who are influenced by powerful others are allowed some potential for control, while those who believe in chance lack any aspect of control which may result in low if any anxious response (Levenson, 1974). The results do support this interpretation of the hypothesis, to some extent.

Another interpretation of these results is linked to the study by Levenson (1974) where student activists who felt as if they were mislead or being controlled by an authoritative system reacted with efforts to change the system. This reinforcement brought forth by desperation can be associated with the current study. Those experiencing control from outside factors (parental guidance or teachers) may more likely react in an anxious manner when presented with an academically oriented task. This reaction is naturally reinforced through the perceived "potential" of control as connected to a belief in powerful others.

Externality can also be labeled as "passive" or "defensive" (Rotter, 1975). These characteristics are determined by the individual through the association of "ego mechanisms" and external locus of control (Vickers et al., 1983). This further dissection complicates the grounded definition of external locus of control used in this research.

Marks (1998) also stated that locus of control is only one "piece" of the individual's belief system and, therefore should not be targeted as the predicting factor in any resulted behavior. The confounding aspects may be linked to gender, SES, self-esteem, depression, IQ or any other influential factor, which can determine functioning. Some research suggests that these factors along with the variables studied in this research, should not be separated and could essentially never yield an accurate assessment (Carver, 1997).

In reference to demographic contributions, Chubb and Fertman (1997), Bachman, O' Mallay and Johnston (1978), found that both males and females tend to drop external orientation during the period of high school. This is explained through gradual self-reliance and increasing independence. Therefore, those who report external locus of control essentially may be in the process of gradual transformation and lack consistency in overall perceptions (Chubb & Fertman, 1997). Many changes occur during adolescence, which affect emotional and cognitive development. Beliefs and values formed at this stage are gathered from many sources. The assessment of locus of control orientation in relation to testing anxiety becomes difficult to measure accurately, as individual

development is not specified (Compas, 1987). As a result, much current research suggests a focus on the earlier stages of adolescence in order to indicate the original contributing factors of pre-adult development. A study by DuBois et al., (1992) found that the measures of life stress and social support in young adolescence were pertinent to the adaptation patterns implemented 2 years after the initial study. Using results from a younger, less confounded population may help determine a starting point for future research.

Limitations and Recommendations

The following represents ideas helpful in developing future research endeavors. A longitudinal study would be helpful in determining developmental patterns and the factors, which contribute to the complex belief and value system of an adolescent. As past research has suggested, many factors can be confounded and difficult to assess separately, it may be wise to study the nature of how these patterns were formulated. The assessment of the appropriate reinforcements may help in discovering the influencing factors, which aid in the formation of test anxiety in adolescence. This would take a longer period of time, which may be difficult; however, it will allow for a more accurate assessment of the variables which contribute to the formation of locus of control orientation and the experience of anxiety in relation to test taking. With this suggestion, other instruments would be recommended in order to assess the data within a different capacity and perhaps a more accurate manner.

Another interesting variable, which may yield some significance, is student involvement in school activities. In this sample 88% of the females participated in an extra-curricular activity and 68% were enrolled in an advanced, college credit course. For males, 83% participated in an extra-curricular activity, while 44% were enrolled in the advanced courses. It is questionable how this relates to testing anxiety; however, it is linked to the development of locus of control orientation and academic performance (Yarworth & Gautheir, Jr., 1978).

The biggest limitation of this research was the sample size and the demographic characteristics. The use of convenience sampling limited the results to this study's specific population. A larger sample size, with random sampling sources may have created significant results, which could have been generalized to other groups. Another limitation was the use of the State- Trait Anxiety Inventory in order to assess testing anxiety. Although it measured the anxiety evoked through the announcement of an exam, it is questionable if it measured only general anxiety. For future research, it may be useful to use an instrument, which focuses on test anxiety.

APPENDIX A

I, P and C Scale

This scale consists of sentences describing feelings and thoughts. Read each item and circle the number which best describes how you feel about the statement.

1= Strongly agree 2= Agree 3= Somewhat agree 4= Somewhat disagree 5= disagree 6= Strongly agree

1 Whether or not I get to be a leader depends mostly on my ability.
1 2 3 4 5 6

2 To a great extent my life is controlled by accidental happenings.
1 2 3 4 5 6

3 I feel like what happens in my life is mostly determined by powerful people.
1 2 3 4 5 6

4 Whether or not I get into a car accident depends mostly on how good a car driver I am.
1 2 3 4 5 6

5 When I make plans I am almost certain to make them work.
1 2 3 4 5 6

6 Often there is no chance of protecting my personal interest from bad luck.
1 2 3 4 5 6

7 When I get what I want, it's usually because I am lucky.
1 2 3 4 5 6

8 Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.
1 2 3 4 5 6

9 How many friends I have depends upon how nice a person I am.
1 2 3 4 5 6

10 I have often found that what is going to happen will happen.
1 2 3 4 5 6

11 My life is chiefly controlled by powerful others.

1 2 3 4 5 6

12 Whether or not I get into a car accident is mostly a matter of luck.

1 2 3 4 5 6

13 People like myself have very little chance of protecting our personal interests when they conflict with those of string interest groups.

1 2 3 4 5 6

14 It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.

1 2 3 4 5 6

15 Getting what I want requires pleasing those above me.

1 2 3 4 5 6

16 Whether or not I get to be a leader depends on whether I am lucky enough to be in the right place at the right time.

1 2 3 4 5 6

17 If important people were to decide they didn't like me, I probably wouldn't make many friends.

1 2 3 4 5 6

18 I can pretty much determine what will happen in my life.

1 2 3 4 5 6

19 I am usually unable to protect my personal interests.

1 2 3 4 5 6

20 Whether or not I get into a car accident depends mostly upon the other driver.

1 2 3 4 5 6

21 When I get what I want, It's usually because I work hard for it.

1 2 3 4 5 6

22 In order to have my plans work, I make sure they fit in with the desires of people who have power over me.

1 2 3 4 5 6

23 My life is determined by my own actions.

1 2 3 4 5 6

24 It's chiefly a matter of fate whether or not I have few friends or many friends.

1 2 3 4 5 6

APPENDIX B

Self-Evaluation Questionnaire

Developed by Charles D. Spielberger
in collaboration with
R. L. Gorsuch, R. Lushene, P. R. Vagg, and G.A. Jacobs

STAI Form Y-1

Name _____ Date _____ S ___
Age _____ Sex: M___ F___ T ___

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken the appropriate circle to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1= Not at all 2= Somewhat 3= Moderately So 4= Very Much So

1	I feel calm.....	1	2	3	4
2	I feel secure	1	2	3	4
3	I am tense	1	2	3	4
4	I feel strained	1	2	3	4
5	I feel at ease	1	2	3	4
6	I feel upset	1	2	3	4
7	I am presently worrying over possible misfortunes	1	2	3	4
8	I feel satisfied	1	2	3	4
9	I feel frightened	1	2	3	4
10	I feel comfortable	1	2	3	4
11	I feel self-confident.....	1	2	3	4
12	I feel nervous	1	2	3	4
13	I am jittery	1	2	3	4
14	I feel indecisive.....	1	2	3	4
15	I am relaxed	1	2	3	4
16	I feel content	1	2	3	4
17	I am worried	1	2	3	4
18	I feel confused	1	2	3	4
19	I feel steady	1	2	3	4
20	I feel pleasant	1	2	3	4

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APPENDIX C

L.P.C.- Counseling Program
Lindenwood University
Self-Evaluation Study

Diana Michaelson: B.A. in Psychology, Graduate Student
Pam Nickels, Ph.D.; Student Advisor

1. Diana Michaelson has requested my participation in this study. The title of the study is the Self-Evaluation Study.
2. I understand that the purpose of this study is to examine my perceptions of myself as an individual.
3. My participation will involve filling out two questionnaires over the period of twenty classroom minutes from one classroom session.
4. I understand that there are no risks in taking these surveys. I only may become more aware of my own functioning and subsequently relate that towards my personal perceptions.
5. I understand that the results of this research may be published but that my name will not be revealed. The study will be based solely on group and not individual data. Only the researcher will have access to the results of my survey responses.
6. I understand that the possible benefit of my participation, to me and to society, includes a better understanding of my responses as they are viewed through a societal scope.
7. I understand that the alternative is non-participation.
8. I understand that my participation is voluntary and that refusal to participate will involve no penalty. I understand that I may withdraw from the study at any time without penalty.
9. If I have questions concerning my participation I may contact Diana Michaelson, who can be reached at 741-5580.
10. If I have questions about my rights as a research participant or in event I believe I have suffered injury as a result of my participation in the research project, I may contact the student advisor, Dr. Pam Nickels at 916-1918.

_____ Student Signature

_____ Parent or Guardian Signature
(If participant is a minor)

APPENDIX D

Age: _____

Gender: Male / Female

Cultural Background: (circle one)

Asian American African American Native American

Caucasian Hispanic American Other

Cumulative Grade Point Average: (optional; circle one)

4.0-3.5 3.5-3.0 3.0-2.5 2.5-2.0 2.0-1.5

1.5-1.0 1.0-0

Current Grade Level: (circle one)

9th grade 10th grade 11th grade 12th grade

Are you involved in any sports or extra-curricular activities? Yes / No

Are you taking any advanced or college credit classes? Yes / No

References

Allen, G. A., (1970). Effect of three conditions of administration on "trait" and "state measures of anxiety. Journal of Consulting and Clinical Psychology, 34, 355-359.

Bartsch, T. W. (1976). A manipulative study of the effect of instructional set on the convergent and discriminate validity of questionnaires measures of trait and state anxiety: a comparative factor analytic approach. Educational and Psychological Measurement, 36, 885-898.

Bjorkland, D. F. & Green, B. L. (1992). The adaptive nature of cognitive immaturity. American Psychologist, 47, 46-54.

Campbell , D. T. & Fiske, D. W. (1959). Convergent and discriminative validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.

Carver, C. S. (1997). The internal-external scale confounds internal locus of control with expectancies of positive outcomes. Personality and Social Psychology Bulletin, 23, 580-586.

Chubb, N. H. , Fertmann, C. I. & Ross, J. L. (1997). Adolescent self-esteem and locus of control: a longitudinal study of gender and age differences. Adolescence, 32, 113-117.

Compas, B. E. (1987). Coping with stress during childhood and adolescence. Psychological Bulletin, 101, 393-403.

D'Andrea, L. M. & D'Andrea, L. R. (1996). Prediction of treatment outcome using state-trait anxiety inventory scores: the use of discriminative analysis. Journal of Addictions & Offender Counseling, 16, 50-62.

deMan, A. F., Hall, Stout, V. & Stout D. (1991). Neurotic nucleus and test anxiety. Journal of Psychology, 125, 671-675.

DuBois, D. L., Felner, R. D., Brand, S., Adan, A. M. & Evans, E.G. (1992). A prospective study of life stress, social support, and adaptation in early adolescence. Child Development, 63, 542-557.

Duke, M. P. & Nowicki, Jr., S. (1973). Personality correlates of the Nowicki-Strickland locus of control scale for adults. Psychological Reports, 33, 267-270.

Findley, M. J. & Cooper, H. M. (1983). Locus of control and academic achievement: a literature review. Journal of Personality and Social Psychology, 2, 419-427.

Friedman, I. A. & Bendas-Jacob, O. (1997). Measuring perceived test-anxiety in adolescents: a self-report scale. Educational & Psychological Measurement, 57, 1035-1046.

Ganellen, R. J. & Blaney, P. H. (1984). Stress, externality and depression. Journal of Personality, 54, 326-337.

Greenberg, J., Solomon, S., Veeder, M., Pyszczynski, T., Rosenblatt, A., Kirkland, S. & Lyon, D. (1990). Evidence for terror management theory II: the effects of morality salience on reactions to those who threaten or

bolster the cultural worldview. Journal of Personality and Social Psychology, 58, 308-318.

Greene, A. L. (1988). Early adolescent's perceptions of stress. Journal of Early Adolescence, 8, 391-403.

Gurin, P., Gurin, G., Lao, R., & Beattie, M. (1969). Internal-External control in the motivational dynamics of Negro youth. Journal of Social Issues, 25, 29-54.

Hamachek, D. (1995). Self-concept and school achievement: interaction dynamics and a tool for assessing the self-concept component. Journal of Counseling and Development 73, 419-424.

Joestring, J. (1975). Test-retest reliabilities of state-trait anxiety inventory in an academic setting. Psychological Reports, 37, 270.

Kalechstein, A. D., Nowicki, Jr., S. (1997). A meta-analytic examination of the relationship between control expectancies and academic achievement: an 11 year follow-up to Findley and Cooper. Genetic, Social & General Psychology Monographs, 123, 29-57.

King, N. J., Mietz, A., Tinney, L. & Ollendick, T. H. (1995). Psychopathology and cognition in adolescents experiencing severe test anxiety. Journal of Clinical Child Psychology, 1, 49-52.

Langfitt, T. W. & Asbury, C. H. (1995). The science of childhood potential. Science and Technology 7, 43-48.

Levenson, H. (1974). Activism and powerful others: distinctions within the concept of internal-external control. Journal of Personality Assessment, 38, 377-383.

Liebert, R. M. & Morris, L. W. (1967). Cognitive and emotional components of test anxiety a distinction and some initial data. Psychological Reports, 20, 975-978.

Manuck, S. B., Hinrichsen, J. J. & Ross, E. O. (1975). Life stress, locus of control and state and trait anxiety. Psychological Reports, 36, 413-414.

Marks, L. I. (1998). Deconstructing locus of control: implications for practitioners. Journal of Counseling & Development, 76, 251-260.

Martuza, V. R. & Kallstrom, D. W. (1974). Validity of the state-trait anxiety inventory in an academic setting. Psychological Reports, 35 363-366.

Mirels, H. L. (1970). Dimensions of internal versus external control. Journal of Consulting and Clinical Psychology, 34, 226-228.

Morris, L. W., & Craden, R. L. (1981). Relationship between locus of control and extraversion-introversion predicting academic behavior. Psychological Reports, 48, 799-806.

Nickels, P. M. (1998). The Relationship Between Career Maturity, Self-Esteem and Locus of Control in a Group of Learning Disabled and Nonhandicapped Adolescence. Unpublished doctoral dissertation., Dept. of Education, University of Missouri-St. Louis.

Nunn, G. D. & Nunn, S. J. (1993). Locus of control and school performance: some implications for teachers. Education, 113, 636-641.

Petrosky, M. J. & Birkimer, J. C. (1991). The relationship among locus of control, coping styles and psychological symptom reporting. Journal of Clinical Psychology, 47, 336-345.

Robinson, E., Rotter, J., Fey, M. & Vogel, K. (1992). Helping children cope with fears and stress. Ann Arbor: University of Michigan. (ERIC Document Reproduction Services, Saint Louis University).

Rotter, J. B. (1975). Some problems and misconceptions related to the construct of internal versus external locus of control of reinforcement. Journal of Consulting and Clinical Psychology, 43, 56-67.

Savin-Williams, R. C. & Demo, D. H. (1984). Developmental change and stability in adolescent self-concept. Developmental Psychology, 20, 1100-1110.

Simon, L., Greeberg, J., Harmon-Jones, E., Solomon, S. & Pyszczynski, T. (1996). Mild depression, mortality salience and defense of the worldview: evidence of intensified terror management in the mildly depressed. Personality and Social Psychology Bulletin, 22, 81-90.

Spielberger, C. D. Gorsuch, R. L. & Lushene, R. E. Manual for the State-Trait Anxiety Inventory. Palto Alto: Consulting Psychologists Presss, 1970.

Stipek, D. J. & Weisz, J. R. (1981). Perceived personal control and academic achievement. Review of Educational Research, 51, 101-137.

Terry, P. M. (1998). Do schools make students fearful and phobic? focus: nurturing, caring relationships in today's schools. Journal For a Just and Caring Education, 4, 193-212.

Tesiny, E. P. , Lefkowitz, M. M. & Gordon, N. H. (1980). Childhood depression, locus of control and school achievement. Journal of Educational Psychology, 72, 506-510.

Vickers, Jr., R. R., Conway, T. L. & Haight, M. A. (1983). Association between Levenson's dimensions of locus of control and measures of coping and defense mechanisms. Psychological Reports, 52, 323-333.

Weist, M. D., Freedman, A. H., Paskewitz, D. A., Proescher, E. J. & Flaherty, L. T. (1995). Urban youth under stress: empirical identification of protective factors. Journal of Youth and Adolescence, 24, 705-721.

Weisz, J. R., Rothbaum, F. M. & Blackburn, T.C. (1984). Standing out and standing in: The psycholoy of control in America and Japan. American Psychologist, 39, 955-969.

Wong, P. T. P., & Sproule, C. F. (1984). An attributional analysis of the locus of control construct and the Trent attribution profile. In Lefcourt, H.M. (ED), Research with locus of control construct, 3, 309-360. New York Academic Press.

Yarworth, J. S., & Gauthier, Jr., W. J. (1978). Relationship of student self-concept and selected personal variables to participation in school activities. Journal of Educational Psychology, 70, 335-344.

Young, T. W. & Shorr, D. N. (1986). Factors affecting locus of control in school children. Genetic, Social and General Psychology Monographs, 112, 405-417.