Author: Van Sistine, Andrew, J

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STUDENT:

NAME Andrew Van Sistine DATE: 5/8/2012

ADVISER: (Committee Chair if MS Plan A or EdS Thesis or Field Project/Problem):

NAME Christine Peterson DATE: 5/8/2012

This section for MS Plan A Thesis or EdS Thesis/Field Project papers only Committee members (other than your adviser who is listed in the section above)

1. CMTE MEMBER'S NAME:	Aaron Barnes	DATE: 5	5/8/2012	
2. CMTE MEMBER'S NAME:	Barbara Flom	DATE: 5	5/8/2012	
3. CMTE MEMBER'S NAME:	Christine Peterson	DATE: 5	5/8/2012	n

This section to be completed by the Graduate School

This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies:

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Van Sistine, Andrew J. The Effects of Negative Self-Talk on the Academic Performance of School-Age Children

Abstract

Research on the topic of self-talk has demonstrated it to impact both positive and negative outcomes in children, adolescents and adults. The current study sought to examine the effect of negative self-talk on student academic performance in school. Students aged 12 to 15 years who attended a school within in a rural Midwestern district participated in a self-report on the topic of negative self-talk. Results were correlated with factors including grade point average, absences, disability status and socioeconomic status.

Results obtained from this study indicated moderate to large negative correlations between various subscales of the Negative Affectivity Self-Statement Questionnaire and grade point average, and moderate to large positive correlations between elected negative selfstatements and student absences in the sample population. These findings revealed with increased levels of negative self-talk, grade point average decreased and the student missed more school days. Additional comparisons revealed special education populations and participants who received free and reduced lunch elected significantly greater levels of negative self-talk on average. Negative self-talk accounts for a measurable degree of variance in academic performance of the sample, which suggests the delivery of evidence based interventions, may be plausible.

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Chapter I: Introduction

Self-talk is the automatic, internal dialogue we use to explain situations and communicate to ourselves. This natural human mechanism of self-control provides a voice for our adaptive functioning and self-regulation by narrating our experience, appraisal, and efficacy as we interact with our environments and engage in different tasks. The existence of this activity is quite normal and healthy, though the appraisal we assign ourselves in these statements is often negative, self-defeating and may pose as a barrier to the maintenance of a positive self concept and production of satisfactory schoolwork. Such statements are not exclusive to children who are suffering from depression or anxiety; it is also prevalent among children who are self proclaimed perfectionists. From a cognitive behavioral perspective, perfectionistic individuals will engage in negative self-talk (Greenspon, 2000) and cause harm to the self with statements resembling "If I cannot please everyone, I am a failure." The statements these particular students say to themselves set requirements or benchmarks that are not always attainable. This leads to a reduction in self appraisal and builds stress, which reduces performance on a variety of tasks, including those which are included in the school curriculum. Given the scope of this problematic unseen behavior, the clarification and understanding of negative self-talk is both necessary and immediate.

What is Negative Self-Talk?

I know I have all the potential, but I don't know why I can't even try to talk to her, who's moping around and looking depressed about something. I just want to help her, maybe even fall on my knees and tell everything, but I am chicken, therefore stupid and aimless.

These are words that have gone unspoken, but were revealed in a typical self report of a school-aged child who struggled with self-efficacy and self concept. Negative self-talk remains

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elusive to those around, but all too present for those who are demoralized or affected by the interruptions. Negative self-talk is experienced by individuals suffering from both anxious and depressive symptoms. Those who think negatively during an initial depressive episode or event may be more likely to think negatively during future negative events and continue a depressive knowledge pattern, thus negative self-talk equates to negative automatic thoughts, or appraisals that we assign new situations (Ingram, Miranda & Segal, 1998).

From a developmental perspective, self-talk as explained by Vygotsky (1962), is initially overt and used by children as an adaptive function to complete tasks, but becomes automatic and internal as children develop. This internalization eventually serves as a fundamental developmental determinant in monitoring behavior and developing self-control. Winsler and Naglieri (2003) have shown evidence of children's normal and predictable use of self-statements to guide children through tasks, though in accordance with Vygotsky's early postulate, the speech becomes internal and unobservable to listeners. Evidence shows it may even become an automatic or unwillful phenomenon as development occurs even when this talk was purposefully employed previously (Beck, 1963). We have the opportunity to observe and interpret the thoughts of toddlers when they are expressed aloud, and can intervene and praise children for their production in-process. It is much more difficult however, to predict the content and remediate the consequences of internal thoughts that go unexpressed and therefore unheard.

Several reports of self-talk are applied for the purpose of studying, rating, and remediating the effects of self-talk focus on the valence and frequency, or rather, is it positive or negative, and how much or to what degree is it experienced. Kendall and Treadwell (1996) stated the existence of negative self-statements is a predictor of anxiety, lending support to the theory that these statements predict maladjustment. As children reported less anxiety, the frequency of negative self-statements decreased. This suggests that anxiety may be prevented by a reduction of such statements. Furthermore, individuals who were not determined to be anxious provided no data indicating an increased number of positive self-statements, but rather a lack of self-statements altogether.

Within the classroom, attempts are being made to help children develop healthy self concepts. According to Craven, Marsh, and Debus (1991), children will internalize positive feedback heard from teachers, such as "You did well on that spelling test, congratulations." As a result from positive feedback at school, the children will theoretically internalize these thoughts and say "I am good at reading from books" and be confident in the completion of such a task. From these self-statements, children are purported to create self concepts that describe their skills and impact their interests. The child will then form the concept of "I am good at reading and I like to read books."

This model, in addition to others that have been formulated, utilizes the positive power of thought and its impact on self perceptions; however, there are disagreements to the usefulness of self-statements. According to Prins and Hanewald (1999), coping self-statements, or the cognitive attempts to control anxiety and mind-wandering, have shown a negative correlation with performance in stressful situations. Even statements like "I don't have to get upset" do not only fail to increase performance quality, but may have a performance reducing effect by appraising the upcoming situation as being one that is unpleasant. In this instance, these self statements may reflect an anxious person's predisposition to attend to and negatively appraise situations that have caused them stress previously.

Statement of the Problem

Research to date has established a general relationship between self-talk and symptoms of affective disorders such as depression and anxiety. Given negative affectivity, depression, and anxiety negatively impacts school performance, we may begin hypothesizing on the impact negative self-talk makes on a student's school performance directly. Children who display measureable negative affectivity, anxious, and depressive self- talk may struggle academically in the school setting if the symptoms are not properly identified and addressed. Students who experience anxiety in the school setting may additionally exhibit disruptive behaviors to avoid the situations that create those anxious feelings. Furthermore, it is necessary to identify effective research-based interventions that may be implemented within the school environment that may promote non-negative thinking.

Currently, the field does not have a resounding commentary regarding the relationship self-talk may have versus school performance. Understanding this connection will inform appropriate screening therefore, as screening directly for anxiety and depression without suspecting a child with a disability would not be appropriate and may be considered much more invasive.

Purpose of the Study

The purpose of this research is to determine how negative self-talk may impact children in the school setting academically. Understanding the relationships between self-talk and academic performance may help school professionals identify what children are most at risk for academic problems and allow them to distinguish evidenced-based strategies to predict, prevent, identify, and remediate the harmful effects of negative self-talk. Given strong links between negative self-talk and anxiety and depression, it will be beneficial to utilize this knowledge to determine whether self-talk has an independent effect on student learning without a commensurate behavioral screen or medical diagnosis of such a disorder.

Research Questions

- 1. Do correlations exist between negative self-talk and grade point average?
- 2. Do correlations exist between negative self-talk and a student's attendance as determined by number of days absent?
- 3. Are there greater levels of reported negative self-talk among students with disabilities?
- 4. Are there greater levels of reported negative self-talk among students who receive free or reduced lunch?

Assumptions and Limitations of the Current Research

This research assumes the measure utilized in this study accurately defines and embodies the concept of negative self-talk. Implications and further research should note this study was conducted in a rural school district which has a higher than average population of free and reduced lunch and special needs population.

Definition of Terms

Coping self-talk. Cognitive attempts to control anxiety and mind wandering (Prins & Hanewald, 1999)

Negative self-talk. Self-talk with a negative connotation associated. Negative self-talk will be discussed in the contexts of anxious and depressive forms.

Self Concept. The mental image or perception that one has of oneself.

Self-Statement. Used synonymously with self-talk as it is referred to by the cited reference.

Self-Talk. Mental talking: the things that an individual says to himself or herself mentally.

Methodology

Research measures conducted as part of this study included the administration of self reports to a sample population of 12-15 year old students within a school district located in northwest Wisconsin. Students were administered the *Negative Affectivity Self Statement Questionnaire* (NASSQ), a measure that was designed to measure self-statements provided by children, and compare the statements reported with characteristics that represent depressive and anxious affect in addition to general negative affectivity and total negative self-statement indices. The individual NASSQ results were compared against demographic factors and school performance to address the research questions that were detailed above. Comprehensive information regarding the experimental design is included in Chapter 3.

Chapter II: Literature Review

This chapter will summarize current research on the topic of self-talk, including an indepth examination of connection between self-talk and anxiety and depression, as well as how self-talk manifests within anxious and depressed populations. Also discussed will be the impacts these affective disabilities may have on academic performance directly. This chapter will conclude with reasons that school-based interventions are necessary and which evidence based practices are available.

Conceptualizations of "Self-Talk"

Research acknowledges the existence of a self-directed speech, or "self-talk," as the act of making "self-statements." However, the purpose of the definition and the implications differ by author and their conceptualization of self-talk (Beck, 1963; Burnett, 1999; Dush & Schroeder, 1989; Greenspon, 2000; Muris, 1998; Ronan, 1994; Kendall & Treadwell, 2007). Vygotsky (1962) recognized a child's adaptive use of overt self-speech in the completion of tasks, while Beck et al. (1979) related these observations to internal self-references as a child reaches maturity, though these references which may be harmful in nature may have stemmed from childhood (1963). A static ideology held by most is that self-talk is an internal phenomena that summarizes content an individual experiences (Kendall & Treadwell, 2007; Muris, 1998; Ronan, 1994), whether they are for the purpose of self-appraisal, predictions of events to come, rehearsal of strategies, destructive maladaptive thoughts, specifically designed coping mechanisms that are taught in behavioral modification methods, or an attempt to reduce stress before athletic competition (Kress & Statler, 2007; Malouff & Murphy, 2006).

According to Vygotsky's explanation, self-referent speech was initially an audible dialogue that helped children complete tasks and understand their surroundings. This was an

audible behavior that may be easily observed by watching children play with toys, or roleplaying a scenario with an imaginary friend. As a child ages, this dialogue becomes internalized and maintains its existence as part of a human's experience, though it becomes a behavior that cannot be observed by an onlooker. Many researchers, however, frame self-talk as a process that has gone one-step beyond internalization to automaticity, suggesting that it is not only the content of the self-talk which cannot be controlled, but the existence of the behavior as well (Beck, 1963). Burnett (1999) uses this assumption, as he feels children automatically form selfstatements ("I did well on that") that mirror praises from teachers to eventually cause the child to form a positive self concept within an academic subject area such as math. This definition places a self-statement in a position to change a child's appraisal of a situation, similarly to positive experiences as they are added to a schema. Burnett contrasts with Kendall & Treadwell in the usefulness of self-statements. Kendall & Treadwell (1996) suggests the existence of negative self-statements can be a predictor of poor treatment outcomes in instances of children with existing anxiety, suggesting if these thoughts that are implanted by teachers cause anxiety in children, the underlying concern may be more difficult to control. However, when this anxiety is successfully treated, the self-talk should diminish accordingly (Kendall & Treadwell, 2007).

Negative self-talk and self-statements are internal and, whether they are automatic or explicit actions, they suggest negative affectivity and symptoms of depression, anxiety and even fear within an individual.

Self-Statements in Children with Anxiety

Research on negative self-talk presents many contrasting ideations and confounding variables; however, a well-documented fact overarches the field's literature: Negative self-talk is seen invariably in children with anxiety problems. Cognitive theories provide evidence to

support development of schemas that focus on the susceptibility of danger, harm to self, and personal vulnerability or inability to cope play a role in childhood anxiety (Beck et al., 1985 Kendall, 1996). The resulting cognitive operation is primed to process information within that oversensitive anxious schema and support production of negative self-statements. Sood & Kendall (2007) recommend consideration of self-talk in assessment of anxiety and the treatment response therefore, as they found valence and content of self statements differed between anxious and non-anxious groups of children. Clinical trials have shown that negative self-talk is meaningfully related to anxiety disorders diagnosed during childhood and can identify the attainment of treatment goals for these children, suggesting negative self-talk can serve as a predictor for anxious behavior (Kendall & Treadwell, 1996). As anxiety disorders are found in about ten percent of children, it is important to attempt to identify how symptoms can ruminate in a child (Bernstein & Borchardt, 1991).

A person's general tendency is to maintain positive self-concepts by demonstrating positive self-directed cognitions (Bromgard, Bromgard, and Trafimow, 2006). This tendency is not seen in children and adults exclusively with self-esteem, anxiety, and depressive symptoms. The field has generally assumed from existing theoretical frameworks that increased levels of negative self-statements are associated with higher levels of anxiety and fear. Kendall and Treadwell (1996) have shown negative self-statements also act as a predictor of therapy outcome, as higher levels were associated with a less favorable therapy outcome in self-statement modification. In a controlled experiment, children who had been diagnosed with anxiety had reported less occurrences of negative self-talk upon successfully responding to treatment of their anxiety disorder in addition to serving as outcome moderators while receiving therapy. In a further investigation, Kendall and Treadwell (2006) examined the content

specificity of self-talk in children with anxiety disorder. They had discovered that the reduction of specifically anxious self-talk (not depressed self-talk or positive self-statements) showed a positive correlation with positive therapeutic outcomes. Therefore content of self-talk closely mirrored events experienced by the individual, and as improvement of anxious symptoms occurred, the self-talk reduced. Positive self-statements showed no effects or trends in this study, suggesting positive thinking may not be as important as "non-negative thinking (Kendall and Treadwell, 2006)."

Beck's (1963) theory of cognition and content specificity help examine concepts that recur within individuals suffering from anxiety, and more specifically social anxiety. Anticipated rejection, disapproval, embarrassment, themes of inadequate social appraisal, and lack of social desirability and acceptance are among these cognitive concepts that are felt and said by those diagnosed with anxiety. Current research has presented social anxiety can alter behavior during social interaction as well as increasing awareness of one's own awareness of a person's anxious arousal, such as searching for physical signs of their discomfort, such as sweating or shaking. This trend causes children, as well as adults, to seek more self-assurance, and engage in self-talk to a greater degree as this anxiety manifests (Heerey & Kring, 2007). Furthermore, as the culmination of the aforementioned distractions, the individual will create a poor social performance and receive feedback that will help assert the anxious individual of their perceived social incompetence. This may lead to excessive "checking" or evaluating for his or her own behaviors and predicting if a feared outcome will occur (Mennin, Heimburg, Turk & Fresco, 2002).

The cognitive content specificity hypothesis suggests anticipated frequency of negative consequences, poor social evaluations, and perceived inadequacy to others are cognitions that

underlie social anxiety. Cho & Telch (2005) tested the content and amount of positive and negative self-statements and automatic thoughts in individuals who were diagnosed with social anxiety. It was determined that the amount of negative self-statements, as gathered by self-report, contributes similarly to social anxiety as absence of positive thoughts. These positive thoughts relate to anticipation, self-efficacy, self-evaluation, and appraisal of interpersonal ability.

Muris et. al (1998) tested the strength of the relationship between anxious symptomology and negative self-statements by comparing diagnosed individuals with a sample of individuals who experience generalized anxiety symptoms, but did not qualify for a diagnosis based on the lesser felt impact of those symptoms. This examination suggests "it is plausible to assume this type of self talk is also present in normal children who exhibit high levels of anxiety disorder symptoms." Therefore, it may be predicted that the severity of symptoms in undiagnosed children will positively correlate with the number of self-talk statements as measured by the Screen for Child Anxiety Related Emotion Disorders (SCARED; Birmaher, Kheterpal, Brent et al., 1997). Children answered 66 questions in this self-report that load on various categories of anxiety based on experiential recollections such as "I worry about things working out for me" and "I am afraid to go to the dentist", which are associated with thoughts of anxious children. Negative self-statements were measured by the Negative Affect Self-Statement Questionnaire, or NASSQ (Ronan et. al, 1994) which asks how often certain distinct phrases come into a child's mind in the past week such as "I thought I would fail." or "Life is terrible." The first result determined, with no sex differences overall, that children show less indicators of both anxious symptoms and negative self-statements as they age. In general, the more frequently children reported anxiety symptoms the more they reported engaging in negative self-talk. Furthermore,

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SCARED scales of anxiety and anxiety specific self-statements on the NASSQ were found to have a positive and significant correlation. Another significant finding was the SCARED generalized anxiety disorder scale and obsessive-compulsive disorder scale were highly linked to depression-specific self-statements. Therefore, the more reported symptoms of generalized anxiety and obsessive-compulsive disorders, the higher frequency of depressive self-statements.

Self-Statements in Children with Depression

Self-talk is experienced by individuals suffering from both anxious and depressive symptoms. Although both groups are able to experience positive experiences, or pleasure in their lives, depressed individuals are less able to maintain interest in the positive (Ronan, 1994). To delineate specific content within a child's negative "self-referent cognitive experiences," or the connection between affect and cognition that is self-talk, Ronan began empirical research to create a measure. Determining content specificity of self-statements is heavily weighted on age factors and care must be taken when measuring self-speech in children. Younger children (of ages 7-10) do not report more abstract cognitive symptoms of depression as they may not have a developmental or cognitive capacity to process information related to multiple feelings regarding a person or situation that are above a concrete level. It is also noted in Ronan's work that younger anxious and depressed children endorsed similar statements, but there was a greater discrepancy between anxious and depressed older children (ages 11-15).

Negative self-schemata, or the negative perceptions of one's capabilities and failures in future actions, according to Beck (1967), are created by experiencing loss or adversity during childhood. Content within these schemata may include dysfunctional attitudes regarding failure or abandonment. When these thoughts are activated by a stressful life event or simply a negative mood, these will negatively bias the individual in the areas of information processing and can

produce negative affect within an individual. This early notion has been coined "automatic thoughts," and can be positive or negative in nature (Beck, et al. 1979). The frequency or strength of these thoughts varies between individuals.

Given this information, combined with the knowledge that depression affects effortful processing, we would expect to find automatic processing, and automatic thoughts, to be prevalent in times of depression. This would be in combination with a decreased occurrence of effortful processing of positive stimuli. Furthermore, we may predict a reduction in in depressive self-statements upon positive treatment of depressive symptoms (Kendall &Treadwell, 2007).

Wang, Brennan, & Holt (2006) tested free recall and compared accuracy of a task to the degree to which the participant was depressed: Clinically depressed, previously depressed, and never depressed. Participants were given a choice to listen to audio tapes which included positive or negative statements, and were instructed that they may toggle between the two per their preference during a 20 minute listening period. Participants were to then record, in a written response, all statements they recalled within the session. This process took inventory of the subject's accurate free recall of items as well as fabrication, or incorrect statements. To measure recognition, the participants completed a questionnaire which included some statements heard in both of the tapes and 60 items were previously depressed and never depressed had listened more to the positive statements than the clinically depressed. Conversely the clinically depressed sample recalled more negative statements than the never or previously depressed group. According to the authors of this study, this testing situation mirrors the real world in the sense that people are constantly being exposed to stimuli which are both positive and negative in

nature and must choose, automatically and effortfully, which to focus on and code into memory; depressed individuals display decreased effortful processing of positive stimuli.

Necessity for School-based Interventions

Childhood depressive episodes have been reported in as many as 10% of children prior to the age of 16 (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003). Depression is also associated with a significant functional impairment (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003). As depressive symptoms may predict similar negative outcomes as those actually clinically diagnosed with a depressive disorder, such as academic difficulty, suicide, or drug use (Covey, Glassman, & Sterner, 1998; Garrison, Addy, Jackson, McKeown, & Waller, 1991), further exploration is necessary to screen for children with such symptomology.

Anxious students also indicate a risk for high school discontinuation, lower reading, math achievement, and total achievement. Students with anxiety report difficulty with concentration, and have lower rates of high school completion (Langley, Bergman, McCracken, & Piacentini, 2004). A child's anxiety, or simply anxious symptomology, also poses detriment to his interpersonal relationships, peer relation, and school adjustment in general (Last, Hansen, & Franco, 1997). Many of these students are educationally identified under the Individuals with Disabilities Education Act (IDEA, 2004) as students with emotional or behavioral disorders (EBD), with other students who demonstrate mental health needs. It is estimated that 14% of the federally defined and identified EBD population meets criteria for an anxiety disorder (Dery, Toupin, Pauze, & Verlaan, 2004), as do many other students who do not demonstrate a need that requires special education designation. Effects of anxiety have been reported to have a similar effect in valence and strength as children with more noticeable, externalizing behavioral needs

(Schoenfeld & Mathur, 2008), and also run comorbid or predicts risks for other disorders, such as depression later in adolescence (Cole et al., 1998).

The World Health Organization's Global School Health Initiative (1998) recommended guidelines for implementation of preventative depression programs in the school. Recognizing their resources and contact time with children, the WHO considers public schools to be venues for emotional development in addition to a place to learn academic skills. According to the Society for Prevention Research, interventions shall be required to fit several criteria prior to usage such as positive effects under real world conditions, must be efficacious as measured by similar results reflected on more than one psychometrically sound instrument, and reporting should take place regardless of outcome (Flay et al., 2005). As much of these criteria remain to be reported by the field, it may be difficult for a school practitioner to recommend a universal prevention in an informed manner if the assumption is of a long-term remediation effect.

Remediation and Prevention

For the purposes of reducing negative self-talk and creating a positive self image in children within our schools, researchers have looked into the classrooms and created methods of aiding children through the use of self-statement formation. Burnett applied theory into the classroom in a 1999 publication delineating two models. The results were measured by self reports.

The first model was created to help children form positive self concepts in relation to their class performance (Craven, Marsh, & Debus, 1991). The internal mediating process was initiated by teachers and was internalized by a chain of events:

A. Teacher gave student specific positive feedback regarding performance on a task ("Good job on that reading test").

B. The student internalized the statement ("I am good at reading tests").

C. The student generalized the self-talk to create a mirroring self concept, with an evaluative/competency/cognitive component (I am a good reader and I do well on reading tests) and a descriptive/affective component (I like reading) (Burnett, 1999).

Another model is a less direct method for creating a self concept from resulting self-talk, though implied the child would gain this without specific verbal prompts. This model, described by Blote (1995), highlighted concepts gathered from previous research: The teacher's expectations (A) influences his or her behavior which is reflected in how feedback is presented to students (B). The teacher's behavior and accompanying feedback is then perceived, interpreted and integrated by the student [self-talk] (C), who as a result of this internalization confirms or changes his or her self-expectations [self concepts] (D) in line with the directions of the teacher's expectations (cited in Burnett, 1999, p.195). It has been previously determined that the amount of positive statements a person perceives within their environment increases the individual's positive self-statement frequency. These statements can include those which are globally directed, or stated to an audience of an entire classroom (e.g. "Good work in group, class"). These are preferred even when compared to statements made by peers, parents, and siblings, though gender differences were found. In males, positive and negative statements made by parents and positive statements made by peers had a greater impact than anything said by a teacher, versus a girl's self-statements were predicted more accurately by the number of positive teacher statements. This provided evidence that environmental efforts can be made to increase self concept and reduce negative self-talk.

In order to examine self-talk as a response to a teacher's statements within a class, Burnett utilized his Self-Talk Inventory (1996), which included Negative Self-Talk and Positive Self-Talk indices. It was concluded that positive self-talk was related to the number of positive statements uttered by the teachers; however, negative self-statements were related to the self concept held in areas of mathematics, and unrelated to statements by the teacher. Once again, gender differences did exist, as boys in the sample had developed negative self-talk due to the teacher's negative statements rather than simply self-concept in specific class performances. Girls did not have increased levels of self-talk but, like the boys, had a lower self-concept in the class, such as math. Aside from the confounding data regarding gender, the study provided evidence that teachers may be able to improve the school environment, increasing the number of positive self-statements in the classroom and creating a healthier learning environment by applying the "power of positive" (Burnett, 1999).

Ostad & Sorenson (2007) conducted a study to examine the use of self-talk, or private speech, in the completion of mathematics problems in children with mathematics difficulties. It was determined task based speech was positively correlated with success in the trials. This study also assumes silence in older children represents the internalization of the private speech.

As self-talk is viewed as a covert behavior, the behaviors are able to be modified in treatment following cognitive behavioral principles initiated by Meichenbaum (1977). Behavior modification is a technique that was founded in behaviorism and is generally applied to children who display problematic overt behaviors in attempt to replace or extinguish a behavior. Such treatments are widely used within school and clinical settings as the child's or subject's actions are visually calculable and can therefore progress can be scientifically measured. Though this process is generally focused on behavior itself, rather than the subject's cognitions or feelings, self-statement modification has been created to address the cognition as the behavior itself. This

sequence has been applied to children who show need to create and apply healthy self-statements into their routine.

Meichenbaum set up several training centers on self-statement modification, or SSM. Drawing on the aforementioned theory of Vygotsky (1962) and Luria (1961), the internalization of self-statements was part of a child's healthy development toward grasping control over his or her own behaviors. Therefore, the inability to control behavior may be seen as a problem with that internalization. SSM was made available to children as a part of a multifaceted behavioral treatment, usually in combination with interventions such as modeling, role playing, behavioral rehearsal, and verbal or token reinforcements (Dush & Schroeder, 1989), though the efficacy of the intervention remained elusive. The basic training format was as follows:

1. Experimenter performed a task talking aloud while subject observed.

- 2. Subject performed the same task while experimenter instructed aloud.
- 3. Subject performed the task again while instructing himself aloud.
- 4. Subject performed the task while whispering to himself.
- 5. Subject performed the task covertly.

Results from this study provided light to the benefits of self-statement modifications, but it also provided more confounding variables in the search for the treatment's appraisal. Effect sizes varied largely with experimenter training (up to 7 times greater effects with doctoral experimenters vs. undergraduates), length of follow up, and age. Despite the confounds, the study determined a half standard deviation difference in effect when compared against those treated with SSM, suggesting a moderate improvement.

Interventions to Address Anxiety in Schools

Mirroring and modifying a proven mental health best practice for the purpose of addressing anxiety symptoms, cognitive behavioral principles have been tested with school age participants. As mental health attention may be difficult to obtain, attend, or afford, appropriately prepared school personnel may be uniquely suited to attend to a child's concerns. Barrett (2004b) adapted existing materials (Kendall, 1990, Shortt et al., 2001) and cognitive behavioral strategies created from proprietary work into the FRIENDS program. This program is designed for classroom based, or small group delivery. This program is available for psychologists or guidance personnel as well as school professionals who attend an approved training program. This program is a widely used clinical, targeted and universal school-based intervention which includes several topics such as the concepts of self-talk, individual responses to anxiety, relaxation, and modeling and includes parent involvement and homework activities for the children. FRIENDS demonstrates strong positive evidence based outcomes as long as 6 years after treatment and has contributed to increased academic engagement, school-appropriate behavior post-intervention (Schoenfeld & Mathur, 2008). Additionally, research on the effects of the FRIENDS program have been shown to reduce the number of children that are at risk of developing anxiety disorders, demonstrating a preventative as well as corrective effect.

Additional clinical research lends credibility for the effectiveness of cognitive-behavioral therapy methods for treatment of child and adolescent anxiety disorders (Barrett, 1998; Kendall & Treadwell, 1996; Silverman, Kurtines, Ginsberg, Weems, Lumpkin, & Carmichael, 1999). The common themes found within this type of treatment include exposure, relaxation, cognitive strategies, problem solving skills, and contingency management, several of which are included within the aforementioned FRIENDS program plan. These skills, taught to both child and his or

her parents, when practiced, are thought to decrease the likelihood of an anxiety diagnosis due to strengthened resilience mechanisms (Spence, 2001). The current research tells of similar outcomes in middle school age and high school age students (Hunt et al., 2009).

Similarly, The Skills for Academic and Social Success program, or SASS (Fisher, Masia-Warner, & Kelin, 2004) is based on cognitive behavioral principles, which have been shown to have a large statistical effect of reduction of anxious symptoms in child and adolescent populations when delivered in group sessions (Miller et al., 2011).

Interventions to Address Depression in Schools

Cognitive-behavioral therapy has a wealth of evidenced based information supporting its effectiveness for the treatment of adult depression, and efficacy data is becoming available for children and adolescents. Findings suggest CBT may reduce or eliminate future symptoms of depression in children with elevated, however, not clinically significant levels of depressive symptomology (Clark et al., 2001).

Clark and colleagues demonstrated outcome success when, after a delivery of a modified Coping with Depression course, group participants were three times less likely to develop clinically significant levels of depressive symptoms. Generally delivered in a group format, CBT may assist teachers, counselors and psychologists to deal with the underdiagnosed and undertreated depressed youth population that is found in the schools. Data with younger children is less convincing; however, several group delivered programs are available (Barrett, 2004b, Gillham et al., 2006).

Rice & Meyer (1994) developed a group delivered intervention program geared for students for the purpose of preventing and remediating early signs of depression and teaching skills that allow student to build prerequisite emotional, behavioral, and cognitive adaptive skills that may help them cope with "chronic strains, stressful life events, developmental transitions and hassles" (Rice & Meyer, 1994). This structured program consists of sixteen, forty minute groups. Initial sessions present situations as opportunities and potential difficulties or risks. Understanding these challenges and frameworks for approaching new situations are then presented. Each subsequent session introduces a new skill, resource, coping method, or challenge that the students may later draw upon to solve certain role-plays or presented situations. This method's efficacy was rated by the group's facilitators, so actual child response in the short and long-term was not calculable, however, evidence based practices are employed throughout.

The Adolescent Depression Awareness Program, initiated in 1999, presented an intervention for the purpose of educating high school-aged students about depression, diagnostic criteria, and attitudes about treatments therefore. This ADAP's program is a two to three session intervention which is designed to be taught during the health curriculum. The goal of this program is geared to teach that depression is the result of social situations and biology, and that suicide is not a regular part of growing up, but a something that may be a symptom of an untreated depressive state. A video created by high school age-mates describes experiences with depressive disorders and the challenges that those disorders present. A second video is an interactive video that presents the diagnostic process for depressive disorders, which directly attends to the program's primary goal of alerting students that depression is a treatable medical illness (Swartz et al., 2010).

Chapter III: Method

The intention of this research was to investigate the relationship between negative selftalk and academic achievement. Utilizing the Negative Affectivity Self Statement Questionnaire (Ronan, et. Al, 1994) middle and high school aged students were to elect the frequency, if any, the self statements presented had occurred in their recent past, enabling the researcher to compare results versus student achievement and demographic information already available. This chapter will discuss the survey instrument utilized in the current study and outline procedures and methods implemented by the researcher in conducting the study, including a description of the statistics collected and their analysis.

Participants Selection

Subjects included in this study were chosen from a rural junior and senior high school in northwest Wisconsin. Potential subjects included all students enrolled in grades seven, eight, and nine, who did not exceed 15 years of age at the time the measure was to be administered.

As the subject sample population included minor children and those of protected populations, parent consent forms were required which explained a description of the study, risks and benefits of involvement, time commitment, confidentiality, and the right to withdraw at any time. Following IRB approval and district consent to conduct the study, the researcher supplied consent forms to parents via mail. Consent forms were collected over a three week period of time with approximately a fifty percent response rate. No incentives or follow-up prompts were employed to stimulate responses.

After consent collection, a rating scale was printed for each student. Each rating scale included a four to five digit number handwritten atop each page. A paperclip which included the student's name was attached to each form correct number assigned. A record of subjects' names

and paired codes was created to allow for the safe use of coded information while maintaining data security. Subject demographic information may be found in Chapter 4.

Instrumentation

This Negative Affectivity Self-Statement Questionnaire or NASSQ 11-15 (Ronan, et. al, 1994) was used for the purposes of this study. Created by Ronan (1994) as a means to allow children the ability to report the content of their self-statements, the NASSQ includes predetermined statements compiled from lists of self-reported statements from anxious, depressed, and undiagnosed children when asked to recall the "thought that popped into (their) head" when imagining themselves in various situations (Ronan, et. al, 1994). This self-report rating scale includes 39 prescribed "thoughts" that children are instructed to determine the frequency these thoughts have occurred on a 5 point Likert scale rating"1= not at all" to "5 = all the time" in the past week.

The NASSQ: 11-15 yields results including a total score which is the sum of all items, an Anxiety Scale, Depression Scale, and Negative Affectivity Scale. The anxiety scale has been shown to reliably indicate statements from an anxious versus non-anxious group, utilizing items on self-report that indicate manifestation of diagnostic criteria (*"I was shaking"*) (Ronan & Kendall, 1997). Similarly, the Depression Scale reliably differentiates a depressed group versus a non-depressed group of children (*E.g., "I thought my world was coming to an end"*). The Negative Affectivity Scale includes selected items that may be included in the Depression Scale or the Anxiety Scale that generally denotes a prediction of an unpleasurable outcome.

This measure, provided by its empirical researcher (Ronan et al., 1994), was modified to be presented in a table format for easy visual access to the sample participants. Atop the document read the test administrator's verbatim prompt, the abbreviated scale's title (NASSQ:11-15), and IRB approval stamp, and a 4 to 5 digit identification code to attempt to maintain minimal face validity and reduce response biases.

Methodology of Data Collection

Subjects were notified one week in advance of their screening date to maximize participation. Data collection occurred in four separate mass administrations, to account for all children, whose parents had returned consent, in each of their homerooms in a one day period.

The NASSQ was administered in a group format. After all participating students were in receipt of their test record form, the test administrator stated, "Some thoughts that can 'pop' into children's heads are listed. Mark how often, if at all, you have had the following thoughts in the past week. Please read each item carefully and circle the number on the answer sheet that matches how often you had the thought. See the key below, 1=not at all, 2=sometimes, 3=fairly often, 4=often, and 5=all the time. Some items are kind of personal, so you may take your name card off before you turn it in to me. Either way, your responses will only be known by me and no one else. They will be kept confidential. You may stop at any time if you prefer not to continue, or you may choose to turn in a blank form." Questionnaire prompts were read aloud to students who regularly receive that accommodation. Upon all participants' completion, the forms were collected and the students were thanked for their participation. A total of 52 participants submitted completed forms, yielding a total of 50 forms that were appropriate for data analysis, as one student performed with a response pattern and another submitted an incomplete form.

Record forms were hand scored by the researcher using a scoring template. Once scored, the record forms were retained and information was placed into a spreadsheet document, which would include the student's numerical code, grade point average for quarter one of the 2011-

2012 school year, number of days absent to the half day, excluding those that were due to a school function, free/reduced versus paid lunch status, special education status, total NASSQ score, Depression Scale score, Anxiety Scale score, and Negative Affectivity Scale score. Each scale score includes a raw total of points the students elected for each items that contributed to the corresponding scale, with some items reverse scored. Names were not indicated on the document.

Data analysis. Descriptive statistics of the sample population were calculated and reported by the researcher. To address this paper's research questions, the researcher analyzed the data to address the concerns of whether statistically significant differences existed among the subscale and total NASSQ scores reported by students who belong to a group eligible for free or reduced lunch versus paid lunch students, or between those who qualify for special education services versus students in general education only. These data were evaluated by using a two sample T-test assuming equal variances.

To address the question of whether there is a correlation between negative self-statements and school performance, as measured by concurrent quarterly grade point average and classroom attendance, each versus the total and scaled scores obtained by the administrations of the NASSQ, discrete data were analyzed by use of a Pearson correlation.

Chapter IV: Results

The goals of this research intended to address the impacts negative self-talk may have on academic performance and attendance, and to what extent this behavior is seen in certain identified at-risk school populations. This chapter will report descriptive information of the sample population, correlation data between obtained NASSQ results and grade point average and number of days students were absent from school, and finally statistical comparison between target populations.

Demographic Information

This study gathered information from participants whose parents responded with consent to participate in current study. Participants consisted of 50 students gathered from an enrollment list of a junior and senior high school in northwest Wisconsin at the start of the 2011-2012 school year whose parents afforded consent in response to a request letter sent out prior to the first day of school (N = 50). No participants opted out of the assessment on the day of the screener's administration. Average age of participant was 13.9 years of age (SD = .94, range = 12.3-15.9: 3.6 years) and included 14 seventh grade, 18 eighth grade, 14 ninth grade, and 4 tenth grade students. Within the comparison groups, 10 received special education services versus 40 students who participated only in the general curriculum; 21 students qualified for free or reduced lunch versus a group a 29 who had paid lunch at the time of test administration.

Results

The first objective of this research was to determine if a there was a correlation between negative self-talk and grade point average. Pearson correlations were computed between the results obtained from the group administration of the Negative Affectivity Self-Statement Questionnaire (NASSQ) versus the respective subject's grade point average, calculated for the

concurrent quarter. Scales utilized within the NASSQ are the Total or combination score of all elected answers, Anxiety Scale (AS), Depression Scale (DS), and Negative Affectivity Scale (NA). Increasing values indicate higher levels of perceived impact of negative self-statements as positive statements were reverse calculated. This research indicated the variables of grade point average (M = 2.79, SD = .14) and Total NASSQ score (M = 68.22, SD = 23.37) demonstrate a large negative correlation, r = -.53, suggesting that the Total Score accounts for 28% of the variance of GPA (grade point average). The AS (M = 37.14, SD = 13.40) versus GPA indicates a large negative correlation, r = -.52. The DS (M = 15.64, SD = 5.88) and NA (M = 15.4, SD = 5.74) each have a moderate to large negative correlation to our participants' grade point average, r = -.48.

Table 1

Correlations between Grade Point Average and NASSQ Scale Scores

Scales	Total	AS	DS	NA
Total Sample GPA	53	52	48	48

The second research question investigated whether a correlation existed between negative self-talk and a student's attendance exists. Attendance information as determined by number of absences to the half day not connected to a school function were compared against the Total, AS, DS, and NA Scales similarly with a computed Pearson correlation. Data suggested variables of number of days absent (M = 1.5, SD = 2.40) versus NASSQ Total have a moderate to large positive correlation, r = .48. Number of days absent values versus AS yield a moderate positive correlation, r = .44. Collective with the DS, the absent days values indicate a .42 positive

correlation. The NA scale was suggested by the data to be the strongest indicator of student absences with a large positive correlation, accounting for 27% of the variance, r = .52. Table 2

Correlations between Number of Absent Days and NASSQ Scale Scores

Scales	Total	AS	DS	NA
Total Sample	.48	.44	.42	.52
Absences				

The researcher's third objective was to determine if greater levels of reported negative self-talk were found in students with disabilities. *T*-tests were carried out to compare average values of Total, AS, DS, and NA Scales calculated from students within a control group (non-disabled, paid lunch) versus students within the group who received special education services and free or reduced lunches.

T-test analysis (two sample assuming equal variances) indicated the non-disabled participants' reported NASSQ Total average scores (N = 40, M = 61.03, SD = 17.15) were significantly less than the students who receive special education services (N = 10, M = 97, SD = 23.44), t(48) = -5.50, p < .000005. Anxiety Scale results report similar results, with significant differences between non-disabled (N = 10, M = 53.5, SD = 14.61) and identified students (N = 40, M = 33.05, SD = 9.51), t(48) = -5.43, p < .000001. Non-disabled students reported significantly less negative self-statement activity on the depression scale (N = 40, M = 12.35, SD = 5.48) than identified students (N = 10, M = 20.8, SD = 4.57), t(48) = -3.43, p < .005. More negative self-statements were reported among special education students in the negative

affectivity cluster (N = 10, M = 22.7, SD = 6.77), than those reported by their non-disabled peers (N = 40, M = 13.58, SD = 3.71), t(48) = -5.8, p < .000001.

The fourth goal of the current research was to determine whether differences existed between the general population versus those who are eligible for free or reduced lunch. To address potential differences in responses between our samples of students who received free or reduced lunch versus students with paid lunch, T-test analysis was completed. Data analysis revealed NASSQ Total scores reported by students with free/reduced lunch (N = 21, M = 77.43, SD = 27.34) reported severity of self-statements that were significantly higher than statements reported by students with paid lunch (N = 29, M = 61.55, SD = 17.68), t(48) = -2.49, p < .05. Anxiety scores demonstrated a similar trend, with greater self-statement symptomology reported by students with free/reduced lunch [(N = 21, M = 41.86, SD = 15.58), versus paid (N = 29, M =33.72, SD = 10.58], t(48) = -2.20, p < .05. Significant differences were seen in self-reports on the Depression Scale, with free/reduced students (N = 21, M = 18.24, SD = 6.96) having reported more negative self-statements from the paid group (N = 29, M = 13.76, SD = 4.14), t(48) = -2.85, p < .01. Continuing the trend, the reported results indicated on the Negative Affectivity Scale also indicated more negative self-statements from the free/reduced population (N = 21, M = 17.3, SD = 6.43) versus participants with paid lunch (N = 29, M = 14, SD = 4.83), t(48) = -2.09, p < 0.000.05.

Table 3

Differences Between Groups on NASSQ Scales

Groups	NASSQ Total	AS	DS	NA
Free/Reduced Vs.	t(48) = -2.49,	t(48) = -2.20,	t(48) = -2.85,	t(48) =2.09,
Paid	<i>p</i> < .05	<i>p</i> < .05	<i>p</i> < .01	<i>p</i> < .05.
Special Ed. Vs.	t(48) = -5.50,	t(48) = -5.43,	t(48) = -3.43,	t(48) = -5.8,
Regular Ed.	<i>p</i> < .00001	<i>p</i> < .000001	<i>p</i> < .01	<i>p</i> < .000001

Chapter V: Discussion

This chapter will summarize the findings of the current research project. Important findings concerning the connections between negative self-statements and academic achievement, attendance, and demographic information will be explained. The field's research on negative self-talk, depression, and anxiety will be related to the current study and demonstrate similarities between self-reported negative self-talk and the effects of depression and anxiety on school performance and the student's self. This chapter will conclude with the researcher's discussion of the current study's limitations and implications for future research and practices.

Research Findings

The research questions within this study aim to broadly determine the connectedness between negative self-statements and other variables that have been shown to predict student outcomes and additionally comparing directly with those outcomes.

Current research reveals there is a negative correlation between total NASSQ score, the Depression Scale, Anxiety Scale, and Negative Affectivity Scale versus the grade point average of the students within the semester concurrent with measurement. The similarity of these correlations occur very closely, with a range of -.48 to -.53 across the four scaled scores collected, indicating a high moderate to large negative correlation: Higher ratings of negative self-statements correlated negatively with GPA averages. This indicates that negative self-statements or the content revealed within these elected self-statements found within this measure account for up to 28 percent of the variance of student GPA. Conversely, participants who only reported infrequent negative self-statements demonstrated higher grade point averages. Additionally and similarly, a series of positive correlations were seen between frequency of reported self-statements and student absences, with the Negative Affectivity cluster representing

the largest predictor or a student being absent from school on a given day, accounting for 27 percent of the variance. Total score, Anxiety, and Depression scales represented a moderate correlation.

This study also conducted comparisons to determine whether significant differences were seen between those who receive free or reduced lunch or receive special education services. Results indicated children who received free or reduced lunch elected more frequent selfstatements than children who eat paid lunch. This trend was seen with more remarkable strength when the comparison was made between students with disabilities versus their nondisabled peers, suggesting a prediction that free and reduced students as well as those enrolled in special education classes will report more negative self-talk than their counterparts.

Recommendations for Practice

Given self-statements and symptoms of anxiety and depression pose the same academic, social, and adjustment barriers as the disorders themselves (Covey, Glassman, & Sterner, 1998; Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003; Langley, Bergman, McCracken, & Piacentini, 2004; Dery, Toupin, Pauze, & Verlaan, 2004; Cole et al., 1998), the field's continued collection of data in accordance with Society for Prevention Research standards to determine preventative strategies for universal dissemination in the schools may be called for. However, targeted interventions may be applied to remediate the symptoms of identified or at-risk youth. The current study's review of literature resoundingly indicates the effectiveness of cognitive-behavioral therapy components for the accomplishment of this priority.

For the purpose of screening students for negative affectivity which has shown to be largely related to academic performance with the study's sample population, the measurement tool, the Negative Affectivity Self-Statement Questionnaire, or another approved measure which addresses the construct of negative self-talk, may be a reasonable, quick screening tool. Useful characteristics of a tool to be used in this capacity are concise delivery, utility, and ties with GPA and student absences; both which directly reflect or predict academic failure. Utilizing a screening tool which is minimally invasive and does not report in diagnostic terms may assist school professionals in identifying at-risk students and group them based on valence and content of negative self-statements in a manner that does not indicate the student is a child with a suspected disability.

Additionally, proactive approaches to working with students to develop positive selfesteem and identity are warranted. The research base thoroughly calls on the therapeutic effects of cognitive-behavioral principles for the remediation of negative self-talk, as delivered by professionally prepared individuals.

Recommendations for Future Research

This study highlighted strong connections between measurable self-statements and concurrent student performance as measured by GPA and number of student absences. However, schools may benefit from this information to a greater extent if the negative self-statements were to also act as a predictor for future academic performance. Combining these student data continually versus a negative self-statement benchmark may be of considerable benefit in attempt to detect similar connections with student academic growth or GPA in subsequent semesters or academic years.

The significance level of the negative self-talk frequency differences between special education students versus their regular education peers was notable and prompts additional research and conversation regarding the variables that surround this finding. Namely, does special education enrollment affect this increase in negative self-talk, or is it a function of the

underlying impairment? Additionally, controls for disability label or self-statement content specificity may be introduced to assist in determining the function of the self-talk or factors that contribute in their formation.

Review of literature discussed several evidence based interventions for the purpose of remediating depressive and anxious symptoms. Additional investigation may be conducted to determine the aforementioned interventions' effects on negative self-statements as measured by the NASSQ. This study may then be replicated to determine if those interventions impact student academic performance similarly.

One may also speculate on the longitudinal relationships between poverty and special education status and negative self-talk. This study did not specify the impairment criteria of the special education students, but those who participated were not selected from an emotional or behavioral disability program as a rule, prompting discussion that low academics may increase negative self-talk. The analysis of negative self-statement data provided by participants who received free or reduced lunch and demonstrated average or above average GPA may be informative for further speculation.

As a final discussion point, future research may be conducted to investigate what appears to be a complex relationship between negative self-talk and academics. Would a student benefit from decreasing negative self-statements to increase academics, or rather, would academic remediation increase perceived ability and reduce negative self-talk? Such information may inform and prioritize program possibilities for anxious and depressed youth.

Limitations

There are limitations to consider if one is to evaluate the inferential ability of the current research. Although sample size is adequate for direct comparisons and identifying statistical

trends, a participant group of 50 students who returned parent permission forms, reduced from the 102 students eligible for participation, is unable to strongly predict that trends gathered in other areas would yield similar results.

A second limitation to be considered was the current study was conducted within one junior and senior high school with a remarkably high poverty rate compared to the samples' agemates seen nationally. It is documented and accepted that a higher depression rate is found within those who fit poverty criteria, which may have affected the frequency of negative selfstatements. This information may impact the ability for similar results to be obtained in another geographic location or with another demographic group.

The current study utilized a tool that measured the participant's election of the frequency of self-statements from a preconstructed list. As self-statements are essentially one's appraisals of their situation, the underlying depression or anxiety that may be influencing this self-directed speech may be the true root of the absence or reduction in grade point average.

Lastly, the statistics obtained for the purpose of this study gathered attendance and grade point average information from the quarter that was in progress at the time of data collection. This only allowed the researcher to describe how current school performance paired with the participants' self-statement responses.

Summary

Self-talk is a regular part the human experience. This study finds negative self-talk impacts an adolescent's grade point average and attendance to a remarkable degree; each of which represents a tangible, low-inference indicator of student outcome that predicting high school completion. Furthermore, special education students and children who received free and reduced lunch elected higher frequencies of negative self-talk, allowing for discussion that both setting events as well as outcomes may be inferred based on valence and frequency of a student's self-talk. A compilation of the field's research also indicates negative self-talk may produce outcomes similarly to clinical diagnoses of anxiety and depression. It is clear that self-talk has a role to play in student academic performance. With a better understanding of this hidden variable, school professionals may prepare themselves to assist students in the development of positive strategies that may improve performance and learning outcomes.

References

- Barrett, P. M. (1998). Group therapy for anxiety disorders in children. *Journal of Clinical Child Psychology*, *27*, 459–468.
- Barrett, P. M. (2004b). *FRIENDS for Life: Workbook for children*. Brisbane, Australia: Australian Academic Press.
- Beck, A. T. (1963). Thinking and depression: I. Ideosyncratic content and cognitive distortions. *Archives of General Psychiatry*, *9*, 324-333.
- Beck, A. T. (1967). *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania Press.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford.
- Beck, A. T., Emery, G., & Greenberg, R. L. (1985). Anxiety Disorders and phobias. New York: Basic Books.
- Bernstein, G.A. & Borchardt, C.M. (1991). Anxiety disorders of childhood and adolescence: A critical review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 519-532.
- Birmaher, B., Khetarpal, S., Brent, D., Cully, M., Balach, L., Kaufman, J. & McKenzie Neer, S. (1997). The Screen for Child Anxiety Related Emotional Disorders (SCARED): Scale construction and psychometric characteristics. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 545-553.
- Blote, A.W. (1995). Students' self-concept in relation to perceived differential teacher treatment. *Learning and Instruction*, 5, 221-236.

- Bromgard, G., Bromgard, I., & Trafimow, D. (2006). Valence of self-cognitions: The positivity of individual self-statements. *The Journal of Social Psychology*, *146(1)*, 85-94.
- Burnett, P.C. (1996). Children's self-talk and significant other's positive and negative statements. *Educational Psychology*, *16*, 57-67.
- Burnett, P.C. (1999). Children's self-talk and academic self-concepts: The impact of teacher's statements. *Educational Psychology in Practice*, *15*, 195-200.
- Cho, Y., & Telch, M.J. (2005). Testing the cognitive content-specificity hypothesis of social anxiety and depression: an application of structural equation modeling. *Cognitive Therapy and Research, 29*, 399-416.
- Clarke, G. N., Hornbrook, M., Lynch, F., et al. (2001). A randomized trial of group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of General Psychiatry*, 58,1127 -1134.
- Cole, D.A., Peeke, L.G., Martin, J.M., Truglio, R., & Seroczynski, A.D. (1998). A longitudinal look at the relation between depression and anxiety in children and adolescents. *Journal* of Consulting and Clinical Psychology, 66, 451–460.
- Costello, J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in children and adolescence. *Arch Gen Psychiatry*, 60, 837-844.
- Covey, L. S., Glassman, A. H., & Steiner, F. (1998). Cigarette smoking and major depression. *Journal of Addictive Diseases*, 17, 35-46.
- Craven, R.G., Marsh, H.W., & Debus, R.L. (1991). Effects of internally focused feedback and attributional feedback on enhancement of academic self-concept. *Journal of Educational Psychology*, 83, 17-27.

- Dery, M., Toupin, J., Pauze, R., & Verlaan, P. (2004). Frequency of mental health disorders in a sample of elementary school students receiving special educational services for behavioural difficulties. *Canadian Journal of Psychiatry*, 49, 769–775.
- Dush, D.M., & Schroeder, H.E. (1989). Statement modification in the treatment of child behavior disorders: A meta-analysis. *Psychological Bulletin*, 106, 97-106.
- Fisher, P. H., Masia-Warner, C., Klein, R. G. (2004). Skills for Social and Academic Success: A School-Based Intervention for Social Anxiety Disorder in Adolescents. *Clinical Child & Family Psychology Review*, 7, 241-249.
- Flay, B.R., Biglan, A., Boruch, R.F., Castro, F.G., Gottfredson, D., et al. (2005). Standards of evidence: criteria for efficacy, effectiveness and dissemination. *Prevention Science*. 6(3), 151–175.
- Garrison, C. A., Addy, C. L., Jackson, K. L., McKeown, R. E., & Waller, J. L. (1991). A longitudinal study of suicidal ideation in young adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 597-603.
- Gillham, J, Reivich, K., Freres, D., Lascher, M., Litzinger, S., Shatte, A., Seligman, M. (2006).
 School-based prevention of depression and anxiety symptoms in early adolescence: A pilot of a parent intervention component. *School Psychology Quarterly.* 21, 323b–348b.
- Greenspon, T.S. (2000). The self experience of the gifted person: Theory and definitions. *Roeper Review*, 22, 176-181.
- Heerey, E.A., Kring, A.M. (2007). Interpersonal consequences of social anxiety. *Journal of Abnormal Psychology*, *116(1)*, 125-134.

Hunt, C., Andrews, G., Crino, R., Erskine, A., Sakashita, C. (2009). Randomized controlled trial of an early intervention programme for adolescent anxiety disorders. *Australian and New Zealand Journal of Psychiatry 2009; 43,* 300-304.

Individuals with Disabilities Education Act, 20 U.S,C.S. § 1400 et seq. (2004).

- Ingram, R. E., Miranda, J., & Segal, Z. V. (1998). *Cognitive vulnerability to depression*. New York: Guilford Press.
- Kendall, P. C. (1985). Behavioral assessment and methodology. In G. T. Wilson, C. M. Franks,
 K. D. Braswell, & P. C. Kendall (Eds.), *Annual review of behavior therapy: Theory and practice* (Vol. 10, pp. 47–86). New York: Guilford Press.
- Kendall, R.H., & Treadwell, P.C. (1996). Self-talk in youth with anxiety disorders: States of mind, content specificity, and treatment outcome. *Journal of Consulting and Clinical Psychology*, 64, 941-950.
- Kendall, R.H., & Treadwell, P.C. (2007). The role of self-statements as a mediator in treatment for youth with anxiety disorder. *Journal of Counseling and Clinical Psychology*, *75(3)*, 380-389.
- Kress, J.L., & Statler, T. (2007). A naturalistic investigation of former Olympic cyclists' cognitive strategies for coping with exertion pain during performance. *Journal of Sport Behavior*, 30(4), 428-452.
- Langley A, Bergman R, McCracken J, Piacentini J. (2004). Impairment in childhood anxiety disorders: Preliminary examination of the child anxiety impact scale-parent version. *Journal of Child and Adolescent Psychopharmacology*. *14*, 105–114.

- Last C.G., Hansen C., Franco N. (1997). Anxious children in adulthood: A prospective study of adjustment. *Journal of the American Academy of Child and Adolescent Psychiatry*. 36, 645–652.
- Lewinsohn, P.M., Rohde, P. & Seeley, J.R., Klein, D.N., & Gotlib, I.H. (2003). Psychosocial characteristics of young adults who have experienced and recovered from major depressive disorder during adolescence. *Journal of Abnormal Psychology*, *112*, 353-363.
- Luria, A. (1961). *The role of speech in the regulation of normal and abnormal behaviors*. New York: Liveright.
- Malouff, J.M., & Murphy, C. (2006). Effects of self-instructions on sport performance. *Journal* of Sport Behavior, 29 (2), 159-168.

Meichenbaum, D. (1977). Cognitive-behavioral modification. New York: Plenum Press.

- Mennin, D. S., Heimberg, R. G., Turk, C. L., & Fresco, D. M. (2002). Applying an emotion regulation framework to integrative approaches to generalized anxiety disorder. *Clinical Psychology: Science and Practice*, 9, 85–90.
- Miller, L.D., Gold,S., Laye-Gindhu, A., Martinez, Y, & Yu, C. M. (2011). Transporting a school-based intervention for social anxiety in Canadian adolescents. *Canadian Journal* of Behavioural Sciences. 43(4), 287-296.
- Muris, P., Merckelbach, H., Mayer, B., & Sneider, N. (1998). The relationship between anxiety disorder symptoms and negative self-statements in normal children. *Social Behavior and Personality*, 26(3), 307-316.
- Ostad, S.A., & Sorensen, P.M. (2007). Private speech and strategy-use patterns: Bidirectional comparisons of children with and without mathematical difficulties in a developmental perspective. *Journal of Learning Disabilities, 40(1),* 2-14.

- Prins, P.J.M., & Hanewald, G.F.P. (1999). Coping self-talk and cognitive interference in anxious children. *Journal of Consulting and Clinical Psychology*, *67*, 435-439.
- Rice, K., & Meyer, A. (1994). Preventing depression among young adolescents: Preliminary process results of a psycho-educational intervention program. *Journal of Counseling and Development*, 73. (4), 145-152.
- Ronan, K.R., Kendall, P.C., & Rowe, M. (1994). Negative affectivity in children: Development and validation of a self-statement questionnaire. *Cognitive Therapy and Research*, 18, 509-528.
- Ronan, K., & Kendall, P. (1997). Self-talk in distressed youth: States-of-mind and content specificity. *Journal of Clinical Child Psychology*. 26, 330–337.
- Schoenfeld, N., Mathur, S. (2008). Effects of cognitive-behavioral intervention on the school performance of students with emotional or behavioral disorders and anxiety. *Behavioral Disorders*, 34(4), 184-195.
- Shortt, A.L., Barrett, P.M., & Fox, T. (2001). Evaluating the FRIENDS program: A cognitive behavioral group treatment for anxious children and their parents. *Journal of Clinical Child Psychology*, 30, 523–533
- Silverman, W. K., Kurtines, W. M., Ginsburg, G. S., Weems, C. F., Lumpkin, P. W., & Carmichael, D. H. (1999). Treating anxiety disorders in children with group cognitivebehavioral therapy: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 67, 995–1003.
- Sood, E. & Kendall, P.C. (2007). Assessing anxious self-talk in youth: The Negative Affectivity
 Self-Statement Questionnaire Anxiety Scale. *Cognitive Therapy and Research*, *31*, 603-618.

- Spence, S.H. (2001). Prevention strategies. *The developmental psychopathology of anxiety* (pp. 101–132). New York: Oxford University Press.
- Swartz, K., Kastelic, E. Hess, S., Cox, T., Gonzales, L., Mink, S., DePaulo, J.R. (2010). The effectiveness of a school-based adolescent depression education program. *Health education & behavior : the official publication of the Society for Public Health Education 2010;37(1)*, 11-22.
- Vygotsky, L.S. (1962) *Thought and language*. Cambridge, MA: MIT Press. (Published originally in 1934)
- Wang, C. E., Brennen, T., & Holte, A. (2006). Automatic and effortful processing of selfstatements in depression. *Cognitive behavior Therapy*, 35(2), 117-124.
- Winsler, A., Naglieri, J. (2003). Overt and covert verbal problem-solving strategies:Developmental trends in use, awareness, and relations with task performance in children aged 5-17. *Child Development*, 74(3), 658-678.
- World Health Organization. (1998). WHO's global school health initiative: Helping schools to become 'health promoting schools'. Fact Sheet No 92. Retrieved 11/7/2011 from http://www.who.int/school_youth_health/gshi/en/.

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

NASSQ: 11-15

Some thoughts can "pop" into children's and adolescent's heads are listed. Mark how often, if at all, you have had the following thoughts in the PAST WEEK. Please read each item carefully and circle the number on the answer sheet that matches how often you had the thought.

- 1 = not at all
- 2 = sometimes
- 3 = fairly often
- 4 = often
- 5 = all the time

		Not at	Someti	Fairly	Often	All the Time
		all	mes	Often		
1.	I usually mess things up.	1	2	3	4	5
2.	I usually do something stupid.	1	2	3	4	5
3.	I thought I was going to do something	1	2	3	4	5
	wrong.					
4.	I am a winner	1	2	3	4	5
5.	I feel frightened.	1	2	3	4	5
6.	I felt like crying.	1	2	3	4	5
7.	I was shaking.	1	2	3	4	5
8.	Life is terrible.	1	2	3	4	5
9.	I feel like everybody was looking at me	1	2	3	4	5
	and laughing					
10.	I am very nervous.	1	2	3	4	5
11.	I felt weak like I was going to faint	1	2	3	4	5
12.	Nobody cares anymore.	1	2	3	4	5
13.	I get scared.	1	2	3	4	5
14.	Other kids are making fun of me.	1	2	3	4	5
15.	I feel like my heart is in my throat.	1	2	3	4	5
16.	I am not happy at all.	1	2	3	4	5
17.	I am going to make a fool of myself.	1	2	3	4	5
18.	I don't feel like doing anything and just	1	2	3	4	5
	want to be alone.					
19.	I wish I could do things right.	1	2	3	4	5
20.	I want to stay in my room forever.	1	2	3	4	5
21.	I feel like screaming.	1	2	3	4	5
22.	Why do these things happen to me?	1	2	3	4	5
23.	I get confused	1	2	3	4	5
24.	I feel so good.	1	2	3	4	5
25.	Just my luck it went wrong.	1	2	3	4	5

26.	I think about somebody dying.	1	2	3	4	5
27.	I get nervous feeling like something is	1	2	3	4	5
	going to happen.					
28.	I feel good about myself.	1	2	3	4	5
29.	I thought my world was coming to an	1	2	3	4	5
	end.					
		Not at	Someti	Fairly	Often	All the Time
		all	mes	Often		
30.	I feel great about life.	1	2	3	4	5
31.	I feel like I am being picked on for	1	2	3	4	5
	everything I do.					
32.	I think I am depressed.	1	2	3	4	5
33.	I feel like something was dying inside	1	2	3	4	5
	me.					
34.	I feel like running away.	1	2	3	4	5
35.	I am very upset.	1	2	3	4	5
36.	I cry so much I can't stop.	1	2	3	4	5
37.	What's wrong with me?	1	2	3	4	5
38.	I can't stand this anymore	1	2	3	4	5
39.	I was afraid I would make a fool of	1	2	3	4	5
	myself					

Signed Consent Form for Research Involving Human Subjects

Consent for your child to Participate In UW-Stout Approved Research

Title: The Effects of Negative Self-Talk on School Age Children's' Academic Performance

Investigator:

Andrew Van Sistine, MS. Ed, NCSP School Psychologist Cornell High School 715-239-6464

Research Sponsor:

Christine Peterson, Ph. D 411 McCalmont Hall 715/232-2182 petersonchris@uwstout.edu

Description:

Self-talk, or self statements are things we say to ourselves, or "hear" that describe our situation or reflect our appraisal of what we are about to approach. As there are determined relationships between *negative self-talk* and depression and anxiety, this may suggest that levels of negative self talk may predict similar struggles in the school setting, such as avoidance of difficult academic activities, difficulty sustaining through classroom work, and problems initiating homework. What I will attempt to shed light on in this study, to be completed with 7th, 8th, and 9th grade students within the Cornell School District, is to determine whether there is a direct link between academic performance and self-talk. I intend to use a very brief screener that will measure positive and negative self-statements, based on the student's self report and compare this information with student performance, as measured by grade point average, attendance, and disciplinary referrals. No individual student information will be investigated, as I am looking to determine a correlation that might help me create or research interventions that may be used in the school setting, or distributed to teachers, to promote non-negative thinking and address student wellbeing.

Risks and Benefits:

Potential benefits include discovering short, simple screening materials that may inform of potential risk factors that predict difficulties with academic achievement, adaptive functioning, and self-efficacy. The measure that will be utilized includes depressive, anxious, and overall negative affectivity subscales. Bodies of research exist independently that inform intervention strategies and may be applied within the school setting as part of a district-level positive behavior support.

Students will complete a self-report of thoughts that may have popped into their head in the recent past. Some items they may be asked to endorse are negative in nature. Students will have the option to discontinue at any point during the 39 question rating scale, which is not expected to take more than 10 minutes of non-structured school time.

Special Populations:

To attempt to collect valid data, students are asked to self-report information. Children under 18 years of age require parent permission to participate in a study such as this.

Time Commitment and Payment:

Students will take approximately 10 minutes (untimed, but estimated from previous administrations of the self-report) to hear and read instructions, circle responses, and have the form collected upon completion. Students and parents will be afforded results and a paper or electronic copy of final project upon completion.

Confidentiality:

Student names will be paired with a number, which will be found atop the rating scales that will be filled out by the student. Corresponding student information data will also be coded with this digit and, once information is effectively paired as raw data, corresponding name list will be destroyed. Therefore results will remain confidential and only known to the researcher and completely anonymous otherwise.

Right to Withdraw:

Your child's participation in this study is entirely voluntary. Your child may choose not to participate without any adverse consequences. Should you choose to participate and later wish to withdraw from the study, you may discontinue your participation at this time without incurring adverse consequences.

IRB Approval:

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

Investigator: Andrew Van Sistine, School Psychologist 715-239-6464 avansistine@cornell.k12.wi.us Advisor: Dr. Christine Peterson 715-232-2182 petersonchris@uwstout.edu Sue Foxwell, Director, Research Services 152 Vocational Rehabilitation Bldg. Menomonie, WI 54751 *Foxwells@uwstout.edu*

Statement of Consent:

By signing this consent form you agree to participate in the project entitled, *The Effects of Negative Self-Talk on School Age Children's Academic Performance*.

Signature of parent or guardian Date

Student's name_____