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Identifying Self Serving Cognitive Patterns in Behavior Disordered Adolescents Using the How I Think Questionnaire

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Appendix A: "How I Think" Questionnaire
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Identifying Self Serving Cognitive Patterns in Behavior
Disordered Adolescents Using the How I Think Questionnaire

BY

Lynn M. Veach

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THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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CHARLESTON, ILLINOIS

1999

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Abstract

The etiology of behavior disorders in adolescents has previously been attributed to such factors as temperament, genetics, social learning, and irrational thoughts described as self debasing cognitions observed in cognitive behavior research. Working with adult criminals, Yochelson and Somenow (1976) found that none of the prevailing theories were conclusive. They unveiled a second set of irrational cognitions which appeared in adolescents and were self serving in nature. Drs. Gibbs and Barriga (1996), working from the position that this observed set of cognitive distortions were present in behavior disordered adolescents, developed the How I Think Questionnaire(HIT). This study used the HIT to compare two groups of adolescents. Group one was from a population receiving educational services in alternative school settings for the behaviorally disordered. The comparison group was selected from a traditional school where no more than 3% of the population required services for behavior disorders. Each group, which consisted of 74% male students and 26% females students, took the HIT questionnaire. Significant differences were found between the two groups on all scales of the HIT, thus indicating a higher rate of self serving cognitions in the behavior disordered group.

Dedicated to Dale G. Briere, Heather M. Miller, Sean R. Miller and the late Violet M. Veach for the support and encouragement over the year it has taken me to prepare this work.

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Chapter 1: Introduction

Identifying Self Serving Cognitive Patterns in Behavior
Disordered Adolescents Using the How I Think Questionnaire

Recently, two young ladies took a joy ride in a car they found with the keys in it. Why were these girls shocked when they were arrested for grand theft auto? Why does a 15 year old female in a residential treatment setting, run away one day before she would gain off campus rights? Why does she blame her running away on her caregivers? Why does a 16 year old male sex offender walk in the front door of the counseling center and out the back, knowing the judge will send him to prison if he does not get counseling for his problem? Why does he believe that no consequence will be levied against his defiance? This study strives to provide insight into these and other questions concerning adolescent behavior problems.

The diagnostic criteria from the DSM-IV (1994) lists two diagnoses that are used as the basis for determining serious behavior disorders. Conduct disorder is characterized by a repetitive and persistent pattern of behavior which violates the rights of others and age-appropriate societal norms. Such violations are manifested by aggression to people and animals, destruction of property, deceitfulness or theft, and serious violations of

the rules. Oppositional defiant disorder is characterized by a pattern of negativity, hostility, and defiant behavior manifested by conflict with authority, deliberate annoyance of others and being easily annoyed, blaming others, being often angry, and vindictive.

Members of the healing arts profession have long sought to find the connection between disorders, their causes, and their treatment (e.g., Thomas & Chess, 1977; Mayr, 1985; Skinner, 1931; Ellis, 1962; Barriga & Gibbs, 1996). In the case of behavior disorders in adolescents several theories have been posited.

Temperament

Temperament as a factor in behavior problems has been the subject of much research (e.g., Thomas & Chess, 1977; Maziade, Caron, Cote, Merette, Bernier, Laplante, Boutin, & Thivierge, 1990; Schwartz C. E., Snidman, N. & Kagan, J. 1996; & Svrakic, Svrakic, & Cloninger, 1996). Temperament theories typically relate behavior problems to inconsistencies between the child's emotional response to environment and the parenting style used (Thomas & Chess, 1977). Thomas and Chess (1977) found no significant correlation between social economic status and difficult children and suggested that predispositions were inherited. In a study of the heritability of juvenile antisocial traits

Lyons, True, Eisen, Goldberg, Meyer, Faraone, Eaves, Tsuang (1995) suggest a genetic influence on criminal behavior. However, environment seemed to be the more influential factor when looking at symptoms of criminality in juveniles. Research determining the source of behavior problems remains at odds over the issue of nurture vs. nature. Both Maziade, et al. (1990) and Schwartz et al., (1996) support Thomas and Chess's (1977) finding that children born with difficult temperaments are at greater risk for development of behavior disorders. Children living in dysfunctional families are at higher risk than those living in supportive environments. Furthermore, Schwartz et al., (1996) followed a cohort of infants classified as difficult at 21 months. They found in a twelve year follow up study that this group scored in the clinical range for externalized behavior, delinquency, and aggressive behaviors on Achenbach and Edelbrock's (1979) Child Behavior Check List, a measure of problem behaviors.

Svrakic et al. (1996) view behavior disorders as stemming from transitions between levels of character development which are nonlinear functions of temperament, genetic influences, social learning, and life events. Both Thomas and Chess (1977) and Svrakic et al. (1996) view temperament as a predisposition of emotional response to the environment. Maziade, et al. (1990) found that extremely

adverse temperament did not consistently equate to clinical disorders. Their data suggested that superior behavioral control considerably decreased risk of behavior disorders in children with difficult temperament (Maziade, et al., 1990). Should we then consider the interactions between temperament and environment rather than temperament alone as a genetic factor?

Character and Personality

Personality has been put forth as a causal factor in the development of behavior disorders. Cattell and Cattell (1995) identified 16 domains of personality which form a bipolar continuum with dysfunction at either pole. Caspi, Begg, Dickson, Langley, Moffitt, McGee, and Silva (1995) found a unique configuration of personality traits in youth engaging in health risk behaviors. They were impulsive, rejecting social norms, were alienated, showed little need or capacity for connectedness, and displayed negative emotion and aggression when stressed. These traits are similar to the character traits outlined in Svrakic et al. (1996) and the temperament traits of the difficult child described by Thomas and Chess (1977). Caspi et al. (1995) described the personality of individuals who involved themselves in risk behavior as being less traditional, less controlled and consistently more aggressive and alienated,

traits which fit well with Achenbach's (1979) characteristics of externalized behavior. In addition to the similarity between personality traits and externalized behaviors, Caspi et al. (1995) found that the subjects in their study of high risk behavior were vindictive and held victimizing attitudes and a cynical world view. Do we then define the behavior disordered child as being of difficult temperament, defective personality, underdeveloped character, aggressive, an undisciplined individual who is a vindictive victim, holding a cynical world view?

Identification

Behavior disorders are traditionally defined as any set of behaviors that adversely affect an individual's ability to function within the boundaries of the social environment. In the past, behavior disorders diagnosed in early childhood (5-8 years) and adolescence (12- 18 years) were limited to attention-deficit hyperactivity disorder, conduct disorder, oppositional defiant disorder, and adjustment disorder (DSM-IV, 1994). In recent years substance abuse and dependence, paraphilia, and pedophilia have been recognized as disorders which may also develop in early childhood (Windle 1991, Moody, Brissie, & Kim 1994). By their nature, they violate the rights of others and the boundaries of society's norms.

Measurement

Achenbach's measure of behavior disorders is based on the diagnostic criteria of the Diagnostic and Statistical Manual of Mental Health III (DSM III, 1980). In his research he unveiled two distinct categories of disturbed behavior: (1) Internalizing behaviors, and (2) Externalizing behaviors (Achenbach & Edelbrock, 1979; Edelbrock, & Achenbach, 1980). Internalized behaviors included inhibition, shyness, anxiety and general personality problems. Externalized behaviors were described as aggression, acting-out, and problems related to conduct which are manifested in delinquency.

Throughout the years attempts have been made to identify the etiology of adolescent behavior problems. Among the paradigms offered are irrational thoughts associated with cognitive therapy. The HIT offers the counselor and therapist a tool in determining the type and magnitude of self serving cognitions associated with deviant behavior.

Chapter 2: Literature Review

Among the pathological behaviors studied are: status offense risks, drug related risks, and criminal behavior risks. Lavert et al., (1993) found a relationship between risk behavior and personality factors of maladjustment.

Risk taking is one aspect of externalized behavior. Lavery, Siegel, Cousins, and Rubovits (1993) defined risk-taking behavior as any activity that deviates from the social norm and invites a control response from the adult community. It is believed that adolescents who participate in risk-taking activities display similarities in their approach to their environments. They are believed to be unconventional in their attitudes, values and perception. Some risk-taking is adaptive for psychological development; however, pathological problem behaviors, including inappropriate and or excessive risk-taking, tend to be both maladaptive and habitual in nature (Lavery, et al., 1993). One feature of risk taking is autistic thinking. Defined as idiosyncratic thought processes it was the only shared cognitive trait for the five behavior categories Lavert et al., (1993) studied. This and other cognitive processes have been studied by others in recent years (e.g., Barriga, Harrold, Stinson, Liau, Gibbs, under review; Liau, Barriga, & Gibbs, in press; Barriga & Gibbs, 1996). Higher

involvement in risk taking behavior, the extent to which one becomes involved in risk taking activities, is closely related to high activity levels and impulsivity. These findings support the correlation between combinations of high activity levels displayed as impulsivity and poor judgment associated with autistic thinking which relates to adaptability, and low rhythmicity, the subject's irregularities of biological functions, with the behavior problems found by Mehregany (1991).

Lavery, et al., (1993) further described individuals in the conduct-disordered group as subscribing to an antisocial belief system characterized by indifference toward others. The antisocial belief system and the accompanying disregard for others are the hallmarks of antisocial personality disorder. According to the DSM-IV (1994), antisocial personality disorder must manifest itself as conduct disorder before the age of 15. What brings about this set of factors?

Cognition and Behavior

Meichenbaum and Burland (1979) among others (e.g., Ellis, 1962; Rachman, 1997; Kendall, Haaga, Ellis, Bernard, & DiGiuseppe, 1995) believe that the mind, or cognitive processes, plays a major role in how people respond to stimuli. Kendall, et al. (1995) summarizes the connection

between thought and behavior: "people usually create appropriate feelings by generating rational or functional beliefs and usually create self-defeating feelings and behaviors by constructing irrational beliefs" (pp. 170). In other words, individuals act upon the belief they hold for a given situation. When an individual perceives a situation as a must, or that the outcome will be awful, they may act upon the perception in maladaptive ways such as avoidance, self-pitying, depression or hostility (Rachman, 1997). It has been posited that children initially learn irrationality from their experiences with parents and care givers (Lester, Muir, Dudek, 1970; & Kendall, et al, 1995). Children form schemata by differentiation and assimilation of experiences which allows them to make assumptions about their circumstances. These cognitive structures correspond to a level of emotional behavior observed by Lester, et al.(1970). This would explain the high correlations between thoughts and beliefs and maladaptive and antisocial behaviors found in studies of family histories of dysfunction (Lyons, et al, 1995, & Denoff, 1988). Among the irrational beliefs found by Denoff were catastrophizing, a tendency to inflate the seriousness of situations, and an elevated need for approval from others. However, the concept of learned irrational beliefs does not account for

children with behavior problems who come from families with no history of dysfunction (Thomas & Chess, 1977).

Denoff (1991) attributes maladaptive behaviors to a second factor of irrational thought, a lack of coping skills. It is not only our beliefs and perceptions of situations that lead to maladaptive behavior, but the repertoire of coping skills which is available to deal with the situation. Situations are often perceived as controllable or non-controllable by individuals. Emotionally based coping strategies have been found to be associated with belief systems that perceive situations as uncontrollable and unchangeable (Denoff, 1991). It is the belief that the situation is beyond the control of the individual that inhibits adaptive coping strategies.

Irrational beliefs

Rational-Emotive Therapy (Ellis, 1962) has identified eleven irrational beliefs associated with emotional disturbances: (1) Catastrophizing is an escalation of the seriousness of the situation, (2) Guilt arises from a deviation from social norms, (3) Perfection or the demand for competence and mastery in all areas, (4) Approval defined as the frame of reference for value judgments and personal attributions, (5) Care and Help or the degree that the individual demands others provide for their needs, (6)

Blame and Punishment is the extent that persons blame themselves and others for mistakes and wrongdoings, (7) Avoidance and Inertia is the individual's unwillingness to accept difficulties or work on unpleasant tasks, (8) Independence or the extent to which the individual takes responsibility for decisions and the resulting consequences, (9) Self-downing is the tendency to upset oneself by negative self appraisals, (10) Projected Misfortune is a tendency to predetermine future events as negative, and (11) Control of Emotion is the perceived ability to control how one feels about emotionally stimulating events (Denoff, 1991). When comparing the eleven irrational beliefs with Achenbach's (1979) behavior profile one sees that with the exceptions of Catastrophizing, Blame and Punishment, Projected Misfortune, and Control of Emotion, the beliefs appear to align with the internalized behaviors associated with depression and anxiety disorders. The question then becomes what cognitive distortions might be associated with the externalized behaviors associated with behavior disorders of oppositional defiance and conduct disorders?

Self serving cognition

In 1961 Yochelson and Somenow found that traditional theories were inadequate to explain the linkage between causal factors and antisocial behavior (Yochelson & Somenow,

1976). Traditional interventions, which were based primarily on psychoanalytical, behavioral and cognitive-behavioral theories, lacked consistency in the prevention and recidivism rates after treatment (Yochelson & Somenow, 1976). The common link found was a tendency for irresponsibility and a unique set of thinking patterns which were both irrational and self serving (Sousa, Peacock, & Sousa, 1998; Yochelson & Somenow, 1976). This finding is different from the assumptions that behavior is a learned response or the result of self debasing thought patterns. Additionally, findings of self serving cognition have been observed by Nakamura (1985), Tisak, Lewis, and Jankowski, (1997) and Barriga and Gibbs (1996).

Tisak, et al., (1997) found similar views about the environment in aggressive adolescents. Examining the link between thought and aggression, they found aggressive individuals see their actions to be legitimate, that aggression was natural and instinctive, and that they felt little or no concern about the suffering of the victim. Aggressive children felt that their actions brought tangible rewards that gave them a sense of pleasure and accomplishment. The children valued the control they had over their victims, had no concern regarding retaliation by the victim, nor did they believe that their actions would

cause rejection by their peers (Tisak, et al. 1997).

Research (e.g., Bandura, 1968, & Crick & Dodge, 1994) provides indications that aggressive individuals tend to make inaccurate judgments about their environment and the situations they encounter. Aggressive youths appear to have deficits in their ability to process relevant information during interpersonal conflicts. Their responses to such conflict situations are often out of proportion to the situation. Males, in particular, recall situations where they became aggressive when reacting to situations they perceived as being hostile. When questioned about such situations, Richard and Dodge (1982) found that male youths were able to generate only one non-aggressive solution with additional solutions being aggressive.

Two notable differences were found regarding the criminal behavior of felons compared to misdemeanants (Tisak, et al., 1997). Felons were arrested with greater frequency compared to those arrested for misdemeanors. Additionally, the type of criminal activity engaged in by felons was broader, e.g., violence, drug offenses, status offenses, and disorderly conduct. However, no difference was found between the two groups for violations against property, e.g., damage to property or violation involving motor vehicles (Tisak, et al., 1997). Subjects were posed a

set of questions regarding two aggressive events--hitting and stealing. In both events the subject was acquainted with the victim. The relationship of the bystander (the subject) to the victim was manipulated such that in one set of circumstances the victim and the bystander were supposed to be casual acquaintances and in a second set of circumstances the victim and the bystander were supposed to be friends. Each subject received both a hitting and a stealing scenario in a structured interview with random procedures employed to determine the order of presentation, e.g., relationship to victim or nature of aggressive act (Tisak, et al., 1997).

The results indicate that there exists a difference in the adolescent's response to an aggressive situation based on the closeness of his/her relationship with the victim. Both felons and misdemeanants indicated a higher rate of response to both hitting and stealing when the victim was a friend. Both felons and misdemeanants were inclined to use hostile, or unspecified response to stealing when the victim was a friend. Misdemeanants were more likely to act as a mediator than felons in the same situation and were less likely than felons to report the event to the authorities (Tisak, et al., 1997). With regard to affirmative responses, both felons and misdemeanants

indicated the bystander's response was correct when the victim was a friend (Tisak, et al., 1997). Felons and misdemeanants were less likely to involve themselves when the victim was an acquaintance across all four question sets (Tisak, et al., 1997).

Tisak, et al., (1997) provide a concise conclusion to their research returning to their opening premise that the perspective of the adolescent offender will have relevance on his/her behavior. They conclude that perspectives vary by offender status, type of aggressive activity, and the relationship to the victim (Tisak, et al., 1997). Findings indicate that offenders judged that peers would respond (expect behavior) when the victim was a friend, while few expected peer intervention when the victim was an acquaintance (Tisak, et al., 1997). There also appears to be a more diverse range of expected behavioral actions than found in similar research conducted with non-aggressive adolescents (Tisak, et al., 1997). A third finding is that when friends are involved hostile intervention is the right thing to do. Tisak, et al., (1997) suggest this may indicate that adolescent offenders are unable to generate viable solutions or evaluate strategies effectively. These findings are in accord with the idea of autistic thinking, (Lavert, et al., 1993) the perception of the situation

(Denoff, 1991), and the vindictiveness and cynicism found by Caspi et al., (1995).

Nakamura (1985) observes that juvenile delinquents appear to hold a sound moral standard for others while trying to excuse their own behavior as justified. These dyadic occurrences of standards are labeled as formal attitude and informal motives (Nakamura, 1985). One hundred-fifty-five boys in custody at detention centers and homes for delinquents were interviewed. They were asked to review their conduct focusing on the situation they were in when they committed the offense for which they were incarcerated. Responses were then analyzed on four points: (1) connection--their relation to victim, (2) rationalization--the reason given for acting against the social norm, (3) risk-taking--how they viewed the risk of detection and (4) right-wrong standard--the rationale used to justify or denounce their behavior. These points correspond to the risk taking behaviors defined by Lavery, et al., (1993).

Crimes were also classified as those where there was a victim and those where there was no victim. Crimes where there was a victim were divided into two categories. In the first category, the victim was present during the commission of the offense. In the second category, the victim was not

present. The first category was then examined for the types of offenses, injury, extortion, robbery, and rape. Responses were compared for each category and subcategories. The analysis found common cognitive processes for the situations surrounding the commission of crimes by the subject. For violent crimes such as rape or injury subjects rationalized their behavior by blaming the victim, by describing the event as self defense, or minimized their behavior based on what others had done in the past. The analysis of risk taking revealed poor problem solving skills and irrational beliefs "I know a back road so that nobody catches me." (Sic), "If I only get a car, I can go to everywhere." (Sic) (Nakamura,1985) This pattern has been found by Barriga and Gibbs (1996), and Sousa, et al., (1998). Subjects recognized that stealing was sanctionable but persisted to contend that it was an offense only if they were caught. Likewise, while they judged it wrong to violate a girl, they maintained that a girl that was violated must have done something to deserve the violation.

Sousa, et al., (1998) have identified eight categories of irrational thought in juvenile offenders that relate to choices made and patterns of dysfunctional behavior. The "Victimscrip" allows the individual to assess their role and accountability in the context of blaming others for their

behavior. The role of the offender as the victim has been accepted as a characteristic of behavior disorders (Denoff, 1991; DSM-IV, 1994; & Caspi et al., 1995). The second irrational belief identified is an unrealistic self image which allows the individual to view themselves as not responsible despite their actions (Sousa, et, al., 1998). This is the counterpart of Denoff's (1991) Self downing belief which allows the individual to hold a negative self image regardless of their accomplishments. Closed thinking or the unwillingness to listen, share information or to withhold critical information was identified as the third irrational belief (Sousa, et, al., 1998). Individuals believe that if they omit facts about themselves those facts are irrelevant. This belief system is closely related to the findings of Nakamura (1985) where offenses only counted if the individual was caught. A fourth irrational belief was the individual's sense of entitlement. Adolescent offenders often state that they had a right to behave in an offensive manner (Nakamura, 1985; Tisak et al, 1997; Barriga, & Gibbs, 1996; & Sousa, et al, 1998). Similar to the unrealistic self image and closed thinking is the concept of compartmentalized thinking. This irrational belief allows the adolescent to view what has happened in the past as not having an effect the future. This enables

the individual to disregard past consequences as learnings about their behavior. This belief system is the inverse of Denoff's (1988) projected misfortune, where the individual over generalized past consequences into future failure. Inappropriate expectation also has counterparts in Denoff's irrational belief system. Avoidance and inertia are defined as an unwillingness to accept difficulties or work on unpleasant tasks and independence is the extent to which the individual takes responsibility for decisions and accepts the resulting consequences (Denoff, 1988). These beliefs are combined in the concept of inappropriate expectations where the individual takes an "I can't" attitude toward difficult or unpleasant tasks and attributes failure related to the decisions they make and the consequences they receive to unfairness of their environment. The seventh irrational belief deals with control through power. Sousa, et al., (1998) observed that behavior disordered adolescents expected to control situations and other individuals by manipulation and intimidation to achieve personal goals. The final irrational belief found was a sense of specialness. This belief pivots on the concept that the individual is being controlled by a set of artificial rules that apply to others but not to themselves (e.g., Caspi, et al., 1995; & Sousa, et al., 1998).

Externalized behavior and irrational thought

Achenbach's (1979) Behavior Check List identifies clinical elevations in maladaptive behaviors identified as internalized or externalized. Externalized behaviors are recognized as those associated with the behavior problems of oppositional defiance and conduct disorder. However, it does not identify the source of the behavior, rather it quantifies the severity. The work of Sousa et al., (1998) focuses on identifying irrational beliefs in a therapeutic setting and challenging those beliefs with the consequences they bring. The primary method of identification is by clinical interview. Until recently these were the only tools available to the clinician to identify and measure the existence of cognitive distortions related to severe behavior disorders. The How I Think Questionnaire (HIT) provides a third means of identifying the nature and extent of youth cognitive distortion (Barriga, & Gibbs, 1996). The HIT is intended to allow the therapist to evaluate the presences and magnitude of self serving cognitions in behavior disordered youth.

The history of the etiology for behavior disorders has followed many paths. Among them have been the concepts of irrational thoughts. Traditionally, cognitive behavior approaches have been based on the concept of self debasing

cognitions. New research has identified the presence of self serving cognitions in behavior disordered adolescents. This study investigates the degree to which these thought patterns are present in behavior disordered adolescents in alternative educational settings.

Chapter 3: Method

This study tests the following hypothesis related to the thinking process of adolescents with behavior disorders: (1) Individuals with behavior problems severe enough to qualify the student for special education services use different thinking patterns and will have a significantly higher rate of self serving cognitions than a non behavior disordered population. (2) The null hypothesis predicts that no differences in cognition will be found between the two groups.

An Ex Post Facto design was selected for this research because the independent variable can not be manipulated and the subjects can not be randomly assigned to the research and control groups (McMillan & Schumacher, 1997).

Subject

The subjects were comprised of students from two alternative school programs offered through a Midwestern special education cooperative for behavior disordered students and students from a traditional high school. The criteria for admission to the alternative schools were a diagnosis of a behavior disorder and the exhibiting of disruptive behaviors severe enough that the student could not be maintained in a traditional school. One high school in the small Midwestern city was selected for comparison.

Only 3% of the traditional high school's student population were receiving services for behavior problems.

Group one: Behavior disordered students.

Forty five of the one hundred ten enrolled high school students participated in the survey. Twenty six percent (n=11) of the participants were female. The remaining 74% (n=34) were male. Forty four of the participants were Caucasian, and one was African-American. Students' ages ranged from 14 years old to 18 years old and attended grades nine through twelve.

Students had been referred to the alternative schools based on the severe nature of their behavior problems at their home schools. Inclusion in the study was based on three criteria: (1) enrollment in the alternative school, (2) receipt of the signed consent form, and (3) presence in the classroom on the day of testing. Students with a dual diagnosis of mental retardation and those absent on the day of testing were excluded.

Group two: Non behavior disordered students

Nine hundred and fifty seven students from the traditional school were solicited to participate in the study. A total of 224 students completed the questionnaire. Inclusion was based on presence in the classroom the day of testing and the school's possession of an informed consent

to test on file. Tests were administered by the school's 28 study-hall teachers, using standardized administration instructions derived from previous administrations and the literature. Approval for inclusion in the study was obtained through the Regional Office of Education.

Forty-one questionnaires were excluded for incomplete information. Approximately 10% of the students were reported as having chosen not to participate. Students' ages ranged from 14 years old to 18 years old and attended grades nine through twelve.

Of those the 183 valid participants 54% were female (n=98) and 46% were male (n=85). Information for ethnicity was not collected as the demographics for the school were, 96% Caucasian and 4% minority, between 1% and 2% for each major minority group, did not provide sufficient diversity to analyze. Also the literature indicates that race has no significant effect on cognitive distortion (Barriga & Gibbs, 1996; Barriga, et al., under review; Liao, et al., in press).

Sampling Procedures

Of the 183 subjects that satisfactorily completed the questionnaire a random sample of 76 subjects was selected, for analysis. This was accomplished by selecting every fifth response for 26% females and 74% males. This provided a

sample with the same ratio of female to male subjects as found in the behavior disordered population.

Instrument.

Only three articles have been written on the "How I Think" (HIT) questionnaire at this time. The preliminary validation study measures cognitive distortions in antisocial youth (Barriga, & Gibbs 1996). The other two are follow up studies. The first study (Liau, Barriga, & Gibbs, in press) researched the relationship between self-serving cognitive distortions and overt vs. covert antisocial behavior in adolescents. The second study by Barriga, Harrold, Stinson, Liau, and Gibbs (1997) analyzed cognitive distortions and problem behavior in adolescents. These follow up studies support the findings of the preliminary validation study. According to the preliminary validation study on the HIT it is suitable for use with delinquents ages 14 to 20. The HIT measures the degree of cognitive distortions and behaviors related to the antisocial behaviors (Barriga, & Gibbs, 1996). The test was normed on youth who met the DSM-IV diagnosis for having a behavior disorder. The validation study was conducted on males within the age range of 14 to 20 years of age. The test consists of 54 questions which measures four subscales of cognitive distortions: (a) self-centered,

(b) minimizing/mislabeled, (c) assuming the worst, (d) blaming others. A self serving cognition may be defined as a thought process which allows the individual to perpetuate associated antisocial behaviors. Each of the cognitive distortion areas contains between 2 and 3 items referenced by a given antisocial behavior category. Scores on any of the scales equal to or greater than 2.75 indicate a clinical level of irrational thought associated with behavior disorders. The test has two additional areas that give balance to the overall test and allow the interpreter to estimate the truthfulness of the responses; they are the anomalous response set and the positive fillers (Barriga, & Gibbs, 1996).

The test presents six Likert-scale choices for each item. These responses form a 6 point scale from strongly disagree (1) to strongly agree (6). This "Likert" type scale is used for scoring and interpretation. Items address cognitive distortions that are related to antisocial behaviors, e.g., 'people force me to lie when they ask me too many questions' addresses "Blaming Others" and "Lying." Items were written based on professional experience and DSM-IV diagnostic criteria. Eight items were added to screen for inaccurate or suspect responding, forming the anomalous response set. The anomalous response score was designed to

screen for suspect or deceptive responses. "People should try to work on their problems." should receive a response in the agreement range. There appears to be a high correlation between anomalous response scores and summary scores for the four subscales and the global. Seven positive fillers were added to balance the test. Items are written at the fourth grade level as evaluated by the program 'Grammatik'. Each item was correlated with the eight subscales; only items that correlated highly (90% interval, $T > 1.66$ to $T > 3.37$) with a predetermined cognitive distortion or behavior category were retained (Barriga, & Gibbs, 1996).

Summary scores are obtained by summing the values of the 39 responses and dividing by the number of items (39) (Barriga & Gibbs, 1996). This mean score is plotted to illustrate where the client falls. Summary scores of 2.75 and higher are believed to be an indication of a clinical level of cognitive distortion. Subscores give an indication of the specific type of distortion present (Liau, Barriga & Gibbs, in press). The higher the scores the greater the likelihood of cognitive distortions, the higher the distortion the more likely the presence of problematic behavior (Barriga & Gibbs, 1996; Barriga, et al., 1997). Specific cognitive patterns appear to be related to specific categories of problem behavior (Liau, et al., in press;

Barriga et al., 1997). The higher the score the more distorted the cognitive process with 3.00 representing the theoretical mean. Scores ranging from 2.5 to 2.74 are believed to be borderline indications of cognitive distortion. Scores ranging from 2.75 to 6.0 are clinical indications of distortion. Subscale scores are obtained in a similar manner. Totals for the subscales are summed and divided by the total number of items in the subscales set, e.g., the 9 subscales items for "Self-centered" cognitive distortions are summed and that sum is divided by the number 9. Mean scores are used to interpret the HIT (Barriga & Gibbs, 1996; Liao, et al., in press; Barriga et al., 1997). Path analysis looks at the correlations between specific sets of variables that might be causal factors (Liao, et al., in press). Test-retest reliability for the HIT was high, $r(135) = .91, p < .0001$. Internal consistency reliability was measured with Cronbach's coefficient alpha = .96 (Barriga et al., 1997). A one-way ANOVA of variables across the three criterion groups found a significant main effect for every variable except the Anomalous Responding scale. Group 2, fifty working class public highschool males age 14-18 and group 3, forty-two upper middle class high school males age 14-18, reported lower scores on antisocial behavior than group 1, fifty-five incarcerated males age 15-

20 (Barriga & Gibbs, 1996). The same pattern was found for internalizing behavior; however, only group 3 scored significantly higher than group 1. Alpha's were obtained for each of the behavioral and cognitive distortion scales. They ranged from .78 to .90. The anomalous responding scale scores were lower, with an alpha = .64. Path analysis shows values ranging from .01 ($t = 69.70$) for Overt-Cognitive Distortions to .18 for Covert Abnormal Behavior < Overt Cognitive Distortion and Covert Abnormal Behavior < Covert Cognitive Distortion ($t = .49$ & 1.87 respectively) (Liau, et al., in press).

The HIT has been correlated with two other measures of aggressive and delinquent behavior. Correlation with the Externalizing Scale of Youth Self-Report produced coefficients of $r=.55$, $p < .0001$. When correlated with the Nye-Short Self-Report of Delinquency Questionnaire the coefficient was $r=.36$, $p<.0001$. Comparison with Internalizing Scale of the Youth Self-Report resulted in $r=.30$, $p<.001$ (Barriga & Gibbs, 1996). The eight cognitive subscales all correlated highly with the HIT summary score with a range from $r=.87$ to $.92$. Inter-scale correlations produced correlations that ranged from $.71$ to $.80$. Correlations between the cognitive distortion subscales and the self-report of deviant behavior measured by the Nye-

Short and the Externalizing Scales of the Youth Self-Report

(Barriga & Gibbs, 1996) ranged from .23 to .55.

Additionally, the HIT subscales correlated highly with the overall HIT with r 's ranging from .87 to .92. Inter-item correlation was the highest with r 's ranging from .70 to .80. There is also some factor analytical support for item validity (personal communication, Barriga, 1997)

ANOVA tests demonstrate the test's ability to discriminate between cognitive distortions and self-reports of antisocial behavior (Barriga, & Gibbs, 1996). Additional studies (Barriga, Harrold, et al., 1997) show a similar ability to discriminate externalization.

The HIT measures the thought processes of the individual rather than self-reported behaviors. It assesses self-serving cognition and behavior rather than self-reported behavior.

Procedure

Students were instructed to be honest in their responses and to answer each of the 54 questions to the best of their ability. Their anonymity was assured by the absence of any information that might identify them as the respondent. Students were instructed to provide only their gender, their age, and the date they tested.

At alternative school one, informed consent forms were

filled out by the students at the time of testing then mailed for the parents' signatures. At alternative school two, the informed consent was obtained two weeks prior to the test date and only students who had completed consent forms on file were tested. The traditional school three obtained consent for testing and research as part of their enrollment process. For this reason the school became the administrator of the questionnaire and the Regional Office of Education gave consent to use the data in the study.

Scoring

Focus for this study was on the global scale and the four cognitive scales discussed above. Scores from the two alternative schools were combined to form Group 1. This group was compared to the subjects from the traditional school which formed Group 2. Random sampling was used for the sample of traditional school students. The sample was selected so that the ratio of male to female students in both groups were the same.

Information was organized by the HIT global scale and it's four subscales: (1) blaming others, (2) minimizing/mislabeling, (3) self-centeredness, and (4) assuming the worst.

Statistical analysis

A 2 X 2 Analysis of Variance (ANOVA) was selected to

find any significant differences between the behavior disordered group and the non-behavior disordered group. An ANOVA was selected for its ability to compare the effect of two or more categories both simultaneously yet separately, and to assess interaction effects of the variables. Two tailed t-tests were used to examine the differences detected (Phillips, 1971). To account for any effect of the gender confound, this variable was also examined. The analysis was accomplished using the statistical program Statistical Program for Social Studies (SPSS).

Chapter 4: Results

This study compared the HIT's score and each of the four subscale scores of self serving conditions for the two groups by using ANOVA and two tailed t-test with a level of significance $>.01$ or greater. To account for any effect of the gender confound, gender was also examined. The preference of choosing this measure is its ability to compare the effect of two or more categories both simultaneously yet separately, and it assesses interaction effects of the variables (Phillips, 1971). It is expected that the behavior disordered students will have elevated scores for the self serving cognitions compared to their counterparts in the traditional school.

The HIT score

The HIT score combines the 39 items from four cognitive subscales to assess the use of self serving cognitions that Barriga, and Gibbs, (1996) assumed to be present in behavior disordered students. ANOVAs resulted in a significant difference between the behavior disordered group ($n=38$) and the non behavior ($n=38$) disordered group with the behavior disordered group using more self serving cognitions than the non behavior disordered group.

Table 1 displays the results of the ANOVA on the HIT for the two groups, taking into account the possible effect

of gender on the outcome.

TABLE 1

HIT 2 X 2 Analysis of Variance (source of variation, degrees of freedom (df), F ratios, and significance) by behavior group with covariates of gender entered first.

Source of Variation	DF	F	Sig
Main Effects	2	8.366	.001
F/M	1	4.666	.034
BD/NBD	1	13.514	.001

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38), Non Behavior Disordered (NBD, n=38)

Table 2 gives the results for the individual two tailed t-test for the differences found in the ANOVA.

TABLE 2

HIT (means, standard deviations, and standard error of the mean) by behavior group

	Mean	SD	SE of Mean
GROUP 1			
BD	3.3893	1.153	.187
GROUP 2			
NBD	2.5472	1.003	.163

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38),
Non Behavior Disordered (NBD, n=38)

Blaming others

The first variable analyzed was Blaming Others (BO), the tendency to place the blame for behavior and consequences on others rather than to accept responsibility for one's actions (Barriga, & Gibbs, 1996). There was a significant difference between the scores of behavior disordered students (n= 39) and non behavior disordered students (n=96) on the BO scale, $F=29.123$, $p=.0001$, with $df=1$. This finding supports the assumption that students with behavior disorders are more likely to blame others for

their conduct and consequences than are non behavior disordered students.

TABLE 3

Blaming other (means, standard deviations, and standard error of the mean) by behavior group

	Mean	SD	SE of Mean
GROUP 1			
BD	3.4231	1.064	.170
GROUP 2			
NBD	2.4760	.9333	.095

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38), Non Behavior Disordered (NBD, n=38)

Self centeredness

The second subscales of cognitive distortion was Self Centeredness (SC). This set of cognitive thought patterns allows individuals to place their own needs above the rights of others (Barriga, & Gibbs, 1996). It might be stated that these individuals justify their behavior by rationalizing their personal needs as being more important than the needs, rights, and safety of others. Results of the ANOVA were

also significant for this factor, $F=12.739$, $p=.004$, $df=1$.

TABLE 4

Self centeredness (means, standard deviations, and standard error of the mean) by behavior group

	Mean	SD	SE of Mean
GROUP 1			
BD	3.3974	1.3974	.216
GROUP 2			
NBD	2.5987	1.072	.174

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38), Non Behavior Disordered (NBD, n=38)

Assuming the worst

On this subscale of self serving cognition, the individual creates a worst-case scenario which: (1) attributes hostile intentions to others, and/or (2) assumes that change for the better is impossible (Barriga, Gibbs, 1996). The between group results indicate that the behavioral disordered group uses significantly more AW cognitions than the non behavior disordered group, $F=29.240$, $p=.0001$, with $df=1$.

TABLE 5

Assuming the Worst (means, standard deviations, and standard error of the mean) by behavior group

	Mean	SD	SE of Mean
GROUP 1			
BD	3.4126	1.089	.174
GROUP 2			
NBD	2.4545	.921	.094

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38),
Non Behavior Disordered (NBD, n=38)

Minimizing/mislabeling

Individuals use this thought pattern from this subscales to rationalize their antisocial behavior as causing no real harm, as acceptable or as admirable. This thought style also allows the person to justify behavior by belittling or dehumanizing victims (Barriga, & Gibbs, 1996). Likewise the main effect for this factor was significant, $F=13.219$, $p=.0001$, $df=2$.

TABLE 6

Minimizing/Mislabeleding (means, standard deviations, and standard error of the mean) by behavior group

	Mean	SD	SE of Mean
GROUP 1			
BD	3.3684	1.311	.213
GROUP 2			
NBD	2.4363	1.027	.105

Male (n=57), Female (n=19), Behavior Disordered (BD, n=38),
Non Behavior Disordered (NBD, n=38)

Chapter 5: Discussion

The working hypothesis for this study was the assumption that behavior disordered students exhibit a tendency toward self serving cognition which would be shown to be significantly different from students not requiring placement in alternative education programs for the behaviorally disordered.

The HIT

The HIT scale combines the items from the four cognitive scales to assess the use of self serving cognitions assumed to be present in behavior disordered students (Barriga, & Gibbs, 1996). This study found a significant difference between the behavior disordered group and the non behavior disordered group. Males in both groups used more self serving cognitions than females, with males in both groups using more self centered cognitions than females. Gender differences, group differences, and the main effect, were at a significance of $p=.001$ or higher. Mean scores for self serving cognitions in the behavior disordered group were significantly higher than the non-behavior disordered group on all scales of the HIT. This indicates a difference in the cognitive style between the groups. When compared to the past research it becomes apparent that, while the behavior disordered and non

behavior disordered groups share some areas of self serving cognition, the behavior disordered adolescents were more likely to justify their behavior with self serving cognitions than were non behavior disordered adolescents.

Blaming others

Blaming Others is the tendency to place the blame for behavior and consequences on others rather than to accept responsibility for one's actions (Barriga, & Gibbs, 1996). The difference between the behavior disordered and non behavior disordered students was significant. The mean score for the behavior disordered group on this scale was 3.64, SD 1.064, SEM .170. This supports the assumption that students with behavior disorders are more likely to blame others for their conduct and consequences than are non behavior disordered students. The assumption may be made that while males and females may use significantly different thinking styles, those styles remain divided between those with behavior disorders and those without. Both male and female behavior disordered students scored higher than their non behavior disordered counter parts. Blaming others might be redefined as the student's inability to take responsibility for his or her own actions and/or accepting the natural consequences of a behavior as part of a learning experience.

Self centeredness

Self centered thought processes tend to allow individuals to place their own needs above the rights of others (Barriga, & Gibbs, 1996). It might be stated that individuals who justify their behavior with such cognitions elevate their personal needs above the needs, rights, and safety of others when they use these thought patterns. Results of the ANOVA were slightly lower but still significant for this factor. Results indicate that males and females may share more self serving thoughts than other self serving cognitions. The different mean scores for between the behavior disordered group (male, $M=3.66$, female, $M=2.65$) and the non behavior group (male $M=2.72$, female $M=2.21$) resulted in mean scores above the stated clinical level of 2.75 for both the behavior disordered and non behavior disordered males. While the differences between the two groups were significant, this may indicate that both groups share more self centered thoughts than the other categories of self serving cognitions, and that non behavior disordered males (mean 2.72, $SD=1.072$) are more likely to justify their behavior by legitimizing their needs at the expense of others than are behavior disordered females or non behavior disordered females. A further study of the effects of gender on self centered cognition might reveal interesting

findings relative to the diagnosis and treatment of behavior problems related to difference in gender.

Assuming the worst

This subscale of cognitive distortion creates a worst-case scenario, attributes hostile intentions to others, and/or assumes that change for the better is impossible (Barriga, Gibbs, 1996). This continues the pattern of differential thinking between the behavior disordered and non behavior disordered subjects. The between group results indicate that the behavioral disordered group uses more assuming the worst cognitions than the non behavior disordered group with mean scores of 3.57 for males and 2.95 for females. Behavior disordered group, male and female, and the male non behavior disordered group resulted in scores that according to the author of the HIT (Barriga, Gibbs, 1996) demonstrate clinical levels. Indications may be interpreted as behavior disordered students seeing themselves as the subject of hostile intentions from others and being unable to change or that change would not result in less hostility toward them. Additional studies would be required to determine if the differences between gender are significant.

Minimizing/mislabeleding

Individuals use minimizing and mislabeling to depict antisocial behavior as causing no real harm, as acceptable or as admirable. This thought style also allows the person to justify behavior by belittling or dehumanizing victims (Barriga, & Gibbs, 1996). Minimizing and mislabeling are perhaps the easiest cognitive styles to identify in the classroom and elsewhere. The introduction described two young ladies who were arrested for grand theft auto. They stated that they could not understand what the problems was with "borrowing the car." They had filled the gas tank, and brought the car back undamaged. Behavior disordered males ($M=3.60$) had the highest score for this factor while behavior disordered females had the second highest score ($M=2.72$), indicating that the behavior disordered group were more likely to discount the seriousness of the outcome of their behavior.

The results of the ANOVA for the main effects found a clear progression toward clinical levels of self serving cognition from behavior disordered male to non behavior disordered females. The one exception to the progression is found for the subscales of self centered cognitions, where non behavior disordered males score higher than behavior disordered females (See Table 7).

TABLE 7

Analysis of Variance of the HIT: all scales by group and gender.

Behavior Disordered			Non Behavior Disordered			
	Male	Female		Male	Female	
Scale	Mean	Mean	F	Mean	Mean	p
	Mean Square					
HIT	3.61	2.78	8.4	2.63	2.27	.001
	(9.342)					
SC	3.66	2.65	7.4	2.72	2.21	.001
	(10.360)					
AW	3.57	2.95	18.6	2.58	2.03	.0001
	(16.713)					
BO	3.64	2.80	19.4	2.60	2.07	.0001
	(17.175)					
MM	3.60	2.72	13.2	2.54	2.10	.0001
	(15.762)					

HIT The How I Think questionnaire global scale.

AW, Assuming the Worst scale. BO, Blaming Others scale.

MM, Minimizing/Mislabeleding scale. SC, Self Centered scale.

The findings of this study support past research with the HIT in substantiating the presence of self serving cognitions in adolescents with behavior disorders. It may be useful as an instrument in targeting individuals for early intervention before behaviors become severe.

Implications

Research is undertaken on the assumption that significant differences exists between the behavior disordered and non behavior disordered adolescents. The validation of this assumption has implications for creating an impact the effectiveness of interventions for behavior disordered adolescents. Past cognitive behavior interventions have been based on the premise that self debasing conditions and low self esteem play major role in inappropriate behaviors exhibited by behavior disordered adolescents. This study and others (Barriga, & Gibbs, 1996; Liao, et al., in press; Sousa, et al., 1998; & Yochelson, & Somenow, 1976) indicate a parallel set of self serving conditions may play a substantial role in the behavior of adolescents with behavior disorders. New interventions based on modifying these self serving conditions can be developed to directly address the thinking errors associated with the four specific scales identified in the HIT questionnaire. Additional studies investigating the

effectiveness of these interventions compared to traditional cognitive behavior therapies should provide additional support for the impact of cognitive distortions based on behavior. The HIT's ability to discriminate between the self serving cognitions of the behavior disordered and the non behavior disordered adolescent could be a valuable tool for the therapist in selecting which intervention is most appropriate for the problem youth.

Limitations

Confounding variables may be defined as variables that may act upon the independent and or dependent variable in such a way as to alter the outcome of the study (Cone, & Foster, 1996). It is therefore important to identify and, when possible, control confounds. A review of the literature identifies factors such as parenting style, social economic status (SES) race, gender, and environment as impacting the behavior of adolescents.

Parenting style

The pioneering research of Thomas and Chess (1977) found that parenting style affected the behavior of the difficult child. This factor may be worthwhile investigating at a later time; it is, however, beyond the scope of this study.

Race

Past research on the effects of race on behavior have produced no significant differences. The work of Barriga and Gibbs (1996), Barriga et al., (under review) and Liao et al., (in press) all used samples with ethnic diversity with results indicating that the thinking patterns of deviant youth was universal in the four domains of cognitive distortion under investigation. The sample population for this study was not ethnically diverse leading to the question, "Is there a difference between the results of past studies and this study?".

Gender

Gender had not been studied in the past research (Barriga & Gibbs, 1996) due to the small percentage of female subjects in the sample population. In this study approximately 26% of the population from the two alternative schools were female. Over 50% of the students in the regular school were female, with 54% of the females participating in the study. To control for the influence a random sample of 26% of the valid female responses were selected to be included in the final statistical analysis. However, individual t-tests were not conducted as the focus of the study was on the difference presumed to exist between behavior disordered students and non behavior disordered

students. One interesting finding was that male behavior disordered students had higher scores than both male and female non behavior disordered students. Female behavior disordered students had higher scores than both male and female non behavior disordered students on all but one subscale. Self centeredness scores for non behavior disordered males was higher than behavior disordered females (see Table 7). The self centeredness scale measures the extent to which individuals validate their own views, expectations, needs, rights, feelings and desires, to the exclusion of the same for others (Barriga, et al., Under review). These results indicate that males in general tend to use more self centered cognitions than do females. These differences may be related to such factors as socialization differences between genders and or cultural conceptualizations and are worth further investigation.

Environment

Environment was also considered as a confounding variable. The students in the alternative school were subjected to a strictly enforced behavioral program which utilized charting of behaviors that was reinforced by rewards for compliance and consequences for noncompliance. Students received weekly counseling to address individual issues related to their behavior problems and daily

counseling groups to improve such skills as anger management, substance abuse awareness, and assertiveness skills. The totality of the program was focused on decreasing deviant behavior and building acceptable behaviors. To ensure that the students gave truthful responses, they were reassured that no one, the tester included, would be able to associate the response with the respondent.

Socialeconomic status

There are other areas that the HIT does not include in the normative data. Variables for IQ or socioeconomic status were not controlled or otherwise accounted for. Lyons, True, Eisen, Goldberg, Meyer, Faraone, Eaves, & Tsuang (1995) mention such correlations in their work on inheritability of antisocial traits. Rather than using derived scores, the HIT uses mean scores. According to both Gibbs and Barriga (personal communication, Barriga, 1997), this so the scores can be transposed on a Likert scale for ease of interpretation.

Test wise subjects

The main problem with the test is the 'test wise' client. Individuals who know what the 'correct response' should be can easily fake their responses. The AR scale helps the interpreter in identifying the individual but does

not provide a means to correct the interpretation (Barriga & Gibbs, 1996; Barriga et al., 1997).

The HIT may prove to be a useful tool to the therapist with its ability to discriminate between the cognitive patterns found to be present in the behavior disordered and non behavior disordered adolescent. If self serving cognitions are the predominate cognitive style used by the behavior disordered adolescent then interventions designed to address the self serving cognition may be initiated. One observation not elaborated on is the fact that even though the behavior disordered population studies was exposed to a daily routine of strict behavior modification techniques and traditional counseling they still scored in the clinical range for self serving cognations. Current treatment approaches don't seem to be effective. Perhaps it is time to try a new approach in treating behavior disordered adolescents. The HIT would be an ideal tool to use in designing a more effective treatment approach that targets the self serving cognitions displayed by this population.

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Appendix A

The "How I Think" Questionnaire

Pages 64-70 are withheld at the request of the copyright holders.

This thesis is available in its entirety through Interlibrary Loan.

Appendix B
Informed Consent

INFORMED CONSENT TO TEST

I _____ consent to participation in Ms. Lynn Veach's research study. I understand my only involvement will be completing the "How I Think" questionnaire. This questionnaire evaluates the thinking processes of teens in certain situations. I understand my results will be made available to me upon request to the researcher. I understand my confidentiality will be maintained by using a coding system, substituting a number for my name. Questions may be addressed to the researcher at:

Lynn M. Veach MS. Ed.
1203 Jackson Avenue
Charleston, IL 61920
(217) 348-8480

Student

Date

Parent/Guardian

Date

Appendix C

Standardized Administration Instructions

ADMINISTRATION INSTRUCTIONS

Our class has been asked to help a graduate student at Eastern Illinois with her research. She is studying how young people think in specific situations.

You are being asked to complete a short questionnaire that looks at how young people think about difficult situations.

This questionnaire is being given at this high school and four other high schools in the central Illinois area.

You do not need to put your name on the questionnaire. The results from this study are anonymous.

First fill out and sign the "Informed Consent" form. (hold up the form)

Remember you DO NOT put your name on the questionnaire.

Now put today's date on the questionnaire.

Then put your age on the questionnaire.

Next circle male or female on the questionnaire.

Now go through the questionnaire and circle the answer that is closest to what you think is the best way to deal with each situation on the questionnaire.

If you have questions about a word please raise your hand and wait for assistance.

When you have completed the questionnaire, please bring it and the informed consent form to the front table.

Appendix D

Letters of Permission to Test



HIT 77

December 8, 1998

Lynn Veach
1203 Jackson Avenue
Charleston, IL 61920

Dear Ms. Veach:

This letter serves to grant you my permission to include the "How I Think" questionnaire as an Appendix to your Master's Thesis. Please be sure to cite Gibbs, Barriga, and Potter as authors and copyright holders for the questionnaire. Please do not include the questionnaire in any potential publications resulting from your thesis and refrain from sharing copies of the questionnaire with other researchers. If you or any other researchers have any questions regarding the questionnaire, feel free to contact me or my co-authors.

Sincerely,

Alvaro Q. Barriga, Ph.D.
Assistant Professor of Psychology
724-830-1084
barri03@setonhill.edu

8-8480

CHARLESTON HIT 78

Community Unit School District

District Administration Office

Phone: (217) 345-2106

410 West Polk Avenue, Charleston, IL 61920

Fax: (217) 345-8121

TO: BUILDING ADMINISTRATORS AND SECRETARIES

SUBJECT: DISTRIBUTION OF HANDOUTS

ORGANIZATION/ACTIVITY

"How I Think" Survey

NAME OF PUBLICATION

Lynn Trench's research for
Thesis

APPROVED

____ Place in office for pickup

____ Distribute through classroom Grade(s) _____

____ Building administrator's prerogative to distribute to interested staff

____ Post in building

OTHER APPROVED INFORMATION FOR DISTRIBUTION

____ For faculty lounge

____ Representative will be contacting the building administrator. Participation is determined by the building principal.

☒ Permission to conduct survey providing the building administrator and teacher(s) involved are agreeable. All necessary documentation is on file with the Assistant Superintendent.

____ **DENIED**

Reason: _____

Jeanne Walters
Assistant Superintendent
Curriculum/Instruction

5-21-98

Date

*This form must be presented, in person, at each attendance center where materials are to be distributed

A **1**st-rate public education for a caring community!



eastern illinois area of special education

HIT 79

(SPED)
112 N. 22nd Street • Mattoon, IL 61938 • (217) 235-0551 • (217) 234-7733 FAX

Michael R. Alt, Ed. D.
Executive Director

Deb Hite
Assistant Director-Administration

Jean Dow Balch, Ph. D.
Assistant Director-Business

December 16, 1998

Ms. Lynn Veach
1203 Jackson Avenue
Charleston, IL 61920

Dear Ms. Veach:

This is in response to your request for a letter of consent that gives you permission to test students at the Treatment and Learning Centers operated by the Eastern Illinois Area of Special Education. You requested permission to administer the "How I Think" questionnaire to these students.

I wish to inform you that on July 14, 1998, the EIASE Administrative Committee granted permission for you to administer the questionnaire.

If I may be of further assistance, please contact me.

Sincerely,

Michael R. Alt, Ed. D.
Executive Director