COGNITIVE BEHAVIOUR THERAPY AND ASPERGER'S DISORDER: DOES TREATMENT INFLUENCE SOCIAL ANXIETY AND THEORY OF MIND?

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This work is dedicated to

my family for their constant support;

my parents, Jack and Berniece,

my sister, Kelsey, and my cousin, Kara.

Abstract

Anxiety impacts the quality of life and future success of adolescents with Asperger's Disorder. This study was aimed at understanding the impact of a Cognitive Behaviour Therapy (CBT) intervention in reducing anxiety while increasing Theory of Mind (ToM) skills in adolescents with Asperger's Disorder. Three male participants, aged 13 to 16, took part in counselling sessions. The intervention consisted of eight, one-hour, individualized sessions that focused on cognitive and behavioural strategies, ToM teaching, and social skill instruction. Results showed multiple trends in anxiety reduction, with significant decreases in both panic disorder as noted in participants' self-reports and in generalized anxiety as noted in parents' reports of their children's anxiety. Data demonstrated changes in anxiety, which varied according to the participant's motivation to change, participation in sessions, and application of strategies outside the counselling sessions. Data from the ToM measures was insufficient to determine if ToM change occurred. Results indicated preliminary support for the CBT intervention in decreasing anxiety in adolescents with Asperger's Disorder.

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Introduction

The social world can be complex for individuals with Asperger's Disorder. Difficulties understanding emotion, interpreting others' perspectives, portraying empathy, and starting and maintaining conversations can make social interactions challenging or uncomfortable (American Psychiatric Association [APA], 2000). Alternatively, intense and restrictive interests in specific topics can dominate conversation, while taking over free time (Attwood, 2007). Together, these characteristics highlight the difficulty adolescents with Asperger's Disorder face in social competence: skills used to establish close friendships, create emotion-based relationships, work in teams, and collaborate with family (Gutstein & Whitney, 2002). As a result, these individuals, particularly adolescents, may feel alone; lacking the typical friendships that mark the milestones of development. Many students want to have friendships, but do not know how to establish or maintain them (Smith-Myles & Adreon, 2001).

Research has shown that social competence is a major determining factor in predicting the future success and quality of life for adolescents moving into adulthood (Gutstein & Whitney, 2002). Many adolescents with Asperger's Disorder have consistently been shown to lack experience-sharing relationships, which is a critical component of social competence (Gutstein & Whitney, 2002). Without this motivation or ability to share experiences with others, they miss out on the reciprocal nature of relationships, as well as enjoyment that socialization brings. Often they repeatedly try to socialize, and fail. As a result, they concede, instead they obtain comfort from predictable and concrete items such as computers and books. Individuals continue to isolate

themselves from social situations, and many times this allows their abilities and potential to be overseen by others.

As individuals with Asperger's Disorder move through adolescence, social situations naturally become more complex, which highlight deficits in social competence. This lack of skill, and repeated failures in social situations, makes individuals susceptible to anxiety and depression (Attwood, 2003). Anticipation of upcoming ambiguous social situations creates anxiety, while struggles with performance lead to social embarrassment. As peers take more notice of these social limitations, the addition of co-morbid diagnoses such as anxiety and depression all increase the need for counselling services (Ramsay et al., 2005). Counselling services provide the support to cope with past failures, deal with heightened anxiety and depression, interpret social situations, develop social competence, and plan for future endeavours. With the appropriate focus being on immediate concerns, counselling that is individualized and tailored can teach the necessary skills, which are applicable and easier to generalize to everyday situations (Gutstein & Whitney, 2002).

Cognitive Behaviour Therapy (CBT) is a counselling approach that focuses on changing thought patterns to create new, more effective behaviours. It is a viable option that is tailored to the intellectual strength of those with Asperger's Disorder (Sofronoff, 2004). CBT's pragmatic approach aims at breaking down and solving problems, which is a major area of strength for this population (Sofronoff, 2004). This approach has been applied to decrease anxiety and depression, while integrating the principles of CBT to instruct social skills (e.g., Bauminger, 2007). The CBT approach also focuses on cognitions that have been misinterpreted, including social cognitions. Since many

concerns arise from misinterpreting social situations, this approach targets one of the core deficits these individuals face.

CBT has shown to be effective for the treatment of anxiety disorders in typically developing adolescents (Sze & Wood, 2007). Since Asperger's Disorder was added to the *Diagnostic and Statistical Manual of Mental Disorders* in 1994, the research and treatment options in this area are gradually emerging (APA, 1994). Until recently, research on CBT for Asperger's Disorder has been limited primarily to case studies and single-subject designs (Sze & Wood, 2007). Results of these limited studies have shown promising effects, but group designs and further research is required to determine the treatment's effectiveness in overcoming primary symptoms of the disorder and secondary anxiety concerns.

Personal Motivation

Helping students with various disabilities has been one of my passions. When I was in Grade two, a neighbour, who had a disability, became a friend and an inspiration. From this point forward, volunteer and work opportunities have included children and youth with disabilities. When my career path brought me to work with children and youth with Autism Spectrum Disorder (ASD), I was fascinated by the disorder. Each child's abilities and disabilities varied significantly from one to the next. Regardless of how debilitating their social or communication impairments were, their strengths and talents were amazing. I still remember the first child I worked with who could not communicate, but could repeat a song from the radio on the piano without having had any formal training. I gained immense respect for these children, as they influenced my life one by one.

As I moved into the counselling field, I realized the need to provide counselling services to adolescents with Asperger's Disorder, a diagnosis on the Autism Spectrum. These adolescents had difficulty fitting in, making friends, adjusting to high school, and dealing with bullying. They were individuals who looked and functioned like many other typically developing persons, but faced challenges with everyday activities. These individuals had average to above-average intellect with the potential for successful careers and lives. Many students, however, are struggling to hold jobs and finish university because of the social characteristics of their disorder, which often causes them extreme anxiety. I saw the role that counselling could play in helping these individuals deal with their overwhelming stress and anxiety. In addition, I was surprised that this service was not readily offered in our society. The limited counselling options in the community and those preliminary research findings seemed to indicate that further research could benefit this population.

After a brief counselling experience assisting individuals with Asperger's Disorder to overcome anxiety, depression, and everyday challenges, I was passionate to continue this research. First, the proposed research study would provide treatment for anxiety to individuals in the community—something that is not readily funded. Second, additional knowledge in this field will clarify the impact of counselling for this population, possibly highlighting the necessity for this service. Finally, the research will provide an avenue to combine my knowledge and understanding of ASD with my newly acquired skills in counselling. While I work as an Autism Spectrum Disorder consultant, this project and the need for these services continue to influence and inspire my work.

Statement of the Problem

Individuals with Asperger's Disorder face many challenges when transitioning into adolescence and young adulthood. Many individuals have difficulties completing university, maintaining employment, completing daily tasks to be independent, coping with co-morbid disorders, and maintaining stable marital relationships and friendships (Ramsay et al., 2005). It is not that these individuals lack the intellect to carry out these tasks, but difficulties with social skills can limit the success they experience.

For individuals with Asperger's Disorder, day-to-day routines and expectations can be problematic as their restricted range of behaviour can cause them to be routine-bound and rigid. Changes in schedules, unexpected events, or overwhelming situations can be stressful, which makes it difficult to function in a modern-day society that changes frequently, is overcrowded, and fast-paced. When stress increases, these individuals tend to become more rigid, relying on their routines and rituals to maintain control of their anxiety (Gillott, Furniss, & Walter, 2001). To outsiders, those with Asperger's Disorder seem opinionated and unwilling to change; this makes day-to-day interactions with educators, peers, and families tense and potentially unstable.

Entering post-secondary education can create new challenges because of the changes to the environment, pressures to be independent, and demands that are both academic and social (Attwood, 2007). Although individuals with Asperger's Disorder have the knowledge to flourish in their courses, the transition, stress, and additional expectations can lead to drop outs and associated anxiety and depression (Attwood, 2007). The adaptations and accommodations available in schools may be unavailable to individuals who score in the normal range on intelligence tests, like those with

Asperger's Disorder. It may be simple superficial changes, such as a change in schedules, the abstract nature of the course, or the social interactions that pose problems with learning, not the actual course content. Taken together, the increased demands can prove to be more than a student can handle.

People with Asperger's Disorder often struggle with employment. In many instances, they are quite proficient at meeting the job expectations, often surpassing co-workers in knowledge and expertise. It is social problems when working with colleagues that can leave people with Asperger's Disorder at risk of losing their jobs (Hurlbutt & Chalmers, 2004). These individuals may have problems with "water-cooler" talk, being diplomatic when in disagreements, or interacting with customers. These idiosyncrasies make it stressful to function as part of a team or to keep a job in a society where quality of life is dependent on successful and fulfilling employment (Hurlbutt & Chalmers, 2004). Unemployment and/or underemployment (when individuals are over-qualified for positions) have been shown to decrease mood and lead to clinical depression in people with Asperger's Disorder (Attwood, 2007). With extreme potential, unemployment can greatly affect a person's self-concept and self-esteem.

When looking at other life aspects, people with Asperger's Disorder can, and often do, have fulfilling marriages and relationships. Again, problems with social situations, difficulties expressing emotions, engaging in solitary activities for long periods of time, remaining housebound rather than vacationing or meeting with friends, or disconnecting from family members, often creates relationship difficulties (Attwood, 2007; Ramsay et al., 2005). As a result, the spouse of the person with Asperger's Disorder may request counselling, feeling that it was not until after the initial courtship

that the person's rigid and routine-bound personality ensued (Attwood, 2007). Spouses report that the person with Asperger's Disorder misses the expression of emotions, acts of affection, and tangible indications of love (Attwood, 2007). In short, people with Asperger's Disorder may struggle with the affective component of a relationship that involves understanding their partner's needs and wants. These relationships may terminate because they are unsure of the appropriate behaviour to comfort their spouse, leaving the individual with Asperger's Disorder feeling alone and confused.

As a result of the difficulties faced in everyday life, co-morbid diagnoses have become common in reference to Asperger's Disorder (Attwood, 2003; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000; Ramsay et al., 2005). Numerous children struggle with the core components of the disorder, and a transition into adolescence creates new difficulties with anxiety, obsessional disorders, depression, suicidal ideation, and rage (Gutstein & Whitney, 2002). Adolescence brings self-reflection, which highlights the differences between themselves and others—craving the relationships that are important during this phase of development (Attwood, 2004b). These continual frustrations, social immaturity, and difficulties with emotional control make coping difficult.

When all of the problems are factored together, it is evident that the Asperger's Disorder population requires intervention to carry out basic skills in society that bring enjoyment, quality of life, and self-fulfillment. Counselling is an intervention that examines the interpersonal nature of the social complexities these individuals face, while helping to relieve co-morbid disorders such as anxiety and depression.

The current project is an extension of the investigations into the effectiveness of Cognitive Behaviour Therapy (CBT) for individuals with Asperger's Disorder. The

project focuses particularly on adolescents with Asperger's Disorder, and while they face a number of anxieties, this paper is narrowed still to their struggle with social anxieties in human interactions. The project aims to understand the CBT strategies and adaptations that are necessary in a counselling setting to overcome this anxiety. In addition, Theory of Mind (ToM) is taught, a skill that many acquire naturally to understand others' mental states. By learning to appreciate others' perspectives, social performances may increase, thus alleviating negative social interactions and the anxiety that precedes it.

The objective of this project is to provide further information on the effectiveness of CBT. There are two primary components. First, the project investigates the effectiveness of a CBT counselling approach in reducing anxiety for adolescents with Asperger's Disorder. Second, the research project aims to determine the changes in ToM skills following a CBT intervention. By conducting a group design, the results will provide stronger evidence of the treatment's effectiveness and the impact on the participant's lives.

<div align="center">Literature Review</div>

<div align="center">*Asperger's Disorder*</div>

In 1944, Hans Asperger first described Asperger's Disorder when he chronicled similar and somewhat unusual social characteristics in a group of children, who were referred to his clinic (Attwood, 2007). He noted delays in their social maturity and social reasoning, showing little emotional control and a preoccupation in particular areas of interest (Attwood, 2007). He noted that many social characteristics were unusual when compared to typically developing children. Although documented in 1944, the diagnosis was not officially added to the *DSM* until the fourth edition, *DSM-IV*, in 1994. Currently,

the text revision, the *DSM-IV-TR*, characterizes Asperger's Disorder by two primary characteristics: repetitive and restricted patterns of behaviour, and social interaction difficulties (APA, 2000). For a diagnosis to be made, there must be no significant delays in cognitive or language development.

Asperger's Disorder is part of a broader spectrum of disorders, often called Autism Spectrum Disorder (ASD). This term was first coined by Wing and Gould (1978), who noticed similar characteristics across three diagnoses: Autistic Disorder, Asperger's Disorder, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). Although the three disorders share similarities, the characteristics often vary in severity, and are considered to fall along a spectrum.

Asperger's Disorder is often referred to as the least severe diagnosis on the Autism Spectrum, and has sometimes been used interchangeably with the term high-functioning autism. The primary distinguishing difference between the two diagnoses is that language development is delayed in early years for those with high-functioning autism, whereas those with Asperger's Disorder develop language at the same rate as typically developing children (Ozonoff, South, & Miller, 2000). As the children move into adolescence, the differences between the two diagnoses often disappear and studies have demonstrated little variation in cognitive functioning, current symptomatology, and historical symptomatology between the two groups (Ozonoff et al., 2000). In fact, Ozonoff and colleagues (2000) found that most of the language differences between the two diagnoses disappeared by early- to mid-adolescent years. Some controversy remains whether these two diagnoses are separate. For the purpose of this project, studies that

used both subjects with high-functioning autism or Asperger's Disorder will be referred to.

Characteristics of the Disorder

As mentioned earlier, two primary characteristics are necessary for a diagnosis of Asperger's Disorder to be made. According to the *DSM-IV-TR,* these include qualitative impairments in social interaction, and a restricted and repetitive pattern of behaviours, interests, and activities (APA, 2000). Social characteristics are often highly noticeable and can be a primary indicator for a diagnosis. The *DSM-IV-TR* notes that a diagnosis requires at least two criteria from four social impairments in non-verbal behaviour, peer relationships, spontaneous sharing of enjoyment, and social and emotional reciprocity (APA, 2000).

Challenges to non-verbal behaviour are prevalent in Asperger's Disorder, with difficulties reading and understanding body language and facial expressions while appropriately displaying social behaviour such as eye gaze and body posture (APA, 2000). Peer relationships are often absent due to social immaturity or the lack of understanding of play, conversation, imagination, and reciprocity required to maintain appropriate interactions. These individuals may fail to share or ask questions about interests or achievements, a common topic in conversation with others (APA, 2000). In addition, those with Asperger's Disorder tend to have difficulties reciprocating in interactions with others. This may include the back and forth nature of speech, reciprocating praise or social niceties to others, or responding emotionally to another person.

The absence of these primary social building blocks makes basic relationships and friendships difficult to establish and maintain. Social relationships are complex and require a significant amount of insight to understand others' intentions, thoughts, and behaviours. In addition, social relationships constantly change with subtle differences in the environment. Changes in location, people, and situations all determine the use of language, the manner to respond, and the appropriate behaviour to engage in. Due to this complexity, social situations are often misunderstood and avoided. It was once thought that individuals on the Autism Spectrum disliked socializing with others, however, it is now known that they often want to interact, but do not know how to (Smith-Myles & Adreon, 2001).

When individuals reach adolescence they often become cognizant of their difficulties with social understanding. Adolescence brings a greater insight into one's own personal behaviour, thereby enhancing awareness of his or her obstacles in understanding others' perspectives. This realization leads to the internalization of negative thoughts, making the adolescent self-critical, apologetic, and withdrawn in social situations (Attwood, 2007). Anxiety and depression are often repercussions of these social deficits, and are quite common co-morbid mood disorders in adolescents with Asperger's Disorder (Attwood, 2004b).

The second component of the disorder—the repetitive and restricted patterns of behaviour, routines, and interests—can take over these individuals' time, conversation, and thoughts (APA, 2000). This is highlighted by a preference for sameness, and an intense preoccupation with special interests (Attwood, 2007). The interests are more than a hobby, as they involve the retention of facts, objects, and information (Attwood, 2007).

These interests can be quite unusual, including fascinations with lawnmowers, sewing machines, bridges, and stop lights. When talking to others, these pursuits may be their only topic of discussion, causing peers to further alienate themselves from the adolescent with Asperger's Disorder. This characteristic is highlighted with a rigidity against change and an unusual adherence to rules, routines, or rituals. To an outsider, the rituals and routines can appear non-functional and to not serve a purpose. For example, a person may need to walk the same path to his or her desk each morning. Disruption to these rituals can cause extreme stress and anxiety. Schedules are highly valued and changes in these can cause significant anxiety (Attwood, 2007). Repetitions in gross or fine motor mannerisms may be present, with a preoccupation with parts of an object instead of the whole. The *DSM-IV-TR* requires the inclusion of one repetitive and restricted behaviour characteristic for a diagnosis (APA, 2000).

The repetitive and restricted pattern of behaviours can further complicate the difficulties these individuals face in social interactions. Social situations are often characterized by a lack of structure and clear rules; the nature of the conversation changes across people, environments, and topics. For example, the same language that is used to talk to a professor is not the same as that used to speak to a person's elderly grandmother. This can be exasperating and upsetting for the individual who thrives on structure and routine. Peers may also become annoyed with the lack of reciprocity in conversations if the person with Asperger's Disorder dominates the conversation with his or her special interest. Peers may alienate the person with Asperger's Disorder, leaving little room to create relationships. As a result, the routines and restricted interests that comfort these individuals become less desirable in social situations.

Theory of Mind

A diagnosis of Asperger's Disorder requires no clinically significant cognitive delays during development (APA, 2000). However, research has demonstrated a unique cognitive profile in Asperger's Disorder, especially in the domains of executive functioning and ToM (Attwood, 2004a; 2007). Executive functioning is the ability to take information in, process it, and make decisions. Those who have Asperger's Disorder have been found to be impulsive and disinhibited, making it difficult to control emotions and be insightful (Attwood, 2004a; 2004b). These individuals tend to interpret information literally, think concretely, and use rote-memory (APA, 2000).

Most recently, cognitive differences in ToM development have been highlighted as a characteristic of children on the Autism Spectrum. These skills are commonly behind the typical developmental progression (Attwood, 2007). ToM is the recognition of others' mental states, including thoughts, desires, and intentions (Attwood, 2007). In other words, it is the ability to put yourself in someone else's shoes or predict what another person may be thinking. This information is then utilized to identify what to say, make sense of others' behaviour, and predict the actions of others (Howlin, Baron-Cohen, & Hadwin, 1999). The skill has also been referred to as mind blindness, and is used daily to adjust personal behaviour based on the social cues that the other person in the interaction has provided (Howlin et al., 1999). This skill allows people to respond appropriately, be empathetic, and not be offensive.

ToM first starts to appear at approximately 18-months of age, and by about three- or four-years of age, typically developing children have well developed skills in this domain (Howlin et al., 1999). During this development, there is a hierarchy of two ToM

levels which children progress through. First-order ToM involves understanding what another person thinks (Ozonoff & Miller, 1995). This involves simply taking another person's perspective about an external event. For example, Pam will predict where Tom will look for the toy when entering the room based on where it was when he left. Twenty to thirty-five percent of children with autism can pass these types of first-order tests, and for children with Asperger's Disorder this skill is often acquired later, between ages four and six (Attwood, 2004b; Howlin et al., 1999). Second-order ToM tasks are more advanced, involving a prediction of what one person supposes another person is thinking (Ozonoff & Miller, 1995). This involves a belief that the person must think about a second individual's thoughts regarding a third person (Howlin et al., 1999). The second-order ToM is usually acquired by age six or seven in typically developing children, whereas many children with autism never acquire the skill (Howlin et al., 1999). Children with Asperger's Disorder are also delayed in the acquisition of second-order tasks, acquiring these at about age 10 (Attwood, 2004b). Although these skills often develop later in individuals with Asperger's Disorder, many of the tests used to measure second-order ToM have a ceiling effect equal to a mental age of six (Kaland et al., 2002). As a result, advanced ToM tests have been developed and have also demonstrated deficits in second-order ToM tasks in adolescents and young adults with Asperger's Disorder (Kaland et al., 2002). Studies have concluded that ToM skills are still compromised in those with Asperger's Disorder compared to other intellectual abilities for this population (Attwood, 2004b; Perry & Condillac, 2003).

Deficits in ToM can lead to many of the social skill difficulties these individuals face. Being unable to accurately predict what another person may be thinking can create a

skewed judgement on how to behave appropriately, thus leaving the person open to make

potentially embarrassing social mistakes (Attwood, 2004b). It can also complicate the

ability to read messages in others' body language, to problem solve, manage conflict, and

to interpret messages as abstract or literal, which may result in appearing rude (Attwood,

2007). As individuals with Asperger's Disorder gradually develop some ToM abilities in

adolescence, they become cognizant of their social skill deficits. The realization of social

clumsiness makes these individuals prone to stress (Attwood, 2003a). In turn, high levels

of stress can be precursors to mood disorders, including anxiety and depression

(Attwood, 2004a).

Anxiety

  The characteristics of Asperger's Disorder create a profile in which individuals

are susceptible to anxiety. For individuals with Asperger's Disorder, misunderstanding

social situations and previously failed performances can lead to embarrassment and

anxiety that prevents them from re-entering social situations. The desire for sameness and

routine can make the smallest social change a crisis, creating immediate anxiety and

anticipation about future events. Lastly, a deficit in ToM makes understanding others'

intentions difficult. With sufficient introspection in understanding their deficits and failed

attempts, the person experiences stress and becomes self-conscious (Attwood, 2004a).

This negative influence on their self-esteem may leave them vulnerable to yet more

anxiety in many situations.

  Anxiety can also cause individuals to engage in more intense rituals and

obsessions to take control of their environment and to seemingly hide their fear and

anxiety (Gillott et al., 2001). Such rituals may include hand flapping, strict obsessions,

rituals that appear meaningless, and intense questioning. These behaviours further isolate persons with Asperger's Disorder from the social world and cause increased negative self-evaluations. While facing these types of challenges, mood disorders are prevalent (Attwood, 2007).

Asperger's Disorder has been identified to be co-morbid with many secondary diagnoses, including anxiety, depression, Obsessive Compulsive Disorder (OCD), Tourette's Syndrome, and Attention Deficit Hyperactivity Disorder (ADHD) (Ghaziuddin, Weidmer-Mikhail, & Ghaziuddin, 1998; Gutstein & Whitney, 2002; Kim et al., 2000). Although people with Asperger's Disorder may demonstrate characteristics of other disorders, in some instances these may be a result of an Asperger's Disorder trait (Attwood, 2007). For example, children with Asperger's Disorder may demonstrate signs of ADHD and hyperactivity, although these may actually be a result of high levels of stress and anxiety from being in social situations (Attwood, 2007). Mood disorders, such as anxiety and depression, have been well documented in the literature, and are often identified as a result of the stress that is produced by characteristics of Asperger's Disorder (Attwood, 2007; Gillott et al., 2001). Due to the social skill deficits in the disorder, these adolescents can be rejected socially and become targets for bullying and teasing, further compounding the anxiety they experience (Ramsay et al., 2005).

Gillott and colleagues (2001) found that children with high-functioning autism showed higher levels of anxiety than did typically developing children or individuals with a specific language impairment. In particular, their anxiety level was highest in the obsessive-compulsive disorder and separation anxiety domains. Social anxiety was also

problematic, with participants with high-functioning autism reporting significantly more social anxiety when compared to other groups.

Kim and colleagues (2000) found that children with high functioning autism demonstrated clinically relevant symptoms of depression and generalized anxiety that were significantly different than typically developing children. The anxiety and depression was found to influence their life in profound manners; they demonstrated increased aggression while limiting the relationships with their peers, teachers, and family. Melfsen, Walitza, and Warnke (2006) compared the levels of social anxiety in a group of adolescents with a variety of diagnoses, including Asperger's Disorder, selective mutism, depression, and OCD. Results demonstrated elevated social anxiety scores for participants with Asperger's Disorder. In fact, social anxieties were the highest amongst those with Asperger's Disorder and selective mutism, even in comparison to those diagnosed with depression or various other types of anxiety.

Russell & Sofronoff (2005) found similar findings, when self-reports and parent reports of their children's anxiety indicated significantly higher anxiety in individuals with Asperger's Disorder versus typically developing children. Parent reports in the Asperger's Disorder group demonstrated higher scores in overall anxiety, obsessive-compulsive tendency, and physical injury anxiety subscales compared to parent reports in a comparative sample diagnosed with an anxiety disorder. Parent reports of their children's social anxiety were also significantly higher for the Asperger Disorder group, as compared to typically developing children.

The high prevalence of secondary disorders in this population has led researchers to not rely solely on self-report measures for adolescents with Asperger's Disorder

(Gillott et al., 2001; Russell & Sofronoff, 2005). The inability to be self-reflective and understand personal awareness in relation to others can make these measures unreliable for the person with Asperger's Disorder (Russell & Sofronoff, 2005). Since self-report measures are one of the primary methods for evaluating mood disorders and treatment effectiveness, further information must be gathered to capture the individual's symptoms. As a result, parent reports of anxiety are often used in conjunction with self-report measures for this population.

<div align="center">*Treatment*</div>

Cognitive Behaviour Therapy (CBT)

The characteristics of Asperger's Disorder and the resulting anxiety impacts these individual's lives in profound ways. The difficulties of fitting into a social world and the prevalent co-morbid disorders provide greater evidence of the need for counselling services. Traditionally, treatment for individuals on the Autism Spectrum has used behavioural approaches to break skills into manageable parts and teach them systematically (McEachin, Smith, & Lovaas, 1993). However, the addition of Asperger's Disorder to the *DSM-IV* has called for new treatment modalities that account for the subject's intellect, and addresses the anxiety and emotional consequences of the disorder. In comparison to other diagnoses on the Autism Spectrum, Asperger's Disorder does not have delays in the development of language and communication, making counselling services that rely on verbal discussion feasible to meet the needs of this population.

CBT is one treatment modality proposed to be suited for this population, as it is a pragmatic approach that does not use insight to understand issues as other forms of treatment do. Instead, CBT requires the break down of problems using intellectual

analysis, which is a strength of individuals with Asperger's Disorder (Sofronoff, 2004). In addition, CBT's objective is to assist people to become more cognizant of their thoughts and behaviour, something that would benefit people with Asperger's Disorder who commonly misinterpret situations or fail to consider all perspectives (Gaus, 2007). Persons with Asperger's Disorder may find traditional forms of counselling that focus on analysis and rely on the client-therapist conversation difficult to understand (Attwood, 2007). CBT will require adaptations in the cognitive, social, and behavioural profile of this population, as well as for secondary anxiety symptoms (Sze & Wood, 2007). Counselling with a professional that understands the cognitive profile of an adolescent with Asperger's Disorder can help the individual self-reflect and articulate situations that occur in a world that is often foreign to this population (Attwood, 2007).

CBT is a problem-oriented treatment approach that examines the cognitive misrepresentations and distortions that cause client distress, while teaching appropriate coping strategies (Anderson & Morris, 2006; Attwood, 2003). By targeting and changing these ineffective cognitive patterns, it is hypothesized that psychological and behavioural problems can be largely alleviated (White, 2003). CBT is based on the assumption that people process information through cognitive schemas (Gaus, 2007). Schemas are cognitive patterns that act as a lens through which the world is filtered (Gaus, 2007; Padesky, 1994). These cognitive patterns are learned and maintained through past experiences. The schemas continually influence how a person thinks, feels, and responds to current events (Gaus, 2007). Emotional concerns are thought to be caused by schemas that distort events, and the situation is made to seem different than it is (Gaus, 2007).

Individuals with Asperger's Disorder are at risk for developing maladaptive schemas due to their cognitive inflexibility or social deficits that prevent them from understanding and interpreting social information correctly (Gaus, 2007). Another person's intention is easily misinterpreted, consequently creating an inaccurate view of the situation, which may cause anger, stress, or further confusion. While trying to interact socially, then failing, the negative schemas about their ability to interact are reinforced (Gaus, 2007). Ultimately, these difficulties lead to negative schemas about oneself, others, the world, and the future, each being thought of as primary reasons for the development of emotional concerns (Gaus, 2007).

Components of CBT. Attwood (2003) lists six core components of CBT to be considered when working with an individual who has Asperger's Disorder. These components highlight adaptations that help the individual meet the learning style of the population, and include: (a) assessment of the nature and degree of the problem, (b) affective education, (c) cognitive restructuring, (d) stress or anxiety management, (e) self-reflection, and (f) the practice of new cognitive skills (Attwood, 2003; White, 2003).

First, assessments provide therapists with a better understanding of both the functioning level of the individual, including co-morbid problems and secondary features (Attwood, 2003; Ghaziuddin et al., 1998; Kim et al., 2000). The use of visuals, concrete items, and multiple-choice questions have been suggested as ways to adapt traditional assessment measures (Attwood, 2003). Structure and goal setting are important, as structure has been shown to be useful for those with Asperger's Disorder due to their ritualized behaviours and need for sameness (Anderson & Morris, 2006). Second, affective education is critical for those with Asperger's Disorder due to their difficulties

involving social interaction, non-verbal behaviour, identifying another's perspective, and social and emotional reciprocity (APA, 2000; Attwood, 2003; 2004b). Therefore, additional psychoeducation on emotions is often required for members of this group to enhance the understanding of their own and others' emotions. Third, cognitive restructuring is applied to correct distorted and dysfunctional thoughts and beliefs (Attwood, 2003). This component is typically used in all CBT treatment approaches, and involves brainstorming evidence to confirm or disconfirm the distorted beliefs currently held. Adaptations may rely on role-playing, scripting, and drawing comic strips in order to make the concepts concrete. Fourth, stress management involves relaxation techniques that are counter-conditioning procedures to cope with the stress and anxiety the individual faces (Attwood, 2003). Fifth, self-reflection is encouraged in this stage to foster insight into one's thoughts and feelings, and to develop a positive and realistic self-image (Attwood, n.d.; 2003). This stage may be difficult for individuals with Asperger's Disorder, as challenges with introspection make this a complex task (Attwood, 2004b; Frith & Happe, 1999). Sixth, individuals with Asperger's Disorder are taught to gradually practice learned skills in different, more difficult, and more anxiety-provoking situations (Attwood, 2003). Generalization of the skills outside of the counselling session may be facilitated with parent and/or peer involvement.

　　CBT and Asperger's Disorder. Traditional treatment of secondary anxiety disorders in children and youth has focused on the well-documented literature supporting the use of CBT (Sze & Wood, 2007). For typically developing adolescents, CBT has focused on two components: (a) skills training, and (b) application and practice (Sze & Wood, 2007). Although there is strong empirical support for CBT in treating childhood

anxiety, the evidence is just beginning to emerge for those with Asperger's Disorder. CBT has been one of the most common treatment approaches for anxiety and other co-morbid disorders in individuals with Asperger's Disorder, however many of these research projects rely on case studies or single-subject reports, making the evidence somewhat limited (Bauminger, 2002; Cardaciotto & Herbert, 2004; Hare, 1997; Reaven & Hepburn, 2003; Sofronoff, Attwood, & Hinton, 2005; Sofronoff, Attwood, Hinton, & Levin, 2007; Sze & Wood, 2007).

Cardaciotto and Herbert (2004) published a case study of a counselling treatment using CBT on a 23-year-old male diagnosed with Social Anxiety Disorder (SAD) and Asperger's Disorder. Fourteen weeks of CBT intervention addressed fear and avoidance of social situations using cognitive restructuring, role-playing, and homework assignments. Standardized assessments and self-reports demonstrated significant decreases in social anxiety and depression. Following the intervention, the participant no longer met the diagnostic criteria for SAD. Another case study by Hare (1997) utilized CBT for a 26-year-old male who was engaging in self-harm and had severe depression. The CBT intervention, involving journal writing, cognitive restructuring, identification and coping with feelings, and relaxation techniques, produced a significant reduction in depression scores. The depression scores were maintained at follow-up, which was completed two months following the intervention.

Reaven and Hepburn (2003) also completed a CBT case study with a 7-year-old female who met the criteria for Asperger's Disorder and had symptoms of moderate Obsessive Compulsive Disorder (OCD). Fourteen sessions were completed focusing on her OCD behaviour. The intervention focused on ranking these behaviours on a hierarchy

while using exposure techniques to gradually ascend the hierarchy and face anxiety provoking situations at each level. A 65% decrease was found on a scale for obsessive compulsive symptoms, with gains in her abilities to self-monitor and self-coach during events that triggered the behaviour.

In another case study of an 11-year-old girl with high-functioning autism, Sze and Wood (2007) used a family cognitive behavioural approach to treat social isolation, separation anxiety, generalized anxiety, and obsessive thoughts and behaviour. Sixteen sessions were completed over four months and focused on psychoeducation, independence skill building, hierarchy development, exposure therapy, coping skills, and friendship skills. At the end of treatment, the client no longer met diagnostic criteria for social anxiety disorder, generalized anxiety disorder (GAD), or OCD that was diagnosed at pre-treatment. Parent reports showed decreases in anxiety, with increased social skills and adaptive functioning.

Two group designs have been completed that utilized CBT to treat secondary anger and anxiety symptoms in children with Asperger's Disorder. Sofronoff and colleagues (2005) completed CBT group therapy with child dyads. Seventy-one children diagnosed with Asperger's Disorder participated in the study. Each child was assigned to one of three groups: a child-only intervention group, a child-parent intervention group, or a wait-list control group. Parents were only involved in the child-parent group, where they attended a group for caregivers to learn the skills taught in session and be able to coach their children in home-based projects. The CBT intervention was six weeks and involved emotional and affective education, social skill training, and strategies to deal with happiness, relaxation, and anxiety. Stress and anxiety management were addressed

using visual representations and worksheets. Each child's parent-rated level of anxiety decreased significantly in both the child-only intervention group and the child-parent groups, as compared to those levels in the wait-list control group. In addition, the child-parent group demonstrated significant decreases in anxiety as compared to the child-only intervention group, proving the importance of including parents to help practice and transfer skills to other environments.

A similar group counselling intervention was completed by Sofronoff et al. (2007), that taught anger management skills to children with Asperger's Disorder. The intervention consisted of six, two-hour groups. Forty-five families participated, with children working in dyads for the intervention and parents attending a parent group. Parents were instructed in how to assist at home with concepts introduced at the intervention. Results demonstrated an increase in the children's anger-management skills, decreases in incidents of anger, and increases in parental confidence in managing their children's anger. Generalization was also measured qualitatively, with 88% of teachers noticing a positive change in school behaviour from the program's inception.

In summary, it is obvious that the use of CBT interventions has been valuable in treating a number of core characteristics of Asperger's Disorder and secondary features. The intervention has been practical in treating a variety of secondary disorders, not only anxiety. With research slowly accumulating to support the intervention's effectiveness, group designs will only enhance support for the treatment's effectiveness. To date, the research demonstrates the promising effects of CBT intervention, but also highlights the need for adaptations to account for the disorder's characteristics.

Theory of Mind (ToM) Intervention

The cognitive profile in Asperger's Disorder cannot be ignored in counselling interventions. ToM delays in this population highlight the need for counsellors to be cognizant of the various processing methods, and to assimilate teaching into their intervention. Unlike typically developing children, these individuals also need to be taught how to interact with others. Teaching ToM, a skill deficit that may be a root problem in all social situations, gives the individual a greater ability to adapt to many circumstances. Contrarily, by teaching specific social skills, such as greetings and how to respond to questions, the applicability is limited to certain situations. Teaching a cognitive concept such as ToM allows the person to adjust his or her thinking and change behaviour in all interactions.

When identifying which social skills to teach, two main deficits have been identified: performance deficits and skill deficits. Performance deficits occur when an individual understands the social skill, but experiences anxiety during the actual situation that inhibits performance (Bellini, 2006). Skill deficits occur when an individual does not have the repertoire of skills necessary to perform the behaviour in the situations (Bellini, 2006). Individuals with Asperger's Disorder have a tendency to have more skill deficits, due to the inherent social difficulties of their disorder (Gaus, 2007). Unlike anxiety interventions for typically developing adolescents, anxiety interventions for those with Asperger's Disorder need to include instruction for skill deficits. Therefore, including skills training for ToM with traditional anxiety interventions will be more successful in accommodating this profile.

Research has begun to explore the effectiveness of ToM training for individuals with ASD. Much of the research measures ToM by using false-belief tasks, which create a situation where the participant has to infer another person's perspective that is false (Hughes, Jaffee, Happe, Taylor, Caspi, & Moffitt, 2005). One of the most popular false-belief tasks is the M&M task, in which a participant is shown a box of M&M's (Ozonoff & Miller, 1995). When the box is opened, the participant is surprised to see pencils. Participants are then asked what a new person entering the room would think was in the box. People with ToM abilities understand that the new person would think M&M's are in the box, given that all the new person has seen is the box. However, people with limited ToM skills respond saying that the other would think there are pencils in the box—demonstrating their own belief, not the belief of the other person.

ToM research for individuals with ASD has been limited in scope, whereby most studies demonstrate increases in the ToM task, but fail to show generalizations to everyday situations. Ozonoff and Miller (1995) taught adolescents with autism, social skills and theory of mind in group settings. Fourteen sessions focused on conversational skills, perspective-taking, and theory of mind. Results demonstrated increased performance on false-belief tasks as compared to the control group; however, according to parent and teacher social skill evaluations, the generalization of skills to other settings was limited. In a separate study, Hadwin, Baron-Cohen, Howlin, and Hill (1997) examined whether increased scores on false-belief tasks increased social communication in natural settings. Results revealed no increases in speech about others' mental states during conversation. Therefore, the researchers concluded that the ability to improve in

ToM may be a result of mastering the ToM task, not necessarily an increase in understanding the concept.

Studies investigating ToM have used various teaching methods. In fact, many ToM interventions have incorporated CBT strategies, including problem solving and cognitive mediation strategies (Ozonoff & Miller, 1995). CBT literature has suggested that the cognitive focus of CBT can assist in helping clients understand others' perspectives and read their behaviour, which are key components of ToM (Attwood, 2007; Gaus, 2007). Although not formally tested, many CBT interventions are including ToM teaching that naturally follows from cognitive perspective-taking exercises. For example, Bauminger (2007) used CBT to teach social skills in a group setting of 19 children with high-functioning autism and Asperger's Disorder. Results demonstrated increases in positive social behaviours with particular growth in social cognition skills, such as problem solving in social situations.

This project creates a cognitive-based intervention to incorporate ToM teaching. By incorporating ToM in counselling, a context is created by which skills can be discussed in session that relate to the client's everyday situations. After teaching the skills, counsellors can individualize treatment sessions to discuss the application of the strategies when clients work through daily struggles. Application of these skills can be assigned for homework and evaluated in follow-up sessions.

Hypotheses

There are two primary hypotheses for this research. First, it is hypothesized that participant and parent scores on measures of the participant's general and social anxiety will significantly decrease following CBT intervention. Second, it is hypothesized that

participant scores on advanced ToM tasks will increase significantly following the CBT intervention.

Method

Participants

Three adolescent males with Asperger's Disorder participated in the research study. Participants ranged from 13- to 16-years-old and each had a confirmed diagnosis of Asperger's Disorder from a practicing mental health professional or physician. Participants were recruited by flyers sent to the local autism society (see Appendix A). The recruitment letter was distributed to the membership via email. The study required that participants were adolescent males (aged 13 to 17) who had a diagnosis of Asperger's Disorder and experienced social anxiety. Parents reported that their children experienced social anxiety at the time of the study, and no formal diagnosis was required. All subjects responded to the researcher via phone, at which time the researcher asked questions to ensure the adolescents met the study criteria. Eight participants were approved to participate in the study according to the research proposal, and three signed-up.

No participant was excluded because they had a diagnosis of a secondary co-morbid disorder such as ADHD or Non-Verbal Learning Disability. Anxiety symptoms were confirmed by participant and parent reports. In an initial clinical interview, which was conducted individually with the parent and their child, the researcher asked questions to determine each participant's specific experiences of general and social anxiety.

Participants and their parents completed informed consent documents for participation. All participants finished the CBT intervention after having provided

consent to start the study. Each participant's name has been changed throughout the write-up of this study to protect his identity.

Individual Case Presentations

  Brandon. Brandon was 13 years and 10 months old at the commencement of the study. Brandon experienced high levels of anxiety across numerous situations and environments, as reported by both him and his mother. Anxiety tended to occur when completing homework, in anticipation of upcoming events, and when people broke rules (i.e., smoking, doing illegal drugs). When such rules were broken, Brandon, who did not necessarily pick up on social rules, would point these out to people then become upset if they continued to engage in these behaviours. Friendships would suffer as a result, and occasionally he reported peers' rule-breaking behaviour to adults. Anxiety was reported to be somewhat problematic in crowds, such as in busy malls or unfamiliar and new situations.

  When interacting with others, Brandon indicated difficulties understanding social subtleties including facial expressions, tone of voice, and sarcasm. Overtly, Brandon's frustration and anger was observed during social interactions, especially when others did not conform in a manner that matched his beliefs. Brandon was easily confused about others' intentions, and had little self-control over his anger and resulting behaviour. Much of his anxiety and misunderstandings resulted in anger or frustration directed towards parents, educators, and peers. He considered everyone in his class a friend, but spent little time with classmates after school. He spent most of his leisure time on the computer or watching TV, but reported he would like to have more close friends to spend free time with.

Throughout the study, Brandon was on a low dose of Risperdal. In the previous three months, Brandon had been involved in an eight-week social skills group with other individuals with Asperger's Disorder, focusing on social skills teaching. He had also attended a social skills summer camp for the previous three summers. He reported that these were somewhat helpful in teaching new social rules and behaviour. He found that the group's greatest benefits were the opportunities to meet new people and develop friendships. He had never attended counselling in the past.

Dustin. Dustin was 16 years and 2 months old when the study began. Dustin reported a significant amount of anxiety that spanned across most situations. Much of his anxiety focused around school settings, with continual anxiety about homework completion, course selection, upcoming exams, and in particular, provincial testing. He reported that the worst years of his life were in elementary school, where he experienced difficulties academically and socially with peers who teased him. Now in high school, he was more involved in school activities and reported that teachers and guidance counsellors helped him arrange situations to ease his anxiety.

Socially, he felt people did not befriend him, understand him, or accept him. He joined many school clubs to interact with others and to keep busy, however, many of these relationships did not continue outside school hours. He continued to feel intense anxiety around strangers, especially in crowds and big cities. His best friend was his brother, and most of his social interactions were spent with his family. He was also terrified of events portrayed in the media, such as murders and gang attacks.

In the preceding year, Dustin attended approximately 12 sessions of counselling to deal with anxiety around high school start-up. He felt that it alleviated some of his

anxiety regarding homework completion and organization. At the commencement of this intervention, Dustin appeared nervous and struggled to extend conversations beyond initial responses to questions. He stuttered and avoided eye contact when nervous. Dustin was not on any medications throughout treatment.

Rob. Rob was 16 years and 7 months old at the study's commencement. He and his mother reported different anxiety concerns than the other participants. Rob reported not experiencing much anxiety, although he appeared extremely anxious. Rob's mother reported that his anxiety caused him to avoid social situations and experience significant stress regarding academic achievements or homework completion. Much of his anxiety was reported to be experienced around other people in social situations. He reported that he enjoyed being alone. Rob related that he was awkward around other people, and was different than other kids his age. He did not believe that others would accept him because of these differences, nor did he think it was worth getting anxious over or trying to change.

The majority of Rob's time was spent doing homework, where he experienced much anxiety over task completion for school. He believed that schoolwork was structured and predictable, and therefore, would rather focus on academics than social interactions. In his spare time he watched TV and played video games, and also participated in Boy Scouts. His mother reported that he would leave an anxiety-provoking environment as a coping method, and occasionally engaged in self-talk to cope. Throughout the sessions he stuttered, appeared panicked, and apologized for not elaborating on questions asked by the researcher. He appeared uneasy during sessions, leaving the room when difficult topics arose.

Rob reported that counselling was not an appropriate strategy for him because he did not act like others with severe forms of autism. Due to a previous experience with a social skills group, he thought that this counselling would be similar and would not be valuable to him. He had attended eight sessions of social skills training prior to the beginning of the current intervention. Rob was on medication, Strattera, throughout the study.

Procedure

The participants' parents contacted the researcher, at which point preliminary questions were asked of them to determine if the participants met the study criteria. Both the participant and his parent met with the researcher prior to the intervention to complete informed consent for treatment (see Appendix B & C) and a clinical interview (see Appendix D). The clinical interview lasted approximately one half hour, and was used to gather information on the client's social anxiety, past counselling experiences, current medication(s), profile of social relationships, and other variables that might affect the intervention's outcome. Both the participant and his parent then completed two anxiety measures. An advanced ToM measure was administered to the participant by the researcher. The three measures were completed at two time points (pre-intervention and post-intervention) during the intervention process.

Eight one-hour sessions of counselling were provided to each participant. The researcher followed an intervention manual. The manual was designed for this study in order to provide consistent CBT strategies and concepts across participants in individual sessions. Counselling sessions followed similar themes to teach specific concepts, however, sessions were individualized for each participant's concerns and anxiety.

Sessions were videotaped and reviewed by the researcher's supervisor to ensure

adherence to the intervention manual and to provide the researcher with feedback on

counselling techniques. At the study's completion, participants wanting to continue with

counselling were referred to other professionals in the community.

Parent involvement included occasional explanations of the counselling strategies

and participation during the last 10 minutes of the sessions. When the participants

provided permission, the researcher would share information from the sessions,

successful achievements, and participant goals with the parents to assist the adolescent in

managing his anxiety outside the counselling sessions.

Intervention

The CBT intervention was structured to address topics traditionally covered in

dealing with anxiety in typically developing adolescents. The topics covered in CBT

groups by Ginsberg, Silverman, and Kurtines (1995) and Heimberg, Juster, Hope, and

Mattia (1995) were used as the structure for the intervention manual. Changes were made

to this intervention to adjust for the reasons why social anxiety occurs in Asperger's

Disorder as compared to typically developing individuals.

Anxiety in individuals with social phobia is thought to derive from catastrophic

thoughts regarding social situations (Ramsay et al., 2005). For individuals with

Asperger's Disorder, their anxiety is often derived from an inability to interpret what may

occur in a social situation (Ramsay et al., 2005). Therefore, the manual for this study

incorporated this differing perspective, while providing emphasis on ToM skills at the

beginning of the intervention to teach the skills to predict upcoming social situations.

Additional accommodations were also included that have been suggested for this population's learning style (Attwood, 2003; 2007). The sessions were designed to be concrete and a schedule of upcoming events was provided. Concepts were presented using visuals and worksheets wherever possible. The researcher was cognizant to use language that was concrete and clear, checked back with the participant for understanding, and provided ample time for processing. When discussions about affect arose, additional time was allocated to ensure understanding and provide education. As Attwood (2004a) suggested, examples that interested the participants were linked to their special interest, and used as often as possible. In addition, the participants were reinforced regularly for their strengths, talents, and intellect (Attwood, 2004a). Themes for each session were presented in the intervention manual with suggestions for variation and application to the specific participant's concerns.

Session one was used primarily as an introduction to counselling, and to begin establishing the working alliance between the researcher and each participant. The participants discussed their anxiety concerns and listed their goals for treatment. Each goal was then rated on a five-point likert scale for personal level of importance. A visual worksheet was used to create an anxiety hierarchy. Participants listed situations from those that were least to most anxiety-provoking, and placed these on the hierarchy. They were encouraged to include as many social anxiety-provoking situations as possible. Clients also rated their anxiety on a thermometer to assist in differentiating between varying levels of anxiety. This provided them with a method to communicate feelings associated with varying levels of anxiety, and to label situations in future sessions. Lastly,

a relaxation script was practiced that would be assigned for homework and used in future sessions when working through the anxiety hierarchy.

Sessions two and three focused on the assessment of current levels of affective understanding. Emotions and ToM were taught in a sequence throughout these two sessions. The ToM teaching was based on *Teaching Children with Autism to Mind-Read* (Howlin et al., 1999). This intervention program focuses on two primary components: teaching about emotions and teaching about informational states.

The teaching emotions component required participants to move through a series of exercises. The adolescents identified emotions in drawings and photographs, then predicted emotions based on situations, desires, and beliefs. In the latter cases, participants were required to express how a character would likely feel based on a comic-strip situation after they've considered the situation, the character's desire, and the character's belief.

In the second component, teaching about informational states, participants were moved through increasingly complex perspective-taking tasks in which they were required to predict actions and understand false beliefs. The researcher incorporated everyday examples and situations throughout this component to ensure the experience remained hands-on and skills learned would be transferable. When opportunities arose in future sessions, the researcher prompted the participant to apply these perspective-taking strategies to a situation they had recently faced in their life.

Sessions four through six introduced the concepts of CBT in dealing with anxiety. Together the researcher and client worked through the anxiety hierarchy that they had created in session one. CBT concepts included the identification of automatic thoughts,

generation of dispute handles, and cognitive restructuring. Clients were first taught how to identify automatic thoughts—the distorted cognitions that occur and influence feelings and actions. Dispute handles were then introduced as general questions they could ask themselves to test for cognitive distortions or automatic thoughts (Heimburg et al., 1995). For example, participants may create a dispute handle asking themselves what evidence they have to support the cognitive belief that everyone will laugh at them when they join in on a conversation. Rational responses to these self-posed questions were generated. The client learned cognitive restructuring, or the changing of dysfunctional thought processes with the incorporation of logical evidence to reinterpret these thought processes (Heimburg et al., 1995). These skills were practiced in session, and then given for homework.

Having learned and applied these strategies, the clients began working through the anxiety hierarchy by exposing themselves to situations rated low on the anxiety hierarchy, engaging in cognitive restructuring, and utilizing relaxation techniques. As they mastered lower levels, they gradually moved to the next higher anxiety-provoking situation on their hierarchy. The participant and researcher role-played these scenarios in the session, while participants faced natural situations for homework assignments.

Sessions seven and eight focused on continuing to work through the anxiety hierarchy and to teach social skills for situations on the participant's hierarchy. Since individuals with Asperger's Disorder often suffer from skill deficits, situations were assessed individually, and as each participant moved up their anxiety hierarchy, the researcher and participant decided which social skills needed to be taught for that situation. The last exercise in session eight was to brainstorm methods the participant

could use to maintain the gains made in the counselling sessions, and continue working through their hierarchy. The last two sessions also prepared the participants for the intervention termination, and for the end of the working alliance between the researcher and participant.

Individual Case Interventions

Strategies, suggestions, and emphasis varied across participants depending on their current reports of anxiety and situations occurring outside of the sessions. Variations and emphases for each client are reported below.

Brandon. During the intervention, there were a number of instances that arose at school and home when Brandon's anger escalated to a point where he had extreme difficulties controlling his behaviour. At one session in which he was particularly angry, he was able to draw a mountain that described how his anger escalated. Triggers to the anger peak, and situations that escalated the anger, were explored. Throughout a number of sessions, this drawing was used as a visual that Brandon could draw upon to understand or explain his triggers and to explore his automatic thoughts. He was then able to take the thermometer that the intervention manual utilized to explain various anger meters for different situations. Brandon identified much more with the anger that he experienced than with the anxiety that triggered this anger, as his anger seemed to be quite prevalent at the time of the intervention. The mountain theme was also used to explain relaxing events that brought him down from the escalation of anger. He was able to draw numerous thermometers that explained his levels of relaxation as well.

During the intervention, Brandon also had a period during which he reported hearing voices to hurt others when he was extremely angry. As a result, a portion of each

session was devoted to following up with these auditory messages. His mother was included in many of these discussions to ensure safety. Upon further exploration, Brandon and the researcher determined that the voices were more similar to thoughts that seemed to spiral out of control when his anxiety heightened. These thoughts were investigated similar to other automatic thoughts, where the distortions were analyzed and positive rebuttals brainstormed. Brandon utilized many of the strategies to deal with anger outside the counselling sessions. Homework assignments from the intervention manual were completed, however, this was done approximately 50 percent of the time.

Since Brandon's circumstances provided increased opportunities for his mother's involvement, strategies were suggested and implemented at home to alleviate some of his anger. The family implemented a visual schedule where each member of the family's activities were posted to provide advanced warning when Brandon would be at home and when others would be at home. This provided clarification of times when he would be able to go on the family computer to avoid disappointment. The relaxation script was also shared with his mother, and they practiced this at home together.

Much of the ToM practical applications were completed around situations that occurred throughout the intervention with Brandon's peers, teachers, and family. Peers occasionally asked him to do embarrassing tasks to gain their friendship. He had a difficult time understanding the peers' intentions, and much perspective-taking was taught to help him comprehend this. Sessions were spent interpreting the teacher's perspective around written and verbal comments on academic tasks, since Brandon often took the comments as personal attacks. Lastly, much perspective-taking was completed around activities at home where Brandon sought independence, but had not informed his

parents of this. Sessions focused on recognizing that his family did not have access to his mental state, and consequently he would need to communicate this to them.

Dustin. For Dustin, much of the intervention focused around academic tasks. Since he had previous negative experiences with exams, and it was nearing the end of the school year, his anxiety regarding exams was a substantial focus. Much time was spent focusing on Dustin's intellectual capacity, specifically his strengths and abilities in completing academic work. Due to this negative view of his abilities, it was difficult for him to generate positive rebuttals. Focusing on generating positive statements resulted in a realization that many of his academic failures were a consequence of performance barriers, such as anxiety, not necessarily skill deficits. Dustin spent additional time brainstorming and practicing relaxation exercises to keep his anxiety under control. All of the homework exercises provided from the intervention manual were completed and returned the following week.

During discussions, Dustin revealed that he was slightly confused on how educators had knowledge of his disorder and his past academic achievements before he had met them. This had caused him a significant amount of anxiety. He thought people, who had not met him, had an unexplained knowledge about his skills and deficits. The researcher and Dustin took one session to review his school record in order to enlighten him as to what educators had access to. Clinical reports that had been completed over the years were explained, and Dustin had the opportunity to read them and ask questions. This was the first time he had seen any of these reports, and he began to appreciate what information others had access to. Dustin's mother was included in this discussion, which promoted further dialogue at home to answer Dustin's questions.

For Dustin, ToM teaching predominately focused on correctly interpreting others' perspectives in social situations. On basic tasks, Dustin readily understood others' intentions, including sarcasm and figures of speech. Many of his misinterpretations were combined with negative automatic thoughts, assuming others thought negatively of him because he was socially awkward. Analysis showed he interpreted others' intentions in this manner because of a lack of confidence in his own abilities in social situations. Accordingly, ToM teaching was combined with cognitive restructuring to overcome the assumption that others were always judging him negatively in social situations.

Rob. Rob's intervention was quite different than that of the other two participants. Much of the first two sessions focused on the purpose of counselling, enabling Rob to determine if counselling would be a worthwhile effort to continue. Therefore, deviations from the intervention manual occurred. Throughout the study, numerous opportunities were presented to him to discontinue the counselling sessions, however, he expressed a desire to continue with the intervention. It took the majority of the eight sessions to build trust with the researcher empowering Rob to discuss concerns.

Rob was initially able to identify two short-term goals, however, he was indecisive in follow-up sessions whether to continue with these goals. Unlike the other participants, Rob did not feel comfortable discussing social anxiety, so exercises focused exclusively on academic anxiety. The majority of time was spent on the thermometer activity, where he was able to express levels of academic anxiety in different situations. The thermometer was referred to multiple times in the following sessions as a method to communicate and quantify the levels of anxiety he identified.

Due to Rob's discomfort with relaxation scripts, these were excluded. However, activities that provided relaxing effects were brainstormed during which time Rob stated that a minimal amount of anxiety was positive for motivation and he did not want to lose this drive. Rob began to identify automatic thoughts in day-to-day situations. As a result of time constraints and Rob's resistance, the process of cognitive restructuring was limited and was not reported to have been applied outside the counselling sessions. Specific social skill training was also not addressed during the counselling, as Rob stated this area of change was unnecessary. Throughout the intervention, Rob did not return the homework assignments, and was unable to provide descriptions of situations where he applied the strategies outside the counselling setting.

ToM was taught to Rob, similar to the other participants. He demonstrated a high level of comprehension when completing exercises and activities that involved understanding others' intentions and perspectives. However, he failed to generate examples, where the researcher could practice applying this skill to his individualized situations. Discussions focusing on Rob's interactions with others were avoided, because he expressed a desire to circumvent discussions about social situations.

Measures

Screen for Child Anxiety Related Disorders (SCARED)

The SCARED is a 41-item self-report measure that examines overall and specific anxieties related to the diagnoses listed in the *DSM-IV* for children and adolescents over eight years of age (Hale, Raaijmakers, Muris, & Meeus, 2005) (See Appendix E). The individual responds to a three-point likert scale, where the sum of the responses indicate scores that reflect possible *DSM* diagnoses. A total score is computed; a score of 25 or

above provides some indications of the presence of an anxiety disorder (Birmaher, Khetarpal, Cully, Brent, & McKenzie, 1995a; 1995b). Subscales on the measure include panic disorder, generalized anxiety disorder, separation anxiety disorder, social anxiety disorder, and significant school avoidance. Subscale scores are also totalled and when these are above a specified cut-off, indicate the possible presence of a specific anxiety disorder. A parent version of the measure lists similar items that are rephrased to reflect a parental point of view (Muris, Merckelbach, VanBrakel, & Mayer, 1999) (See Appendix F).

The SCARED has been found to be reliable and valid. An internal consistency coefficient of 0.92 was found for the total score, while coefficients for specific sub-scales ranged from 0.54 to 0.89 on both the parent and child versions (Muris et al., 1999). The test-retest correlation was also significant, with a score of 0.81 (Muris et al., 1999).

Social Worries Questionnaire (SWQ)

The SWQ is a 13-item self-report measure for children aged 5 to18 (Spence, 1995) (See Appendix G). It examines social worries about commonly avoided situations that involve some type of evaluation of themselves by others (Johnson, 2005). The questionnaire's items are commonly feared situations reported by children and adolescents who are socially phobic (Spence, 1995). Participants respond to each question on a three-point likert scale. The parent version consists of 10 items that assesses predominately social situations at home where parents have more contact with their child (Spence, 1995) (see Appendix H). Scores are totalled, with a maximum potential score of 26 for the participant version and 20 for the parent version.

The psychometric properties of the measure are quite high, with an internal reliability alpha coefficient of 0.94 for the parent version and 0.84 for the pupil version (Spence, 1995). Neither version of the measure showed any significant difference in scores across age or sex. The construct validity was also high when the scale was compared to the Children's Social Fears Questionnaire, a measure examining affect and cognitive fear responses to social situations. The correlation between the two measures was 0.70, demonstrating measurement of the same construct.

Stories from Everyday Life

The *Stories from Everyday Life* measure is an advanced second-order ToM task designed specifically for individuals with Asperger's Disorder. The measure includes 26 stories evaluating one's ability to infer physical and mental states in everyday contexts (Kaland et al., 2002) (See Appendix I). The 26 stories are divided into 13 pairs depicting various situations that include: lies, white lies, figures of speech, misunderstandings, double bluffs, irony, persuasion, contrary emotions, forgetting, jealousy, intentions, empathy, and social blunders.

After each story, 10-15 questions assess comprehension of the story and the inferences. The majority of questions are control questions to determine if the participant understood the general idea of the story. A physical inference question is located near the beginning of the story, and the two mental inference questions are at the end. Physical inferences are questions where the answer was not actually provided in the story, but the participant had to infer the physical state from the context of the story. Similarly, mental inferences ask participants to infer the mental state of someone in the story based on the context provided. The mental inference questions include a comprehension question to

assess understanding of the inference, as well as a justification question for the participant to explain why they believe the person holds the mental state. The original stories were modified slightly for this project to reflect North American terms, currency, and spellings that participants would recognize.

 Participants' scores are based on the accuracy of their answers. Prompts are provided by the researcher to ensure understanding of the participant's answer. Two points are awarded for fully correct answers, one point for partially correct answers, and zero for incorrect answers. Comprehension questions are omitted, so that only the physical and mental inference questions are scored for a possible maximum score of 26 on each half of the measure. In the current study, one pair of stories was provided at pre-intervention, and the second pair at post-intervention.

To date, the validity and reliability of the measure has not been analyzed. In spite of this, empirical results have demonstrated that differences on the physical inference questions are not statistically significant between controls and adolescents with Asperger's Disorder (Kaland et al., 2002). However, significant differences were found between groups for mental inference tasks. Those with Asperger's Disorder scored significantly lower than those in the control group, demonstrating the difficulty people with Asperger's Disorder have with ToM.

<div align="center">Results</div>

Preliminary analyses revealed that the distribution of the data was sufficient for the utilization of t-tests for pre- and post-intervention measures. The data set was completed for participant and parent reports on the SCARED and SWQ questionnaires. Missing data for post-intervention scores on the *Stories from Everyday Life* measure

resulted in a separate evaluation of that data. Participant, parent, and researcher

qualitative evaluations of the intervention were included in the evaluations from

conversations and videotaped sessions.

<p align="center">*SCARED*</p>

A series of repeated measures t-tests were completed to compare levels of general

anxiety across time from pre- to post-intervention on both participant and parent reports.

Six scores from the SCARED were analyzed, including the total score and five sub-

scales: panic disorder or significant somatic symptoms, generalized anxiety disorder,

separation anxiety disorder, social anxiety disorder, and significant school avoidance.

Participant reports on the total SCARED anxiety score demonstrated an overall

reduction from pre-intervention (M = 32.00) to post-intervention (M =18.67), although

this did not reach significance (t(2) = 2.84, p = .11). Means decreased across SCARED

subscales, as shown in Table 1, with major reductions in panic disorder, separation

anxiety, and social anxiety. Participant reports of anxiety on the panic disorder subscale

significantly reduced from pre-intervention (M = 6.67) to post-intervention (M = 3.00,

t(2) = 4.16, p = .05). The remaining subscales also failed to reach significance.

Parent reports on total SCARED anxiety scores also decreased following

intervention. Parents rated their children's anxiety as reduced from pre-intervention (M =

22.67) to post-intervention (M = 13.00), although this did not reach significance (t(2) =

1.97, p = .19). Parent reports also showed reduced anxiety on SCARED subscales (see

Table 1), and were most notable for generalized anxiety disorder, separation anxiety

disorder, social anxiety disorder, and significant school avoidance. Generalized anxiety

disorder significantly decreased from pre-intervention (M = 9.00) to post-intervention (M

= 6.67, t(2) = 7.00, p = .02) for parent ratings of their children's anxiety.

Table 1. Mean SCARED scores are represented across participant self-reports and parent

reports of their children's anxiety. SCARED scores represent the total score and scores

on the five subscales: panic disorder, generalized anxiety, separation anxiety, social

anxiety, and school avoidance. Scores show the comparison of reports from pre-

intervention to post-intervention for both participant and parent reports.

Table 1

Mean Participant and Parent SCARED Scores (Standard Deviations in Brackets)

SCARED	Participant		Parent	
	Pre	Post	Pre	Post
Total	32.00 (19.98)	18.67 (14.15)	22.67 (13.61)	13.00 (8.54)
Panic Disorder	6.67 (4.04)	3.00 (2.65)	1.67 (2.08)	1.00 (1.00)
Generalized Anxiety	9.67 (5.50)	8.67 (4.61)	9.00 (4.58)	6.67 (4.04)
Separation Anxiety	5.00 (4.58)	0.67 (1.16)	3.67 (3.51)	1.00 (1.00)
Social Anxiety	7.67 (4.04)	4.67 (4.73)	6.00 (3.61)	3.67 (4.04)
School Avoidance	3.33 (3.22)	1.67 (1.16)	2.33 (3.22)	0.67 (0.58)

Note. Pre refers to scores attained before the intervention, while Post refers to scores attained

after the intervention.

The SCARED provides cut-off scores that indicate the possible presence of a *DSM-IV*
diagnosis. Two of the three participants' total scores indicated possible anxiety disorders
prior to treatment. Although both participants' scores decreased, only one no longer met
the criteria for an anxiety disorder (see Table 2). One of the parent's total scores for their
child's anxiety reduced from a clinically significant score to not meeting the criteria
following treatment. Five instances occurred on SCARED subscales where parent and
participant scores no longer met the criteria for specific anxiety disorders after the
intervention.

Table 2. SCARED scores for participant self-reports and parent's ratings of their children's anxiety. Highlights differences from pre- to post-intervention and instances where the clients meet the clinically significant cut-off according to the SCARED.

Table 2

Participant and Parent SCARED Scores Indicating Presence of Anxiety Disorders

	Participant		Parent	
SCARED	Pre	Post	Pre	Post
	Brandon			
Total	27[a]	10	18	5
Panic Disorder	6	2	0	1
Generalized Anxiety	7	6	5	3
Separation Anxiety	6[a]	0	7[a]	1
Social Anxiety	7	1	5	0
School Avoidance	1	1	1	0
	Dustin			
Total	54[a]	35[a]	38[a]	22
Panic Disorder	11[a]	6	4	0
Generalized Anxiety	16[a]	14[a]	14[a]	11[a]
Separation Anxiety	9[a]	2	4	2
Social Anxiety	12[a]	10[a]	10[a]	8[a]
School Avoidance	7[a]	3[a]	6[a]	1
	Rob			
Total	15	11	12	12
Panic Disorder	3	1	1	2
Generalized Anxiety	6	6	8	6
Separation Anxiety	0	0	0	0
Social Anxiety	4	3	3	3
School Avoidance	2	1	0	1

[a]Clinically significant score may indicate presence of anxiety disorder as per *DSM-IV*.

SWQ

Repeated measures t-tests were also completed for participant and parent reported reductions in social anxiety across time from pre- to post-intervention. Responses on the SWQ were totalled, with a possible maximum score of 26 and 20 for participant and parent questionnaires, respectively.

Averaged results demonstrated reduced social anxiety from pre-intervention (M = 10.33) to post-intervention (M = 6.33) for participant reports, although this was not significant (t(2) = 1.33, p = .31). Parent measures of their child's social anxiety also decreased from pre-intervention (M = 11.00) to post-intervention (M = 2.33), however, these were also not significant (t(2) = 1.93, p = .19).

Although reductions in social anxiety were not significant, there were large individual changes as demonstrated in Table 3. Brandon, Dustin, and Rob demonstrated 13, 53, and 25 percent decreases respectively in social anxiety as rated on the SWQ. Parent ratings on the SWQ for Brandon decreased from 11 to 0, a 100 percent decrease, whereas Dustin's parent's ratings decreased from 16 to 1, a 94 percent decrease. Parent reports for Rob did not demonstrate any change following intervention.

Table 3. SWQ scores listed by participant. Participant self-reports and parent reports of their children's anxiety are listed. Pre- to post-intervention differences can be seen.

Table 3

Participant and Parent SWQ Scores from Pre- to Post-Intervention

	Participant		Parent	
Subject	Pre	Post	Pre	Post
Brandon	8	7	11	0
Dustin	19	9	16	1
Rob	4	3	6	6

Stories from Everyday Life

Due to the lengthy nature of the Stories from Everyday Life test, the measure was not completed by all participants at either time point. The data set is complete for pre-intervention tasks across all participants. One participant did complete both the pre- and post-intervention task. The information could not be analyzed due to these circumstances, and no significant changes in scores were noted.

Pre-intervention scores for the physical inference task ranged from 19 to 22 (M = 20.3) out of a possible score of 26. This was slightly lower than the empirical research has demonstrated, for which participants with Asperger's Disorder attained a mean score of 23.9 (Kaland et al., 2002). Scores on the mental inference task ranged from 10 to 23 (M = 18.3) out of 26 possible points. This was similar to earlier research, where participants with Asperger's Disorder attained a mean score of 18 (Kaland et al., 2002).

Dustin completed the measure at pre- and post-intervention. On physical inference tasks, his score increased from 19 to 25. However, on mental inference tasks this trend was reversed, and decreased from 22 to 19. This did not follow the hypothesis that mental inferences would increase following ToM teaching during the intervention.

Individual Case Results

Brandon

At the end of the intervention, Brandon noted he had achieved two out of his eight primary goals. He reported being able to befriend new people and to prevent himself from becoming annoyed as quickly. He indicated that he partially achieved four other goals, which included greeting new people, reading people's faces more accurately, starting conversations, and maintaining conversations. He reported that he did not

achieve the goals intended to reduce the speed and number of activities he completes in a day, or to be invited into social situations by peers.

Brandon reported that a number of positive events in his life were improving. He had been receiving compliments from his parents and teachers regarding his increased independence and positive behaviour. He noted specific changes at the end of the intervention:

> I don't tend to get that frustrated anymore, and I don't tend to go in that rage cycle much anymore, and people haven't been repeating things over and over and annoying me and...anymore, and I don't think people have been trying to find ways to get a rise out of me anymore...And another change is, I don't play videogames that much anymore... I'm still a big fan of videogames, just, it's just that I basically don't have the time to play them anymore. I am occupied with other things.

He noted that he found the counselling helpful and would have liked to continue the sessions. At the conclusion of the study, he planned to continue the sessions privately. He noted that one of the biggest benefits to counselling was that he gained comfort in confiding in the researcher and having someone to listen to him unconditionally. This helped him temporarily overcome some situations. He said:

> I am the puny shrimp in every, every situation in my family. I am like the bystander in the community who...is at a protest against the government. That's what I feel like. But, but, are what me and my group saying getting noticed by the government? Basically, I'll tell you what the government basically says, STFU. And GTFO...You're the first person I've told all my emotions feel like. No one

else has the time to listen...Every time I'm not in school, I feel alone...It feels like I'm in a constant sea full of scorpions and bees being stinged constantly while being weighted down. But, I never die. It just... The pain just keeps going on and on. Like, sinking and getting farther away from the light...Because the swarms of enemies are numerous and I am only one person in a sea of nothing... The most I can stay afloat for is 24 hours to 3 days and then I start sinking again...See this is the reason, and this is the first person I told this to... I don't want anyone to know except someone I know I can trust. And you are the only one I know I can trust for more than five minutes... That just won't time me for five minutes.

He stated others would give him time limits as to how long he could talk, and were not truly listening to him. Due to Brandon's perception that he trusted the researcher and that the researcher was listening to him, he revealed emotions he had not disclosed to others.

Brandon's mother reported a number of positive changes as a result of the intervention. She noticed that he was able to use deep breathing and relaxation exercises when he became frustrated, and she observed that he was using self-talk to handle potentially annoying situations. She also reported an increased ability for her son to express feelings both verbally and in writing.

Additionally, his mother detected differences in Brandon's ability to socialize with peers. He appeared able to recognize when to avoid frustrating social situations and when to join in positive ones. Brandon appeared able to avoid those peers who made fun of him and yet was able to join in with other peers participating in pro-social activities such as soccer. Brandon's parents stated that he seemed happier overall and was experiencing less anxiety at the end of the intervention. They related that he coped with

more of his anxiety by planning ahead and asking to be more independent when possible.

His parents described that the one-to-one nature of the counselling sessions were helpful

in that they allowed him to confide in someone. As a result, his parents were going to

seek private counselling as per Brandon's request.

Clinical impression. Brandon demonstrated significant gains throughout the

counselling sessions, and applied various strategies from his counselling to everyday

events. He experienced a number of crises during the study during which he experienced

extreme anxiety and heard voices that instructed him to hurt others when he was

frustrated. As he worked through these periods, he demonstrated growth in his ability to

describe his feelings, including both external triggers and thoughts which precipitated his

anxiety, anger, or voices. This was generalized beyond the counselling sessions. He

described and communicated these feelings to family members or school personnel

during potentially frustrating situations, preventing his anger from escalating. He was

able to identify the thoughts and situations that precipitated his hearing of voices to offset

his anger from escalating. His perceptions of someone unconditionally listening to him

and the establishment of the working alliance emerged as a major contribution to the

reported changes.

Following the intervention, Brandon's anger intensity diminished allowing him to

become proficient at preventing triggers from escalating into crises. He also became

competent in considering other's perspectives in some potentially frustrating situations.

Although not always understanding others' perspectives, he was capable of stopping and

considering that the other person may have a different perspective at which time he

would inquire before becoming angry.

Anger was the emotion Brandon most readily expressed. He had limited social awareness compared to other participants, thus tended to situate himself in potentially embarrassing social situations without having realized. For example, he would say socially awkward statements or discuss information that did not interest his peers. He would often enter a situation, possibly acting awkward or breaking social rules. Consequently, he was asked to leave the situation or left without becoming aware of how his behaviour affected peers. Realization came afterwards for Brandon, followed by increased anxiety. This would result in frustration and his anger would be expressed. The fact that reports highlighted decreases in anger and frustration also contributes support for decreases in precipitating anxiety.

Dustin

At the completion of the intervention, Dustin noted considerable progress towards his goals. Dustin believed he had reached four of his six goals: worrying less about what others thought about him, being comfortable and confident in taking exams, dealing with the embarrassment in social situations, and increasing time management. He remarked that he somewhat reached two goals: to start and maintain a conversation and to present in front of the class.

He reported he was becoming cognizant of his thought processes in many situations, including social situations. In the last session, he found himself questioning his thought process when walking down the hall and noticed people were looking at him. In the past, he found himself jumping to the conclusion that these peers were ridiculing him, but caught this automatic thought and concluded that there was no evidence to support this. Instead, he was able to greet the group of peers and interaction was successful. He

also initially reported being unconfident in front of others, especially when he would see his outgoing sister at the school. The actions and participation of his sister in school talent shows and clubs caused him extreme anxiety at the beginning of the study. This anxiety was diminished at the end of the study.

Another major gain for Dustin was a reduction in anxiety regarding his teachers' perceptions of him. He reported feeling less worried about educators' perspectives because he was aware of how they received information about his background and diagnosis. He was confident because he accepted the school records he had reviewed and recognized that educators likely had read these, but that this was not a reflection of him personally.

The study ended shortly after the high school exam period. Dustin reported having much less anxiety during this time period than in previous years, and reported using various coping strategies to manage his stress. In particular, Dustin identified automatic thoughts and used dispute handles to reinterpret his potentially self-defeating thoughts. He remarked that taking tests was much less anxiety provoking, moving from a seven out of ten on the fear hierarchy to a five or six. He also became an advocate for himself and developed strategies to deal with the stress of exams. He noted:

> I asked the teacher to give me the exam one piece of paper at a time. So, I don't get... So, I don't get stressed over the exam. Because I figured... because if I see a whole bunch of pages, I won't want to do the exam...Well, I'll do all the hard ones... the ones I know first, even if they are hard, but, if I have ones that I don't know I'll leave them and wait for the teacher to be available to ask questions and all that...

He spoke optimistically about the exams, reporting how he altered his thought processes to overcome his anxiety and developed strategies to manage potential problems.

Dustin's mother reported that the intervention was successful in helping him deal with social and academic tasks, noticing a significant reduction in Dustin's anxiety. In particular, she remarked that the counselling alone had helped the exam period be a "breeze" in comparison to previous years, when the exam period was perceived as difficult and anxiety-provoking. She reported being excited about the counselling and mentioned that it was worthwhile for the changes she observed in her son.

Clinical impression. When Dustin first attended counselling, he demonstrated significant signs of anxiety: appeared physically uncomfortable, stuttered, used little eye contact, and struggled to carry out a conversation. By the end of the intervention, he appeared more relaxed in sessions and exhibited less physical signs of anxiety. He was willing to initiate conversations, voluntarily brought up disconcerting situations, and openly expressed his anxiety.

Dustin showed diligence in completing homework; he returned each week with written journals and worksheets that tracked his automatic thoughts, dispute handles, and other successful coping strategies. His speech altered from discussing experiences in a self-defeating manner to expressing confidence in his abilities. He was requesting and relying less on guidance counsellors or resource teachers for assistance, and was carrying out independent tasks more confidently. He also appeared less worried about the possibility of traumatic experiences happening to him or his family members.

Dustin demonstrated numerous situations weekly when he was able to apply strategies from the sessions. He even applied these strategies to arguments with his

siblings, which had not been discussed as a concern in the counselling sessions. He was particularly successful in applying strategies to academic situations where he had previously experienced the most anxiety. Socially, he went out of his comfort zone and identified some of the automatic thoughts that had prevented him from interacting with others. He showed talent in identifying the self-defeating thoughts, and began to develop self-confidence in these situations as well.

Dustin struggled before with both skill deficits and performance deficits, which caused him much anxiety. His growth was impressive in that he worked through his fear hierarchy to first overcome the skill deficits, and then face his performance anxiety. At the conclusion of the intervention, he related that his anxiety had significantly decreased in each of the progressively higher-ranking levels of the fear hierarchy. Essentially, he had overcome many of the anxieties that defeated him before the intervention.

Rob

At the end of intervention, Rob reported little growth towards his personal goals. He did not make formal goals or identify specific areas for change throughout the treatment. Two areas that were identified as potential goals were calming down when feeling overwhelmed with homework and dealing with his brother during contentious issues. In follow-up sessions these areas were not consistently identified as concerning for Rob.

Rob reported that his anxiety had decreased, and attributed this to the onset of summer vacation and the decreased demands of schoolwork. He stated that he was unwilling to decrease much of his anxiety, as it assists him to remain motivated, especially for schoolwork. The strategies that he used most frequently were to take deep

breaths and to take a break from the situation. Rob stated that counselling was not that useful to him because he disbelieved that he had areas to adjust, and was dealing adequately with his anxiety to get his schoolwork done. When asked if counselling had produced any changes, he responded with:

> Um, I don't really know... I am not sure if we made any significant progress at all...I don't know, I just don't feel that my stress level is any different or I am doing anything that exactly changed my perspective on anything...Well, nothing we've done over the time we've been together has really, has really changed my perspective...

He expressed that the stress he had experienced around social situations was something that he did not wish to discuss, and the lack of change was acceptable to him because he was not "horrible with social situations." He did not want to stop the intervention early, as he wanted to maintain the commitment that he had made. However, when asked about continuing counselling at the current time or in the future, he replied with:

> Well, I'm not sure if [counselling] is something that is going to have a profound influence on my life, and I'm not sure if I just feel comfortable with more counselling really. Just, I don't think I want to do anymore of it...Yes, it does feel a little awkward.

Rob's mother did not notice a significant change or reduction in anxiety. She recognized his resistance to counselling and his inability to identify the areas she observed him struggling with. She noted that he still avoided anxiety-provoking situations by leaving the room to go to the bathroom when his anxiety appeared. His mother attended one session to promote him joining a club or activity at school as

suggested by a teacher. Although some promise was shown that he may take actions towards this goal, she reported that he did not follow-up on this.

She related that at this point, Rob was not ready for change to deal with the anxiety that he faced on a daily basis. She viewed him being self-critical and confused on how to handle situations. She observed the benefits that counselling could provide to her son and had completed additional research to explore other counselling options after the study was finished. She intended to move forward with future interventions at a time when Rob was willing.

Clinical impression. Throughout the intervention, the anxiety that Rob faced was apparent in many areas. He found it very difficult to carry on a conversation, stuttered when talking about difficult situations, left the room on many occasions, and used tactics to avoid coming into the session (i.e., extra bathroom breaks, going to the store after his mother dropped him off). He was resistant to the counselling sessions and was rarely able to discuss the anxiety he was experiencing. The avoidance techniques may be a result of the fact that the sessions were anxiety-provoking for Rob.

In three sessions, Rob was able to describe how he performed in social settings and stressful academic situations. However, beyond initial disclosures regarding not fitting in and being unclear about what to do in social situations, he was unwilling to discuss this matter further. He remarked that he was socially awkward, did not fit in, and this was something that could not be learned.

When the researcher addressed Rob's tendency to first disclose feelings then back away in the counselling session, Rob admitted that this was accurate and he was not ready to discuss these situations further. When conversing about strategies, he indicated

that some of the strategies (i.e., the thermometer) were somewhat confusing and clumsy. Previous to these sessions, he had not engaged in self-reflection or made efforts to identify his own emotions. These concepts were difficult for him to comprehend. He may have not applied strategies outside of the counselling session because identifying his own emotions was new to him. Additional time, beyond the number of sessions in the research project, may have been required to assist Rob in identifying his emotions before moving on to application and change.

Rob did make progress in recognizing the levels of anxiety he experienced, although he was uncomfortable identifying anxiety in social situations. Progress was observed in establishing a working alliance with the counsellor since Rob's body language, speech, and conversation appeared more relaxed in the last two sessions. At the intervention's end he appeared to contemplate change. Because this did not appear until the end of the intervention, the counselling sessions were not highly influential in addressing or alleviating the anxiety he was facing.

Discussion

The current project set out to answer two primary hypotheses. The first hypothesis was partially supported in that rates of participant anxiety decreased following the CBT intervention. It was only partially confirmed because two anxiety subscales significantly decreased, whereas the others failed to reach significance. Nonetheless, anxiety trends declined across the participant and parent reports for a variety of anxiety subscales. The second hypothesis was not supported. Data from the study was not sufficient to accurately determine if ToM skills increased. Available data did not illustrate increases in ToM skills following the CBT intervention.

Anxiety

Overall, anxiety scores did decrease across participants and questionnaires from pre-to post-intervention. However, few scores reached significance and inconsistencies did occur across participants. A significant finding was found on the participant's self-reports of the SCARED subscale for panic disorder. This may demonstrate the coping abilities the participants acquired to guard against immediately becoming anxious in a potentially stressful situation, which may be precursors to panic attacks. CBT strategies, whereby participants are taught how to reanalyze their thought patterns during such a situation, may have assisted in this process. Together with relaxation exercises, this may prevent the stress that causes participants to feel anxious.

Parent reports of their children's anxiety also significantly decreased on the SCARED subscale for generalized anxiety. In anecdotal parent reports, parents noticed an overall decrease in levels of anxiety during everyday situations. Parents commented that although particular events continued to trigger anxiety, they noticed an overall reduction in anxiety throughout the day. This global reduction seems reasonable given that parents are often responding based on the multiple experiences at home, in reports from school, and in extracurricular activities.

Taken together with anecdotal reports, results demonstrated preliminary support for the use of CBT in reducing anxiety in adolescents with Asperger's Disorder. The intervention demonstrated significant gains for two participants to reduce numerous types of anxiety as reported in self-reports, parent reports, and noted behaviour change. The third participant experienced little change. The variability in responses across the participants on the anxiety measures was a factor as to why few subscales reached

significance. Together with the modest number of participants in this study, the data did not have enough power to reach significance. Nonetheless, the degree of anxiety reductions in individual participants should not be understated.

The anxiety change noted in the individual case results highlights the degree of change and the resulting enhancements to quality of life for these individuals. For Dustin, he experienced significant gains in reducing academic anxiety. As a result, he was able to succeed in an academic setting and show others his true potential. This increased performance leads to increased opportunities for post-secondary education and future employment opportunities. This affects social opportunities as well, as his peers now see these strengths. For Brandon, the decreased anxiety and anger increased his quality of life in many settings. By becoming cognizant of this stress and controlling it, he was able to have more successful interactions with his teachers, family, and peers. Socially, he was able to take others' perspectives, thus leading to more successful and healthy relationships with peers. For Rob, his insight into his emotions and anxiety may bring some self-reflection at a later time. Although he did not make the gains of the other two participants, his self-awareness may be the first step for him to initiate change.

When examining anxiety decreases, Brandon and Dustin's decreased SCARED anxiety scores highlight the impact of the CBT intervention. Since the SCARED measured a variety of different anxiety disorders, the overall picture of participants' anxiety was captured. Both parent and participant SCARED anxiety scores decreased across the total score and all subscales, except for Brandon's school avoidance, which did not change. The SCARED scores have a clinically significant cut-off, which indicates the possible presence of a specific *DSM-IV* anxiety disorder diagnosis. This is significant to

note, as decreases below this cut-off may make the anxiety less invasive and less likely to be considered as clinically impacting the individual's day-to-day life. Both Brandon and Dustin did note the reduction in social and academic anxiety, positively impacting their quality of life. In Brandon's case, his total score and separation anxiety subscale reduced such that it no longer met the clinically significant cut-off following the intervention. Dustin's scores were well above the clinically significant cut-off on the total score and all subscales prior to the intervention. Following the intervention, Dustin no longer met the cut-off for two subscales. Parent reports for both adolescents followed similar trends. Not only did the anxiety decrease for these two individuals, but it decreased to levels that typically developing adolescents may face. In turn, this allowed the participants more opportunities to participate in the variety of activities common in adolescence.

Comparable findings were also seen when examining decreases in social anxiety for both Brandon and Dustin. As their social anxieties decreased, they became more socially competent, increasing opportunities to share experiences with others. For both participants, performance deficits and skill deficits were overcome to allow opportunities for socialization. When comparing the pre- and post-intervention results on the SWQ, Dustin's self-reports and parent reports of social anxiety showed the greatest decrease. His self-reported social anxiety decreased 53%, whereas the parent report showed a decrease of his social anxiety by 94%. As noted during sessions, Dustin was able to cognitively restructure his perception of what others thought of him. He began to see that he was automatically assuming others' negative perception of him, thus provoking social anxiety. Brandon's self-reports and parent reports of social anxiety also decreased. His parent reports of his social anxiety showed a 100% decrease, whereas his self-reports

only showed a decrease of one point, which translates to a 13% reduction. The high parent reduction in the SWQ score was also consistent with parent comments about Brandon's acquired ability to choose appropriate friends to interact with and to control anger, thus indicating a reduction in his anxiety.

For all participants, consistency was noted between participant and parent scores on anxiety measures. The degree and/or lack of change between the participant's self-report and their parent's report was similar. For Brandon and Dustin, their self reported decreases in anxiety were similar to the parent reported decreases. For Rob, the lack of change was also consistent across self- and parent reports. The exception to this was Brandon's SWQ scores.

Previous research that has included persons with Asperger's Disorder has relied increasingly on parent reports due to the decreased introspection in adolescents with Asperger's Disorder, which may lead to unreliable self-reports (Gillott et al., 2001; Russell & Sofronoff, 2005). However, this study failed to demonstrate this effect. In this study, there was significant consistency between participants and parent's rated anxiety. Therefore, these scores are seen as reliable when interpreting the effectiveness of CBT in reducing anxiety across participants.

The one outlier was the variability in scores between self and parent reports on Brandon's social anxiety in the SWQ. Upon further examination of this variability, Brandon reported a large decrease in his social anxiety on the SCARED subscale, but indicated little change in social anxiety on the SWQ. When investigating the questions on the two scales, the types of questions are different. The SWQ inquires about anxiety that occurs in any number of different social situations. However, the SCARED asks about

feelings in specific situations where the participant is with new people. The difference in Brandon's social anxiety reports may be due to the nature of the questions. One of Brandon's counselling goals was to befriend new people and approach unfamiliar individuals. Practice occurred weekly on how to approach new people, introduce himself, and how to change automatic thoughts that may discourage him from approaching strangers. Therefore, the items on the SCARED captured this domain, which was a focus of the counselling sessions. New social environments were not sought out, but Brandon capitalized on meeting unfamiliar individuals in typical social situations.

A second explanation for this lack of change on the SWQ may be because crowds bother Brandon. Items on the SWQ reported as anxiety provoking at pre- and post-intervention mentioned groups of people. Brandon reported that groups of people can be loud and invade his personal space, thus highlighting some of his sensory concerns. In addition, many items on the SWQ involved making an inference, and the measure was not created specifically for individuals with Asperger's Disorder. For example, one question asked if the person experiences anxiety using the telephone. The individual has to infer that using the telephone involves talking to other people, possibly strangers. When completing the questionnaire, Brandon asked why the phone would create anxiety, possibly thinking of the physical telephone itself. Brandon had particular difficulty with inferences on the ToM task, demonstrating that he may have incorrectly interpreted what the question signified. The majority of items he answered as non-anxiety provoking were for questions where he had to infer that other people were in attendance. However, situations reported as anxiety provoking were questions that explicitly stated groups of people were present. The other two participants demonstrated an increased ability to

make inferences on the ToM task, especially physical inferences like the SWQ items. Dustin did report decreases similar to his decreases on the SCARED social anxiety subscale, while Rob did not report changes, also similar to the SCARED social anxiety subscale. Brandon's mother reported substantial declines in social anxiety on the SWQ, which may provide further support that Brandon's score on the SWQ may have been a reflection of the types of questions on the measure, not necessarily his social anxiety itself.

Theory of Mind

Participants did not demonstrate changes in ToM skills following the CBT intervention. This was determined with two pieces of information. First, not all participants successfully completed the ToM measure, making the data set incomplete and unavailable to interpret. Second, the one participant who did complete the pre- and post-intervention measure failed to increase his score on the measure. One difficulty with this portion of the research project was the ToM measure used. The task was very lengthy, and participants found it taxing to read 13 stories then answer 10 to 15 related questions. The task required much concentration, and clients were requested to make inferences—a task that is not natural to many with Asperger's Disorder. Therefore, only one participant successfully completed the task at both pre- and post-intervention. The client who did complete the task did not demonstrate consistent increases in scores, and his scores actually decreased on the mental inferences task.

Other difficulties in ToM measurement occurred when trying to understand higher-order ToM skills. Adolescents with Asperger's Disorder have developing ToM skills, but still struggle with complex, higher-order ToM skills (Attwood, 2004b). Natural

situations that require ToM are quite ambiguous and complex. Therefore, developing a measure that clearly communicates the situation yet has consistent answers is difficult. When situations are ambiguous, many people naturally misinterpret the situation. In addition, figures of speech, sarcasm, and other inferences are usually made by examining the environment, which includes body language, tone of voice, and facial expressions. By relying on a story that does not include this information, it can be difficult to understand the character's true meaning.

Nonetheless, the CBT intervention demonstrated promise in integrating ToM teaching during the counselling session. Everyday situations arose in sessions whereby the participant and the researcher discussed perspective-taking and natural teaching was provided. For instance, several situations arose when Brandon discussed anxiety-provoking situations that involved perspective-taking. Brandon had the lowest ToM skills at pre-intervention, which was highlighted when he admitted he did not understand when people were asking him to do embarrassing tasks for their enjoyment. Through the counselling process, he gained insight into when it was appropriate to reassess his automatic thoughts and then determine what the other person may be thinking. At the completion of the study he did comment on how he had improved his consideration of other's perspectives, although he did not always comprehend what the actual thought was.

Dustin also progressed in his ability to take others' perspectives. This was linked to his social anxiety and automatic thoughts. Dustin showed significant improvements in becoming self-aware of his cognitive processes. As a result, he was able to identify automatic thoughts in social situations that may hinder his involvement with peers. Often

he had previously assumed that peers were making fun of him. At the completion of the study, he presented situations where he caught these automatic thoughts, took the perspective of others, and then determined a more accurate perception of the situation.

Rob also demonstrated high levels of ToM for both the pre-intervention measure and the informal discussions. He often understood others' perspectives of him and interpreted situations accurately. Unfortunately for Rob, he never progressed to the point of identifying with his automatic thoughts or understanding the self-defeating nature of his perspective-taking.

Lastly, teaching basic ToM skills was difficult during the intervention. Most participants had acquired basic ToM skills, including some higher-order skills. Reviewing comic strips and false-belief tasks seemed fundamental for this group. To date, ToM teaching has been done primarily with younger children diagnosed with autism, who may not have acquired the beginning levels of ToM (Hadwin et al., 1997; Ozonoff & Miller, 1995). In this particular intervention, the psychoeducation teaching component seemed ineffective. Instead, the most productive teaching and gains came when natural situations were discussed, and cognitive perspective-taking strategies were applied.

In summary, the cognitive strategies of the CBT intervention increased individuals' self-awareness of their thought processes. They started to understand when it was appropriate to take another's perspective, especially when linked to a negative automatic thought. However, it is unclear if the actual ability to infer another's perspective was recognized. This may be a result of the short nature of the intervention or the difficulty of the measure in measuring this skill.

Counselling Prerequisites and Treatment Outcomes

As with any counselling intervention, the participant's adherence to the specific treatment regime will influence the results. In particular, counselling involves a number of participant variables that can influence the success of the treatment. Participant prerequisites for change often involve their readiness for change, their adherence to the intervention manual, and their willingness to apply the strategies outside the session. The results from this research project have shown initial indications of the treatment's effectiveness in decreasing anxiety in adolescents with Asperger's Disorder. Further evidence for the treatment's effectiveness can be demonstrated by examining each individual's commitment to the counselling process and their resulting experiences of change. This correlation indicates the degree to which each individual applied the principles of CBT and the resulting change experienced.

When examining the anxiety scores in the study, Dustin demonstrated the most improvement on measures of both social and other various types of anxiety. Both self-reports and parent reports indicated the highest levels of anxiety at the beginning of the treatment, with levels having dropped significantly after treatment. During Dustin's intervention, he met three major prerequisite criteria. First, he was motivated to engage in the treatment and ready for change. Dustin had engaged previously in a brief counselling endeavor, which increased his self-awareness of his anxiety. He also valued the counselling process as a means to deal with this anxiety. The transtheoretical model of change is a model used to identify a client's readiness for change and movement through the change process (Prochaska, DiClemente, & Norcross, 1992). Dustin entered the study having already thought about change and was at the preparation stage, a phase where one

plans to take action in the near future. As counselling began, he moved easily into the next stage of the model, the action stage, during which commitment and movement towards his goal began (Prochaska et al., 1992). Second, Dustin actively participated during the sessions; all aspects of the intervention manual were completed throughout his intervention. Dustin participated in all the exercises, worksheets, and homework assignments. Research has shown that client participation assists with change by providing clients a sense of control and choice in their treatment (Cormier & Nurius, 2003). Third, Dustin applied the strategies and theory learned in the sessions, and finished homework assignments. He regularly spoke about strategies utilized in his daily life and used learned terminology from the session to regularly describe his everyday situations.

Dustin demonstrated a readiness for change, adherence to the CBT intervention, and application of the treatment. Dustin's anxiety scores consistently decreased across the SWQ and SCARED for both self-reports and parent reports. Dustin's significant improvement may be partially accounted for by the counseling prerequisites he demonstrated. Dustin and the researcher had also developed a strong working alliance, which is often one of the major indicators of change in counselling (Graybar & Leonard, 2005). As a result, these factors produced significant gains in reducing anxiety and increasing his quality of life.

Brandon also met some of the prerequisites for counselling. He demonstrated significant reductions in his anxiety, although these did not attain the same extent or consistency as Dustin's results. In Brandon's case, he met two of the three counselling prerequisite criteria. Brandon was motivated to change and was an active participant.

First, Brandon was motivated to change because of the extreme anger and frustration he expressed at the beginning of treatment. Similar to Dustin, Brandon was most likely at the preparation stage of change according to the transtheoretical model (Prochaska et al., 1992). Second, he actively participated in the counselling session. He came to the sessions with topics to discuss and was willing to move through the intervention manual and complete all activities. However, Brandon was not consistent in engaging in the third component—application. Brandon's homework was completed sporadically. Strategies such as cognitive restructuring and behavioural changes were applied frequently, but were not always deliberate or consistent. In Brandon's case, one of the strengths was the strong working alliance he developed with the researcher. The trust in the researcher was reflected in his personal statements, and may have accounted for much of his personal growth and self-reflection.

Brandon's anxiety reductions were modest when compared to Dustin's. In particular, Brandon's reductions in social anxiety on the SWQ decreased insignificantly, along with self-reports of generalized anxiety. This may be a reflection of a failure to follow through and apply the strategies on a consistent basis in his day-to-day life.

In contrast, Rob's self-reports and parental reports revealed that there was little change in anxiety reduction, unlike the other two participants. When examining the prerequisites for counselling, Rob failed to meet any of the three criteria the other participants had. First, Rob was not motivated to change. When looking at the transtheoretical model of change, he was most likely at the precontemplation stage, such that he was unaware of the need for change, nor was he intending to change (Prochaska et al., 1992). Hence, little movement occurred in or out of the session because he was not at

a stage where he was ready for change. Second, Rob did not actively participate in the sessions. Many components of the intervention manual were incomplete due to his resistance. In contrast to the other participants, Rob did not bring his individual experiences to the session, nor did he discuss many topics at length. Third, Rob did not apply the strategies in the session to his everyday experiences. Due to his lack of motivation to change, many of the strategies suggested in the counselling sessions were disregarded.

Rob did not meet the prerequisites for counselling and as a result, showed insignificant reductions in anxiety at the completion of the intervention. This particular participant's behaviour highlights the role of individual factors in influencing the intervention's effectiveness. These intervening variables prevented the intervention from being completed as intended. Therefore, in Rob's case the lack of change may be due to not having these prerequisites, rather than the intervention itself.

Given the different amount of effort and consistency that each participant engaged in throughout this study, this is a variable that influenced the amount of change each participant experienced. Those who provided the most consistency and effort showed larger decreases in anxiety. Upon examining the three participants individually, this research project illustrated significant effects of the CBT intervention in reducing anxiety with motivated clients, who actively participate, and apply the knowledge. The study has provided promising results for reducing anxiety in adolescents with Asperger's Disorder, who demonstrate the prerequisites for counselling.

Strengths

The current research project had a number of strengths. First, the project was a group design, which allowed it to evaluate a number of participants who were provided similar interventions. Together, this enabled greater support for the effectiveness of CBT in decreasing anxiety. Although the group consisted of only three participants, the profile of the three participants and their individual readiness for change and commitment to counselling described the degree to which change is possible. In addition, the sample size allowed for the in-depth analysis and comparison of three case studies. The explanation of each participant's profile allowed for an increased analysis of each individual's commitment to counselling, and thereby providing an explanation for the varying degrees of anxiety change.

Another strength of the study was the ability to individualize counselling for each client. Although counselling was based on a common intervention, it was altered from individual to individual in order to focus on the concerns each brought forth to the counselling sessions. This approach is more realistic and similar to that of a community counselling centre. The approach also allowed the researcher to specifically target concerns as these arose in the individual's life. It was applicable and immediate, which assisted clients more effectively in the change process.

The study was also innovative in the manner ToM skills were integrated within the CBT context. Previous research has found that increases in ToM skills may be a result of learning the method to master the ToM measures, not necessarily generalizing the skills to other areas (Hadwin et al., 1997). Therefore, this study did not teach participants according to the ToM test. Instead, general ToM skills were taught, then applied within

their individual situations. It fit nicely with the CBT model, because as individuals became cognizant of their cognitive processes and identified automatic thoughts, they found that taking others' perspectives could counteract these negative thoughts. By taking time to understand what another person may be thinking, the participants were able to falsify their negative automatic thought. In addition, monitoring their thoughts allowed them to think of others' perspectives before engaging in potentially embarrassing situations. Therefore, the strength of pairing CBT with ToM has great potential for designing future studies to target ToM skills.

Limitations

One of the most apparent limitations of the study was the small sample size. Had the allotted number of eight participants been involved it would have provided greater strength in determining the effectiveness of CBT and rule out other extraneous variables causing the decreases in anxiety. With the current sample size and range of participant scores, the statistical measures had high error rates, and thus changes were not significant. With three participants, the study was only able to show promising effects of the intervention. Additionally, the range of participants in the current sample was a limitation because it included a client who may not have been ready for the intervention. Since he did not display a readiness for change, he did not participate in the study as per the methodology. This may make the data incomplete or skewed.

Other limitations of the study involved the counselling process itself. In particular, the researcher has had limited experience conducting counselling sessions. Feedback and suggestions were provided to the researcher by the project's supervisor. The limited experience could have caused the researcher to interact with the clients in a

different manner than an experienced counsellor would have. Since the working alliance

was found to be one of the major causes for change, an experienced counsellor may be

able to facilitate this process more quickly and accurately. The inexperience may have

also influenced the counsellor's ability to foresee problematic situations and act in a

timely proactive manner.

Although the individualization of the sessions was a strength of the study, the

modification for each participant somewhat limited the adherence to the identical CBT

approach. As noted, some participants were unable to proceed through all components of

the manual. Although the primary theory was employed, the emphasis on certain

strategies and manners in which the information was presented varied across the

participants. These slight variations may be considered extraneous variables, thus making

it difficult to discern which components of the counselling are the most important in

influencing change.

A major limitation revolved around the ToM component of the project. The

difficulties with the Stories from Everyday Life measure limited the completion of the

task and the reliability of the results. The measure itself had a number of limitations that

did not necessarily capture the participant's ability to use ToM in everyday situations.

The measure had not been used to measure ToM skill changes in the previous studies,

and therefore may not have been appropriate. Furthermore, previous research on the

Stories from Everyday Life task used two raters to score participants' answers. Each

mental and physical inference was recorded, and the raters determined if the inference

was incorrect, partially correct, or correct. Accuracy may have increased if two raters

recorded the scores throughout this project. Therefore, having one rater may be a partial

explanation for the variability in the scores for this measure.

Future Directions

Future research is needed to assess the effectiveness of CBT interventions in

reducing anxiety in adolescents with Asperger's Disorder. The current project's initial

findings support this hypothesis, however, research with larger sample sizes will provide

more solid evidence of statistically significant changes within the group. This study was

unique in that it was a group design, but focused on an individual counselling approach

rather than counselling in dyads and groups. Research needs to continue in order to

investigate group designs that individualize sessions that meet the unique needs of each

participant. This involves integrating the client's individual needs and wants into the

counselling session.

Future research is required to target social anxiety in persons with Asperger's

Disorder. The social anxiety experienced is often intense, and causes extreme problems in

day-to-day functioning. Unfortunately, this is often convoluted by past social failures and

social skill deficits that precipitate and maintain the anxiety. The anxiety often differs

from social phobia, which necessitates consideration during assessments and

interventions. Research may benefit from social anxiety questionnaires that are specific to

those with Asperger's Disorder. In addition, CBT interventions must focus on the skill

deficits of these individuals, which influences the anxiety of an individual in a different

manner than for those with social phobia.

Future interventions should also consider the difficulty adolescents struggle with

when discussing social anxiety. Many of the participants in this project were embarrassed

about their lack of skill and commented on their odd behaviours, which often ostracize them from peers. The establishment of the working alliance is crucial to be instituted prior to these discussions for the adolescents to feel secure when disclosing these feelings. This suggests that a more lengthy intervention may be necessary. Since the social anxiety is often precipitated by the social skill deficits, treatment should include appropriate social skill teaching.

Past research that relies on group social skill training has limitations, as the environment is unnatural and many participants are facing similar social skill problems, making the other group members inappropriate models. It is vital to include same-age typically developing peers for social skills teaching. Adult-mediated approaches may not teach social skills that use age appropriate language or mannerisms that adolescents use in everyday situations. Therefore, future counselling interventions can benefit from the expansion of the social skill teaching aspect to include same-age peers interspersed with individualized sessions.

A significant amount of research is required to explore both ToM deficits in adolescents with Asperger's Disorder, and effective treatment approaches. Much of the prior research in this area has been focused on persons with Autistic Disorder. Reliable measures are essential to measure ToM skills in people with Asperger's Disorder who have significantly more ToM skills than those with Autistic Disorder. Finally, teaching ToM continues to be an area that lacks research. ToM is a complex skill that relies on insight, analysis, and interpretation of complex social situations. Creating methods to enhance ToM comprehension can promote enhanced social skills for this population.

Summary and Conclusions

This research project has provided a number of initial indications of the effectiveness of a CBT intervention in reducing anxiety in individuals with Asperger's Disorder. Similar to other research, this project has demonstrated reductions to social anxiety and general anxiety in both self-reports and parent reports of their children's anxiety. The research also supports the counselling literature in which the effectiveness of the intervention depends on a number of individual characteristics and adherence to the treatment regime. This study demonstrated that without the client's motivation to change, active participation in the sessions, and application of the strategies to everyday situations, the intervention's effectiveness is markedly decreased.

This study also illustrated the equivocal results of using a CBT intervention to increase ToM skills for adolescents with Asperger's Disorder. Due to a number of methodological issues with the ToM measure used in this project, the degree of change was insufficient to be determined. Preliminary results established no significant increase in ToM skills for participants. The final results indicated the need for future research to determine appropriate ToM measures for this population while continuing to investigate interventions that would effectively target these skills.

Results revealed that participants with Asperger's Disorder face high levels of anxiety. Many pre-intervention anxiety scores for participants had reached the clinically significant range, demonstrating possible indications of a *DSM-IV* diagnosis for an anxiety disorder. The impacts of this anxiety were seen first-hand, as participants explained how the anxiety influenced their friendships, schoolwork, and quality of life. When clients were ready for change, the intervention proved to be successful in reducing

anxiety in many social and academic situations. Of importance is the anxiety that academic situations produce for these children. Their average to above-average intelligence allowed them to complete grade-level academics, but the accompanying anxiety often disrupted this performance. However, participants and their parents reported on the significant reductions in anxiety related to schoolwork, as a result of this intervention. Taken together, the findings highlight the need for parents, school personnel, and counsellors to advocate for interventions in order to alleviate the anxiety, thereby increasing performance in various settings.

This research project has proven that CBT counselling interventions have merit in assisting adolescents with Asperger's Disorder to reduce their anxiety. Additional research utilizing group designs may further support this preliminary finding. When the client is motivated to change, actively participates in the treatment, and applies the strategies outside the counselling context, the results provide further confirmation of the intervention's effectiveness. Individuals with Asperger's Disorder continue to face much anxiety in a world that has high social expectations. Through continued research and advocacy for counselling, results demonstrate the promising effects of a CBT intervention in reducing anxiety and increasing future quality of life for adolescents with Asperger's Disorder.

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Appendix A: Recruitment Flyer

**Seeking Adolescents with Asperger's Disorder
Who are Experiencing Social Anxiety**

Campus Alberta Applied Psychology, University of Lethbridge, is seeking

individuals with Asperger's Disorder who are experiencing social anxiety in London and

area. A research project is being conducted on how Cognitive Behaviour Therapy

counselling intervention affects changes in anxiety. We are particularly interested in how

perspectives change as a result of this study.

Participation involves counselling for eight sessions of no longer than 90 minutes

per session. Participants will also be asked to complete two questionnaires and one task

prior to and after the counselling sessions. These will take approximately one hour at

each time point. Parents will also be required to fill out two questionnaires prior to and

following the counselling intervention. Participation for parents takes approximately 30

minutes at each time point.

To participate in this research, participants must be:
- Ages 13 to 17 years old
- Male
- Experiencing social anxiety
- Have a formal diagnosis of Asperger's Disorder
- Have had a previous cognitive assessment
  (Written confirmation of the diagnosis and cognitive assessment is necessary)

For participants who are interested in this study, please contact Carmen Hall

carmen.hall@uleth.ca   (226) 234-5575

Appendix B: Informed Consent Form (Participant)

University of
Lethbridge

Faculty of Education

PARTICIPANT CONSENT FORM

Cognitive Behaviour Therapy and Asperger's Disorder: Does Treatment Influence Social Anxiety and Theory of Mind?

You are being invited to participate in a study called *Cognitive Behaviour Therapy and Asperger's Disorder: Does Treatment Influence Social Anxiety and Theory of Mind?* that is being conducted by Carmen Hall. Carmen Hall is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact her if you have further questions by calling (226) 234-5575 or email, carmen.hall@uleth.ca.

As a graduate student, I do research as part of my degree in Masters of Counselling Psychology. My supervisor is Dr. John A. LaPorta. You may contact my supervisor at (519) 685-8681, or by email, john.laporta@tvcc.on.ca if needed.

This research project looks at how counselling decreases anxiety in social situations for adolescents with Asperger's Disorder like yourself. These are situations where you may feel scared or anxious when meeting and talking with other people. The research is measuring the changes in your anxiety before and after counselling. Also, we will be measuring your ability to understand other people's perspectives before and after counselling. During this study you will be asked to come to counselling for eight sessions over ten weeks. During these sessions, the researcher will understand your concerns and together make goals to work on.

Research is important because there are many other people with Autism Spectrum Disorders who face the same thing you do. You will help these other people because you will help us understand what works. Social situations can be difficult and make you scared. Sometimes counselling may be needed to help learn how to enter these situations. Counselling has worked with other adolescents, but more research is needed to see how effective it can be. Another difficultly you may experience is knowing what other people are thinking or feeling. Until now research has not examined how counselling can help with this.

You are being asked to participate in this study because you are an adolescent male between the ages of 13 and 17, who has been diagnosed with Asperger's Disorder and is experiencing social anxiety. You or your parent responded to an advertisement for this study through Autism Ontario, and were one of the first eight participants to contact the researcher. The researcher will collect papers from those who made your diagnosis and did past cognitive assessments. This will help when looking at the research data and writing up the study.

WHAT WILL HAPPEN IN THIS STUDY?
If you and your parent agree to voluntarily participate in this research, you will be completing questionnaires and doing eight sessions of counselling. Before counselling starts, you will be asked to fill out two questionnaires to understand your anxiety. You will also be asked to do a perspective-taking task where you and the researcher read 13 stories and answer questions. These tasks should take no longer than one hour combined. This will help the researcher know how you are feeling before counselling starts.

One of your parents will also be asked to complete two questionnaires. They write down how much anxiety they think you experience. This should take less than 30 minutes for your parent to complete. This will help the researcher know your anxiety from your parent's perspective.

An interview will also be conducted with you and your parent to understand what has happened in the past, any concerns you or your parents may have, and any medications that you may be on. This will help researchers understand anything that could change the way we do counselling. This will take no longer than one hour.

You will be asked to come to eight counselling sessions over 10 weeks. You will come by yourself, without your parent. Each session will last no longer than 90 minutes. During the counselling sessions, you and the researcher will work together to see if there are patterns of thoughts and feelings that cause you to become anxious. We will learn to change thoughts, learn new ways of relaxing and interacting with people, understand how others are thinking and feeling, and make plans to slowly go into some of these anxious situations.

All counselling sessions will be videotaped. These videotapes are reviewed only by the supervisor. This is done to ensure the right counselling strategies are used.

After the eight counselling sessions, you and your parent will be asked to complete the same questionnaires that were completed at the beginning of the study. You will do the same two questionnaires and read 13 different stories and answer questions. It will take no longer than one hour. Your parent will be asked to complete the same two questionnaires completed at the beginning about your anxiety. This will take them no more than 30 minutes.

Risks: By taking part in this study, there is some inconvenience to you. You will be required to provide your time for the questionnaires and the counselling. Also, you and your parents will be required to travel to and from the counselling site. At some points, your participation in this study may bring up difficult topics. This may be uncomfortable. At any point throughout this project, you or your parent have the right to withdraw or leave this study with no consequences. If you still have concerns, referrals to appropriate agencies will be made for further counselling. Another risk is discussing emotional topics during the counselling session.

To prevent or to deal with this risk, the following steps will be taken:
- The researcher will follow up with all topics that caused you to be upset
- The researcher will disclose information to your parents and others if you provide any information about hurting yourself or others.
- All sessions will be videotaped and reviewed by the researcher's supervisor to ensure concerns have been addressed appropriately.
- Referrals to other agencies will be made, if requested, to follow up with concerns disclosed in the counselling sessions.

Benefits: There are a number of benefits to you participating in this research project. Counselling has been effective in helping decrease anxiety. By changing thoughts and behaviour, others with Asperger's Disorder have reported not feeling as anxious. The counselling can potentially help you interact with others, develop friendships, help you become more independent, and enhance your social skills. In addition, the information from this research can help direct research and clinical practice for others working with adolescents with Asperger's Disorder.

RIGHTS OF RESEARCH PARTICIPANTS:
Participation and Withdrawal: Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study, your data will be destroyed. This information will not be used in the analysis, publication, or presentation of the results.

Researcher's Roles: The researcher's relationship with you during the counselling sessions is that of a helper. As a part of the helping role, the researcher is in a position of power. To help prevent this relationship from influencing your decision to grant permission, the following steps have been taken:
- The researcher's role will be to assist you in changing thoughts, feelings, and behaviour, while decreasing social anxiety.
- The goals during counselling will be directed to you, and you have the right to choose goals and the direction of counselling.
- All sessions will be videotaped, and reviewed by the researcher and supervisor to ensure that the position of power is not negatively influencing you or the direction of the intervention.

To make sure that you continue to consent to participate in this research, the researcher will verbally review your rights in this research at the beginning of each session. At this time, your verbal consent will be requested to continue with the intervention.

Anonymity: In terms of protecting your anonymity, extreme caution is taken so that information disclosed remains confidential. Throughout the counselling sessions, personal information will be disclosed to the researcher. This information may include identifying information and footage of the counselling sessions. This information will only be seen by the researcher and supervisor. During the write-up of these results, you will remain anonymous.

Confidentiality: Your confidentiality and the confidentiality of the data will be protected by the researcher, except when legislation or a professional code of conduct requires that it be reported. All information that you tell the researcher in the counselling session will remain confidential with the researcher and the supervisor. No information will be shared with your parent unless you provide the researcher with permission to do so. If you do tell the researcher about plans to hurt yourself or somebody else, then the researcher must share this information.

All participants in this study will be given a unique participant identification code, to ensure that your name will not appear on any documentation. Further, you will be given a code, and this will be referred to for all publications or presentations of this research. All video tapes will only be seen by the researcher and the supervisor of this project. Only the researcher and supervisor will have access to the completed questionnaires, session notes, and videotapes.

Storage and Disposal of Materials: All information collected in your and your parents' questionnaires, interviews, and counselling sessions will be stored in a locked filing cabinet and on a password protected computer. DVD's of the video sessions will also be stored in the locked filing cabinet. These will be destroyed five years after this study is done.

Data collected in this research project will be interpreted to see changes in anxiety and theory of mind. The results of this study will be shared with others for the researcher's final project. The information will be written, and will protect your identifying information. This will be displayed on an online forum in a secure website for University of Lethbridge students in the Campus Alberta Applied Psychology program. This forum allows the researcher's peers to be made aware of the completed research. In addition, the results of this research will be used in publications and presentations. Throughout these, your identifying information will remain confidential.

In addition to being able to contact the researcher and supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting Dr. Rick Mrazek, the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge (403-329-2425).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Name of Participant	_Signature_	_Date_

A copy of this consent will be left with you, and a copy will be taken by the researcher.

University of
Lethbridge

Faculty of Education

PARENT/CAREGIVER CONSENT FORM

Cognitive Behaviour Therapy and Asperger's Disorder: Does Treatment Influence Social Anxiety and Theory of Mind?

Your child is being invited to participate in a study entitled Cognitive Behaviour Therapy and Asperger's Disorder: Does Treatment Influence Social Anxiety and Theory of Mind? that is being conducted by Carmen Hall. Carmen Hall is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact her if you have further questions by calling (226) 234-5575 or email, carmen.hall@uleth.ca.

As a graduate student, I am required to conduct research as part of the requirements for a degree in Masters of Counselling. It is being conducted under the supervision of Dr. John A. LaPorta. You may contact my supervisor at (519) 685-8681, or email, john.laporta@tvcc.on.ca.

The purpose of this research project is to understand the success of counselling for adolescents with Asperger's Disorder who are experiencing anxiety in social situations. This includes situations where your son interacts with other people. The research is measuring the changes in anxiety before and after counselling. Also, we will be measuring your son's ability to understand other's perspectives before and after treatment. During this study your child will be asked to come to eight counselling sessions over 10 weeks. During these sessions, the researcher will work with your child to uncover some of their concerns in social situations and the anxiety that they are experiencing. Your child will develop goals along with the researcher that are unique to your concerns.

Research of this type is important because the rate for Autism Spectrum Disorders continues to rise. Social skills can be difficult, often creating uneasiness and fear in social situations. As people with Asperger's Disorder get older, the social skills often get in the way, and counselling may be needed to deal with social situations. Counselling has been shown to be effective with this group; however, more studies are needed to know how effective counselling can be. In addition, it is often difficult for individuals with Asperger's Disorder to understand another's perspective. This is called Theory of Mind. To date, research has not examined how counselling can affect this skill.

Your child is being asked to participate in this study because they are an adolescent male between the age of 13 and 17, who has been diagnosed with Asperger's Disorder and is

experiencing social anxiety. You or your son responded to an advertisement for this study through Autism Ontario, and were one of the first eight participants to contact the researcher. The researcher will need to see documentation from the person who made this diagnosis and the results from a past cognitive assessment.

WHAT WILL HAPPEN IN THIS STUDY?
If you agree to permit your child to participate in this research, and your son agrees, his participation will include the completion of questionnaires and eight sessions of counselling. Before counselling starts, your child will be asked to fill out two questionnaires to understand the anxiety faced both in general and when in social situations. In addition, he will also be asked to complete a perspective-taking task to understand his ability to understand other people's perspectives. All three of these tasks will be completed before counselling begins. These tasks should take no longer than one hour combined. This will help the researchers know the anxiety experienced before counselling and how well you are able to understand other people's perspectives.

As a parent, you will also be asked to complete two questionnaires about the amount of anxiety you feel your son experiences. This should take less than 30 minutes to complete. The questionnaires will assist the researcher in understanding the amount of anxiety you feel your son experiences.

An interview will also be conducted with you and your son to understand what has happened in the past, any concerns you or your son may have, and any medications that he may be on. This will help researchers understand anything that could change the way we do counselling. This will take no longer than one hour.

Your son will be asked to come to eight counselling sessions over a 10 week period. He will come by himself, without your presence in the counselling session. Each session will last no longer than 90 minutes. The counselling will be a Cognitive Behaviour Therapy counselling approach. What this means is that during the counselling sessions, the researcher and your son will work together to see if there are patterns of thoughts and feelings that cause him to become anxious. The focus will be on uncovering these thoughts and changing them, learning appropriate social skills and relaxation strategies, and developing a plan to gradually enter these anxiety-provoking situations. In addition, a large portion of the counselling will be about understanding other people's perspective and how this may help to decrease anxiety and increase social skills.

All counselling sessions will be videotaped. These videotapes will be reviewed regularly by the researcher's supervisor. This is done to ensure that appropriate counselling techniques are used and that high standards are maintained.

After the eight counselling sessions, you and your son will be asked to complete the same questionnaires that were completed at the beginning of the study. Once again, your son will do two questionnaires about anxiety and a task about understanding other people's perspective. It will take no longer than one hour. You will be asked to complete the two

questionnaires you completed at the beginning about your son's anxiety. This will take no more than 30minutes.

Risks: Participation in this study may cause some inconvenience to you or your son. The time commitment to participate in this research includes time to complete the questionnaires by you and your son, and time for counselling. The time to complete these tasks was described above. In addition, you and your son will be required to travel to and from the counselling site to participate in the research. Participation in this study may cause some inconvenience to your child, including the fact that some point he may feel uncomfortable with the counselling process and the discussion around difficult topics. At any point throughout this project, you or your son have the right to withdraw from this study, with no consequences. If there are further concerns, referrals to the appropriate agencies will be made.

There are some potential risks to your child by participating in this research, including the discussion of emotional topics during the counselling session. To prevent or to deal with these risks the following steps will be taken:
- The researcher will follow-up with all emotionally sensitive topics that are discussed throughout sessions.
- The researcher will disclose information to you and others, where appropriate, if your child discloses any information to hurt himself or others.
- All sessions will be videotaped and reviewed by the researcher's supervisor to ensure that these concerns have been addressed in the counselling session.
- Referrals to other agencies will be made, if requested, to follow-up with concerns disclosed in the counselling sessions.

Benefits: There are a number of benefits to participating in this research project. Counselling has been effective in helping to lessen some of the anxiety your child is experiencing. By looking at some of the thoughts experienced in social situations, and changing them, others with Asperger's Disorder have reported not feeling as anxious. Ultimately the potential exists for your son to interact with others, develop friendships, enhance his quality of life and independence, and promote social skills. In addition, the information gained from this research can assist in directing research and clinical practice for others working with adolescents with Asperger's Disorder.

RIGHTS OF RESEARCH PARTICIPANTS:
Participation and Withdrawal: Your child's participation in this research must be completely voluntary. If you do decide to allow your child to participate, you may withdraw your permission (and your child from the study) at any time without any consequences or any explanation. If your child does withdraw from the study his/her data will be destroyed. This information will not be used in the analysis, publication, or presentation of the results of this study.

Researcher's Roles: The researcher's relationship with your child during the counselling sessions is that of a helper. As part of the helping role, the researcher is in a position of

power. To help prevent this relationship from influencing your decision to grant permission, the following steps to prevent coercion have been taken:

- The researcher's role will be to assist your son in changing and decreasing social anxiety.
- The goals during counselling will be directed by your son, and he has the right to choose goals and the direction of counselling.
- All sessions will be videotaped by the researcher and supervisor to ensure that the position of power is not negatively influencing your son or direction of the intervention.

To make sure that you continue to give your consent for your child to participate in this research, the researcher will verbally review your son's rights in this research at the beginning of each session. At this time, his verbal consent will be sought to continue with the intervention.

Anonymity: In terms of protecting your anonymity, extreme caution will be taken to ensure that the information disclosed will remain confidential. Throughout the counselling sessions, personal information will be disclosed to the researcher. This information may include identifying information and footage of the counselling sessions. This information will only be seen by the researcher and supervisor. During the write-up of these results, you will remain anonymous.

Confidentiality: Your child's confidentiality and the confidentiality of the data will be protected by the researcher, except when legislation or a professional code of conduct requires that it be reported. All participants in this study will be given a unique participant identification code, to ensure that your son's name will not appear on any documentation. Further, your son will be given a code, and this will be referred to for all publications or presentations of this research. All video tapes will only be seen by the researcher and the supervisor of this project. Only the researcher and supervisor will have access to the completed questionnaires, session notes, and videotapes. All information will be stored in a locked filing cabinet, and destroyed five years following the completion of this study.

All information that your son tells the researcher in the counselling session will remain confidential with the researcher and the supervisor. No information will be shared with you, the parent, unless your son provides the researcher with permission to do so. If your son does tell the researcher about plans to hurt himself or somebody else, then the researcher must share this information.

Storage and Disposition of Materials: All information collected in your son's and your questionnaires, interviews, and counselling sessions will be stored in a locked filing cabinet and on a password protected computer. DVD's of the video sessions will also be stored in the locked filing cabinet. These will be destroyed five years following the completion of this study.

Data collected in this research project will be interpreted to understand the changes in anxiety and theory of mind after counselling. It is anticipated that the results of this study will be shared with others primarily for the researcher's final project. The information will be written, while protecting your son's identifying information. This will be displayed on an online forum in a secure website for University of Lethbridge students in the Campus Alberta Applied Psychology program. This forum allows the researcher's peers to be made aware of the completed research, and inquire. In addition, the results of this research will be used in publications and presentations. Throughout all of these ventures, your son's identifying information will remain confidential.

In addition to being able to contact the researcher and supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting Dr. Rick Mrazek, the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge (403-329-2425).

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to having your child participate in the study.

_____   _____   _____

Name of Parent or Guardian   *Signature*   *Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix D: Clinical Interview

Suggested Topic Areas and Questions:

1. Presenting Concerns

    When did the present anxiety concerns begin?

    Where does the anxiety occur?

    What events precipitate the anxiety? Make it better? Worse?

    What degree does the anxiety interfere with daily functioning?

    What previous solutions/plans have been tried and with what results?

2. Past Counselling Treatment/History

    Type of treatment

    Length of treatment

    Concerns addressed

    Outcome

3. Health/Medical

    Current medication

    Treatment for current complaints

4. Social/Developmental History

    Social/leisure time activities/hobbies

    Contact with people (support systems, family, friends)

    Significant events in childhood/adolescence

(Cormier & Nurius, 2003)

Appendix E: Screen for Child Anxiety Related

Disorders (Child Version)

Screen for Child Anxiety Related Disorders (SCARED)
Child Version—Pg. 1 of 2 (To be filled out by the CHILD)

Name: _____

Date: _____

Directions:
Below is a list of sentences that describe how people feel. Read each phrase and decide if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" for you. Then for each sentence, fill in one circle that corresponds to the response that seems to describe you for <u>the last 3 months.</u>

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
1. When I feel frightened, it is hard to breathe.	○	○	○
2. I get headaches when I am at school.	○	○	○
3. I don't like to be with people I don't know well.	○	○	○
4. I get scared if I sleep away from home.	○	○	○
5. I worry about other people liking me.	○	○	○
6. When I get frightened, I feel like passing out.	○	○	○
7. I am nervous.	○	○	○
8. I follow my mother or father wherever they go.	○	○	○
9. People tell me that I look nervous.	○	○	○
10. I feel nervous with people I don't know well.	○	○	○
11. I get stomachaches at school.	○	○	○
12. When I get frightened, I feel like I am going crazy.	○	○	○
13. I worry about sleeping alone.	○	○	○
14. I worry about being as good as other kids.	○	○	○
15. When I get frightened, I feel like things are not real.	○	○	○
16. I have nightmares about something bad happening to my parents.	○	○	○
17. I worry about going to school.	○	○	○
18. When I get frightened, my heart beats fast.	○	○	○
19. I get shaky.	○	○	○
20. I have nightmares about something bad happening to me.	○	○	○

Screen for Child Anxiety Related Disorders (SCARED)
Child Version—Pg. 2 of 2 (To be filled out by the CHILD)

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
21. I worry about things working out for me.	○	○	○
22. When I get frightened, I sweat a lot.	○	○	○
23. I am a worrier.	○	○	○
24. I get really frightened for no reason at all.	○	○	○
25. I am afraid to be alone in the house.	○	○	○
26. It is hard for me to talk with people I don't know well.	○	○	○
27. When I get frightened, I feel like I am choking.	○	○	○
28. People tell me that I worry too much.	○	○	○
29. I don't like to be away from my family.	○	○	○
30. I am afraid of having anxiety (or panic) attacks.	○	○	○
31. I worry that something bad might happen to my parents.	○	○	○
32. I feel shy with people I don't know well.	○	○	○
33. I worry about what is going to happen in the future.	○	○	○
34. When I get frightened, I feel like throwing up.	○	○	○
35. I worry about how well I do things.	○	○	○
36. I am scared to go to school.	○	○	○
37. I worry about things that have already happened.	○	○	○
38. When I get frightened, I feel dizzy.	○	○	○
39. I feel nervous when I am with other children or adults and I have to do something while they watch me (for example: read aloud, speak, play a game, play a sport.)	○	○	○
40. I feel nervous when I am going to parties, dances, or any place where there will be people that I don't know well.	○	○	○
41. I am shy.	○	○	○

SCORING:

A total score of ≥ 25 may indicate the presence of an **Anxiety Disorder**. Scores higher that 30 are more specific.

A score of 7 for items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34, 38 may indicate **Panic Disorder** or **Significant Somatic Symptoms**.

A score of 9 for items 5, 7, 14, 21, 23, 28, 33, 35, 37 may indicate **Generalized Anxiety Disorder**.

A score of 5 for items 4, 8, 13, 16, 20, 25, 29, 31 may indicate **Separation Anxiety Disorder**.

A score of 8 for items 3, 10, 26, 32, 39, 40, 41 may indicate **Social Anxiety Disorder**.

A score of 3 for items 2, 11, 17, 36 may indicate **Significant School Avoidance**.

For children ages 8 to 11, it is recommended that the clinician explain all questions, or have the child answer the questionnaire sitting with an adult in case they have any questions.

Appendix F: Screen for Child Anxiety Related

Disorders (Parent Version)

Screen for Child Anxiety Related Disorders (SCARED)
Parent Version—Pg. 1 of 2 (To be filled out by the PARENT)

Name: _____

Date: _____

Directions:
Below is a list of statements that describe how people feel. Read each statement carefully and decide if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" for your child. Then for each statement, fill in one circle that corresponds to the response that seems to describe your child for the last 3 months. Please respond to all statements as well as you can, even if some do not seem to concern your child.

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
1. When my child feels frightened, it is hard for him/her to breathe.	○	○	○
2. My child gets headaches when he/she is at school.	○	○	○
3. My child doesn't like to be with people he/she doesn't know well.	○	○	○
4. My child gets scared if he/she sleeps away from home.	○	○	○
5. My child worries about other people liking him/her.	○	○	○
6. When my child gets frightened, he/she feels like passing out.	○	○	○
7. My child is nervous.	○	○	○
8. My child follows me wherever I go.	○	○	○
9. People tell me that my child looks nervous.	○	○	○
10. My child feels nervous with people he/she doesn't know well.	○	○	○
11. My child gets stomachaches at school.	○	○	○
12. When my child gets frightened, he/she feels like he/she is going crazy.	○	○	○
13. My child worries about sleeping alone.	○	○	○
14. My child worries about being as good as other kids.	○	○	○
15. When he/she gets frightened, he/she feels like things are not real.	○	○	○
16. My child has nightmares about something bad happening to his/her parents.	○	○	○
17. My child worries about going to school.	○	○	○
18. When my child gets frightened, his/her heart beats fast.	○	○	○
19. He/she gets shaky.	○	○	○
20. My child has nightmares about something bad happening to him/her.	○	○	○

Screen for Child Anxiety Related Disorders (SCARED)
Parent Version—Pg. 2 of 2 (To be filled out by the PARENT)

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
21. My child worries about things working out for him/her.	○	○	○
22. When my child gets frightened, he/she sweats a lot.	○	○	○
23. My child is a worrier.	○	○	○
24. My child gets really frightened for no reason at all.	○	○	○
25. My child is afraid to be alone in the house.	○	○	○
26. It is hard for my child to talk with people he/she doesn't know well.	○	○	○
27. When my child gets frightened, he/she feels like he/she is choking.	○	○	○
28. People tell me that my child worries too much.	○	○	○
29. My child doesn't like to be away from his/her family.	○	○	○
30. My child is afraid of having anxiety (or panic) attacks.	○	○	○
31. My child worries that something bad might happen to his/her parents.	○	○	○
32. My child feels shy with people he/she doesn't know well.	○	○	○
33. My child worries about what is going to happen in the future.	○	○	○
34. When my child gets frightened, he/she feels like throwing up.	○	○	○
35. My child worries about how well he/she does things.	○	○	○
36. My child is scared to go to school.	○	○	○
37. My child worries about things that have already happened.	○	○	○
38. When my child gets frightened, he/she feels dizzy.	○	○	○
39. My child feels nervous when he/she is with other children or adults and he/she has to do something while they watch him/her (for example: read aloud, speak, play a game, play a sport.)	○	○	○
40. My child feels nervous when he/she is going to parties, dances, or any place where there will be people that he/she doesn't know well.	○	○	○
41. My child is shy.	○	○	○

SCORING:

A total score of ≥ 25 may indicate the presence of an **Anxiety Disorder**. Scores higher than 30 are more specific.

A score of 7 for items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34, 38 may indicate **Panic Disorder** or **Significant Somatic Symptoms**.

A score of 9 for items 5, 7, 14, 21, 23, 28, 33, 35, 37 may indicate **Generalized Anxiety Disorder**.

A score of 5 for items 4, 8, 13, 16, 20, 25, 29, 31 may indicate **Separation Anxiety Disorder**.

A score of 8 for items 3, 10, 26, 32, 39, 40, 41 may indicate **Social Anxiety Disorder**.

A score of 3 for items 2, 11, 17, 36 may indicate **Significant School Avoidance**.

Appendix G: Social Worries Questionnaire (Child Version)

Social Worries Questionnaire –
P U P I L

Date: Name: Sex:

Class: School: Age:

Please put a circle around the rating which best describes you *over the past four weeks.*
Please answer all questions.

('Avoid' means to try to get out of doing something.)

1	I avoid or get worried about going to parties	Not true	Sometimes true	Mostly true
2	I avoid or get worried about using the telephone	Not true	Sometimes true	Mostly true
3	I avoid or get worried about meeting new people	Not true	Sometimes true	Mostly true
4	I avoid or get worried about presenting work to the class	Not true	Sometimes true	Mostly true
5	I avoid or get worried about attending clubs or sports activities	Not true	Sometimes true	Mostly true
6	I avoid or get worried about asking a group of kids if I can join in	Not true	Sometimes true	Mostly true
7	I avoid or get worried about talking in front of a group of adults	Not true	Sometimes true	Mostly true
8	I avoid or get worried about going shopping alone	Not true	Sometimes true	Mostly true
9	I avoid or get worried about standing up for myself with other kids	Not true	Sometimes true	Mostly true
10	I avoid or get worried about entering a room full of people	Not true	Sometimes true	Mostly true
11	I avoid or get worried about using public toilets or bathrooms	Not true	Sometimes true	Mostly true
12	I avoid or get worried about eating in public	Not true	Sometimes true	Mostly true
13	I avoid or get worried about taking tests at school	Not true	Sometimes true	Mostly true

SOCIAL SKILLS TRAINING

Appendix H: Social Worries Questionnaire (Parent Version)

nferNelson
understanding potential

Social Worries Questionnaire –
P A R E N T (S)

Date: Young person's name: His/Her sex:

Class: School: His/Her age:

Name of parent completing the form:

Please put a circle around the rating which best describes your son or daughter *over the past four weeks.*

Circle the number 0 if the item is not true. Circle the number 1 if the item is sometimes true. Circle the number 2 if the item is mostly true.

Please answer all items.

	He or she:	Not true	Sometimes true	Mostly true
1	Avoids or gets worried about going to parties	0	1	2
2	Avoids or gets worried about using the telephone	0	1	2
3	Avoids or gets worried about meeting new people	0	1	2
4	Avoids or gets worried about presenting work to the class	0	1	2
5	Avoids or gets worried about attending clubs or sports activities	0	1	2
6	Avoids or gets worried about approaching a group of kids to ask to join in	0	1	2
7	Avoids or gets worried about talking in front of a group of adults	0	1	2
8	Avoids or gets worried about going into a shop alone to buy something	0	1	2
9	Avoids or gets worried about standing up for him/herself with other kids	0	1	2
10	Avoids or gets worried about entering a room full of people	0	1	2

SOCIAL SKILLS TRAINING

Appendix I: Stories from Everyday Life

Set A: Story 1 (Lies/Deception)

Pocket Money

   15-year-old Ronny, is good at helping at home, and receives $5 allowance from his parents. His friend Ben calls one Monday evening and recounts how he has had some bad luck. Ben says, "When I was about to pay for a hamburger and a coke, my wallet was completely empty. Somebody must have stolen all my allowance." He asks Ronny if he can borrow a few dollars until Friday.

   Ben is known among his friends for always telling the truth and abiding by what is right, and he also likes coke and hamburgers. Each day he goes to McDonald's. The money he receives in allowance is only enough to purchase one hamburger and two cokes each week.

   Ronny wants to help his friend and loans him $5. Ben thanks Ronny, but says he shouldn't say anything about it to his parents. Ben promises to repay the money next Friday because he always receives his allowance on Fridays.

   When Ronny meets Ben in the playground on Friday morning, Ben looks unhappy. He says to Ronny, "I received my $5 allowance as normal this morning and put it in my coat pocket. When I came back into the classroom after the break, the money had disappeared without trace. Some wicked people must have stolen it." Ben asks if he can borrow a further $5 from Ronny until the following week.

Questions

1. Why does Ronny receive $5 allowance each week from his parents?
2. What is Ronny's friend's name?
3. What did Ben say happened at the counter when he was going to pay for his hamburger and coke?
4. **Why can't Ben buy hamburgers and coke at McDonald's every day? (Physical Inference (PI))**
5. What does Ben ask Ronny?
6. When does Ben promise to repay the $5 he has borrowed from Ronny?
7. Why can he pay back the money next Friday?
8. How does Ben appear when Ronny meets him in the play ground on Friday morning?
9. Why do you think he looked unhappy?
10. What did he say had happened while he was out at break time?
11. When does Ben receive his weekly pocket money?
12. Is it true what he says about receiving his pocket money on Fridays?
13. **Why does Ben say on several occasions to Ronny that somebody has stolen his money? (Mental Inference (MI))**

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Set A: Story 2 (White Lies)

Down Dark Streets on a Late Autumn Evening

One rainy autumn evening 11-year-old Robert accompanies his grandmother to play bingo at the Women's Institute in town. At 10:30 the bingo ends, and on the way home they pass through some dark and scary town streets. They are both a little frightened because they have often heard and read about people who have been robbed of their money in the area.

Robert's grandmother has recently received the bill for the monthly house rent, which she usually pays in cash to the landlord. She has earlier been to the post office and withdrawn $500, with some extra to play bingo with. As she doesn't like to have all this money lying at home in a drawer, she carries it around with her. Robert doesn't know that his grandmother has been to the post office earlier that day and made a withdrawal. When he becomes quite afraid that they are going to be robbed, he asks her if she has any money on her. Robert's grandmother, who is an honest person, answers: "No, I haven't got much money on me."

Questions

1. Why do Robert and his grandmother go to the Women's Institute on a rainy autumn evening?
2. Where does their route home take them after the bingo has finished in the evening?
3. Why can it be dangerous to go through this area of the town?
4. **Why has Robert's grandmother earlier been to the post office and withdrawn money? (PI)**
5. Why does she have all this money with her?
6. Does Robert know that his grandmother has earlier been to the post office and withdrawn money?
7. What does he ask her?
8. Why does he ask his grandmother about this?
9. What is his grandmother's reply?
10. Is Robert's grandmother's reply true?
11. **Why do you think she says this to him? (MI)**

Set A: Story 3 (Figurative Speech/Metaphors)

Castles in the Sky

The architect Ken Peterson is known as a person with many ideas. He works with Bill, a master builder who has his office in town. He goes to Bill almost daily with new ideas about how to build bigger and better buildings.

The architect with many ideas uses steel and glass as construction materials because they are the materials that can give the most protection against storms and bad weather. With these materials it is possible to build fine, big buildings. Wooden material and roof tiles are well suited for the construction of normal single-floored buildings, he says.

Many of the people who hear of Peterson's many building plans, regard them as quite unrealistic. Bill, the master builder is also normally sceptical to the architect's ideas.

One day Peterson arrives and says that he has begun drawing the town's new planned city hall. He will build it high, he says, 35 floors - because this will save on land area. Bill the master builder thinks that this and a number of Peterson's other recent ideas are totally unrealistic. Bill says: "Peterson, now I think you are building castles in the air."

Questions

1. What is an architect?
2. What is architect Peterson known for?
3. Who does he work together with?
4. What is a builder?
5. What do most people think of Peterson's ideas?
6. What does master builder Bill think of them?
7. **Why doesn't architect Peterson use wooden material and roof tiles when projecting high buildings? (PI)**
8. How many floors does Peterson intend the new Town Hall to have?
9. What is Bill's opinion of a building so high?
10. Does Bill really mean that Peterson is planning to build a castle of only air?
11. **What does Bill mean when he says that Peterson builds castles in the air? (MI)**

Set A: Story 4 (Misunderstanding)

Broke

David Swensen is broke at the moment because he has just paid some large bills. One day after filling his old, but well-maintained car with gas, he drives off without paying. The attendant at the station is busy with another customer, and at the same time his telephone is ringing and a mechanic in the garage is calling him.

Swensen doesn't feel totally at ease as he drives away, and he keeps looking in his mirror to see if anybody is following him. After having driven 4.5 kilometres he is suddenly shocked; in front of him on the road there is a policeman who signals him to pull over. Swensen regrets what he has done and thinks it is very embarrassing to be stopped by the police. He opens his car window and says to the policeman, "It's stupid of me, not paying!" he says embarrassed, "but I am broke!"

"Broke," the Police officer mutters. Having controlled cars for hours he is looking forward to being replaced by another police officer. He immediately thinks that he once again has to deal with a person who fears that there is something wrong with his car, and Swenson's car is definitely not brand new. He says, "That's not my problem! I have to do my job. That can certainly cost you some money if anything with your car is wrong," he says annoyed. He asks Mr. Swensen if he can see his license and then routinely examines the car. After some minutes he says, "Everything is in order. Drive on!"

Questions

1. Why does David Swenson drive away without paying for the gas from the gas station?
2. **Why doesn't the attendant at the station stop Swenson when he drives away after not having paid for his gas? (PI)**
3. Why does Swenson keep looking in his mirror?
4. What gives him a sudden shock after he has driven 4.5 kilometres?
5. What does Swenson mean when he says it was very stupid of him to do what he has done?
6. Of what does the policeman think Swenson is afraid?
7. Does the policeman know that Swenson has filled his tank without paying?
8. **Why don't you think the policeman arrests Swenson - saying instead it's in order and wishing him a good journey? (MI)**

Set A: Story 5 (Double Bluff)

The Robbery

One late, dark autumn evening the 14-year-old Paul is going along some scary town streets with his mother. They are both a little afraid because they have heard and read of people who have been robbed of their money in this area.

Earlier that day, Paul's mother had been to the bank and made a withdrawal of $100. She has placed the money in an inside coat pocket instead of in her handbag. Her old washing machine broke down a couple of days ago, and she has to buy a new one in the coming days. Paul doesn't know that his mother has earlier been to the bank and made a withdrawal.

Suddenly, two masked men, each with their own firearm, emerged from a dark side street and shouted, "Hands up, this is a robbery! Where is the money old lady?" Paul's mother takes a real chance and says that she has hidden the money in an inside pocket. The robbers snatch her handbag and disappear into the darkness.

Questions

1. Where is Paul going with his mother late on a dark autumn evening?
2. Why are they both a little afraid of going in this area?
3. How much money has Paul's mother withdrawn from the bank earlier in the day?
4. **Why has she been to the bank and made a withdrawal? (PI)**
5. Why does she place the money she has taken out in an inside pocket?
6. Who comes suddenly out of a side street and threatens them with firearms?
7. What are the robbers after?
8. Why does Paul's mother say that she has hidden the money?
9. Is what Paul's mother says true?
10. Why do the robbers take her handbag and not her hat?
11. **Why does Paul's mother say that the money is in an inside pocket, where she has really hidden it, and not in her handbag? (MI)**

Set A: Story 6 (Irony)

Tidying the Room

Tom and Adrian are brothers. Tom is 8-years-old and Adrian 14. Their mother is very strict and always makes sure that their rooms are tidy. One day she says that they must both tidy up their rooms. Tom, the youngest of the brothers, is always making a mess, and his room is usually very untidy. His mother often complains about the mess. Adrian seldom has to hear such remarks, but his mother says that he should occasionally help his father tidy their garage.

Both Tom and Adrian go to their rooms to begin tidying. After a while their mother shouts and asks if they will soon be finished. Adrian replies that he is finished.

But, Tom hasn't begun to tidy up at all! Adrian's mother asks if he can look in Tom's room to check if he has tidied up. Adrian opens the door to Tom's room, peers in and sees that the room appears as it normally does. He shouts to his mother: "Mother, Tom has, as usual, done a splendid job tidying up!"

Questions:

1. What are Tom and Adrian?
2. How old is Tom?
3. How old is Adrian?
4. What does their mother say they must do one day?
5. How does Tom's room look?
6. **How does Adrian's room look? (PI)**
7. What does Tom and Adrian's mother want to know after a while?
8. What does Adrian answer?
9. What is Adrian meant to check when he is asked to look into Tom's room?
10. Do you think Tom has tidied up his room?
11. Adrian says to his mother that Tom has as usual done a splendid job tidying up. Is what he says true?
12. **Why does Adrian say this? (MI)**

Set A: Story 7 (Persuading)

A New Car

Peter Robinson is a doctor and drives a Chrysler car. One day, when he is on the way to town, he hears an unusual sound coming from the car's engine. The nearest Chrysler dealer is a little farther down the street. Robinson has had the car regularly serviced since he purchased it three years ago, and the car has up until now functioned without a problem. He drives to the car dealer straight away.

Unluckily for Robinson, the mechanics are having their lunch-break, but one of the salesmen who has earlier worked in the workshop, agrees to help. The car salesman opens the hood and listens to the engine while it is running. He says, "I don't like the sound of this. The engine is quite worn out, the car is in poor condition." He adds, "Come with me into the sales room and I'll give you a good offer for a reliable second hand car."

The salesman says to Robinson that the Chrysler isn't known for its long mileage. "Besides," he says, "I think that doctors ought to have a more presentable and reliable vehicle." Robinson replies that he wants to get his car repaired, and that he is not interested in changing his car. The car salesman nevertheless continues, "A car in poor condition is a danger in traffic. As a doctor, you should know that most traffic accidents are caused by irresponsible driving in worn out vehicles that are a danger to the owners and the lives of others."

Questions

1. Which make of car does Peter Robinson drive?
2. What does he hear one day while on the way to town?
3. How old is Robinson's car?
4. **Why does Robinson drop into the Chrysler dealer today? (PI)**
5. Why won't the mechanics examine Robinson's car when he arrives?
6. Who offers to look at his car?
7. What does the car salesman say when he opens the hood and listens to the sound of the engine?
8. What does he say about Robinson's car?
9. Why does he want Robinson to accompany to the salesroom?
10. What does the car salesman think about Chrysler models?
11. What do you think the car salesman hopes to sell Robinson?
12. Does Robinson want to change his Chrysler for another kind of second hand car?
13. **The car salesman says that a car in poor condition is a danger when driven in traffic, and that Robinson as a doctor should know that most accidents are caused by drivers in worn out and dangerous vehicles. Why does he say all this? (MI)**

Set A: Story 8 (Conflicting Feelings)

A New Job

Emily Peters is 27-years-old, educated as an architect, and has worked in an architect's office. She greatly enjoyed working there, and couldn't imagine working in another place. But, because they didn't get many contracts, half of the employees were laid off. In the last couple of years Emily has applied for a number of positions as an architect, but without success.

Emily has recently had a son named Andy. He is now three months old, and Emily is now at home looking after the child. She thinks little Andy will still need her at home for a while.

One day however she is offered a very well paid job in an architect firm in town. Emily tells her husband about the offer and is very happy about it. Her husband says that she is lucky to have received such an offer in a time with such high unemployment among architects. He says she ought to take the chance and accept the job. Emily agrees, and says that she is happy about the opportunity.

The next day Emily's mother pays a visit. Emily tells her mother about the new job she has been offered, but adds, "I don't want to take the job I have been offered. Little Andy still needs me at home."

Questions

1. What is Emily trained as?
2. What is an architect?
3. **Why has Emily applied for several architect positions in recent years? (PI)**
4. How old is Andy?
5. Why does Emily believe that Andy will still need her at home for a while?
6. What offer does Emily receive one day?
7. Is she happy about the offer?
8. What does Emily's husband think about the offer and what advice does he give to her?
9. What does Emily say to him?
10. What does Emily say to her mother when she pays a visit the next day?
11. Is it true what Emily says to her mother?
12. Is it true what Emily has earlier said to her husband that she is happy about the new job offer?
13. **Why does Emily say to her husband that she is happy about the job offer, but says to her mother that she has no desire to take it? (MI)**

Set A: Story 9 (Forgetfulness)

The Spectacles

Ron Hanson is 21-years-old. He works in a record shop in town selling CDs. He catches the bus to work, and the bus journey to town takes about an hour.

On the bus Ron usually reads the newspaper. Today it is Saturday morning, and he takes the newspaper from his bag. He looks at the headlines like usual, and after having skimmed through most of the newspaper he finds an article about CDs that have just been released on the market. He really wants to read this article. He takes his spectacles from their case, which was in his bag, and puts them on so he can read about the new CDs.

On Saturdays there is plenty of space on the bus, so he can put his belongings on the seat beside him.

Ron has a cold, earache, and a sore throat. He therefore only reads the paper for a couple of minutes and puts it back in his bag. Thereafter he takes off his spectacles and places them on the seat, so that he can relax for a moment.

When the bus approaches his stop Ron pulls the cord, picks up his bag, and leaves the bus. "Good to come into the fresh air," he thinks and proceeds down the street until he reaches the record shop.

In the shop he finds a letter on the counter, and it is addressed to him. He opens his bag to find his spectacles: in his bag he finds the newspaper and an empty spectacles case. He stands and thinks for a moment, and then he says, "I don't understand, I put my spectacles in their case and then put them my bag before I left home this morning."

Questions

1. What does the 21-year-old Ron sell?
2. How does he get to work?
3. What does he usually read each morning on the bus to work?
4. **Why does Ron first take a quick look at the newspaper's headlines? (PI)**
5. How much space is there on the bus on Saturdays?
6. Where does Ron normally put his newspaper and spectacles when he isn't reading?
7. Where does he keep his spectacles?
8. Why does he only read the newspaper for a couple of minutes today?
9. What does he put down after a while?
10. What does he find on the counter in the shop?
11. What does he search for in his bag?
12. Did Ron put his spectacles in their case and then in his bag before he left home that morning?
13. **Why does he find the spectacles case empty in the shop? (MI)**

Set A: Story 10 (Jealousy)

Betty's Brother

Seven-year-old Betty is the daughter of Barbara and Andrew Mason. She has always received a lot of attention from her parents. She enjoys their attention, and wants it for herself. When guests visit, Betty turns on the television and adjusts the volume too high. Betty's parents often then move with their visitors to the house's lower floor living room.

One day when Betty and her mother are sitting talking together, her mother says, "I have some happy news to tell you." Her mother is knitting baby clothes while she tells Betty about what is going to happen. A week before Christmas day, Betty gets a little brother. In the days after, Betty's mother returns from the clinic, and many relatives visit to see the baby. All remark how large and cute he is. "This is the grandest baby I have ever seen," expresses Betty's grandmother.

All are interested in little Tommy, as he is to be called. Nobody pays much attention to Betty any longer. She has to give up her pleasurable moments with her mother in front of the television.

One day she says to her mother, "I hate Tommy! He is the most stupid and ugly baby I ever set eyes upon. I wish he had never been born!"

Questions

1. What does it mean by saying that Betty is an only child?
2. From whom has Betty received much attention?
3. Why does Betty want to have her parents to herself?
4. What does she do when they have visitors?
5. **Why do Betty's parents often move with their visitors to the house's lower floor living room? (PI)**
6. What happens a week before Christmas day?
7. Why do many relatives visit Betty's home?
8. What do the visitors think of the baby?
9. What is Betty's brother named?
10. Which of the two children now gets the most attention from their parents and relatives, Betty or little Tommy?
11. Does Betty like that Tommy receives more attention than her?
12. **Why does Betty say that she hates Tommy and wishes that he had never been born? (MI)**

Set A: Story 11 (Lack of Consideration for Other People's Feelings)

Little Agnes

John Frank is 25-years-old and he tunes pianos. He is the only piano tuner in town, and his clients must normally wait a week before he can do the work they desire. Usually he carries out his work in the homes of the clients.

One day an old lady calls him. She calls herself Mrs. Agnes Lind, and says that she would like to have her piano tuned. She tells him her address. A few minutes earlier, a small job John Frank was to do had been cancelled, so he could go.

A few minutes later John arrives at Mrs. Lind's villa. He rings the bell and Mrs. Lind comes quickly, opens the door, and heartily greets him. She has rheumatism, and therefore experiences some pain when she walks. John learns that she has had pain since her husband, Dr. Robert Lind, passed way suddenly one year ago. John notes that she is quite small, has short legs and her back is bent.

John goes straight into the living room where the piano stands - with an open music score. After an hour's work, the piano is tuned, and Mrs. Lind pays John, who asks for $50 for the job.

John, who is known to be a skilful piano tuner, says as he packs away his tools, "Little Agnes, I thought your piano stool is a bit high. I must therefore tell you that I have adjusted down your stool a couple of marks, so that you can reach it with your short legs."

Questions

1. What is Johns Frank's profession?
2. How long must his clients normally wait to get their pianos tuned?
3. Who rings to him one day to ask if he can tune their piano?
4. **Why doesn't Mrs. Lind have to wait a week to have her piano tuned? (PI)**
5. How does Mrs. Lind look?
6. What has Mrs. Lind experienced in recent years?
7. Where does he tune the piano?
8. How much time does he use on the job?
9. What kind of reputation does John have as a piano tuner?
10. Do you think Agnes Lind likes what John says to her when he wants to inform her that he has adjusted the piano stool?
11. **What do you think Agnes feels when she hears what John says to her? (MI)**

Set A: Story 12 (Mistaken Intentions)

At the Clock Makers

Henry Olson is in his 40s, has trained as clock maker, and runs a small shop. He thinks that many of those who come into his shop ask about the strangest things. As a busy watchmaker he doesn't think he can waste his valuable time on people who only want to talk to him or ask pointless questions. Some days when people want to visit the shop they find the doors locked, with the following notice attached to it, "The shop will be open tomorrow."

One day an 18-year-old comes into the shop and says that his watch has stopped, "I think the battery has run down, so I must be given a new one." Henry, who has few customers and doesn't sell much answers, "Give you a new one? Do you think I just stand here and give away batteries?" The boy is irritated and leaves the shop.

Later in the day a second customer enters the shop, a young lady. She would like to look at an elegant, expensive gold watch. The customer looks at it for a while and then says: "This is expensive, is it not?" "Yes," replies Henry. The customer looks at Henry in a questioning manner for some time. Henry thinks he has answered the customer's inquiry, and returns to his workshop to repair a clock that someone will pick up in a few hours time. The busy watchmaker hears the lady exclaim as she leaves the shop, "This is a strange shop; you don't get an answer when you ask a question!"

Questions

1. What kind of business does Henry have?
2. What is a clock maker?
3. What are talkers?
4. **What does Henry do to prevent talkative customers coming into his shop and taking up his time? (PI)**
5. What does the young gentleman who comes into the shop say?
6. What does the man mean by saying that he should be given a new battery for his watch?
7. What does Henry say to the young man?
8. What does the young lady who comes into the shop later in the day want?
9. What does she ask Henry?
10. What is Henry's reply?
11. Has Henry really provided an answer to what she wants to know about the watch?
12. **What does she really want to know? (MI)**

Set A: Story 13 (Social Blunders)

Out Shopping

One Tuesday morning, the mother of 18-year-old Allan is planning an enjoyable party for her sewing circle. His mother wants to serve the guests some really good sandwiches. It is not so long before the guests are to arrive, and she is busy cleaning the dining room, spreading the tablecloth, and adding the cutlery and plates before they arrive. She asks Allan if he can go to the local shop and buy the groceries she needs. Allan says he will and she puts the shopping list and $40 on the kitchen table.

When Allan arrives at the shopping centre some minutes later, he suddenly realizes that he has forgotten his mother's shopping list. He thinks that instead of wasting time by returning home to fetch the shopping list, he can just look at the shop flyers for the week's best buys, as his mother usually does. He reasons that people usually find the goods they need.

Priding himself on his solution, he proceeds to fill up his cart. He pays for his items, receiving $5 in change from the $40 he had.

But Allan can't carry all the items and therefore gets somebody to call a taxi. On arriving home, his mother stands at the door and wonders if an accident has occurred since he has taken a taxi. The taxi driver helps him take the items from the trunk: 2 loaves of whole wheat bread, 2 packets of lunch meat, a big piece of yellow cheese, 2 kilos of sugar, a chicken, 2 boxes of Kleenex, 2 bottles of ketchup, 2 packets of sausages, and a bag chips, all purchased on sale.

He proudly shows his purchases and is waiting for his mother to praise him for his savings. But his mother says, "Have you lost your mind, boy? What am I going to do with these things?"

Questions

1.   What is Allan's mother arranging on Tuesday morning?
2.   What does she want to offer her guests?
3.   **Why does she ask Allan to shop for her instead of going herself? (PI)**
4.   Does Allan want to shop for his mother?
5.   What does Allan forget to take?
6.   Why doesn't Allan return home to fetch the shopping list?
7.   What kinds of things does Allan put in the cart?
8.   How much change does he receive from the $40?
9.   Why does he have to take a taxi home?
10. Why does Allan's mother think an accident has occurred?
11. Do you think his mother should praise him for all the good purchases he has made?
12 What does his mother say to him when he comes home?
13 Why does Allan's mother react as she does? (MI)

Set B: Story 1 (Lies/Deception)

Father Christmas

On Christmas Eve Billy is eating berries and cream for dessert. Everybody around the table is excited as they wait for Santa Clause to arrive, as he has done on all previous Christmas Eve's.

When they have finished their dessert, Billy's father suddenly says: "I don't feel well, perhaps it is all the Christmas food I have eaten. I must step outside and have some fresh air on the doorstep."

A moment after Billy's father left, there is a loud knock on the door, and in comes Santa Clause carrying a large sack on his back. Billy is happy, but also a little afraid when he sees the figure. He has a long, white beard, red coat and low, black shoes. Santa Clause talks with a powerful, thundering voice, and asks, "Are there children here who have been good all year?" Santa Clause hands out packages, sings a little, says farewell, and disappears. Billy thinks that Santa Clause's voice sounds like his fathers.

A few minutes later, Billy's father returns. Billy looks at his father's shoes and notices that they are exactly the same as those worn by Santa Clause. His father hears about Santa Clause who has just departed and says, "Santa Clause, you don't say? Has Santa Clause really been here while I was outside getting some fresh air?"

Billy stands up, thinks and then after a while says, "I think it was you father who was dressed up as Santa Clause."

The father replies, "I didn't know that Santa Clause would come tonight." Billy repeats once again that his father was disguised, but his father says, "No my boy, you are making a big mistake, Santa Clause was here tonight."

Questions

1. What does Billy and his family eat for dessert?
2. Who are Billy and his family excitedly waiting for?
3. **Where is Billy's father while they sit and eat dessert? (PI)**
4. What reason does Billy's father give when he says that he wants to have some fresh air?
5. Who knocks on the door some minutes later?
6. According to Billy whose voice resembles Santa Clause's?
7. Who comes into the room after Santa Clause has left?
8. What does Billy notice about his father's shoes?
9. What does Billy say to his father after a while?
10. What has Billy discovered which makes him suspicious that his father has dressed up as Santa Clause?
11. Billy's father says that he didn't know that Santa Clause was going to pay a visit on Christmas Eve. Is it true what he says?
12. **Why does the father say that Billy is making a mistake when he believes that it was him - his father - who was dressed up as Santa Clause? (MI)**

Set B: Story 2 (White Lies)

Strong Pain

Mrs. Hanson is 73-years-old and has not been feeling so well recently. She has strong back pain and decides to pay the doctor a visit. The doctor is very friendly towards Mrs. Hanson and tries to make her feel at ease. He examines her thoroughly and takes a number of tests. Mrs. Hanson is asked to come back in a week because the doctor will have received the test results.

A few days later the doctor has the results of Mrs. Hanson's tests. He studies the x-rays closely, identifies a number of abnormal findings in the patient's spine. Since he is a skilled doctor, he realizes immediately that there is no point in carrying out an operation on the patient.

The next day Mrs. Hanson has an appointment with the doctor. When she goes into the doctor's office she asks the doctor if he has found anything serious. The doctor, who knows Mrs. Hanson well, realizes that she is anxious and that there is something seriously wrong. He says that people of her age must expect a few problems, and that there is something in her back that is giving her strong pain. He writes out a prescription for some medicine, and says that she will soon be better when she takes 2 doses three times per day.

Questions

1. Why does Mrs. Hanson go to the doctor?
2. Where does she have strong pain?
3. What does the doctor do with Mrs. Hanson?
4. Why is she going to return in a week?
5. **Why does the doctor, after having studied Mrs. Hanson's x-rays, realize that there is no point in operating on her? (PI)**
6. What does Mrs. Hanson ask when she enters the doctor's office?
7. What is Mrs. Hanson anxious about?
8. What does the doctor say is the reason for her strong pain?
9. What does he say will happen when she takes the medicine he prescribes?
10. Does the doctor tell Mrs. Hanson what he has found on the x-rays?
11. **Why do you think the doctor doesn't tell Mrs. Hanson about her illness? (MI)**

Set B: Story 3 (Figurative Speech/Metaphors)

In the Same Boat

One day Kevin and Kenny borrow the rowing boat to go fishing. The rowboats belong to Kevin's father. It is windy and rainy, but Kevin and Kenny have been out fishing before, so they aren't afraid. At sea they reel up one fish after another. By 1 p.m. they have caught 50 fish, and this is more than they can eat or put in the freezer at home. Soon they begin to row towards home.

The wind has got up, and the waves are soon quite high. In the strong wind they lose control of the boat, which is tossed back and forwards by the high waves. The spray from the sea is against them and they can't see if they are going towards the island. Kevin and Kenny begin to become afraid.

Soon they hear a braking sound as the boat hits the ground and is smashed to pieces against a large stone on the small island. Kevin and Kenny luckily arrived with no harm. They shout for help, but nobody can hear them.

They seek shelter from the wind behind some large stones, and try as best as they can to keep warm and keep in good spirits. Kevin says, "Now we are in the same boat, Kenny!"

Questions

1. Where do Kevin and Kenny go one day?
2. What is the weather like when they set out?
3. How many fish do they catch?
4. **Why do Kevin and Kenny begin to row home again at about one o'clock? (PI)**
5. What happens to their boat in the strong wind?
6. Why are they now afraid?
7. What does the boat hit?
8. What happens to their boat?
9. Where do they seek shelter?
10. What do they try to do to the best of their ability?
11. Is it actually the case, as Kevin says, that they both find themselves in the same boat?
12. **What does Kevin mean when he says that they are now in the same boat? (MI)**

Set B: Story 4 (Misunderstanding)

Is This Your Umbrella?

Willy Larson is 21-years-old, and he is only interested in music. He lives in his own world and doesn't always listen closely to what others say. He plays in a popular rock band and writes a number of pop songs. The band has recently become quite well known nationally for their songs. Especially one called, "Is this your umbrella?" which has become very popular and released as a record.

One day when Willy is about to take the bus to town it begins to poor heavily with rain. He remembers that he has an umbrella in a cupboard in the hall and fetches it. The lock on his bag, which he normally takes with him each day he goes to town, jammed two days ago. The housing association's caretaker, who was earlier a locksmith, is a person Willy knows. He has promised to repair it by the end of the week.

Willy climbs onto the bus from the bus stop. He puts the umbrella on the shelf above his seat, where he is sitting with another passenger.

On the way to town the rain ceases and the sun comes out from the clouds. Willy is extremely happy when he hears a fellow passenger humming the melody, "Is this your umbrella?" which he sings with his rock band. "Cool, our songs are sung everywhere," he thinks. Willy looks at the sun as the bus pulls to a halt and he is getting ready to get off. As he gets off he hears the man who sat beside him say, "Is this your umbrella?" The man raises his eyebrows when he sees that Willy leaves the bus without taking the umbrella. Willy on the other hand is happy and content as he saunters down the street with his hands in his pockets, "Even the man on the bus knows our song!"

Questions

1. What is Willy Larson's main interest?
2. What is the name of the popular song that his rock band has released as a record?
3. What is the weather like when Willy is getting ready to catch the bus into town?
4. What does he find in the hall before he takes the bus to town?
5. **Why doesn't Willy need to take his bag into town to get it repaired? (PI)**
6. Where does he place his umbrella on the bus?
7. How does the weather turn out on the way to town?
8. Which song does he hear somebody humming on the bus?
9. What does he think when he hears the song being sung?
10. What does the man beside Willy mean when he says, "Is this your umbrella?"
11. Does Willy correctly understand what he says?
12. **Why doesn't Willy stop to take the umbrella when the man beside him asks if it belongs to him? (MI)**

Set B: Story 5 (Double Bluff)

The Valuable Coin

Thomas and Nick, who are friends, go to the dump to look for things that they can sell. Thomas suddenly sees something shining among the trash. He picks it up, and it turns out to be a very old and valuable coin. Nick, who also collects old coins, says the coin is just as much his since they are together looking in the trash.

On the way home they call a coin dealer, Paul, who has a shop on High Street. After Paul has seen the coin and estimated its value, they leave. On the street Thomas says, "Cool, the coin is quite valuable!" "Yes, $100 for each of us isn't to turn your nose up," says Nick.

Thomas believes that the coin is his alone, since he was the one who found it.

Nick is disappointed that Thomas won't share it with him. He makes his mind up to find out where Thomas has hidden the coin because he needs the money.

Thomas has hidden the coin in his desk drawer. The drawer can't be locked. Thomas has a safe deposit box, which can be locked. He wants to keep the coin in his desk drawer, so that he can take it out as often as he likes.

One day Nick is visiting Thomas, and he asks if he has locked the coin in the safe deposit box, which is standing on the desk. Thomas, who knows that Nick might steal the coin, says that he has hidden it in his office drawer. "I trust people," says Thomas as he goes out to fetch the post. While Thomas is outside Nick takes the safe deposit, hides it under his jacket and disappears from the room.

Questions

1. Why do Thomas and Nick go to the dump?
2. What does Thomas find?
3. Why does Nick say that the coin is just as much his own?
4. **How much does the coin dealer say the coin is worth? (PI)**
5. What does Nick want to find out?
6. Where does Thomas keep the valuable coin?
7. Why does he keep the coin in the desk drawer and not in the safe deposit box, which can be locked?
8. Where does Thomas say that he has hidden the coin?
9. Is it true what Thomas says to Nick?
10. Why does Nick steal the safe deposit box when Thomas says to him that he has hidden the coin in the desk drawer?
11. **Why does Thomas say to Nick that he has hidden the coin in the desk drawer - where he has really hidden it - and not in the safe deposit box? (MI)**

Set B: Story 6 (Irony)

The Polite Lady

Carol, who is a very polite and friendly lady, is invited to a coffee evening at Anne's, her sister-in-law. Around the coffee table there are several of Carol's relatives; they are talking pleasantly to each other. Carol's uncle, George Strand, is also present. He is a general in the army, and is himself a very polite person, who expects that other people also behave like him.

One day Carol is in town, and she passes uncle George while she is cycling along High Street. It is in the middle of rush hour, and she has to concentrate on the large amount of traffic and the many pedestrians. She doesn't see uncle George as she cycles by him, while he is walking along the pavement only meters away from her.

At the coffee evening Carol tells the other guests that she cycled to town a few days ago, and that it was a far from pleasant experience because of the busy traffic. Her uncle, who is sitting beside her at the table, interrupts her and says while smiling, "Carol is a very friendly lady. The other day I met her while she was cycling in town, she smiled at me and politely said hello."

Questions

1. Where does Carol go for a coffee evening?
2. What do Carol and her relatives do when they are sitting around the coffee table?
3. What is Carol's uncle's occupation?
4. What does uncle George expect of others?
5. Who does Carol pass one day when she is in town?
6. **Why doesn't Carol greet uncle George as she cycles past him in town? (PI)**
7. What does Carol tell the others around the coffee table?
8. Does uncle George mean what he says, that Carol smiled and greeted him politely when they met each other the other day in town?
9. **What is uncle George's intention when saying what he does to Carol? (MI)**

Set B: Story 7 (Persuading)

Fido

The Hanson family, Mrs. Elsie, her husband Gerald and their children, Emma and Dan, have a large, kind, hunting dog called Fido. Both Emma and her brother Dan are very fond of Fido. Every day Fido sits on the doorstep, looking out for Emma and Dan when they come home from school, and waves his tail when he sees them.

As a child, Emma and Dan's mother was attacked by a big dog. Since then she has never liked dogs, and she is not particularly fond of Fido. Besides she complains that Fido regularly runs after birds in the muddy ground close by.

The dog is for the most part in the kitchen when it isn't outside running. Elsie has to wash the kitchen floor almost daily, something she also complains about. Even though she knows that her husband and her children are fond of the dog, she has several times said to her husband that she would like to get rid of Fido. Her husband is against this, especially because the children are extremely fond of Fido.

Emma has asthma, and suffers sometimes from asthma attacks, as a rule when she is at school. One day she has an attack and is almost unable to breath. Luckily, she has her asthma spray in her school bag, so she soon recovers. When her mother hears about this she says to her husband, "I am quite sure that Emma's asthma attack was caused by an allergy to dogs, and that this is Fido's fault. It is therefore time to get rid of this dog before it ruins Emma's health!"

Questions

1. What is the Hanson family's dog called?
2. What do Emma and Dan think of Fido?
3. Why does Fido sit and wait for Emma and Dan to return from school?
4. What do Emma and Dan's mother think of dogs?
5. **Why does she wash the kitchen floor almost daily? (PI)**
6. What does she want to do with Fido?
7. What do her husband and children think of this?
8. What kind of illness does Emma have?
9. What does Emma's mother say to her husband after hearing about Emma's asthma attack at school?
10. Where is Emma when she normally has her attacks?
11. Is Fido normally present when Emma has her asthma attacks?
12. **Why does Emma's mother say that Fido is the cause of Emma's asthma attacks, even though she has her attacks when the dog is not present? (MI)**

Set B: Story 8 (Conflicting Feelings)

A Difficult Choice

Peter Miller is a furniture dealer and he has owned several furniture shops and has just sold them. He is 60-years-old and wanted to sell his business to have more time for his hobbies. While Peter's parents passed away some years ago, he showed that he cared for them by visiting them often in the old people's home. They were both very ill, but appreciated each of Peter's visits. With Peter not visiting in recent years, he has had more time for himself. Six months ago he moved in with Nina, who he has known since his school days.

Peter has always had sympathy for those in society who have a difficult life. With the sale of his business he has a large fortune. Without telling anyone, he has thought of giving his fortune to a centre for those injured in traffic accidents. The centre plans to modernize its old building and this would use up most the money.

Peter has asthma and problems when it is cold and damp. One day Nina shows him a newspaper advertisement of a large, elegant villa. It is for sale outside Barcelona in Spain. She says that they ought to buy the property and move to Spain. "It would be good for your health, Peter," she says. Peter agrees that it is a good idea.

The following day, Peter's good friend and head of the centre for traffic injuries, Gary Hagen, pays a visit. While Peter and Gary are sitting together and talking about the modernization plans for the centre, Peter says that he wants to give his entire fortune to the cause. Nina, who is sitting at the other end of the lounge can't avoid hearing their conversation.

After Gary has left, Nina says to Peter, "You just said to me that it would be a good idea to buy the house in Spain. To Gary Hagen you now say that you will give away your fortune to the centre for traffic injuries." Peter finds what Nina says problematic, but answers, "Yes indeed, I would like to help other people, but at the same time I regret that perhaps there won't be a new villa in Spain."

Questions

1. Why does he sell his furniture business?
2. Who did Peter often visit in the old people's home?
3. **Why hasn't Peter been to the old people's home in the last year? (PI)**
4. Who moved in with Peter six months ago?
5. What does Peter suffer from when it is cold?
6. What does Nina propose one day after having read a newspaper advertisement?
7. What does Peter think of Nina's idea of buying the house in Spain?
8. What do Peter and Gary talk about?
9. How does Nina know what Peter and Gary talk about?
10. What does she say to Peter after Gary has left?
11. Is it correct that Peter wants to give his money both to the centre for traffic injuries and to use it in the purchase of a Villa in Spain?
12. **What does Peter feel when he expresses pleasure about being able to help other people, but at the same time feels regret that he might not be able to buy the villa in Spain? (MI)**

Set B: Story 9 (Forgetfulness)

At the Bank

Martin Anderson is at the bank withdrawing $200 of his pension. As the cashier counts out the money and places it in front of him, an old friend named Tim Lane comes over to him and says, "Good day Anderson. It is indeed a long time since I saw you. And now you have become one of the pensioners!"

Andersen and Lane stand and talk together for over a half hour. Suddenly, Anderson remembers that he has agreed to meet his wife at 2 p.m., where they are to eat lunch together at the Small Café. The cashier shouts to Anderson as he is about to leave the bank. However, there is much noise as there are two workmen putting up some new signs on the concrete wall.

Anderson arrives at the café almost 20 minutes late. Mrs. Anderson has already ordered the food, and it is almost cold when he arrives. Irritated, she asks him if he has been to the bank and taken out the money. "Yes," says Anderson in a hesitant tone, "of course I have…" Anderson's face takes on a strange appearance. He jumps up from his chair and rushes at great speed out of the café.

Questions

1. How much money does Anderson withdraw?
2. Who comes over to talk to Anderson as the cashier is counting the money?
3. What does Lane mean by saying that Anderson has become one of the pensioners?
4. How long do Anderson and Lane stand together and talk in the bank?
5. What does Anderson suddenly remember at 2 p.m.?
6. **Why doesn't he stop leaving the bank when the cashier shouts after him? (PI)**
7. Why isn't Mrs. Anderson friendly towards Andersen when he enters the café?
8. What does she ask her husband?
9. Is Anderson affected by what his wife asks him?
10. **Why does Anderson jump up from his stool at great speed and rush from the café? (MI)**

Set B: Story 10 (Jealousy)

The Stranger

Steve Heath is extremely fond of his charming, faithful wife, who has been married to for 20 years. Nevertheless, Steve keeps a close eye on what she does. He thinks that perhaps she might come to like another man more than him, and this steadily worries him.

One day he is walking along the town's main street and sees her talking with an unknown man. At a distance it is difficult for Steve to see who the stranger is. He puts his hand into his jacket pocket to reach for his glasses case. However, recently he has been in the habit of putting his glasses case on his writing desk at home, where today he was reading some documents from the insurance company.

He hides behind a telephone box to see what his wife does with the stranger. Suddenly, he sees his wife move along the pavement with the stranger and they turn into a side street. Steve follows them and in the side street he shouts, "So, this is what you do in the open, in the day time!" His wife is shocked and turns to her husband, "But Steve! What are you talking about now? Can't you see that this is your own brother-in-law?"

Steve, who can't make out who the stranger is, shouts, "Keep to the truth. I hate people who tell lies!"

Questions

1. Is Steve fond of his wife?
2. How long have Steve and his wife been married?
3. Who does Steve see one day along the town's main street?
4. **Why is it difficult for Steve to see who the person is who is talking to his wife? (PI)**
5. Why does he hide behind a telephone box?
6. Where does his wife go with the stranger?
7. Does Steve follow them?
8. What does he shout?
9. What does his wife reply?
10. Who is the strange man she is talking with?
11. Does Steve believe what his wife is saying?
12. **Why does Steve react as he does? (MI)**

Set B: Story 11 (Lack of Consideration for Other People's Feelings)

The Wrong Orange Juice

On the way home from work one Friday afternoon in the middle of rush hour, Kent's mother experiences problems with her car. It breaks down and she has to be towed home. As usual on Fridays after work she has been to Superstore to buy her groceries for the weekend. Unfortunately, Kent's favourite orange juice is sold out on this particular Friday. Instead Kent's mother buys the no-name brand of orange juice.

Kent's mother says that she is very tired and has shoulder pains. The last few weeks she has had to work over-time, and arrives home from work late in the evening. Because of the pain she hasn't slept very well at night. Kent listens to what his mother says, but is unhappy that dinner, which is usually served at 5 p.m., is delayed by several hours.

Kent helps his mother in unpacking the groceries and putting them in the fridge. While he is doing this he discovers that his mother hasn't bought his favourite juice, but another make of orange juice instead. He therefore fetches his mother's jacket and says, "If you hurry, you will make the store before it closes in half an hour. I know that they have Mills Orange Juice."

Kent's mother becomes extremely angry when she hears this and shouts in desperation, "You think only of yourself Kent!" Kent, who only wanted his favourite juice, is quite surprised that his mother becomes so angry because of this.

Questions

1. What happens to Kent's mother on the way home from work on Friday afternoon?
2. Where has Kent's mother bought her groceries for the weekend?
3. Why can't she buy Kent's favourite juice?
4. **Why on this particular Friday evening is Kent's mother tired with shoulder pains? (PI)**
5. What does Kent think about his dinner not being served at the usual time?
6. What does Kent help his mother with?
7. What does he discover as he puts the groceries into the fridge?
8. Why does Kent go and fetch his mother's coat?
9. Is Kent's mother angry on hearing his proposal that she should go to the store to buy his favourite juice?
10. **Why is Kent so surprised that his mother becomes angry just because he would like to have his favourite juice? (MI)**

Set B: Story 12 (Mistaken Intentions)

The Heavy Bag

Tina and Charlotte are in the 2nd grade at school; they are friends and often go to school together. Tina has been to the library and borrowed many books, so her school bag is very heavy. Her arm becomes very tired with the weight. Charlotte on the other hand, has not been to the library today. In her knapsack she has only her pencil case and two exercise books.

Charlotte is a kind and helpful friend, especially when she understands that somebody needs her help. But, she doesn't say much.

Just before they are to begin going home, Tina says, "Can you wait a moment for me by this flag pole, while I go to the toilet?" "Yes," says Charlotte, "I can." But, Charlotte doesn't wait for Tina, and when Tina comes out from the toilet, Charlotte has already begun going home. Tina runs after her as fast as she can, while carrying the heavy bag in her right hand. After a while when she catches up with Charlotte she says, "You promised to wait for me, why did you just go?" asks Tina. But, Charlotte just looks in a questioning manner.

Tina's arm is now very tired and she says to Charlotte, "Can you carry my bag?" "Yes, I can," replies Charlotte. Tina stops and waits for Charlotte to take her bag, but Charlotte just keeps on going.

Questions

1. What grade are Tina and Charlotte in?
2. Why is Tina's school bag heavy today?
3. **Why is Charlotte's knapsack light to carry? (PI)**
4. What does Tina ask Charlotte when they are about to begin going home from school?
5. What does Charlotte do?
6. What does Tina say to Charlotte when she has caught up with her?
7. How does Charlotte react to what Tina says?
8. Why does Tina want Charlotte to carry the heavy school bag?
9. **Why doesn't Charlotte stop to take Tina's bag when Tina's arm is so tired? (MI)**

Set B: Story 13 (Social Blunders)

A Well-Earned Rest

Nineteen-year-old Frank is a gardener and he is tidying a garden. Today he is clearing a piece of damp ground in preparation for planting some bushes. At lunch time Frank washes his hands, brushes the dirt from his overalls, and sits behind some trees in the garden to eat his lunch pack, which he normally has with him.

Frank has recently been ill, so he needs to rest a little in the course of the day. Just as he is about to open his lunch pack, he suddenly begins to think about the poor weather report he heard on the radio this morning. He looks up at the dark clouds in the sky and says to himself, "The plants need water, but it isn't a good time because I am about to eat." He sees the owner of the house, Mrs. Beatrice Jones, who is standing by the door, and he goes over to her. He asks if he can eat his food in the house. That is all right she says.

As Frank enters the house he sees that Mrs. Jones is baking some bread rolls, and her hands are full of dough. He therefore thinks that it is unwise to disturb her further, so he finds the bathroom on his own and washes his hands. Thereafter, he goes into the dining room and eats his food. When Frank has finished eating, he brushes the larger breadcrumbs from the table onto the carpet, where they won't be so visible.

Because Frank feels a little tired and wishes to rest a little, he looks for a place where he can relax for a moment. In the lounge he sees a lightly coloured sofa, and he lies down on it to rest. Just after he has sat down in the sofa to relax for a while, he sees Mrs. Jones enter the lounge.

Questions

1. What kind of work does Frank do?
2. What is he doing today?
3. What does Frank do at lunchtime?
4. Where does he sit?
5. Why does he need to rest a little in the course of the day?
6. **Why does Frank go and ask Mrs. Jones if he can eat his food in the house? (PI)**
7. What is Mrs. Jones's reply?
8. Why doesn't Frank want to disturb Mrs. Jones unnecessarily, and find the bathroom and dining room himself?
9. Why does Frank brush the larger breadcrumbs from the table onto the carpet?
10. Why does he look around for a place to rest?
11. Does Mrs. Jones think it is all right for Frank to rest on the sofa in the lounge?
12. **What do you think Frank thinks Mrs. Jones will think of him lying down on the sofa to rest? (MI)**