

EQUINE ASSISTED THERAPY FOR ADOLESCENTS CHALLENGED BY ANXIETY IN
SCHOOLS

by

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A Paper

Presented to the Gordon Albright School of Education

In Partial Fulfillment of the Requirements

For the Degree of Master of Education

EEA650 Leadership Project

OR EGC640 School Counselling Project

November, 2018

Equine-Assisted Therapy for Adolescents Challenged by Anxiety in Schools

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Dedication

I would like to dedicate this capstone to the countless amazing animals that I have been wonderfully fortunate to have in my life; in particular, the horse who started it all, Chaser, and the horse whom I will never forget, Shakespeare. Additionally, and most importantly, I dedicate this capstone to my parents, without whom I would never have had the opportunities to discover my many passions. Their never-ending love and support in all that I have done and currently do has provided me with the courage to pursue all my endeavors no matter what the outcome may be. They have provided me with a secure base from which to explore the world and safe place to land whenever I should need it. Thank you, mom and dad for all that you do. I am forever grateful.

Acknowledgements

I would like to express my gratitude to the amazing, kind, and inspiring professors I had the opportunity to learn from throughout my program. A special thank you to my supervisor, Mary O'Neill for believing in me, even before my counselling journey began. You were there to support me when things got tough and to celebrate my achievements along the way. I am very appreciative of all your encouragement.

I would also like to give a special thank you to Dr. Jill Taggart who supported me through the process of my Capstone. Your patience, knowledge, and prompt feedback were very appreciated and made this wonderfully challenging experience more valuable.

Thank you to my mentors, Pam and Jamal. I have learned so much from both of you and it was a true pleasure to have had your expertise along the way.

Finally, a great big thank you to my family. Babi, I am deeply saddened that you did not get to see me graduate, but you have been in my thoughts and my heart every step of the way. I love you forever. Mom, dad, Irene, and Deedee, I truly could not have done this without your love, support, encouragement, reassurance, confidence, and babysitting! Kyle, thank you for always believing in me. Mason and Ellie, you are my inspiration.

Abstract

Adolescent anxiety is highly problematic in the high school setting and can cause long-term persistent mental health issues such as further anxiety, depression, and substance use problems later in life. Animal-assisted therapy, and more specifically, equine-assisted counselling has been shown to be beneficial in reducing anxiety symptoms and helping adolescents in developing strategies to overcome patterns of anxiety. It has also been suggested that equine-assisted counselling may function by way of an attachment-based model, in that the client-therapist working alliance is strengthened with the use of the horse in addition to the client-horse relationship providing the client with an additional relational connection. This capstone aims to propose a study for further research in equine-assisted counselling in the high school setting using phenomenological qualitative methodology for students with anxiety.

Key words:

Animal-Assisted Activity; Animal-Assisted Therapy; Animal-Assisted Therapy in Counselling; Equine-Assisted Activity and Therapies; Equine-Assisted Activities; Equine-Assisted Therapies; Equine-Assisted Counselling; Equine-Facilitated Psychotherapy; Generalized Anxiety Disorder; Human-Animal Bond; Social Anxiety; Working Alliance

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Equine-Assisted Counselling for Adolescents with Anxiety in Schools

Chapter 1

Introduction

According to the World Health Organization (WHO) (n.d.), approximately 20% of children and adolescents around the world have mental health disorders and about half of those begin before the age of 14. Evidence suggests anxiety disorders to be the most common mental disorders among children and adolescents (Beesdo, Knappe, & Pine, 2009; Costello, Egger, & Angold, 2005; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003), which suggests the necessity for a variety of effective prevention, intervention, and treatment options. Cognitive behavioural therapy (CBT), mindfulness, social-emotional learning, and animal-assisted therapy are examples of strategies that have been shown to be beneficial.

The aim of this capstone is to analyze the research which has been done with respect to the effectiveness of animal-assisted therapy, more specifically, equine-assisted counselling as a treatment option for adolescent anxiety in youth. Chapter 1 aims to describe the context of the research and will include the definition of terms. Chapter 2 will include a review of previous research done regarding equine-assisted counselling (EAC) as a treatment option for those struggling with anxiety and other mental health challenges. This discussion will also include the theoretical relevance of Bowlby's attachment theory as it pertains to EAC. Furthermore, the barriers to using equine therapy and the safety concerns with respect to the client, the therapist, and the horse will be reviewed. Finally, chapter 3 will introduce a proposed methodology based on the research question which aims to identify the efficacy of equine-assisted counselling therapy for decreasing anxiety symptoms in adolescent anxiety. Additionally, chapter 3 will

include a discussion regarding the limitations of the proposed methodology as well as alternative suggested research for the future.

Background to the Research Problem: Anxiety

Anxiety disorders are the most common mental health diagnosis for school-aged kids with an estimated 31.9% among adolescents, including 8.3% with severe impairment (“Any Anxiety Disorder”, 2017). Anxiety is a natural, adaptive response which benefits organisms by encouraging the avoidance of danger (Beesdo et al., 2009). Anxiety becomes less adaptive and more pathological when one’s worries begin to interfere with everyday functioning with worries becoming exceedingly frequent, intense, and persistent (Beesdo et al., 2009; Stein & Sareen, 2015). The WHO (n.d.) defines anxiety as feelings associated with experiencing physical, social, economic, and/or psychological stress and works by encouraging us to remove or avoid the source of anxiety. However, many sources of anxiety cause more long-term stress when avoided and lead to heightened, persistent anxiety which may become debilitating. Anxiety disorders include generalized anxiety disorder, panic disorder, phobias, agoraphobia, social anxiety disorder, selective mutism, substance induced anxiety disorder, and separation anxiety disorder (DSM-V, 2013). Anxiety disorders have no known cause although they are linked to genetic, psychological, environmental, and developmental influences (DSM-V, 2013). Research has shown that anxiety disorders affect children and adolescents more commonly than other psychiatric disorders (Beesdo et al., 2009).

Adolescence, which is described as the period between childhood and adulthood from the ages of 10-19 (WHO, n.d.) is often a challenging time in one’s life. Childhood and adolescence are critical periods for the onset of mild to severe anxiety symptoms (Beesdo et al., 2009; Costello, et al., 2003). In schools, many students find themselves trying to fit in socially,

struggling to be successful in their academics, finding their own independence, and balancing their academic, social, and extracurricular lives. For those who are suffering from constant, extreme anxiety, those challenges can seem insurmountable. Physiological symptoms (difficulty breathing, dry mouth, increased heart rate, shaking, stomach pains) and psychological symptoms (extreme worry, superfluous fear, panic) can cause negative effects on academics, social acceptance and relationships, aggression, and depression (Llorca, Malonda, & Samper, 2016).

Cosgrove, et al. (2011) distinguishes between internalizing and externalizing disorders. Anxiety is an internalizing disorder in which distress is expressed inwards and individuals try to over-control or over-regulate their cognitive and internal emotional state whereas externalizing disorders, such as attention-deficit/hyperactivity disorder or oppositional defiant disorder, is when individuals have little control or self-regulation of their emotional state and express their distress outwardly by way of aggressiveness and/or defiance (Cosgrove et al., 2011; Nivard et al., 2017). Internalizing disorders include mood disorders (e.g. depression) and anxiety disorders (e.g. generalized anxiety and phobias) (Cosgrove, et al., 2011; Nivard et al., 2017). Fear, shyness, poor self-esteem, and sadness are correlated with internalizing disorders such as depression and anxiety (Ollendick & King, 1994). Some youth often exhibit both internal and external disorders in conjunction with one another (Nivard et al., 2017).

Long-term anxiety disorder, if not treated successfully, can often lead to continued adult anxiety disorders (Allan, et al., 2013; Sweeney & Pine, 2004) and can also lead to mood disorders and problems with substance use (Wolitzky-Taylor et al., 2015). Additionally, stress and anxiety have been linked as contributing factors to poor physical health, including cardiovascular disease (Barker & Dawson, 1998; Craske, & Stein, 2016). Anxiety disorders have

also been highly associated with the prevalence of long-term depression (Almeida et al, 2012; Weiss, et al, 2016) which according to the WHO (n.d.) is the main cause of disability.

Effects of anxiety

Academic achievement. It is well understood that engagement and participation are imperative aspects to positive academic achievement. It goes without saying that success in high school leads to more options for post-secondary education. Post-secondary education, in turn, is associated with overall physical and psychological health, lower crime rates and welfare costs (McMahon & Oketch, 2013). Anxiety and depression can have a detrimental effect on students and their career development (Apodaca, 2016). Anxiety disorders have been shown to affect students' attendance in class and cause absenteeism due to school avoidance (Skedgell & Kearney, 2016). Unfortunately, due to the high prevalence of anxiety among adolescent children, academic success can be compromised regardless of students' abilities and those with anxiety have a substantially more challenging time with school and social functioning than for students who are non-anxious (Mychailyszyn, Mendez, & Kendall, 2010). Persistent anxiety leads to poor academic achievement, deficiencies in problem solving, dependent and attention-seeking behaviours, decreased self-concept (Allen & Klein, 1996) and working memory (Opatye, 2014; Patel et al., 2016).

Social skills. Early adolescence is a time when social acceptance from friendships and peer groups begin to increase in importance both socially and academically. Building positive relationships between students, and students and teachers encourages comfort and engagement in the classroom environment (Conner, 2014; Davis, Summers, & Miller, 2012). A study done by Erath, Flanagan, & Bierman (2007) showed that anxious compared to non-anxious adolescent students were less accepted and more discriminated against by peers, and frequently teachers

noticed poorer social interactions and more social withdrawal. Withdrawal and avoidance perpetuate anxiety considering coping strategies to successfully manage anxiety cannot be developed when the opportunities to do so are non-existent when avoided (Ollendick, Vasey, & King, 2000). Anxiety disorders can have long-term negative effects on friendships as well as romantic relationships (Hebert, Fales, Nangle, Papadakis, & Grover, 2013). In other words, it can be nearly impossible to overcome anxiety due to heightened withdrawal strategies which eliminate possible opportunities to experience positive outcomes in anxiety-causing situations and to develop genuine connections in the classroom.

When considering social interactions among adolescents, it is helpful to identify emotional intelligence and how it is related to anxiety. Mayer (2001) considers emotional intelligence to be the ability to perceive one's own and someone else's emotions, the ability to access emotions from the past and the present, the ability to understand as well as manage one's emotions, and the ability to develop meaningful relationships. Conner and Slear (2009) identified a negative correlation between emotional intelligence and anxiety, as in high levels of anxiousness supported low levels of emotional intelligence. Additionally, studies have shown a positive correlation between emotional intelligence and empathy, positive self-esteem, extroversion, and the ability to express one's feelings verbally (Opatye, 2014). When one is challenged with anxiety, their ability to appropriately develop their emotional intelligence becomes compromised, further leading to difficulties in establishing relationships in and out of the school setting, and likely contributing to additional struggles with anxiety.

To summarize, social fears and performance fears are primary anxiety generating concerns (Weems & Costa, 2004), which are virtually unavoidable in the school environment. Thus, the necessity to provide intervention and treatment strategies to those suffering from

anxiety disorders is critical to the academic success and social well-being of adolescents in the school setting, and will contribute to their long-term overall well-being once these students reach adulthood.

Characteristics and predictors of anxiety. Internalizing disorders such as anxiety can often be difficult to recognize. It is therefore useful to discuss several characteristics which may increase awareness that one may be struggling with anxiety. Common characteristics include excessive worrying, fears of specific situations, increased sensitivity to physical cues, physiological arousal such as increased heart-rate, excessive sweating, nausea, and shaking, compulsive or obsessive behaviour, negative or unrealistic thoughts, and panic attacks (Merrell, 2001). One way of explaining anxiety symptoms is known as the tripartite model (Merrell, 2001). This model states that there are 3 areas of symptoms which include subjective feelings such as fear, worry or discomfort, unconcealed behaviours such as avoidance and withdrawal, and physiological reactions such as increased heart rate, sweating, and shaking (Merrell, 2001). There is significant evidence that shows that anxiety and depression have a high degree of comorbidity (Dia, Harrington, & Silverman, 2010; Merrell, 2001) thus it is highly probable that students showing signs of or are diagnosed with depression are additionally struggling with anxiety and vice-versa.

Gender has been shown to be a significant predictor of adolescent anxiety in that girls tend to suffer from anxiety and depression symptoms almost three times more than boys (Olino, Klein, Lewinsohn, Rohde, & Seeley, 2010; Weeks, et al., 2014). Risk factors which could contribute to anxiety include low socioeconomic status (McLeod & Shanahan, 1993; Rutter, 2003; McLaughlin, Costello, Leblanc, Sampson, & Kessler, 2012) chronic health problems

(Jones et al., 2017), and being exposed to neglect and/or maltreatment from caregivers (Hovens, Giltay, Hemert, & Penninx, 2016).

Additionally, it has been shown that insecure attachment patterns are a predictive risk factors of adolescent anxiety symptoms (Lee & Hankin, 2009; Hankin, 2005) and that hostile and/or neglectful parenting in early childhood is a predictor for adolescent anxiety (Weeks, et al., 2014). Furthermore, these patterns are thought to persist into and throughout adulthood which suggest a possible link between insecure early attachment to anxiety disorders later in life (Gunnar & Quevedo, 2007; Sbarra & Hazan, 2008).

In summary the aim of this capstone is to investigate if including horses during therapy benefits students by reducing anxiety through building relationships, providing an opportunity to develop communication and social skills, and developing self-concept by overcoming challenges.

Definition of Terms

Animal-assisted activity (AAA): “opportunities for motivational, educational, and/or recreational benefits to enhance quality of life . . . delivered in a variety of environments by specially trained professionals, paraprofessionals, and/or volunteer, with an animal that meet specific criteria” (Pet Partners, 2012).

Animal-assisted therapy (AAT): “Animal-assisted therapy is a goal-oriented, planned, structured, and documented therapeutic intervention directed by health and human service providers as part of their profession. A wide variety of disciplines may incorporate AAT. Possible practitioners could include physicians, occupational therapists, physical therapists, certified therapeutic recreation specialists, nurses, social workers, speech therapists, or mental health professionals” (Pet Partners, 2012).

Animal-assisted therapy in counselling (AAT-C): Using animals, most often pets, as therapeutic agents into the process of counselling (Chandler, 2017)

Anxiety: The World Health Organization (WHO) defines anxiety as “one of the feelings all of us experience when we are under stress: physical, social, economic, psychological. It helps at times by driving us to action to remove the source of anxiety, however if it becomes too much it can result in us being unable to do anything” (n.d.). In other words, anxiety is an elevated emotional state, stemming from concerns and worries about potential future threats which develops into severe distress (Llorca, Malonda, & Samper, 2017).

Equine-assisted activity and therapies (EAAT): EAAT describes two types of interventions: equines assisted activities (EAA) and equine assisted therapies (EAT). EAA includes therapeutic horseback riding (THR), vaulting, carriage driving and non-riding activities with the horse and EAT describes therapies including equine assisted psychotherapy and hippotherapy (Professional Association of Therapeutic Horsemanship International, n.d.).

Equine-assisted counselling (EAC): Equine-assisted counselling is when therapeutic modalities performed by a mental health professional include the use of horses to facilitate therapeutic strategies (Chandler, 2017).

Equine-facilitated psychotherapy (EFP): “an interactive process in which a licensed mental health professional working with or as an appropriately credentialed equine professional, partners with suitable equine(s) to address psychotherapy goals set forth by the mental health professional and the client (Professional Association of Therapeutic Horsemanship International, 2014). This is essentially the same as EAC.

Generalized anxiety disorder (GAD): Generalized anxiety disorder is “characterized by chronic and persistent worry, which is multifocal, excessive, and difficult to control, typically

accompanied by other nonspecific psychological and physical symptoms” (Solomon, Stein, & Sareen, 2015, p. 2059).

Human-animal bond: the human-animal bond is defined as “mutually beneficial and dynamic relationship between people and animals that is influenced by behaviours essential to the health and wellbeing of both. This includes, among other things, emotional, psychological, and physical interactions of people, animals, and the environment.” (“Human-Animal Bond”, 2018)

Social anxiety: Social anxiety, also known as social phobia, is an anxiety disorder described as a persistent fear or panic of interpersonal judgment connected with the possibility of being embarrassed or humiliated in social and/or performance situations (Mancini, van Ameringen, Bennett, Patterson, & Watson, 2005)

Working alliance: the working alliance or therapeutic alliance is the “collaborative and affective bond between therapist and patient” (Martin, Garske, & Davis, 2000, p. 438).

Significance of Study

It is clear that anxiety is problematic for many children and adolescents, therefore the necessity for intervention to support youth with anxiety is critical. Without intervention strategies, childhood anxiety disorders can lead to adult anxiety disorders, depression, substance abuse, suicidal ideation and attempts, and psychiatric hospitalization (Kendall, et al., 2004). The purpose of this capstone is to investigate equine-assisted counselling (EAC) as a treatment option for adolescent anxiety. The relevance of attachment theory as a theoretical basis for implementing EAC, the efficacy, benefits, and accessibility of equine-assisted counselling being offered to adolescents in schools, and the restrictions and limitations of equine therapy, will be addressed.

Chapter 2

Literature Review

Introduction

Animals have long been recognized to have positive benefits to human functioning and well-being. Initially, these interactions were largely for a utility purpose such as work, war, food, fur, and protection. It is not clearly documented when human-animal companionship interactions came to develop, however graves with people buried with a cat or a dog dates back as early as 14,000 BC (Ikram, 2005). Although the benefits of the human-animal bond have been witnessed for centuries, research on the social, physiological, and psychological advantages has been recently increasing. This literature review will begin with some examples of treatment options which have been shown to benefit adolescents living with anxiety disorders. It will then review the benefits of animal-assisted therapy, and equine-assisted counselling, discuss the theoretical underpinnings of these benefits, and examine its benefits for reducing anxiety in adolescents, and consider the restrictions and limitations of providing EAC in a school setting.

Attachment theory

Positive and meaningful connections through infancy and childhood will nurture the same type of relationships in adulthood (Bowlby, 1988; Waters, Crowell, Elliot, Corcoran, & Treboux, 2002). Attachment theory was first coined by John Bowlby in the 1960s. He, along with contributions from Mary Ainsworth, hypothesized that, in terms of evolution, infants instinctively form an attachment with their primary caregiver (most often the mother) for survival. According to Bowlby (1988), "Attachment behavior is any form of behavior that results in a person attaining or maintaining proximity to some other clearly identified individual who is conceived as better able to cope with the world. It is most obvious whenever the person

is frightened, fatigued or sick, and is assuaged by comforting and caregiving” (pp. 29-30).

Intuitively, mothers are genetically programmed to be protective, caring, and nurturing towards their offspring (Bowlby, 1988). If this attachment relationship is disconnected in some way, the child will not naturally develop a sense of security and safety during infancy (Ainsworth, 1989). A lack of a safe and secure attachment relationship can have detrimental, long lasting effects on a child’s life. In absence of positive attachment, a child will be less adventurous and more fearful which will inhibit their desire to explore and learn from the world and this sense of adventure is integral in learning and development (Attachment Theory, n.d).

Ainsworth et al. (1978), classified two main categories of attachment; secure and insecure. It has been demonstrated that insecure attachment is correlated with depression and anxiety among kids (Sund & Wichstrom, 2002). Attachment also has large implications concerning the strength and healthiness of an individual’s future relationships, since the connection with their primary caregiver acts as a template for children in their relationships that are developed throughout their lives (Grearity, 2005). Research has shown that attachment style influences emotion regulation in children and adolescents (2000; David-Vilker, 2000) and that insecure attachment at a young age is a significant component to mental health risks later in life (Groh, Roisman, van Ijzendoorn, Bakermans-Kranenburg, & Fearon, 2012; Fearon et al., 2010). In summary, a poor attachment between a child and their primary caregiver can have a long-term effect on a person’s confidence, desire to learn and explore, future relationships, and mental well-being. Insecure attachment styles in early life experiences are thought to continue throughout one’s life and is linked to anxiety disorders as one gets older (Gunnar & Quevedo, 2007; Sbarra & Hazan, 2008).

It is important to note that attachment styles may be modified and altered throughout one's life based on life experiences and connections made within those experiences (Bowlby, 1988; Dykas, Woodhouse, Cassidy, & Waters, 2006). Within attachment-oriented psychotherapy, the therapist hopes to take on the role of an attachment figure (Bowlby, 1977, Bowlby, 1988; Parish, & Eagle, 2003), in hopes of becoming a reliable and trustworthy "secure base" for the patient to explore their emotions and experiences from the past to help them reshape their current thinking and behaviour (Bowlby 1988). Through attachment-based interventions, the therapist's role is to support the client in re-evaluating and re-formulating their own view of themselves and those of their attachment figures, using their experiences and insight gained within the therapeutic relationship (Bachi, 2013). The therapeutic alliance, ideally developing as a secure attachment-based relationship between the therapist and the client through "a building of trust and a reformative experience of early life attachments" (Bachi, 2011, p. 307), allows for deeper and more meaningful therapeutic outcomes as the client feels safe to explore their emotions.

Treatment Options for Adolescent Anxiety

Insecure childhood attachment relationships are strongly associated with childhood and adolescent anxiety (Brumariu & Kerns, 2010). Ainsworth, Blehar, Waters, and Wall (1978), using the Strange Situation procedure, identified three types of attachment style; 1) secure attachment where a child will show distress when separated from their caregiver but are quick to reconnect and are soothed once reunited, 2) insecure avoidant where a child will rarely cry or show significant distress when separated from their caregiver and distance themselves upon being reunited, and 3) insecure ambivalent where a child is highly distressed during separation and seek proximity upon being reunited but are not able to be easily soothed. In 1990, Main and

Solomon identified insecure disorganized attachment where a child demonstrates fear of their caregiver and shows a combination of strategies to deal with their distress but never feel comforted. The literature shows that there is a stronger relationship between insecure ambivalent attachment and the development of anxiety during childhood and adolescences than there is for the other attachment styles (Bar-Haim, Dan, Eshel, & Sagi-Schwartz, 2007; Colonnesi et al., 2011). When caregiving is unpredictable and irregular, insecure ambivalent attachment patterns are cultivated due to fear of abandonment and these children tend to develop constant carefulness, less independence, trouble with emotion regulation, and are less likely to explore their environment (Bar-Haim et al., 2007). This lends itself to the development of internalizing disorders, in particular, anxiety (Sroufe, 1997).

Effective childhood and adolescent treatment strategies for anxiety are a critical component to the school system considering, anxiety is associated with long-term detrimental outcomes such as poor social skills, withdrawal, low self-esteem, and poor academic performance (Stein, & Kean, 2000). Since school-aged children have increased brain plasticity compared with those in adulthood (Galván, 2014) early prevention/intervention is highly beneficial. Identifying and treating mental illness at early onset is critical since persistent issues can lead to poor outcomes at school, familial conflict, social problems, substance abuse, and at-risk behaviours (Rappaport, Kulick, & Phelps, 2013). Effective treatment for adolescent anxiety often involves psychotherapy, psychotropic medications, or a combination of the two (Kendall, Settapani, & Cummings, 2012; Walkup, et al., 2008).

Prescription psychotropic medications. Prescription psychotropic medications are becoming increasingly important as an intervention strategy for youth. There has been a rising trend in the use of prescribed psychotropic medication possibly due to the increase in adolescents

seeking help from doctors for mental health issues (Steinhausen, 2015). However, it is preferable that psychotropic medications are not the sole form of intervention because they inhibit the development of strategies and coping skills that can be of long-term benefit.

Psychotherapy. Considering medications do not generally address the root cause of mental health issues, and they often come with undesirable side effects, it is highly beneficial for children to receive additional support in improving their skills on how to regulate emotions, enhance their social abilities with peers, receive appropriate academic programs, and, when possible, support within their family structure (Zito et al., 2008). These additional supports often come in the form of group, family, and/or individual psychotherapy, also known as talk therapy. According to the American Psychological Association, there are 5 categories of therapy within psychotherapy; psychoanalysis, behaviour therapy, cognitive therapy, humanistic therapy, and integrative therapy (Different approaches to psychotherapy, n.d.). The process of psychotherapy involves understanding clients and their problems and facilitating solutions (Different approaches to psychotherapy, n.d.).

Experiential therapy. There are a number of less clinical therapies which have been shown to be successful to help decrease anxiety which do not have the undesired side effects of psychotropic medications or might be used in conjunction with medication. Experiential therapy includes the “therapeutic technique that uses expressive tools and activities, such as role-playing or acting, props, arts and crafts, music, animal care, guided imagery, or various forms of recreation to re-enact and re-experience emotional situations from past and recent relationships.” (“Experiential Therapy”, n.d.). Through experiencing the activities and with the guidance of the therapist, the client can begin to identify their emotions and begin to release blocked or persistent negative emotions. Some examples of experiential therapeutic treatments that have shown to

have positive outcomes with respect to decreasing anxiety symptoms include art therapy (Clark, 2014), yoga therapy (Clark, 2014; Williams-Orlando 2013), music therapy (Jasemi, Aazami, Zabihi, 2016), and exercise (Herring, Jacob, Suveg, Dishman, & O'Connor, 2010).

Occasionally, this form of therapy can be continued through self-administration which can be useful as it is often more cost effective than clinical therapy or medication, there are few to no risks associated with treatment, and they are often more easily accessible. This capstone will consider a form of experiential therapy known as equine-assisted counselling which is a sub-category within animal-assisted therapy.

Animal-assisted therapy. For hundreds of years humans and animals have long been connected in a variety of ways. In the 1830s, the British Charity Commissioners recommended that mental institutions have domestic animals to improve the environment for patients (Fine, 2006). It was not until around the 1960s that animal-assisted therapy (AAT) began to be more formally suggested as a therapeutic strategy when Boris Levinson published his paper “The dog as a ‘co-therapist’” in *Mental Hygiene* journal, in 1962 (Chandler, 2017). As a child psychologist, he recognized that significant progress was made with his patients when his dog, Jingles, was present in therapy sessions (Chandler, 2017).

Chandler (2017) defines AAT as the therapeutic agent incorporating an animal into the therapeutic process to promote and facilitate recovery of physical and/or mental illness. AAT includes therapeutic interventions which can be applied by several professional disciplines such as counsellors, physicians, nurses, occupational therapists, and physical therapists (Chandler, 2017). This differs from animal-assisted activity (AAA) in that AAA is “an informal interaction and visitation conducted by the human-animal team for motivational, educational, and recreational purposes” (International Association of Human-Animal Interaction Organizations,

2014, p. 5). AAT can have a positive impact on a variety of clients (Chandler, 2017 & Fine, 2006) and is appropriate for a variety of settings such as schools, therapeutic private practice, corrections facilities, and hospitals (Chandler, 2017). To clarify, this capstone refers to AAT in counselling (AAT-C) which is specific to mental health practitioners incorporating animals into the therapeutic counselling process to improve psychological and emotional well-being (Chandler, 2017).

Animals are able to provide a loyal, non-judgmental relationship, which allows a sense of calm, care, and companionship (Chandler, 2017). Research shows that pet ownership itself has benefits to physical health (Kao, Friedmann & Thomas, 2010; Kushner, 2008), psychological health (Kruger & Serpell, 2006; Tsai, Friedmann, & Thomas, 2010), and social well-being (Wood, Giles-Corti, & Bulsara, 2005). Although conventionally, many people recognize the benefits of the human-animal relationship, only more recently is it becoming more scientifically established that AAT-C is recognized by both clients and mental health therapists as having the potential to be clinically valid (Hartwig, Smelser, 2018; Chandler, 2017; Stewart, Chang & Rice, 2013). Considering AAT-C is a relatively new field, research on its effectiveness as a therapeutic treatment option is limited, thus more research on the benefits of the human-animal bond to one's well-being would be highly beneficial (Chandler, 2017; Stewart, Chang, & Rice, 2013).

Human-animal interaction. In a qualitative study done by Chandler, Fernando, Barrio Minton, & Portrie-Bethke in 2015, pet owners were interviewed and 8 domains of increased personal wellness were identified: “(1) emotional and physical nurturance, (2) sense of family, (3) sense of responsibility and purpose, (4) friendship and/or companionship, (5) social interaction and connections, (6) personal values and/or spiritual meaning, (7) fun and play, and

(8) physical health” (p. 273). According to the Journal of American Veterinary Medicine (1998), the human-animal bond is defined as:

“a mutually beneficial and dynamic relationship between people and other animals that is influenced by behaviors that are essential to the health and well-being of both. This includes, but is not limited to, emotional, psychological, and physical interactions of people, other animals, and the environment” (p. 1675).

Establishing a bond with an animal provides a trusting, caring, mutually favorable relationship which is free of judgement and can diminish the sense of aloneness (Chandler, 2017).

Chandler (2017) explains that AAT-C can be applied either by the counsellor using their own pet or the counsellor seeking a trained handler who owns or has access to a qualified pet. Stewart, Chang, and Rice (2013), identified four themes from the counsellor’s perspective which contribute to an effective AAT-C model:

“(a) AAT-C requires a unique set of skills and competencies, (b) AAT-C providers utilize a highly developed working relationship with a therapy animal, (c) AAT-C impacts the therapeutic process, and (d) AAT-C enhances the scope of traditional counselor–client relationships” (p.336).

These themes identify the importance of the counsellor’s relationship with the animal and the client, their competence in working with the animal and their ability to recognize their animal’s cues, their belief in the human-animal bond, and the necessity for appropriate AAT-C training for therapists. All participants felt that the therapeutic process is positively impacted by the use of animals in the treatment through influencing the therapeutic climate, establishing and strengthening the therapeutic relationship, and focusing therapeutic work in the here-and-now. One participant stated: “It’s almost like a relief for some clients to see the animal, and I don’t

really know how to explain that. It's something you kind of have to see, but it's like you can just feel them relax" (Stewart et al., 2013, p. 340). Having a relaxed atmosphere within any situation can act as a catalyst for positive outcomes.

The quality of the relationship between a client and their therapist has been shown to be a primary predictor for successful mental health treatment (Webb, DeRubeis, & Barber, 2010). The human-animal bond established throughout AAT contributes to the affinity between the client and therapist since the client may be comforted by witnessing the strength of the bond between the animal and the therapist (Chandler, 2017; Reichert, 1998). Additionally, it has been observed that there was a decrease in language needed during AAT as the clients are better able to express what they are feeling through their interactions with animals (Shani, 2017) which provides comfort and sympathy non-verbally, decreasing the emotional dependency of the client on the counsellor (Fine, 2006), decreasing the likelihood of burnout for the counsellor and thus increasing their effectiveness (Stewart, Chang, & Rice 2013). The influence of the relationship between the therapist and the patient and its value to positive outcomes within therapy will be emphasized further in a following section.

Studies have shown both psychosocial and psychophysiological benefits to animal-human interactions. As previously mentioned, anxiety has been linked to cardiovascular problems (Barker & Dawson, 1998; Craske, & Stein, 2016). Studies have shown faster and more long-term recovery for cardiac patients who have animals in their lives (Friedmann & Thomas, 1995). An earlier study found that blood pressure, stress, and anxiety decreased when children were in the presence of an animal (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). In consideration of social development, it has been shown that children with emotional and/or developmental disorders had more appropriate social behaviours and fewer behaviour problems

when they interacted with a therapy pet (Redefer & Goodman, 1989; Kogan, Granger, Fitchett, Helmer, & Young, 1999) and children with various mental health diagnoses were more socially extroverted after AAT with a dog (Prothmann, Bienert, & Ettrich, 2006). Chandler (2017) states: “with contact, such as a purring cat in a lap or a dog displaying its tummy for petting, can facilitate personal and social development in a client.” (p. 18). Opportunities to interact with animals can promote an increase in human-to-human social interactions, known as the “social catalyst effect” (Beetz, Uvnäs-Moberg, Julius, & Kotrschal 2012). A class of first-grade students paid more attention to the teacher with a dog present in the classroom compared to no dog in the classroom (Kotrschal & Ortbauer, 2003) and another study done, also in a first-grade class, showed that students’ socialization between classmates improved with the presence of a dog (Hergovich, Monshi, Semmler, & Zieglmayer, 2002). Other studies showed the psychosocial benefits of AAT such as improved social skills for prison inmates (Fournier, Geller, & Fortney, 2007), a more positive therapeutic alliance between the patient and their therapist (Wesley, Minatrea, & Watson, 2009), and psychiatric patients who underwent therapy with animals had a significant increase in social interactions with other patients compared to those whose therapy was without animals (Marr et al., 2000). Therapeutic strategies which enhance social well-being are likely to benefit many patients struggling with anxiety considering social anxiety is a large contributor to mental health problems seen during adolescence with detrimental long term outcomes (Sportel, de Hullu, de Jong, Nauta, 2013), thus AAT could be a useful strategy worth consideration.

It may come to mind that the therapeutic relationship between a client and a therapy animal is not equivalent to the bond shared between a pet and its owner. The therapeutic benefits

of AAT are based on the concept of the human-animal bond (Kaminski, Pellino, & Wish, 2002).

According to Tannenbaum (1995) a true human/animal bond includes the following:

- “It must involve a continuous, ongoing relationship rather than one that is sporadic or accidental
- It must produce not just a benefit but a significant benefit to both, and that benefit must be a central aspect of the lives of each
- It must involve a relationship that is, in some sense, voluntary
- It must be bidirectional
- It must entitle each being in the bond to respect and benefit in their own right rather than simply as a means to an end” (p. 184)

These characteristics are more often witnessed between a human and their pet and not often witnessed in the relationship between a patient and their therapy animal (Chandler, 2017) considering there are time constraints, limitations on amount of sessions, restrictions on activities, among other variables. However, Chandler (2017) considers the function of the relationship between the therapy animal and the client is “more about a desire for affiliation with a nurturing being, a desire that is present at the initiation and early stages of an attachment or bonding process” (p. 6). Clients often find it initially easier to trust a therapy animal, consider the animal as a source of nurturance, the therapy animal can facilitate a client’s exploration of interpersonal relationship, and often become more connected with their therapist as a result (Chandler, 2017). In other words, the connection between a client and a therapy animal are the early stages of the bonding/attachment process and may not be as strong as the connection between a human and their pet, but can still be highly beneficial in the healing process.

Neurophysiological response with AAT. It is imperative to discuss the neurophysiological responses when considering AAT and its benefits on social interactions. It has been shown that endorphins, dopamine, and oxytocin levels increase for both species involved in addition to a decrease in cortisol levels in humans during human and dog interactions (Odendaal, 2000; Odendaal & Meintjes, 2003). Dopamine is a neurotransmitter which functions to regulate emotional responses, pleasure and reward, and encourages motivation (Manya, 2017). Moreover, decreased dopamine receptor-binding has been found in those who suffer from social anxiety (Manya, 2017). Endorphins, released in response to stress and pain, act as a pain reliever to help decrease anxiety and sadness, curbing the perception of pain as well as an increasing sense of euphoria (Cafasso, 2017). Oxytocin, also referred to as the cuddle hormone, facilitates social connection and pair bonding in relationships (Algoe, Kurtz, & Grewen, 2017; MacGill, 2017), increases feelings of pleasure, reduces stress, and encourages a sense of calm (MacGill, 2017; Uvnas-Moberg, Arn, & Magnusson, 2005). Epinephrine and norepinephrine (also known as adrenaline and noradrenaline, respectively) are used when the body is in stress or sensing fear by increasing blood sugar and heart rate to encourage a fight or flight response (Nall, 2018). Decreased levels of epinephrine and norepinephrine were found in cardiac patients in the hospital after having spent time with a dog (Cole, Gawlinski, Steers, & Kotlerman, 2007). Another study demonstrated the benefits of AAT for children categorized as having insecure attachment patterns through a decrease in adrenaline levels after having been with a dog (Beetz, Kotrschal, Hediger, Turner, & Uvnäs-Moberg, 2011). An abundance of research links hormone-release, primarily oxytocin, to the “construction and maintenance of social bonds (attachments) and social connections in mammals because positive social contact is rewarded by the experience of pleasure from oxytocin release” (Chandler, 2017, p. 9). In other words, social connections

between mammals, encourages the release of oxytocin which further establishes those relationships. The biochemical effects of oxytocinergic system, which plays a role in establishing attachment bonds and regulating the social stress response, may contribute to the benefits which have been witnessed in AAT (Beetz, Uvnäs-Moberg, Julius, & Kotrschal, 2012). The significance of attachment relationships as the theoretical underpinnings of AAT will be discussed further.

Therapy animals. Chandler (2017) suggests that the use of therapy animals can enhance the therapeutic process in some of the following ways: clients may be more willing to attend therapy when they know a therapy animal will be present, clients may feel comfort when holding or petting the pet, clients may feel more acceptance when around the pet, clients may feel more aware of how their actions affect others by how the pet responds to them, and clients may receive healing affection from their interactions with the pet. Chandler suggests two characteristics of animals which adds to the benefits of incorporating animals into therapy; “1) the animal’s capacity and desire to nurture people and, 2) the animal’s ability to detect and signal emotional distress it perceives occurring in a person (Chandler, 2017, p. 3) and the animal species best known for these abilities are dogs and horses considering they are domesticated and innately interact as pack/herd animals in well-developed social systems (Chandler, 2017). Chandler (2017) suggests that “A dog’s or horse’s ability to be attentive to commands and training cues can facilitate skill development in a client as well as strengthening a client’s self-concept and self-esteem” (p. 19).

It is clear that the benefits of the human-animal bond cannot be ignored. A review of the literature on the benefits of human and animal interactions done by Beetz, Uvnäs-Moberg, Julius, & Kotrschal (2012) suggests the following positive effects: enhanced social attention and

interactions, better behaviour, mood, mental health, and physical health, reduction of self-reported fear and anxiety, heart rate, and blood pressure. One of the first to professionally advocate and study the psychotherapeutic benefits between humans and animals was Boris Levinson. He suggests that “The development of empathy, self-esteem, self-control, and autonomy can be promoted in children through raising pets, while the loneliness of old age can be eased and deterioration warded off by nurturing an animal” (Levinson, 1978, p. 1031). This suggests the benefits of AAT in schools could be immense. This capstone will now consider the more specific benefits of using horses as the therapy animal.

Equine-assisted therapy. Equine therapy is a form of AAT which utilizes horses specifically as the therapeutic agents. Although there is limited research on this form of AAT, it has seen significant growth in the past two decades (Selby & Smith-Osborne, 2013). A number of related, often interchangeable terms which have been used to label this burgeoning field are equine therapy (ET) (Cody, Steiker, & Szymandera, 2011), equine-assisted therapy (EAT) (McLean, 2011), equine-facilitated therapy (EFT) (McNamara, 2017), equine-assisted experiential therapy EAET (Klontz, Bivens, Leinart, & Klontz, 2007), equine-facilitated psychotherapy (EFP) (Bachi, 2013; Bachi, 2012; Bachi, Terkel, Teichman, 2011), and equine-assisted counselling (EAC) (Chandler, 2017). The number of terms and the overlapping definitions within the field of animal therapies has made for some confusion and need for clarification amongst those who research and incorporate them. For clarification, this capstone will use the term equine-assisted counselling (EAC) and will use Chandler’s definition as the “incorporation of horses into the counselling process to facilitate therapeutic outcome” (Chandler, 2017, p. 221).

Horses as the therapy animal. As prey and herd animals, horses have an innate sense of responding to their natural environment. Chandler (2017) explains that horses are optimal candidates for use as animals in therapy:

“Horses are well suited to their role as therapy animals as a result of their ability to perceive, evaluate, and respond to social behaviours - a necessary skill for survival as a prey animal and useful for coping in a herd with a competitive social order. This translates into an ability to detect and immediately respond to emotional and behavioural presentations by other animals as well as humans” (p. 222).

This demonstrates the horse’s ability to instantly and honestly respond to behaviours, verbal and nonverbal communication, and attitudes with those who are working with them (Irwin & Weber, 2001). Horses are prey animals (unlike the traditional companion animals, dogs and cats, which are predators) and their survival depends on their ability to be sensitive to their environment, the social bonds established among herd members (Evans & Gray, 2012), and the nonverbal communication between members of their herd as well as other animal species (Evans & Gray, 2012; Wake, 2014). Horses have maintained this sensitivity to their environment and other animals around them, including humans, and are able to recognize and reflect our nonverbal messages and internal emotions (Evans & Gray, 2012; Wake, 2014). The bond between humans and horses through the process of domestication has led to horses recognizing humans as a herd-member (Scheidhacker, 2000). This bond is maintained and strengthened when humans take on a leadership role within the ‘herd’ providing security and protection for our equine companions (Bachi, et al., 2011). In a counselling setting the client is thus given the opportunity to “enhance elements of leadership, self-control and the manner of addressing the “other”, employing the

developing motivation of the client to be in a leadership position towards the horse” (Bachi, et al., 2011, p. 300).

The horse’s presence in therapy enhances traditional therapeutic interventions which consists of solely of the client and the therapist. According to Trotter, Chandler, Goodwin-Bond, and Casey (2008) elementary students exposed to EAC showed statistically significant improvements in several behaviour areas including an increase in adaptive skills and a decrease behaviour problems, anxiety and depression. In addition, studies have found that adolescents exposed to EAC showed trends towards positive change in self-image, self-control, trust, and general life satisfaction (Bachi, et al., 2011), and increases in hope and decreases in depression (Frederick, Hatz, & Lanning, 2015). Rothe, Vega, Torres, Soler, and Molina (2005) suggest that horses help develop both verbal and nonverbal communication and problem-solving skills, creativity, assertiveness, a sense of responsibility, leadership and teamwork in children. These studies suggest that horse-human interactions can serve as metaphors, opening the client to alternative perspectives, and allowing the horse to be an agent of change within the therapeutic process (Karol, 2007).

Limitations of the current research. Although benefits of EAC have been witnessed, to date there is only limited research on its effectiveness as a psychological treatment option. A systemic review which analyzed literature on equine-assisted interventions published between 2008-2012, showed that it is beneficial as a psychological treatment intervention, with youth in particular, with social and behavioral challenges, however it was noted that many of the studies included problems in methodology and further randomized control research is needed (Kendall, et al., 2015). A meta-analysis of 14 studies on equine-assisted treatments identified lack of experimental controls groups, deficiencies in experimental procedures, and lack of unbiased

researchers (Anestis, Anestis, Zawilinski, Hopkins, & Lilienfeld, 2014). Similarly, Bachi (2012) also states that the majority of studies lack a control groups, have small sample sizes and limited sampling methods, and lengths of interventions are short and have limited intervention evaluation. Furthermore, the majority of studies done with respect to EAC focus on the physiological applications of using horses in therapy (Janura, Gallo, Svoboda, Svidernochoová, & Kristiniková, 2015), rather than research done on the social and emotional components that are addressed through EAC (Bachi, 2012; Bachi et al., 2011; Burgon, 2011; MacLean, 2011; Trotter et al., 2008). Bachi (2012) articulates that much of the current research in the field of EAC consists of anecdotal reports and identifies the need for further research to analyze the efficacy of EAC, determine what type of client would benefit from EAC, and to develop the theoretical underpinnings of its efficacy.

Based on the necessity of a developed theoretical foundation for EAC (Bachi, 2012; Bachi et al., 2011; Burgon, 2011; Hallberg, 2008), and the research which shows the benefits of human-horse interactions on self-image, self-control, trust, and general life-satisfaction (Bachi et al., 2012), social, occupational, and psychological functioning (Schultz, Remick-Barlow, and Robbins, 2007), behaviour and psychosocial interaction (Trotter et al., 2008), and increasing self-esteem and self-efficacy and decreasing feelings of isolation (Frame, 2006), the relevance of EAC to attachment theory is worth further investigation. Many studies in which populations benefited from EAC may have also benefited from attachment-based interventions due to possible insecure attachment patterns, for example, adolescents who were exposed to intra-family violence (Schultz et al., 2007). As EAC becomes more recognized for its benefits in the field of mental health interventions, it becomes ever more critical to develop its theoretical foundation (Bachi, 2013):

“If interventions are being legitimized and widely implemented before best practices have been established it poses emotional, physical and financial risks for clients. These interventions should be further explored and theoretical foundation should be developed as to promise that clients’ treatment are effective and grounded in solid knowledge to guide them.” (p. 188).

Based on previous studies of EAC and attachment theory-based psychotherapy, it is clear that there are commonalities between humans’ attachment to humans and their attachment to horses. As people gain awareness of the benefits of EAC as a mental health intervention strategy, looking at attachment theory as its theoretical foundation may give EAC further credibility.

Attachment and the therapeutic alliance. According to Bowlby (1988) there are five main tasks within the therapist’s role based on the theory of attachment: 1) provide a safe and secure base for the client to delve into painful past and present relational experiences, 2) encourage the client to reassess their current behaviours, biases, emotions and expectations with regards to the present relationships in their lives, 3) assist the client in exploring the client-therapist relationship using their own perceptions and expectations based on their parental-influence of how the therapist should respond to them, 4) invite the client to contemplate the possibility of how their current thoughts and feelings could be due to their past experiences, and 5) facilitate the client to recognize that his perceptions of self and those around him come from painful past experiences or inaccurate messages and are not necessarily applicable to the present or future. When considering attachment-based EAC as an intervention method, these five tasks remain the same, however they will also incorporate the horse and the setting of the stables into the relational context which encourages additional emotions, thoughts, and reactions. Adding a horse to the therapeutic process creates a triadic dynamic which may be considered less

threatening and more engaging since the stigma of clinical treatment is taken away (Brandt 2013; Carlsson, Ranta, & Traeen, B. 2015; Richmond & Padgett, 2002) and there is a general consensus among researchers that horses contribute positively to the therapeutic triad (Bachi, 2012).

The presence of the horse during EAC provides an enhancement to traditional therapy, and the therapeutic alliance which exists includes the triad of the client, the therapist, and the horse (Karol, 2007). Bachi et al. (2011) explains the benefits of the horse in the therapeutic alliance in EAC as:

“...an opportunity for experiencing attachment both emotionally and physically (and in a non-verbal manner). The stable presence of the horse embraces the client both physically and emotionally, in a manner that is not always possible between a human-therapist and the client” (p. 300).

The therapeutic alliance, or working alliance is the trusting relationship between a therapist and their patient which includes an agreement on working towards the established goals for treatment and this bond is both professional and interpersonal (Taylor, Rietzeschel, Danquah, & Berry, 2015). Research has shown that the therapeutic alliance between client and therapist, regardless of theoretical construct or presenting problem, mediates the outcome of therapy (Goldman & Anderson, 2007) whereby a client is more likely to discontinue treatment when they have a lower-rated relationship with the therapist (Taylor et al., 2015) and a secure attachment promotes effective treatment (Goldman & Anderson, 2007). One study, which included 66 clients and 33 therapist with a variation of theoretical orientations, had participants complete The Outcome Questionnaire before each treatment session, and the Working Alliance Inventory after each session, and the findings were such that the strength of the therapeutic alliance, predicted by

their attachment style, and the ability of a the client to form secure attachment bonds increased the probability of a positive therapeutic outcome (Byrd, Patterson, & Turchik, 2010). This study further suggests that clients with insecure attachment who are able to build a good therapeutic alliance are more likely to have positive outcomes through treatment (Byrd et al., 2010). Furthermore, a stronger therapeutic alliance allows for greater trust and sense of security, decreasing feelings of anxiety and leading to deeper exploration of self (Romano, Fitzpatrick, & Janzen, 2008). Research has shown that the presence of the horse during EAC potentially facilitates the alliance between a therapist and their client (Bachi, 2012; Selby & Smith-Osborne) thus leading to more positive outcomes.

Horses as attachment figures. Conventionally, attachment figures are those who provide a positive influence such as caregivers, friends, teachers, and therapists (Bowlby, 1988; Waters & Cummings, 2000). However, the possibility that pets can serve as attachment figures, or that humans can establish an attachment bond with a pet has been postulated (Bachi, 2012; Zilcha-Mano, Mikulincer, & Shaver, 2011). Based on Bowlby's principles, research conducted by Zilcha-Mano, Mikulincer, and Shaver (2011) suggest that pets satisfy the following criteria: humans enjoy and seek to be close to their pets; pets are a safe haven, offering affection, comfort and support; pets provide a secure base from which owners can explore their world; and pet owners feel grief and mourn at the loss of a pet. This demonstrates that pets can provide a secure base and can serve as attachment figures for humans (Zilcha-Mano et al., 2011; Zilcha-Mano, Mikulincer, & Shaver, 2012), and although research on EAC requires overall improvements, considering there is general agreement throughout the research that the horse benefits the therapeutic triad and provides positive benefits for the client using the theory of attachment as underlying principles (Bachi, 2012), it is probable that the bonds formed between the client, the

therapist, and the horse, significantly improve treatment outcomes and this dynamic is worth further investigation. The unique qualities of the horse, such as its sensitivity, and non-judgmental nature, its powerful conformation, and its ability to instantaneously respond to and reflect nonverbal communication, may open the door to developing more secure attachments within the therapeutic triad, and allow for deeper exploration and more desire for a client to continue treatment and ultimately, gain positive outcomes.

Considerations for application of EAC interventions

Although EAC has been shown to benefit a variety of populations such as at risk youth (Bachi et al., 2011; Carlsson, 2017), veterans (Vasher, Delano, Herlache-Pretzer, Meyer, & Stawowy, 2017), those with substance abuse problems or behavioural problems with ADHD (Yoo et al., 2016), adolescents with emotional, behavioural, and learning difficulties (Holmes, Goodwin-Bond, Redhead, & Goymour, 2012; Trotter et al., 2008) to name a few examples, it is not beneficial for everyone. When working with horses, safety is of utmost importance. EAC is not suitable for everyone due to safety issues associated with working with horses and the barn/field setting in which EAC is performed (PATH Intl., n.d.). Considering their size, strength, and general unpredictability as a prey animal, it is imperative to clarify and discuss the risks involved, and establish safety rules and strategies when exposing clients to horses. Additionally, horses are not liked by everyone. Not everyone who may deem suitable for equine therapy should take part. It is important for the therapist to consider health conditions, safety concerns, and client-preferences when considering EAC as option (Burgon, 2011).

The safety and benefits to the client have been considered, however, the well-being of the horse must also be taken into consideration. A horse's needs, such as work and rest schedule, stable management conditions, and health care must be properly provided (Quiroz Rothe et al.,

2005). It is additionally important to consider a horse's own sense of calm and well-being as not all horses are suitable to use for therapy.

It goes without saying that horses are expensive animals and generally an unavailable option for many areas. This makes EAC a challenging option to pursue in most school settings. Although EAC offers unique benefits to traditional therapy, it is not often a financial or logistical possibility (Bachi, 2012).

Finally, the therapists experience with horses is critical in how EAC benefits a client, and an important piece to maintaining safety. A therapist should be experienced and attuned to the language of the horse, with the ability to manage a horse should something go wrong (Bachi, 2012; Chandler, 2017). A therapist should enlist the assistance of a trained horse-person should they not be experienced themselves (Chandler, 2017).

Summary

Upon reviewing the existing literature, it seems that the horse's ability to analyze, and respond to social cues across species makes it a valuable addition to the therapeutic alliance (Bachi et al., 2011, Bachi, 2012, Bachi, 2013, Chandler, 2017; Trotter, 2012). Clarifying inconsistencies in terminology within the field of EAC (Bachi, 2012, Yang, 2017), and establishing a relevant theoretical base to illustrate the benefits seen in EAC (Bachi, 2012), could lead to a more solid foundation for EAC as a potential treatment option for mental health. Limitations and challenges to research due to cost, availability, and sample size (Anestis et al., 2014, Bachi, 2012), and a need to further investigate the therapeutic triad dynamic within EAC (Bachi, 2012) are suggestions for future research to address. The literature reviewed in this chapter suggests a strong correlation between attachment theory and the positive results that have been found within the current research and warrants further consideration.

In the following chapter I will propose the framework for an EAC program to be implemented and researched in the high school setting. I will suggest a logical methodology with respect to the design and procedures, selection of participants, and the process for data collection and analysis. The chapter will conclude with limitations of the methodology, ethical standards which should be considered and a final conclusion.

Chapter 3

Methodology

Introduction

Adolescent anxiety is highly problematic in the high school setting and effective intervention is critical to decrease the possibility of long-term mental health issues. This capstone proposes the use of experiential therapy in the form of EAC to assist students in managing their anxiety. Qualitative research is suggested as the methodology as it provides a textual in-depth perspective of how a target population thinks and feels about an experience (Dodgson, 2017). Using a qualitative research design will allow the researcher to extrapolate commonalities in themes and patterns to examine the research questions; ‘How does participating in an EAC program assist high school students to improve self-concept and social skills?’; ‘How can EAC contribute to developing coping strategies when dealing with anxiety?’ The design, selection of participants, what the procedure consists of, its execution, and a description of the data analysis will be put forth in this chapter. The chapter will conclude with a discussion of the ethical considerations, limitations of the study, and a final summary and conclusion. At the end of this chapter the reader should have a solid understanding of how this research could be applied.

Design

The premise behind qualitative research is that there are multiple views of reality depending on perspective and one’s past experiences (Pascale, 2011). With this methodology, since it is based on one’s own interpretation of what is meaningful within the experience, there are no predicted or defined variables (Willig, 2013). The subjectivity of qualitative research allows the researcher to be a part of the research process while collecting data (Dodgson, 2017).

In contrast, the aim of quantitative research data collection is an objective view from the researcher and results should not change regardless of who is collecting the data (Dodgson, 2017).

Considering an experiential therapy program such as EAC, the personal process toward the outcome is unique for each participant. There may be commonality within the themes being extrapolated from the data, however each student will experience and process their individual feelings and outcomes differently, with different perspectives. With this, qualitative phenomenological research is suggested as the methodology suitable for this particular study. Phenomenological research is used to describe an event or phenomenon by collecting data through watching videos, conducting interviews, reading documents, or attending events to understand the significance for the participants on what is being studied (Sauro, 2015) and the researcher relies on the “participant’s own perspectives to provide insight into their motivations” (Sauro, 2015, par. 10). Allowing participants to describe their experience in EAC will “allow for the development of themes, which develops an understanding of (EAC) as a therapeutic intervention, and further growth in the field” (Wilson, Buultjens, Monfries, & Karimi, 2015).

In this study, one-on-one interview sessions will be conducted at the end of each 8-week program with each of the students selected. Qualitative research is the chosen methodology as it would allow for common themes to be extracted through thematic analysis using the data transcribed from the one-on-one interviews from each of the participants, and lends itself to a small sample population. Additionally, students will be asked to keep an optional journal. Students will be invited to share their journals with the researcher at the end of the program for further documented qualitative data.

Proposed Method

Participants

The students. The students considered for the equine therapy group will be students in grade 9-12, who are diagnosed with anxiety or recognized as students who are struggling with anxiety. Five students for each semester will be selected for a total sample size of 10, assuming all participants continue participation through to the end of the study. Purposive sampling will be used among students who struggle with anxiety in order to allow for gender variations, different academic and social situations, and with the aim to increase the likelihood of students within the group connecting with one another during the program. Students will be recommended for the program through the school's youth worker, counsellors, administration team, and resource teachers (those who often work closely with vulnerable students). Through school-based team discussions students will be selected based on those who struggle with anxiety and are believed to benefit from the program. The following will be taken into consideration and discussed based on school staff perception and documented evidence in order for selection:

- Attendance: Is the student currently attending school on a regular basis? Could a program such as EAC help maintain/improve the student's attendance?
- Connectedness to the school: How is the student connected to their peers? Teachers? Counsellors? Coaches? Others?
- What supports is the student currently receiving inside and outside the school (outside counselling services, aboriginal youth worker, school counsellor support, IEP, peer groups, etc.)?

- Current relationships between those considered. Are there certain students who would benefit/not benefit from taking part in this program at the same time? Are there known conflicts between any students being considered?
- Current academic achievement. Is the student currently passing their courses? Are they registered in a full course load? Are they in a regular/adapted/modified program?

These criteria will be discussed case by case among the school-based team in order to select students who are believed to benefit and be a good fit. Once selected for the program, parents will be notified first and given the opportunity to decline or accept their child's participation in both the program and/or the study in order to avoid unnecessary disappointment should a parent not want their child to participate. Students will then be notified by their counsellor and also offered the opportunity to decline or accept being a part of the program and/or the study. Students selected for the program will not be turned away should they not want to participate in the study. Throughout the school year the program will run once each semester. Those not selected but deemed suitable will receive in-school supports and be considered again for the following semester.

The horses. The horses selected to be used for the program must be properly trained and evaluated to be appropriate for the program. Horses differ in their temperament, attentiveness, and ways in which they respond to others. Horses who demonstrate calmness, responsiveness, and an affinity for working closely with people would increase the likelihood of being suitable for the program. Each week students will be taken to the barn with the school counsellor and a teacher who has experience in training and working with horses.

The facilitators. In agreement with the Equine Facilitated Mental Health Association (EFMHA), EAC should be facilitated by both a mental health professional working together with

an experienced credentialed equine professional (EFMHA, 2008). This study proposes the school counsellor (the researcher) along with an experienced equine professional from the same school to be organizing and facilitating the program. The equine professional will be more attuned with the horses due to their experience with equines, while the counsellor will be more focused on the therapeutic facilitation of the sessions.

The researcher. The researcher, who is also the school counsellor, will have the role of recognizing opportunities for therapeutic discussions and facilitating those conversations to provide a meaningful experience. Additionally, interview conduction, transcribing the interviews, and analysing interviews to explore possible themes will be completed by the researcher.

Procedure

Each trip to the barn will include a counsellor, the equine specialist/teacher, and the students. The students will receive transportation from the staff. This will occur once a week for 8 consecutive weeks with 5 students taking part each 8-week period, one each semester of the school year. This will occur during school hours on a rotating block schedule to limit the amount of time each student is out of a particular class. The table found in appendix A will describe each session of the program. Each session will include discussion among group members facilitated by the counsellor. Each student will have an assigned horse with which they will be working with throughout the program assuming no changes need to be made due to safety reasons or considerations for the horse's well-being.

Each student will be asked to keep a journal to document their experiences, although this will be optional. These can be done in the form of a conventional written journal, audio journal, or drawing journal. If the student has other ideas on how to document their experiences in the

program this can be discussed with the counsellor. This will allow students to further process the experience and facilitate their recollection during their interview. At the end of each EAC session, students will be given time to add a submission in their journal and are welcome to add to it at any time about anything they choose even if it is not related to the program.

Not all activities will incorporate horses, but all will be done in the barn setting as a group. All the challenges and activities put forth during sessions will have follow-up discussions which include what the session was like for participants. The counsellor is to act as a facilitator allowing the students to communicate freely, while maintaining respect for one another. Questions which focus on the process rather than specific outcomes should be asked within the group.

The following week after the eight weeks of EAC, each of the 5 students will have a set interview time with the researcher/counsellor. Interviews will be audio recorded and transcribed verbatim by the counsellor, making notes of pauses and strong emotion. Interviews will last approximately 30-45 minutes. The questions used during the interview are found in appendix B. The interview will be transcribed by the researcher/counsellor.

Analysis

These sets of interview questions will be transcribed by the researcher and analyzed thematically to examine any themes or patterns that may be identifiable such as problem-solving strategies, opportunities for social experiences, communication skills, and relationships with others.

Ethical Considerations

The study. Approval for this study must be submitted and approved by the Institutional Review Board (IRB), the school district, and the school itself. All necessary parental and

participant consent will need to be obtained before the research begins. This will include consent from parents/guardians of the participants, and the participants themselves. All students and parents/guardians will be aware that they are allowed to terminate their involvement in the research at any time throughout the program without jeopardizing their ability to continue with their EAC program. When publishing results, student names will not be used in order to maintain confidentiality. Names of horses, which could potentially identify participants will also be omitted from all transcribed data and documents. Students and horses will be identified numerically. Consent form for the study is found in appendix D.

Working with horses. Consent will be required from parents and participants to acknowledge the risks involved in working with horses. They are large animals and can be unpredictable. The setting of a field/barn also poses risks due to uneven terrain, weather factors, fences and gates, and possible broken or damaged infrastructure. The risks must be clearly acknowledged and the forms used for the acknowledgement of risk must be approved by both the school and the school district. Consent form for working with horses and being a part of a program offered through the school are found in appendix E and F.

The horse's well-being. The horse is a key component of EAC. Its welfare is important and its needs should include awareness of appropriate health care, stable management/living conditions, work/leisure schedules, and equipment needs. If at any time throughout the program it seems a horse does not like its role in therapy, this must be taken into consideration and appropriate adaptations should be applied to maintain the horse's well-being.

Limitations

Equine therapy is not a common option within the school system in the majority of districts. The cost of horses and property management make it virtually impossible for schools

to be provided the opportunity. This program would be restricted to schools which would have access to horses at little to no cost through a staff member, community members who are willing to donate the horses and facility for use, or schools which may have enough funding to make it possible. Additionally, the logistics of running a program such as this, with two staff members out of the building with five students once weekly may not be feasible.

The small sample size allows for phenomenological qualitative research; however, it is often criticized that the small sample sizes found in much of the equine therapy research limits the validity of beneficial EAC outcomes. Additionally, this methodology, which by definition is subjective, may lead the researcher to finding outcomes or links between participant experience and themes that are non-generalizable to another similar population.

The benefits found in current research in the field of equine therapy interventions shows that there is something highly valuable in this form of therapy. Although growing in awareness, unfortunately it is under-researched, lacking in a theoretical base, contains confusion among the variation of terminology, and lacks consistent methodology (Bachi, 2012). Further research is recommended in order to address these obstacles.

Summary

The aims of this proposed study were to investigate through qualitative phenomenological methodology the experiences of high school students of equine therapy. Particularly, as the research suggests, the researcher would be looking for themes related to developing additional strategies for building relationships through positive attachment experiences, increasing their communication skills, and increasing their self-worth through problem solving and overcoming challenges, and ultimately to improve coping strategies with anxiety.

Final Conclusion

The aim of this capstone was to investigate the research concerning EAC and the outcomes of this form of treatment on a variety of populations, more specifically, youth struggling with anxiety. Furthermore, this capstone examined how EAC benefits adolescent anxiety using attachment theory as a proposed theoretical basis to explain the positive outcomes which have been witnessed within the research.

Chapter 1 introduced the underlying research problem, adolescent anxiety, and how it affects academic achievement and social success for students, often leading to long term issues. This first chapter also includes a definition of terms.

Chapter 2 included the literature review of existing research related to the topic of EAC and mental health. Within this chapter the theoretical basis of Bowlby's attachment theory and its connection to the EAC process was provided. Additionally, a discussion regarding the barriers of EAC in the high school setting and the safety concerns for the therapist, the student, and the horse were brought forth.

Finally, chapter 3 described a proposed study using qualitative research methodology which aims to identify the effectiveness of EAC for students with anxiety in high school, including the ethical constraints which are fundamental to the study. This chapter also included the limitations of the proposed study as well as future EAC research suggestions.

The increase in prevalence in adolescent anxiety leads mental health and education professionals to recognize the need for innovative and effective intervention strategies. It is impossible to deny the benefits witnessed of this novel and engaging form of therapy. This proposed study should be considered as an opportunity to further research the benefits of EAC for the adolescent population.

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Appendix A

Program Plan Details

Session	Materials needed	Activities
1	Toothpicks and marshmallows	<p>a) Get to know one-another through self-introductions and sharing something they feel comfortable sharing with the group (does not need to be anything personal)</p> <ul style="list-style-type: none"> • The counsellor and the equine specialist will use this opportunity to discuss the importance of confidentiality within the group to help set the tone of safety and respect. • Students are encouraged to talk about things that help them feel safe and worries/anxieties they may have in working in a group and in working with horses • Students will work together to build a tower out of toothpicks and marshmallows to symbolize that they are in this process together and will rely on one-another throughout the program
		b) Tour of the barn where students can meet horses over the stall doors and in paddocks or fields and get a good sense of the setting
	Lead ropes	<p>c) Discussion on basic safety considerations around horses, such as staying calm, deep breathing if they should feel nervous, walking and moving around horses, etc.</p> <ul style="list-style-type: none"> • Students will practice what was discussed using a horse brought in by the equine specialist • Students will learn a quick-release knot in order to safely tie a horse
	Sheet with pictures to demonstrate a horse's body language <i>(Appendix C)</i>	<p>d) Discussion on interpreting a horse's body language, specifically tail and ear signals</p> <ul style="list-style-type: none"> • Using the nonverbal examples, the counsellor can initiate a discussion regarding elements of communication between horses, humans and horses, and humans.
	Sheet with pictures to demonstrate a horse's body language	<p>e) Observe the horses together in a field</p> <ul style="list-style-type: none"> • Watch for the body language movements previously discussed • Using the horses' interactions as a metaphor, discuss herd dynamics and how it may (or may not) relate to things that happen in our own lives
2		a) Brief review of safety and confidentiality that needs to be respected between those in the group discussed the previous week and a review of safety with the horses

		b) Observe the horses in the field watching for the body language discussed during the first session
		c) Interact with all the horses in the field <ul style="list-style-type: none"> • Without consulting with others, students will choose the horse they feel they want to work with (keeping in mind it may not be the one they actually work with but it will be taken into consideration) • Students can write their selection in their journal and brief summary of why they may have selected that horse • Members of the group are invited to share why they chose a particular horse • The counsellor can use the student's selection of horse as a metaphor for possible struggles a student might see in themselves, for example, if one horse is picked on in the field, or if one tends to be more solitary, or perhaps a physical appearance such as height or weight
	Halter and lead rope	d) With no explanation, students will be given a halter and a lead rope to catch their assigned horse in the field <ul style="list-style-type: none"> • Discuss what worked, what didn't, and problem-solving methods that could be used in catching a horse
3		a) Developing a relationship with the horse <ul style="list-style-type: none"> • Grazing, petting, taking for a walk - students can brainstorm some ideas together before getting started
	Post-its	b) Parts of the horse with post-its <ul style="list-style-type: none"> • Learning more about horses using proper terminology for the different parts of the horse
		c) Group conversation about the importance of being firm, assertive, fair, and consistent – how does that relate to our own relationships?
4	Grooming kits	a) Grooming <ul style="list-style-type: none"> • Proper grooming techniques • Cleaning hooves • Discussion: How does caring for a horse help build our connection?
		b) Leading with a halter and lead rope through an obstacle course <ul style="list-style-type: none"> • Each student will lead their horse individually

		c) Wrap-up conversation: what did the horse get out of being groomed? What did the students get from grooming? What things came up when you were taking the hoses through the obstacle courses?
5	Grooming kits	a) Groom horses
	Obstacle course materials (poles, standards, etc.)	b) Obstacle course without a halter and a lead rope <ul style="list-style-type: none"> • Students will work together to guide several horses through an obstacle course one at a time
		c) Conversation: what worked? What did not work? What could you do differently next time? What were your frustrations? Your triumphs? Etc.
6	Grooming kits	a) Groom horses
	Lunge line and lunge whip	b) Lunging with a lunge line <ul style="list-style-type: none"> • Go over purpose of lunging • Ear/tail/body language to watch for and what could it mean?
		c) Wrap-up conversation: Now that students have had several days with their horses, other students, counsellor, and equine specialist, how have these relationships changed over the course of therapy? How do other relationships in your life look different?
7		a) Play go-go-stop with horses being hand-walked/trotting on the lead rope
	Lunge whip	b) Join-up exercise – having a horse connect with its handler and having it follow you <ul style="list-style-type: none"> • Why would the horse follow? How did the trust between you develop?
	Buckets, grain, bran mash	c) Feeding a bucket of grain <ul style="list-style-type: none"> • Students will prepare the horses grain and feed them
		d) Discuss what it was like to prepare the meal and feed the horses. How does that further develop our relationship with a horse? How does that translate to relationships between people?
8	Any material needed	Final wrap-up day <p>a) Students may choose from many of the activities they have done in the previous sessions and spend time with their horse</p> <ul style="list-style-type: none"> • Grooming • Lunging • Grazing • Hand-walk • Free-handling in the paddock <p>b) Final group conversation – open to anything that students want to discuss, counsellor to facilitate as needed.</p>

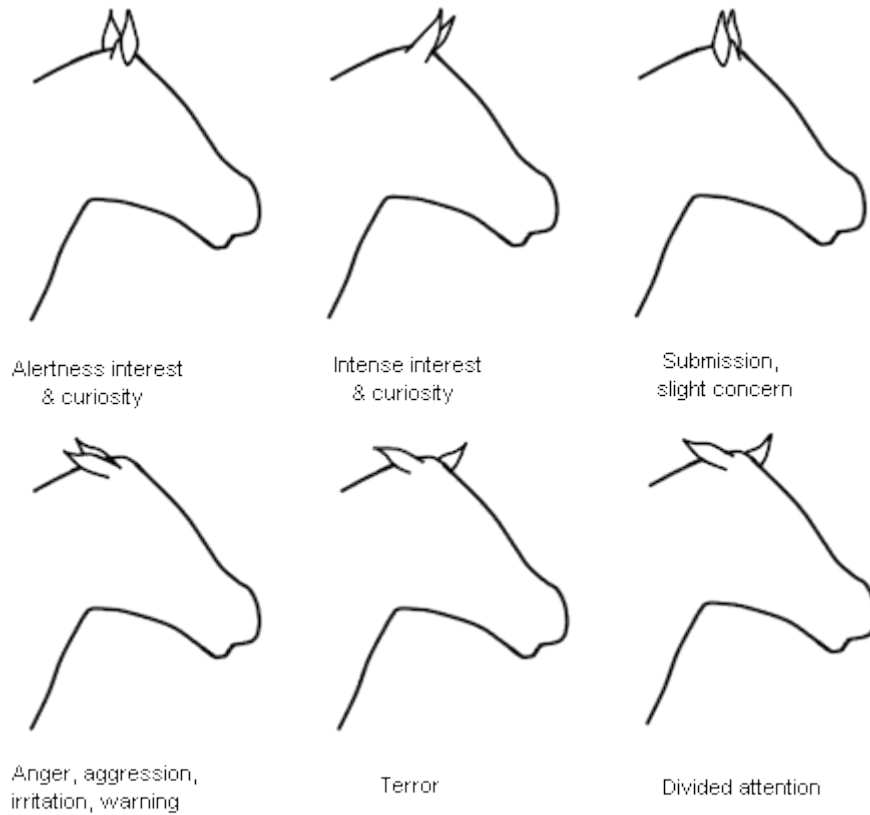
Appendix B

Questions during the interview will include the following:

1. Who/what are your supports or people you are connected with inside and outside the school?
2. Tell me about relationship changes within the school throughout the program? Outside of school?
3. Describe your relationship with your horse.
4. What were the challenges you faced in having your horse listen to you? What were the ways you found to overcome those challenges?
5. Describe a situation during the program when your anxiety was high. Were you able to overcome it? What helped? What did not help? What was the horse's role in that situation? What was the counsellor and/or equine specialist's role in that situation?
6. What did you learn about horses?
7. Describe a situation when you overcame a challenge you faced during the program? How did you overcome the challenge? How did you feel afterwards?
8. What would you do differently if you had this opportunity again?
9. What would you not want to change because you felt it helped you in some way?
10. How did EAC help you?
11. What was your overall experience if you had to sum it up in 1-2 sentences?

Appendix C

Reading Body Language in Horses



Retrieved from

<http://lrrpublic.cli.det.nsw.edu.au/lrrSecure/Sites/Web/8131E/equine/Behaviour/Normal/ReadingBodyLanguage.htm>

Appendix D

Consent for Participation in Interview Research

I volunteer to participate in a research project conducted by the counsellor from my high school. I understand that the project is designed to gather information about equine-assisted counselling for adolescents struggling with anxiety in high school. I will be one of approximately 10 people being interviewed for this research.

1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one from my school will be told.
2. I understand that most interviewees will find the discussion interesting and thought-provoking. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.
3. Participation involves taking part in a weekly equine-assisted counselling program for an 8-week period with approximately 4 other students and an equine specialist and then being interviewed by the counsellor. The interview will last approximately 30-45 minutes. Notes will be written during the interview. An audio tape of the interview and subsequent dialogue will be made. If I don't want to be audio recorded, I will not be able to participate in the study.
4. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.
5. Teachers and administrators from my school will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.
6. I understand that this research study has been reviewed and approved by the Institutional Review Board (IRB) for Studies Involving Human Subjects: Behavioral Sciences Committee at the City University. For research problems or questions regarding subjects, the Institutional Review Board may be contacted.
7. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.
8. I have been given a copy of this consent form.

Student's Name: _____ Student's signature: _____

Parent's Name: _____ Parent's signature: _____

Researcher's name: _____ Researcher's signature: _____

Appendix E

PARENT/GUARDIAN OPTIONAL EQUINE THERAPY PROGRAM INFORMATION AND CONSENT FORM

Dear Parents / Guardians

The purpose of this letter is to inform you about a proposed field trip involving your child and to seek your support and written permission for your child to participate.

Please note that participation in this activity is optional. Any cost of the trip reflects your child's expenses only. No student will be denied access to a field trip or activity due to an inability to pay. If the fee presents a hardship to you, please contact the school principal or vice principal. All such requests will be kept confidential.

While school staff will take reasonable steps to prevent injuries to students, some degree of risk is inherent in the nature of activities and injury may occur without fault on the part of the student, the school board, its employees and volunteers, or the facility where the activity is taking place. By allowing your child to participate in this activity, you are agreeing that the activity described above is suitable for your child and acknowledging that you understand there is a risk of injury associated with it.

Teacher

Principal

Nature of the Program: Equine Assisted Counselling

Dates of sessions: _____

Students will need to bring: Closed-toed shoes/boots that can get dirty, backpack, rain jacket, layered appropriate clothes for cold, wet weather, snacks, water. Students clothing may get dirty during the activities. Students may wish to bring an additional change of clothes to change into for when we return to the school

Teacher(s)/Administrator(s) in Charge: *School counsellor, Equine specialist teacher*

Your son/daughter will be traveling by: *Teacher drivers*

Known Risks and Safety Information:

- Students will learn basic safety skills around horses before handling them
- Horses are large and can be unpredictable. Even those normally well-behaved, may spook, bolt, buck, rear, kick, bite, trample, and otherwise cause harm to those working with them. Please read the release of liability from the stables for more information
- If students do not demonstrate safety skills, they will not be allowed to participate

The following activities will likely be part of the program:

- Safety around horses
- Leading horses
- Brushing and grooming
- Cleaning hooves
- Feeding
- Basic stable management
- Hand feeding
- Taking horses for grass
- Basic first aid around horses
- Lunging
- Working with horses on the ground

Note: Students **will not** be riding horses in the program.

Please include any information or special concerns such as allergies, medical conditions, etc., that school staff should be aware of surrounding your child's participation:

My child and I understand that both the School District and School's Code of Conduct apply during the field trip. I will be responsible for any costs caused by my child's failure to abide by the Codes of Conduct, including any costs to send my child home.

(Please print) I, _____, give permission for my child _____, to participate in the field trip described above. I understand that my child may be exposed to a risk of injury due to accident while participating in this activity.

- My daytime contact phone number is _____
- My son/daughter will not be attending this fieldtrip

Date

Parent/Guardian Signature

Contact Phone Number

Please complete the attached consent form and return the completed form to the sponsor teacher listed above

Appendix F

ACKNOWLEDGEMENT OF RISK AGREEMENT FOR THE STABLES

PLEASE READ CAREFULLY

Name of Student: _____

Parent or Guardian (if rider us 18 years of age): _____

Address: _____ Postal Code: _____

Phone Number(s): _____

Date of Birth: _____ HCBC # (if applicable): _____

Care Card #: _____

Emergency Contact

Name: _____ Phone Number: _____

Please list any health concerns/conditions we should be aware of:

Definition

In this agreement the term “horse and stable activities” shall include all activities, events or services provided, arranged, organized, sponsored or authorized by Occupiers and Owners including but not limited to: horse riding; riding lesson; stable maintenance including but not limited to stall, stable and any other cleaning and repair, feeding including medication and supplements; horse handling of all types including but not limited to turnout and bringing in, walking, cooling, lunging, soundness jogging, and attending horses for Occupiers and Owners or for others including but not limited farriers, veterinarians and perspective purchasers; and for all other activities, events and services in any way connected with or related to the foregoing, including but not limited to the observing of same.

ACKNOWLEDGEMENT OF RISK- INJURY AND DAMAGE ETC. CAUSED BY HORSE AND STABLE ACTIVITIES

I am aware that participation in horse and stable activities involves certain risks, dangers and hazards. Horses including those normally well-behaved, are unpredictable and may spook, bolt, buck, rear, kick, bite, trample, and otherwise cause harm to persons and property including other horses. The facilities and terrain used for these activities may involve surfaces both man-made and in their natural state and may contain many obstacles and hazards. The facilities and terrain may not have been ridden or traveled before and are not regularly patrolled or inspected. Medical, ambulance, fire and police services are remote and in the event of an accident, rescue and medical treatment may not be immediately available. Weather conditions may be extreme and include lightning and can change rapidly without warning. Horses and stable activities involve reliance upon safety gear, horse tack, stable equipment, fencing, gates and other equipment fixtures; and reliance on riders, handlers, riding instructors, observers, farriers, veterinarians, and others. I acknowledge and accept that personal injury, death, property damage or loss may result from the failure of such safety gear, horse tack, stable equipment, fencing, gates, and other equipment and fixtures; or negligence, inattention, or inexperience of riders, handlers, riding instructors, observers, farriers, veterinarians and others.

I AM AWARE OF THE RISKS, DANGERS, AND HAZARDS ASSOCIATED WITH HORSES AND STABLE ACTIVITIES AND I FREELY ACCEPT AND FULLY ACKNOWLEDGE ALL SUCH RISKS, DANGERS, AND HAZARDS AND THE POSSIBILITY OF PERSONAL INJURY, DEATH, PROPERTY DAMAGE OR LOSS RESULTING THERFROM.

Initial:

I CONFIRM THAT I HAVE READ AND UNDERSTOOD THIS ACKNOWLEDGEMENT OF RISK PRIOR TO SIGNING IT.

Signature

Date

Please print name clearly

Witness

Signature of Parent or Guardian if under 18