THE USE OF ADVENTURE THERAPY TO SUPPORT ADOLESCENTS WITH DEPRESSION

by

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Abstract

Depression amongst adolescents is on the rise and is of great concern. Literature suggests that there is a lack of alternative therapies to treat adolescent depression. Cognitive Behaviour Therapy (CBT) is one of the most used and effective forms of treatment for depression in clinical and school settings. However, it may not work for everyone and is not the only beneficial therapy. Adventure Therapy offers one type of program that may prove useful for some youth in supporting their mental health. This paper examines current literature related to adolescent depression and Adventure Therapy to explore its effectiveness as a form of treatment for depression in a school setting. Many studies have shown Adventure Therapy to be a moderately effective form of treatment that has the potential to improve one's overall functioning and mental health. Through the use of adventure activities in nature, adolescents are able to experience personal growth, improved interpersonal skills, and mastery of skills that may improve ones' self-concept. This is an important finding for school districts and all employees involved in supporting adolescent mental health within a school, especially adolescents looking for an alternative to traditional therapy in an office. Students are lacking social skills and confidence leading to feelings of isolation and hopelessness. A group Adventure Therapy program developed for schools is proposed to help support students in their fight against depression, gain the skills necessary to improve social skills and networks, develop resilience, improve physical and mental health, and connect with nature in new ways.

Keywords: adventure therapy, wilderness therapy, adventure-based counselling, experiential learning, depression, adolescent depression, isolation

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The Use of Adventure Therapy to Support Adolescents with Depression

Chapter 1: Introduction

Introduction

Depression is a mental health concern that is affecting people of all ages, especially so for adolescents (Shore et al., 2018; Thapar et al., 2012). The feelings of loneliness and hopelessness associated with depression give teenagers little hope that things will get better. Further to this is the fact that many teenagers may not want help from others as they are trying to find their own independence. Peer support and connection are the important values that adolescents desire and when depression hits, they often feel unsupported, unheard, and unable to cope. Adventure therapy may provide an opportunity to work with fellow adolescents in processing their depression, developing social skills, learning coping strategies, and building resilience and self-confidence. Used in an alternate environment different from traditional therapy in an office, adventure activities have the potential to provide the framework for treatment that is fun and engaging. Adventure therapy takes a holistic viewpoint, focusing on the mental, physical and social well-being.

Background Information

Adolescence is a time of great difficulty and change for many as they struggle to find their own way and identity in life. This phase of life involves rapid developmental changes that often create periods of personal turmoil (Crisp & O'Donnell, 1998). Adolescents are living in an unpredictable world where they cannot define themselves, feel overwhelmed, unable to cope, and have a sense of hopelessness that things will never get better (Norton, 2010). Erik H. Erikson (1950) suggests that adolescents struggle with identity and role confusion and rely on the views

of their peers more and more in shaping who they are. These struggles can lead to the possibility of mental health issues when they cannot deal with the changes with which they are presented with. The school setting is a place that constantly tests variables such as emotional competencies, self-esteem, relationships with their peers, and emotional difficulties (Lacomba-Trejo et al., 2020). Therefore, it is increasingly important to find ways to educate and support student's coping strategies to deal with such difficult changes and maintain positive mental health.

Statement of the Problem

Mental health among adolescence is becoming a growing concern, especially related to depression. The World Health Organization (2020) states that adolescent depression is the fourth leading cause of mental illness amongst 15 to 19 year-olds, eleventh amongst 10 to 14 year-olds, and constitutes half of all mental health conditions that start before the age of 14 years. In addition, they also state that suicide is the third leading cause of death amongst 15 and 19 years old. Additional to these troubling statistics is the possibility for other comorbid mental health issues later in life such as anxiety, conduct disorders, and substance abuse (Bittner et al., 2007; Creswell & Waite, 2016; Saluja et al., 2004). These high rates present a scary trend related to adolescent depression and the potential negative future outcomes.

Compounding matters is the fact that depression can be difficult to recognize in adolescents. Symptoms of depression can range from the typical presence of sadness to boredom, irritability, difficulty experiencing joy or pleasure, and somatic symptoms (Bohman et al., 2012; Brent & Birmaher, 2002; Norton, 2010). The presence of somatic symptoms is often overlooked or undiagnosed by medical practitioners which creates confusion for all parties in trying to identify potential depression (Bohman et al., 2012). With an inability to properly

recognize and treat depression, adolescents are left in a position to deal with these issues on their own.

This perceived lack of support creates feelings of isolation and hopelessness. Current trends in technology and social media are not helping; they are leaving teenagers with weakened social skills, less quality time with family, and increased exposure to violence and bullying (Badri et al., 2021). Adolescents are spending more time looking at their phones, computers, and playing video games instead of interacting in face-to-face communication. These are creating further feelings of isolation as they are often in their rooms instead of outdoors. When faced with the opportunity to interact, they lack self-confidence and struggle to make social connections. When adolescents are not able to handle their feelings of depression, suicide may be seen as the only option for many. According to the World Health Organization (2020), suicide is the third leading cause of death among youth between 15 and 19 years old. This points to the need for appropriate identification, interventions, and treatments to support adolescents who are suffering from depression.

Unfortunately, treatments for adolescent depression have mixed reviews. Current practices involve the use of psychotherapy, pharmacotherapy, a combination of both, and universal education. Psychotherapy typically involves the use of CBT which has been found to be one of the most effective forms of treatment in dealing with adolescent depression (Tak et al., 2016). However, Cuijpers et al. (2006) suggest there is a lack of research looking at other forms of therapy and their effectiveness. This is important because "40% to 60% of young people involved in therapeutic treatment disengage despite professional advice" (Duncan et al., 2007, as cited in Dobud, 2016, p. 39). Additionally, Fletcher and Hinkle (2002) suggest that traditional counselling sessions may allow clients to deny issues and avoid intrapersonal confrontations

which may inhibit the therapeutic process. Therefore, it appears there is a need to explore alternative methods of psychotherapy that may have similar efficacy as that of CBT. Pharmacotherapy has mixed reviews as Brent & Birmaher (2002) state that although effective, the exact dosage of SSRIs for each individual is difficult to ascertain. This creates longer treatment times in order to find the correct dosage for each client. Finally, universal delivery of education within the school setting can be effective but can vary from one teacher to the next. Programs that are used in school tend to be CBT-focused, can have small effect sizes, and often require students' motivation in order to be effective (Goossens et al., 2016; Tak et al., 2016). The lack of effective treatments and research related to alternative forms of therapy suggests a need for alternate forms of therapy and treatment. They should focus on engaging adolescents and providing them with skills and strategies to reduce and hopefully end their depression.

Adventure therapy has shown to be a moderately effective form of treatment for youth with regards to their psychological, psychosocial and behavioural functioning (Bowen & Neill, 2014; Bowen et al., 2016; Dobud, 2016; Tucker et al., 2013; Vankanegan et al., 2019). With its ability to provide moderate positive effects for adolescents in general, it also has been shown to be an effective form of treatment specifically related to adolescent depression. Bowen et al. (2016) suggest the possibility of short-term improvements in resilience, social self-esteem and depression with large improvement in suicidality and general self-esteem. Adventure Therapy also provides the opportunity for adolescents to build coping skills that help with developmental progression through challenge and adventure activities (Norton, 2010). This is a unique and alternative form of therapy that offers something that may be of more interest to adolescents than sitting in an office doing talk therapy.

Purpose of the Paper

The purpose of this capstone is to provide a review of the current literature related to depression and Adventure Therapy in order to explore current trends in both areas and offer an Adventure Therapy program that can be used by counsellors and adventure therapists in a school setting. More specifically, the goal of this paper is to examine whether adventure therapy could be a useful program in a school setting to support adolescent depression. The current literature is small in its sample sizes and there is very little in the relationship between Adventure Therapy and schools; however, research does indicate that adventure therapy may provide some mental (Bowen et al., 2016), social (Tucker, 2009), and physical health benefits (Song et al., 2016) for adolescents in general, and specifically those suffering from depression.

Understanding adolescent depression is a key piece in diagnosis and treatment. Although CBT has shown to be effective in the treatment of adolescent depression, it is also important for schools and counsellors to be aware of other potentially beneficial treatment alternatives. Not every adolescent responds well and follows through with traditional therapy performed in an office setting. Having multiple effective treatment options may prove beneficial to a wider population of the school thus reducing the number of students lacking support. This paper examines current literature in Adventure Therapy to explore its potential effectiveness in supporting adolescent depression.

Research Question

With depression being a growing concern, there needs to be alternative ways of treating and supporting adolescents in their recovery. Adventure Therapy presents as a possible alternative program that may be effective in supporting some adolescents. Therefore, the

research question this paper strives to answer is whether Adventure Therapy could be a useful program in a high school setting to support adolescents with depression.

Significance of the Study

School districts, schools, administrators, counsellors, and teachers would benefit from learning about the prevalence and effects of depression amongst adolescents. Having increased knowledge of an alternative form of treatment such as Adventure Therapy may give schools and counsellors additional resources to support particular adolescents who need more than talk therapy. This paper provides background knowledge on depression and Adventure Therapy with a program that could be implemented in high schools to support adolescents and a focus of future research for Adventure Therapy in school systems.

Outline of the Remainder of the Paper

The next Chapter examines current research literature on depression and Adventure Therapy. First, the Chapter discusses prevalence and symptomatology and the current trends in practice to treat adolescent depression. Then, it discusses Adventure Therapy and its history, definitions, essential components, effectiveness, limitations of the research, and its use as a treatment. Finally, Adventure Therapy is examined through the lens of its relevance and effectiveness related to depression. This will center on the role of nature, physical activity, and the use of groups in treatment and how they can benefit adolescents suffering from depression.

Chapter Three presents an eight-session Adventure Therapy program that can be used by a school counsellor in conjunction with an outdoor education teacher to support adolescents struggling with depression. The program applies four important components of Adventure Therapy (Nature Setting, Challenge, Groups, and Processing) intertwined within the program and can be easily adapted or altered depending on one's access and availability to the environment

around them. The hope is that counsellors, teachers, schools, and districts will be able to understand the benefits of the combination of nature, adventure, and therapy on adolescents' physical and mental well-being and, as a result, can begin to implement Adventure Therapy in school settings. With the rise in mental health issues in adolescents, it is imperative to find more ways to support and treat these mental health concerns in our schools to provide more hope for our youth.

Chapter 2: Literature Review

Introduction

An investigation into adolescent depression and how it presents in youth and current trends in therapy is important in understanding the diverse mental health needs of youth today. The use of Adventure Therapy provides a unique experience for the treatment of adolescent depression, unlike traditional therapies such as Cognitive Behavioural Therapy (CBT), interpersonal, and other forms of talk therapy performed in an office. A review of the history, general practices, benefits, and potential drawbacks of Adventure Therapy will be examined. The following chapter will evaluate current research on how Adventure Therapy may be used to support adolescents suffering from depression.

Depression

The following section will provide a literature review of research related to adolescent depression. The first topic will discuss the prevalence of depression amongst adolescents followed by a review of the symptomatology with specific focus on somatic symptoms, isolation, and suicidal ideation. Additionally, I will examine current practices in the general treatment of depression, concentrating on psychotherapy and pharmacotherapy. Finally, the chapter will conclude with a discussion of current school-based treatments, interventions, and education.

Prevalence

Adolescent depression is considered the fourth leading cause of mental illness amongst 15 to 19 year-olds, eleventh amongst 10 to 14 year-olds, and constitutes half of all mental health conditions that start before the age of 14 years (World Health Organization, 2020). The incidence of depression is greater in girls than in boys and emerges between 13 and 15 years of age. The trend tends to be similar prior to this age, but the prevalence in both sexes increases by age, with

rates jumping quickly between grades six to 10, twice as much for boys from 7.1% to 13.6%, and almost triple for girls from 12.6% to 34.3% (Saluja et al., 2004). Adding to these already staggering and sobering numbers, Thapar (2012) states that there is often an under-diagnosis of depression and reporting by adolescents, thus making it important to recognize early, especially in high-risk populations. These facts point to the importance of early identification and finding effective preventative interventions and treatments for adolescents suffering from depression so they can be supported as they move into adulthood.

Another compounding factor with adolescent depression is the possibility for other comorbid mental health issues later in life such as anxiety, conduct disorders, and substance abuse (Bittner et al., 2007; Creswell & Waite, 2016; Saluja et al., 2004). Multiple disorders often share risk factors which could account for higher levels of comorbidity but could also arise if comorbid disorders are risks or consequences of depressive disorder (Thapar et al., 2012). Due to the potential of comorbidity of mental health problems, identification and treatment become even more difficult when there is more than one presenting issue. These multiple disorders may mask the symptoms of one disorder thus causing it to go unrecognized and producing issues that go unresolved for longer periods of time.

Symptomatology

There are several potential depression disorders that can be evident in adolescents such as major depressive disorder, disruptive mood dysregulation disorder, and persistent depressive disorder (dysthymia). The American Psychiatric Association DSM-V (2013) defines each disorder as follows. Major depressive disorder includes episodes of depression, involving depressed mood and lack of interest or joy that last at least two weeks in duration (pp. 160-161). Disruptive mood dysregulation disorders are identified as frequent episodes of chronic and

severe irritability with frequent temper outbursts that last at least one year in two different settings, such as school and home, and are specific to children and adolescents (p. 156). Finally, dysthymia is characterized by depressed mood for more days than not, for at least two years in adults and one year in children and adolescents (p. 168). The National Institute of Mental Health (2018) identifies common symptoms associated with depression as: sad mood, hopelessness, irritability, worthlessness, loss of interest or pleasure, fatigue, slow movement, restlessness, difficulty concentrating, sleep difficulties, appetite and weight changes, suicidal ideation, and somatic aches and pains.

Depression can look quite different in adolescents as symptoms do not only include sadness; depression can be displayed through boredom, irritability, difficulty experiencing joy or pleasure, and somatic symptoms (Bohman et al., 2012; Brent & Birmaher, 2002; Norton, 2010). What teachers see as students doing poorly in class, such as starting fights, skipping school, not feeling well, or not paying attention in class, may be signs of something more than just acting out. These could all be signs of depression. Proper education to staff and students in school becomes important in helping identify depression early so that proper treatments can be implemented.

Somatic Symptoms. The presence of somatic symptoms associated with depression can have serious lifelong effects. A long-term study of somatic symptoms of adolescents by Bohman et al. (2012) found that dizziness, polyuria, insomnia, tiredness, and abdominal pain, had strong predictive power of depression later on in life, the latter having the most power. They went on to further state that even healthy adolescents with no form of depressive experiences were found to suffer depression later in life when there was some form of somatic symptoms present. If an adolescent is unaware that the somatic symptoms may be a form of depression, this contributes

to the under-diagnosed cases due to a lack of reporting. Bohman et al. (2012) further suggest that many patients who experience somatic symptoms have no medical explanation and get overlooked as being linked to depression; they are viewed as having health anxiety instead, which is the misinterpretation of ones bodily sensations as being a sign that they are ill. This leads to confusion and poor treatment or clinical guidance when trying to support youth presenting with these issues. A limitation to this study was that the baseline somatic symptoms in adolescence were from self-rated assessments, whereas the follow-up in adulthood were diagnosed through a clinical interview and screening instrument. Although this may have slightly impacted the results of the testing, the importance of identifying somatic symptoms early and ensuring that they are either related to depression or not is an important distinction for clinicians. An incorrect diagnosis could prove costly resulting in more severe depression and possible suicidal ideation.

Youth reporting frequent somatic symptoms (frequent absenteeism, headaches, physical symptoms) display higher rates of depression (Saluja et al., 2004). Somatic depression is characterized as having a diagnosis of major depression plus symptoms within the following three categories: appetite/weight disturbance, sleep disturbance, and fatigue (Silverstein et al., 2013). The importance of being aware of these signs and symptoms becomes paramount to supporting youth who suffer from somatic depression. As Thapar et al. (2012) state, “depression can also be missed if the primary presenting problems are unexplained physical symptoms” (p. 1056) which are often characterized as normal adolescent developmental changes. For instance, teenagers’ erratic sleep schedules may often create fatigue and general tiredness; weight gain or loss may often be seen as being due to hormonal changes going on in the body; headaches may be viewed as originating from all the screen time that adolescents are engaged in. All of these

symptoms may be considered "normal" for adolescents, while also indicating depression. Making matters worse, when there are concurrent somatic symptoms, there is a risk of higher severity of depression that adolescents may experience, even leading to a decreased life expectancy (Bohman et al., 2012). To the untrained eye, these may seem normal, however, they may be part of a deeper issue going on for adolescents and should not be underestimated.

Isolation. Isolation is a concerning symptom of depression and tends to be more profound now due to the presence of technology and social media (Badri et al., 2021; Puri & Sharma, 2016). The increase in youths dependency on technology and social media has led to weakened social interactions amongst peers, less quality time with family and friends, and exposure to more violence and bullying leading to a decrease in their mental health (Badri et al., 2021). As seen in schools more often, students spend most of their time in groups, not socializing, but looking and interacting through their social media accounts. This lack of face-to-face socializing is creating a deficit in social skills that may cause some youth to feel depressed and isolated (Saluja et al., 2004). Adding to this is the fact that a child's perception of whether they have poor social relationships, rather than objective measures of social networks, plays a major role in their feelings of loneliness and depression (Puri & Sharma, 2016; Qualter et al., 2010). Therefore, a lack of friends and followers on social media can result in feelings of isolation and loneliness which may then lead to depression. Furthermore, Puri and Sharma (2016) suggest that "students might be spending more time on their computers than involved in the community" (p. 1001). Not only are adolescents feeling socially isolated, but they may even be physically isolated from others as well. Being socially and physically isolated and away from the natural world may be a cause for concern as adolescents are becoming more and more

disconnected from the outside world. Although not a focus of this paper, it should be a focus for future research.

Adolescents are social creatures who seek to find their own identity and peer group to associate with. However, when rejection hits, feelings of inadequacy and loneliness arise. Peer-related loneliness is a key predictor of depression due to the fact that adolescents view their peer groups as their preferred source of support, meaning that any form of rejection can lead to this path of loneliness and depression (Qualter et al., 2010). When faced with rejection from a peer group, if adolescents do not have the appropriate social skills or confidence to seek out new groups to associate with, isolation can become the only option for some. Therefore, a lack of coping skills and healthy relationships during adolescent development causes struggles with individuation and personal identity creation (Norton, 2010). Although individuation is something that isolation may support due to being on one's own; social interactions and interpersonal relationships is what helps create individual identity. This is often seen in high school as students from various elementary schools come together in high school creating new social networks and connections. When a student struggles to make this new connection, either due to underdeveloped social skills or peer-rejection, they may feel excluded and unable to find a social group to help develop a personal identity. However, Kistner et al. (as cited in Qualter et al., 2010) suggest that "actual rejection over time does not predict increased depression, but perceived rejection does" (p. 494). This lack of perceived association may create a negative self-concept that has the potential to lead to future depression.

In a study by Badri et al. (2021), the authors identify three factors that play a key role in adolescents' feelings of isolation and loneliness: generalized trust, involvement in informal activities with friends, and quality time with family. These three factors are all correlates of

creating social networks, therefore a deficit in one factor may affect another factor thus leading to a lack of connection with others and feelings of isolation. The study revealed that the feeling of isolation and loneliness generated the highest direct and total effect on self-perceived depression (Badri et al., 2021). If adolescents are unable to build positive and strong social connections with their peers and family, they may face difficulties with developing trust in others. This lack of trust has the potential to create greater feelings of loneliness and negative self-perceptions of personal and family life (Badri et al., 2021). Kassis et al. (2017) state that positive interpersonal relationships are an important aspect of protecting against depression. This points to the importance of developing and supporting treatment that is focused on building adolescent's social skills. Further to this, stronger peer relationships may inevitably lead to more involvement in informal activities with friends which is a positive factor for fighting against loneliness. It could be assumed that stronger interpersonal skills that foster positive relationships would then lead to more time spent with friends. Badri et al. (2021) went on to suggest a positive relationship between the involvement in informal activities with friends and more quality time with family. Thus, when adolescents perceive themselves to be rejected and not a part of a social group, they may feel isolated. This could pull them away from their family which may be the last protective factor in their fight against depression. It is this negative self-perception that needs to be focused on in treatment. The development of social skills to increase self-confidence may hopefully lead to greater trust in others thus creating stronger relationships with peers and family. Supportive parents and peers can provide for strong protective factors against the development of depressive symptoms later in life (Badri et al., 2021; Shore et al., 2018).

Suicidal Ideation. According to the World Health Organization (2020), suicide is the third leading cause of death among 15 to 19 years-olds. As mentioned earlier, according to

Thapar et al. (2012), there is often an underdiagnoses of mental health disorders due to underreporting which points to the severity of the problem and lack of support that adolescents obviously need. When left undiagnosed or untreated, depression can lead to serious problems later in life, with alarming rates of adolescent suicidal ideation (Norton, 2010). Boys and girls are at equal risk for suicide before puberty; however, girls rise to twice as high as boys after puberty (Brent & Birmaher, 2002). Additionally, girls are found to have higher rates of suicide attempts, whereas boys are found to complete suicide more often (Brent & Birmaher, 2002). Furthermore, when adolescents presented with more than five somatic symptoms, suicidal behaviour was nine times more prevalent than in depressed adolescents without these symptoms (Bohman et al., 2012). These are sobering statistics that point to the need for early interventions in the treatment of adolescent depression. The fact that so many youths in need are turning to suicide as their only option suggests a lack of support, interventions, treatments, and education. This must be provided to help lower these numbers and give adolescents a chance at living a long and healthy life.

Current Practices

When diagnosed depression is not complicated and is an isolated disorder on its own, it can be managed by qualified primary care physicians or therapists, while more complicated forms of depression in which there are other underlying issues, conditions, or comorbidity should be dealt with by a child psychiatrist (Brent & Birmaher, 2002). Current practices in the treatment of either form of adolescent depression by therapists and psychiatrists center around the use of pharmacotherapy and psychotherapy.

Psychotherapy. Psychotherapy, or talk therapy, involves the use of a therapist that works with individuals with mental health problems. It is often considered to be the first treatment for

most depressed youths (Cuijpers et al., 2006). Cognitive Behaviour Therapy (CBT) has been found to be one of the most effective forms of treatment to reduce and prevent adolescent depression (Tak et al., 2016). This type of therapy involves reviewing one's thoughts, feelings, and behaviours and seeing how a positive change in one aspect can affect positive changes in the others. When used over eight to sixteen sessions, it has been found to be one of the more effective forms of treatment of depression compared to others, with interpersonal therapy also being effective (Brent & Birmaher, 2002). However, Thapar et al. (2012) noted in their review of meta-analyses that CBT was an effective form of treatment for milder forms of depression but was not as effective for moderate to more severe forms of depression. As CBT tends to be the most used form of treatment in adolescent depression, there is a lack of research looking at other forms of therapy and their superiority or inferiority (Cuijpers et al., 2006). This leads one to believe that CBT tends to be the only effective option for dealing with depression due to its high usage in therapy, which may not be the case. Therefore, it is important to look at other forms of psychotherapy that may be abstract or not as well known that may have similar efficacy as that of CBT.

Pharmacotherapy. Selective serotonin-reuptake inhibitors (SSRIs) are the most common pharmaceutical drugs and medication used in the treatment of adolescent depression due to their proven efficacy. The use of SSRIs for treatment often lasts from six months to a year. However, side effects can include nausea, loss of appetite, sedation, agitation, and difficulty sitting still (Brent & Birmaher, 2002). Thapar et al. (2012) indicate another alarming side effect that "individuals younger than 25 years of age treated with antidepressants are more likely than older adults to develop thoughts about suicide" (p. 1062). This may create a difficult situation for parents when determining how to treat their child's depression, as the treatment may

make the situation worse. Additionally, Brent & Birmaher (2002) state that the exact dosage of SSRIs for each individual is difficult to ascertain as adolescents often require higher doses than adults which may increase the amount of time it takes to treat with SSRIs alone. Additionally, somatic forms of depression have been shown to have a lower response to antidepressant medication than when traditional symptoms of depression, such as sadness and negative thinking, are present (Silverstein et al., 2013) This makes finding correct dosages even more difficult.

School Practices

Unfortunately, there is little research addressing programs used to support adolescent depression within schools. Universal depression prevention programs are aimed at targeting all individuals in a setting whereas targeted programs are specific to identified individuals. Cuijpers et al. (2006) found in their review of studies that the use of a universal screening program in the intervention and treatment of adolescents with depressive symptoms was found to be of a moderate effect size. Unfortunately, the reviewed studies were small, quality was inconsistent, and there was often a lack of follow-up measures for long term effects. However, they suggest that "screening and early intervention in schools may be an effective strategy to reduce the burden of disease from depression in children and adolescents" (Cuijpers et al., 2006, p. 305). This could help reduce the number of adolescents suffering from low levels of depression by giving them the strategies to cope with their symptoms on their own. This would then allow school counsellors to support those that need direct intervention and psychotherapy.

As suggested previously, CBT tends to be the most common form of therapy delivered to adolescents suffering from depression. However, the efficacy of these programs is of great debate. A study performed by Tak et al. (2016) looked at the use of the Op Volle Kracht, an

adolescent school-based depression prevention program, that focused on CBT principles with added lessons focusing on coping skills, decision making, social skills, and problem solving skills taught to all children in a high school. The universal delivery of the program was found to have no effect at preventing depressive symptoms over a two-year follow-up. Students in the program described the lessons and activities to be boring and unrelatable (Tak et al., 2016). This could mean that there is a need to make these programs more interactive with games, activities, and sharing. An interactive program has the potential to provide more engagement by adolescents which may result in an increase in knowledge gained. When adolescents felt comfortable sharing their own experiences, they reported fewer symptoms at a follow-up after one year (Tak et al., 2016). This suggests that when they were able to make their own connections to the material, they were able to apply the strategies they learned into their daily lives.

Another study that also focused on CBT as one of its core therapy components looked into the use of the Preventure program by Goossens et al. (2016) to determine its effect on decreasing depression amongst adolescents with certain personality traits, and specific to depression was the group involving negative thinking. The program consisted of two brief 90-minute sessions focused on developing self-efficacy and CBT skills. The results showed small improvements in both control and intervention groups, however, the control group showed stronger effects at follow-up. When interventions were focused solely on the negative thinking groups, results showed negative intervention effects at the 12-month follow-up. This could suggest that this form of intervention may be beneficial for short-term reductions of depression, but not effective for long-term retention. It may also point to the apparent ineffectiveness of brief forms of intervention when dealing with depression as shown in the small effect sizes.

Furthermore, Goossens et al. (2016) state that increased intervention doses are probably needed for specific subgroups, in this case, the negative thinking group. This may prove to be effective for low-level forms of depression or supporting the general states of low mood that most people deal with, but with moderate to severe levels of depression, a longer intervention and treatment plan is necessary.

As seen in the previous two examples, universal delivery of mental health education and brief intervention programs often do not produce the positive results school counsellors would like to see. Unfortunately, this is the form of psychoeducation and treatment that is available in our current educational climate. Counsellors in schools are usually only able to provide brief forms of intervention and treatment due to large populations of schools and over-sized caseloads. Teachers are often responsible for delivering mental health psychoeducation, and some of them have little to no background knowledge on the subject and are far from experts in the field. Another consideration for future programs is their applicability to specific demographic groups. Our communities are multicultural and as Goossens et al. (2016) state, "it cannot be assumed that positive intervention effects found in one study will also be found in studies performed in other (cultural) contexts and under other circumstances" (p. 647). This does not mean we should abandon these techniques altogether, as there are potential benefits, and these techniques may lessen the burden of the low-level forms of depression cases for counsellors. However, with effect sizes often being either small or null, it is important to begin to look at alternative forms of treatment that will engage adolescents and provide them with the skills and strategies they need in order to reduce and hopefully end their depression.

Adventure Therapy

The following section will review literature on Adventure Therapy (AT) related to adolescents. Adventure Therapy is an alternate form of therapy that has the potential to support adolescents with depression. I will begin by providing the brief history and theoretical framework related to experiential education, and definition of Adventure Therapy focusing on the following program deliveries: wilderness therapy, long-term residential camps, and activity or adventure-based therapy. Secondly, there will be a review of four important components of Adventure Therapy: nature setting, challenge, groups, and processing. Thirdly, I will analyze the general effectiveness of Adventure Therapy followed by its effectiveness related to depression. The final section will review the limitations of Adventure Therapy.

History

The therapeutic effects of being outside in nature have been well documented. In the early 1900's, "tent therapy" was considered one of the first outdoor therapeutic programs performed at the Manhattan State Hospital East. Forty tuberculosis patients found dramatic improvements in their physical and psychological states by being put in tents on hospital grounds to isolate them from other patients (Davis-Berman & Berman, 1993; Fletcher & Hinkle, 2002). From this, future programs began to emerge with a focus on the group as a vehicle for growth and change by using the healing and restorative powers of the natural environment (Davis-Berman & Berman, 1993). Although not in a natural setting such as a forest, it became apparent that being outdoors proved to be beneficial.

Around the mid to late 1960's, the beginnings of Adventure Therapy began to take form based on the Kurt Hahn model of Outward Bound (Baştemur, 2019; Gillen & Balkin, 2006; Russell, 2001). Originally theorized as character and leadership training through the use of

outdoor education (Freeman, 2011), the program suggested that reflection and insight were the responsibility of the clients, not the leaders, as being outdoors was therapeutic (Davis-Berman & Berman, 1993). However, Outward Bound slowly shifted their theory towards a deeper development of personality through personal growth using adventure (Freeman, 2011). The term Outward Bound designates the concept of leaving the safe harbour for a journey into the unknown (Baştemur, 2019; Gillen & Balkin, 2006). Hahn believed that it was possible to find resilience by putting people into experiences that allowed them to rise above adversity and overcome their own fears and negative attitudes (Warren et al., 1995). A key aspect of Hahns's theoretical perspective and philosophy for Outward Bound was the use of experiential education (Brown, 2019; Freeman, 2011).

Experiential Education. The theoretical roots of Adventure Therapy come from experiential education (Norton et al., 2014; Russell & Lee Gillis, 2017; Tucker et al., 2016). The basic concepts of experiential education were founded in the works of John Dewey (1938) and later reworked into Kolb's (1984) idea of the experiential learning cycle. The cycle focuses on the four key elements of the therapeutic process involving experiencing, reflecting, thinking and integrating or acting (Kolb & Kolb, 2017; Norton et al., 2014). With the ability to be entered in at any phase, the learning cycle is continuous and progressive, thus allowing clients to experiment with new ways of thinking, behaving, and interacting (Tucker et al., 2016). This may provide an individual or a therapist with the opportunity to look at the experiences of an individual and the way they interact with their thoughts, feelings, and behaviors, thus being able to make productive changes.

Experiential learning suggests that learning is the result of direct experience using multiple senses from an individual being actively involved in the process of learning (Newes &

Bandoroff, 2004). Eklund et al. (2016) suggest that the use of multisensory experiences in the forest greatly impacts and enhances actual learning. Through active participation in the learning process, students are able to develop the skills of reflection, critical thinking, and formation of self-concept (Eklund et al., 2016). This allows the student to be an active participant in the therapeutic process through hands-on experiences that can elicit emotion through exposure to real and meaningful natural consequences, and then providing the opportunity to reflect and transfer their learning into their everyday lives (Norton et al., 2014). It is this active participation that allows the individual to draw personal and meaningful reflections from their experiences and apply them to their personal lives outside of the learning experience to make positive future changes. These reflections become more significant when the individuals are placed in situations that are outside of their comfort zones and must then navigate these difficult situations to achieve balance in their daily lives (Newes & Bandoroff, 2004). This provides the opportunity for greater personal growth instead of staying within one's personal safety net.

Definition of Adventure Therapy

The definition of Adventure Therapy is varied worldwide based on different social systems and applications of the program, however, many have distinct similarities and differences based on the concept of utilizing outdoor adventure for therapeutic gains (Norton et al., 2014; Russell & Lee Gillis, 2017). Not only does adventure therapy have varied definitions, but it is often referred to as "wilderness therapy", "therapeutic adventure", "adventure therapy", "wilderness-adventure therapy", "adventure therapy", "adventure-based counselling" (Newes & Bandoroff, 2004), "outdoor behavioural health care", and "bush adventure therapy" (Dobud et al., 2020). Due to these differences, there is a growing need for appropriate definition of

therapeutic wilderness programs and a professional agreement of the requirements of staff for such programs (Davis-Berman & Berman, 1993; Dobud, 2016).

Due to such variation in the terminology and components of each type of therapy as listed above, there is a need for a comprehensive definition that encompasses the basic concepts of all modalities. An early consolidated definition brought forth from Simon Crisp (1998) states that Adventure Therapy is a therapeutic intervention that uses created indoor or urban setting activities that are experiential and challenging in nature in the treatment of an individual or group. Alvarez and Stauffer (2001) define Adventure Therapy as “any intentional, facilitated use of adventure tools and techniques to guide personal change toward desired therapeutic goals” (p. 87). Newes and Bandoroff (2004) view it as the use of the traditional modes of therapy in combination with the therapeutic benefits of adventure activities and experiences. Bastemur (2019) suggests that Adventure Therapy is the combination of traditional therapies conducted in nature environments with the goals of improving communication skills, social responsibility, development of character, overcoming limitations, improving themselves, and learning to use their intrinsic skills of survival. However, one of the most used definitions of Adventure Therapy in literature is by Gass et al. (2020) who define it as “the prescriptive use of adventure experiences provided by mental health professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels” (p. 1). Based on the above definitions there appears to be a consensus that Adventure Therapy involves the use of specific adventure activities performed in nature or the wilderness combined with a psychotherapy focus to develop personal growth towards one’s goals.

A key consideration for Adventure Therapy to be considered therapy is that the client needs to be assessed, a care plan needs to be created and implemented by a qualified professional

with a consistent follow-up care. In the absence of a qualified professional, a program is only therapeutic due to the changes that happen by being involved in activities in nature (Davis-Berman & Berman, 1993). Therefore, the act of counselling and processing in Adventure Therapy is what distinguishes itself as therapy versus therapeutic. As Itin (2001) suggests, Adventure Therapy focuses on change at the meta-processes level, unconscious processes, in conjunction with adventure-based practices, whereas therapeutic adventure is the process of change from just being involved in the activity itself. These two points highlight the importance of having trained and qualified professionals involved in the therapeutic process. This ensures psychotherapy is being completed to advance these clients towards their stated goals. Otherwise, the program would lose its purpose and credibility.

Wilderness Therapy. Adventure Therapy programs tend to fall under three general formats: activity or adventure-based therapy, wilderness therapy, and long-term residential camping (Baştemur, 2019; Newes & Bandoroff, 2004; Tucker, 2009). The wilderness setting can be described as remote uninhabited areas where the lands have not been cultivated or substantially developed (Thomsen et al., 2018). In wilderness therapy, clients embark on an expedition into a remote setting in the wilderness where the clients live together in small groups ranging from seven days to a couple of months (Newes & Bandoroff, 2004; Tucker, 2009). Therapists use group therapy, group systems models, and interpersonal behavioral methods to elicit holistic changes over time (Crisp, 1997). The therapy can be intense and bring about great change in a very short time (Newes & Bandoroff, 2004). Wilderness therapy should be therapeutically-based, with careful selection of clients that is based on clinical assessment, the creation of individual treatment plans, activities performed in the outdoors by skilled certified leaders, and group psychotherapy facilitated by qualified professionals with continuous and

consistent evaluation throughout the program and follow-up (Russell, 2001). The group focus of these programs emphasizes survival skills and interdependence of the group (Newes & Bandoroff, 2004) as well as learning from natural consequences (Crisp, 1997). Due to the length of time that this type of program requires, it would be very difficult to apply this into a school setting to support high school students dealing with depression. A program such as this would be more beneficial for students suffering from moderate to severe forms of mental health issues where a therapist is present and able to support any manner of issue that may arise during the expedition.

Long-Term Residential Camps. Long-term residential camps are often less intensive than short-term wilderness therapy programs and are more characteristic to boarding schools (Newes & Bandoroff, 2004). These camps, also known as therapeutic camps, have a length of several months to two years and are most often used with at-risk adolescents (Baştemur, 2019). Clients focus on group living, structure, and learning how to be self-sufficient for survival in the wilderness (Newes & Bandoroff, 2004). Again, like the previous programming, this would be a more beneficial form of therapy for adolescents who suffer from moderate to more severe forms of depression where parents are looking for long-term care. As the program is long in duration, this would not be possible in a typical school setting but more akin to a specialized school or boarding school as mentioned.

Activity or Adventure-Based Therapy. This concept of Adventure Therapy uses adventure-based activities as a part of the client's overall treatment plan (Baştemur, 2019). The intervention activities may range from a short session of an hour up to a full day in duration typically taking place in a natural environment, an open space or a park, or a facility that supports interventions such as a ropes course or a climbing gym (Crisp, 1997; Newes &

Bandoroff, 2004). The selected activities and skills are often contrived by the therapist with specific therapeutic techniques designed to work toward specific outcomes in mind based on the client's needs (Newes & Bandoroff, 2004). The adventure aspect of activities is not the focus, and instead the focus is on whether or not the client finds the experience to be relevant and a worthy approach to the problem (Warren et al., 1995). This type of approach is accessible to more clients due to the fact they are not required to live in the wilderness or to go on multiple day excursions, and the activities are easily adapted to the general outdoor environment (Tucker, 2009). As these forms of programs are low cost and can be done in just about any outdoor facility, even within urban areas, this would be the form of programming that could be applicable within a school context and would only require day outings. This would enable more people to participate and not have as drastic an impact on the adolescent's academics and social life as they would be able to stay in their own school.

Components of Adventure Therapy

The following section will outline some of the key components that literature has identified as being important to adventure therapy focusing on the nature setting, challenges, groups, and processing.

Nature Setting. One of the key factors and unique to the idea of adventure therapy is the reliance on the outdoor natural setting (Fletcher & Hinkle, 2002). There is a growing amount of empirical research that focuses on the link between human health and the natural environment, especially with regards to the mental health benefits of participating in activities such as hiking, camping, paddling sports, rock climbing, backpacking, mountain-biking, skiing, and snowboarding (Thomsen et al., 2018). Based on the natural environment that we have in British Columbia, the possibilities are endless regarding the activities and settings that could be used for

Adventure Therapy. Using nature in the therapeutic process allows for a live, interconnected, and interactive relationship to the natural surroundings with an unpredictable partner thus requiring a more flexible approach by the practitioner (Naor & Mayseless, 2020). Experiential education and natural consequences have the opportunity to play a large role in the experiences that participants may have in an Adventure Therapy program.

Although difficult to describe, nature is considered to be actively participating in the therapeutic process through personal dialogue between humans and nature, external reflection of internal aspects, and symbolic interaction (Naor & Mayseless, 2020). Being in nature cultivates internal awareness by requiring the client to focus not only on their body, thoughts, and feelings but also the sounds, smells and movements of nature around them (Naor & Mayseless, 2020). This process allows one to connect with all senses of the body and to not focus solely on their thoughts and feelings. It creates a holistic perspective of healing by changing the environment from an office to the outdoors thus incorporating more senses to the therapy session.

Not only does the natural environment provide health benefits to the individual, but it also takes them away from the normal context of their presenting problems, thus potentially breaking the ties to previous coping problems and offering a new and unfamiliar environment to work from (Baştemur, 2019; Newes & Bandoroff, 2004). This process of providing new context and environments can be important for people who have become both physically and socially isolated from the world. It has the ability to provide them with new ways of viewing and shaping their views and problems. Doing this can help break old habits and as Ower et al. (2019) suggest, therapies that utilize the benefits of outdoor natural environments should be taken into account for everyday clinical practice

Challenge. Another component of adventure therapy is the level of risk in the activities, both real and perceived, as they are critical in the process of functional change (Gass et al., 2020). Physical risks such as rock climbing, bouldering, and high ropes courses place the client in real danger due to the risk of falling and hurting oneself. Although the risk is evident, adventure therapists are highly trained at ensuring the safety of their clients. The risks are not just physical, but they also encompass social and emotional risks, which is why a clinically trained therapist is important for supporting and guiding clients through the process (Newes & Bandoroff, 2004). Sharing problems, discussing past traumas, and creating trust within a group all pose social and emotional risks. With adolescents dealing with isolation, hopelessness, and social disconnect, the ability to open up can be limited. This is why clients are taken through carefully selected challenges that are incrementally sequenced in difficulty both physically and mentally. By doing this, therapists can create a sense of disequilibrium by removing clients from their comfort zone to help encourage change (Fletcher & Hinkle, 2002; Newes & Bandoroff, 2004). This creates natural consequences from the choices they make and becomes a part of the therapy process as clients learn from their own failures and successes and not from an authoritative figure, such as the leader of the group (Russell, 2001). These challenges and consequences, when sequenced properly, may provide clients with the opportunity to experience early success and mastery, therefore, counteracting some of their negative feelings of depression and hopelessness. It allows one to reshape a more positive perspective on their current situation by developing resilience and self-esteem.

Groups. One of the benefits of Adventure Therapy is the focus on the group. The most common clients of Adventure Therapy are adolescents with group goals being developmentally appropriate and a key component of success (Newes & Bandoroff, 2004). As Tucker (2009)

suggests, the views and opinions of peers are of great importance and their ability to learn from each other is heightened. Groups range in size from six to 14 people and tend to be heterogeneous in terms of the type of client (Baştemur, 2019; Newes & Bandoroff, 2004). Key to being in a group is that an individual is able to learn more about themselves and others through interaction with others by exchanging ideas, thoughts, and knowledge (Eklund et al., 2016). These social skills are integral for building relationships, mutual respect, cooperation, and conflict resolution between people in clinical situations (Eklund et al., 2016). With modeling and reinforcing the positive social skills that are being used by individuals, there is an increased chance of them repeating these behaviours and trying new ones (Tucker, 2009). This could help adolescents who lack the appropriate social skills and feel isolated to build relationships with their peers. An increase in positive social interactions may give depressed adolescents hope that they belong and can have and maintain friendships in the future.

Adding to the importance of the group are the findings by Christian et al. (2019) that show that the developmental processes of Adventure Therapy groups are similar to those of traditional group therapy. This points to the importance of the therapist understanding where a group is at and adjusting activities and challenges when needed. The leader is then able to promote and maintain a level of physical and emotional safety for all of the members of the group (Tucker et al., 2016). As the physical challenges increase, the level of cooperation required by the group for each activity does as well, providing participants with the opportunity to develop trust in a different way than in traditional group therapy (Newes & Bandoroff, 2004). This has the potential to create a level of trust on a physical level which may allow the participants to open up emotionally as the group progresses through therapy. Newes & Bandoroff (2004) state that as trust within the group increases, the group becomes more self-reliant and

open to communication, therefore creating the group therapy environment necessary for emotional sharing.

Processing. Finally, processing provides the opportunity for clients to review experiences and identify transference of their presenting issue back into their daily lives (Fletcher & Hinkle, 2002; Gass et al., 2020; Newes & Bandoroff, 2004). The use of soft skills associated with traditional counselling, such as reflective listening, leadership styles, reframing, and problem solving is imperative to ensure understanding of presenting issues, processing of information, and managing potential emotional breakdowns (Fletcher & Hinkle, 2002; Gass et al., 2020). Front loading, preparing clients for what to expect and focus on in a session, and backloading, doing the activity and then reviewing and processing a session, can play key parts in the therapeutic process by creating deeper meanings and understandings of the experience (Fletcher & Hinkle, 2002). It is during the debrief that further therapy and processing can be applied to everyone or to individuals in a group therapy style session.

A processing skill that tends to be used a lot in Adventure Therapy is the use of metaphors to link the experiences from the adventure activities into the real lives of clients which is vital in maintaining change (Fletcher & Hinkle, 2002; Newes & Bandoroff, 2004). As Gass et al. (2020) suggest, when metaphor is presented to clients effectively and is co-created, the clients have the potential to use their affective, behavioural, and cognitive resources to promote healthy change. When metaphors are client-created, they tend to be more effective and provide ongoing growth and learning that the client can continue to use outside of therapy (Newes & Bandoroff, 2004). However, caution needs to be taken when using metaphors as they can be over-stimulating, anxiety inducing, and even confusing, especially with younger children (Alvarez & Stauffer, 2001). This would imply that the therapist needs to have adequate skills in being able to

use metaphors so as not to create further issues that the participant is enduring. Although the use of metaphors is a powerful component of Adventure Therapy, it is dependent upon the assessment of a client, the therapeutic environment, and it needs to be guided toward desired therapeutic goals (Alvarez & Stauffer, 2001).

General Effectiveness

Adventure Therapy (AT) has shown to be a moderately effective form of treatment for youth with regards to their psychological, psychosocial and behavioural functioning (Bowen & Neill, 2014; Bowen et al., 2016; Dobud, 2016; Tucker et al., 2013; Vankanegan et al., 2019). Bowen et al. (2016) found in their self-reporting study of 36 participants small and statistically significant improvements in their psychological and behavioural symptomatology over a short-term period when involved in a Wilderness Adventure Therapy program. Specific to Youth Self-Reporting outcomes, Bowen et al. reported that participants had improved their emotional and behavioural functioning from the pre-program to the three-month follow-up. This is consistent with later research by Vankanegan et al. (2019) who used the Adventure Works program and a similar Youth Self-Report that found improved overall functioning and interpersonal relations for clients who participated in a group format of Adventure Therapy. As evidenced by the above studies, Adventure Therapy can affect change in the overall functioning of individuals. The use of self-reporting shows that adolescents are aware of their maladies, and follow-ups provide them with the ability to see actual positive changes when they are reviewed. Additionally, Vankanegan et al. (2019) suggest that a lack of follow-up interventions to support the changes made weakens the validity of studies and the ability to generalize findings. Follow-up then becomes an important process in any Adventure Therapy program to ensure the positive overall functional changes one has made can last over a longer period. Therefore, in a school setting

where the counsellor will be back at school with the youth from the program, follow-up may be easier and possibly can help prolong the overall positive effects.

A key consideration when using Adventure Therapy is the age of the participant. Although Adventure Therapy has been shown to have positive effects among most participants, there have been studies that show a predominance for it being more effective with older aged individuals. Bowen and Neill (2014) found that age was a heterogenous predictor in some of the results they discovered in their meta-analysis of adventure therapy outcomes. They suggest that older participants could possibly get more out of therapy due to the higher chance of voluntarily joining Adventure Therapy, whereas younger participants could potentially be pressured or forced into therapy. These results could also be due to older adolescents being further along developmentally than their younger counterparts. Their greater cognitive processing abilities may allow them to engage more deeply in the processing portion of Adventure Therapy which could allow them to get more out of it. However, Tucker et al. (2013) found in their study that younger clients were more likely to have larger decreases in their problem severity. Caution must be taken with these results as most of the clients in the program were 12 years or younger, which may have influenced the numbers. As the meta-analysis by Bowen and Neill (2014) involves a larger sample size of studies, there appears to be more credibility to the findings that older participants get more benefits. This is an important finding as older adolescents may have been suffering from mental health issues for longer periods without intervention or treatment which may also be why there are greater benefits. With contrasting views of what age group would see the most benefits, there is need for more research with a focus on the delivery of Adventure Therapy and its effectiveness to specific age groups.

Due to AT's wide applicability with regards to its intervention strategy, community-based settings have been shown to have similar improvements to youth as wilderness applications (Tucker et al., 2013; Vankanegan et al., 2019). Improvements in the overall functioning of youth from intake to discharge, with specific significance to interpersonal relations and critical items from the Youth Outcomes Questionnaire Self-Report were found by Vankanegan et al. (2019). Although Adventure Therapy was used in conjunction with other forms of therapy in this study, it gives some credibility to its use in a variety of methods and not just as part of a nature and wilderness environment or philosophy (Vankanegan et al., 2019). Adding further credence to community settings of Adventure Therapy is the study by Tucker et al. (2013) stating that "between 50 and 55.8% of the youth who engaged in AT could be considered recovered at discharge, compared to 42.5 and 43.4% of youth who did not have AT as part of their treatment" (p. 172). This is an important aspect of Adventure Therapy if it is to be used in a school setting or as part of a school-based intervention. Schools do not always have the ability to venture out into the wilderness due to their locations and the costs associated to excursions. However, if some of the interventions could be carried out within school and others on excursions into the wilderness, there is the possibility of gaining the benefits from both.

Benefits of Adventure Therapy can be found in skill development, self-esteem, physical health, and improved social skills. A study of outdoor adventure camps showed that participation in Adventure Therapy resulted in improvements in mastery of skills, self-esteem, and social connectedness from the beginning of programs to the end. However, post-camp results one month later were not sustained (Cotton & Butselaar, 2013). The feeling of mastering a skill leads to improved confidence and self-esteem. If a participant can experience positive change in one area, they may be more hopeful of change in another area, resulting in a positive mind shift.

Further to this, participation in physical activity as a lifestyle change benefits cognition (processing speed, executive functioning, coordination, and planning) when activities are at least 30 minutes in length and are engaged in over the course of one month, with increased benefits when programs are six months or longer (Walsh, 2011). This may suggest that an Adventure Therapy program extended over a longer period may have greater physical and cognitive benefits to those involved. With improved cognitive functioning, participants could be better able to process and control emotions leading to a more positive mental state.

Effectiveness Related to Depression

In addition to the effectiveness on overall functioning, it has been found that participants with clinical levels of mental health issues tend to respond well to Adventure Therapy, especially with respect to depression. Bowen and Neill (2014) found that there were moderate, positive, statistically significant outcomes for clinical forms of mental health with an effect size of (0.50), which was the highest effect size of the eight outcomes they were evaluating. Bowen et al. (2016) were able to further substantiate these findings in their research with similar results being statistically significant, especially pronounced amongst those with clinical levels of depression. The results even suggest short-term gains up to three months after completion of the program. These studies provide evidence that clinical levels of depression can be decreased due to short-term improvements in resilience, social self-esteem and depression with large improvement for suicidality and general self-esteem (Bowen et al., 2016). Adventure Therapy provides the opportunity for adolescents to build coping skills that help with developmental progression through challenge and adventure activities (Norton, 2010). With improved ways of coping with depression and the ability to build self-esteem and competence through mastery of skills,

Adventure Therapy shows that it may be effective in dealing with some of the more debilitating issues of depression such as suicidality, hopelessness, and isolation.

Additionally, Adventure Therapy is a unique experience with activities and adventures that are fun, entertaining, social, and enjoyable. It has been found that Adventure Therapy creates feelings of happiness and optimism as evidenced from both participants and parents (Dobud, 2016). Considering that this increased sense of positivity and enjoyment could be a key component of aiding and treating youth suffering from clinical levels of mental illnesses, it then seems like Adventure Therapy could be a viable option for treatment and intervention. By being involved in Adventure Therapy, adolescents are exposed to new activities and challenges that may create newfound enjoyment and potential therapeutic lifestyle changes. This could help empower self-management of their own health and may be used for primary prevention and secondary intervention (Walsh, 2011). Once an adolescent feels they have a sense of control over how they are feeling, feelings of hopelessness may dissipate. It is this "creation of a new narrative [that] may increase the depressed adolescent's ability to envision themselves in a new place emotionally, creating a deeper sense of future" (Norton, 2010, p. 230). This new future may create feelings of optimism and hope which in turn may lead to an improved emotional state.

Limitations

There are several limitations regarding the use of Adventure Therapy for supporting adolescent depression. The first major concern is related to long-term outcomes. Many studies have struggled to determine whether or not the improvements or positive changes participants made were able to be maintained after completion of therapy (Bowen et al., 2016; Dobud, 2016; Tucker et al., 2013; Vankanegan et al., 2019). Bowen et al. (2016) found that for the most part,

improvements in psychological functioning, psychological resilience, depression, and social self-esteem were retained at a three month follow-up period. Participants valued follow-up services from their leaders and were better able to cope in a more positive way, with parents also making the similar affirmations with the home transitions (Dobud, 2016). However, it is often unclear if these changes remained over time due to the lack of multiple long-term follow-up data (Bowen et al., 2016) and/or the fact that there was no actual follow-up once participants had been discharged (Tucker et al., 2013; Vankanegan et al., 2019). This lack of long-term follow-up has garnered a lot of attention as something that future research needs to focus on. With a lack of follow-up or ongoing treatment, “the effects of wilderness therapy may be short lived” (Norton, 2010, p. 233). If an Adventure Therapy program were to be used in a school setting, the possibility of follow-up may be easier for a counsellor as they will see these students potentially for several years unless they are graduating. This could enable the follow-up to potentially provide greater long-term sustaining power of the treatment, however, there is no current research to support this hypothesis.

Another criticism of adventure therapy is the small sample sizes that are typically used in studies. A number of studies have found Adventure Therapy to be effective in supporting adolescents with mental health issues (Bowen et al., 2016; Cotton & Butselaar, 2013; Jeffery & Wilson, 2017; Norton, 2007), however, their results must be interpreted with caution as they cannot be generalized due to the small sample sizes. This creates a problem of not knowing exactly who Adventure Therapy is beneficial for and suggests a need for more research with larger sample sizes to determine the true effect to a larger group. The small sample sizes also created the issue of a lack of a control or comparison group in many studies to strengthen the findings and overall effects of Adventure Therapy (Bowen et al., 2016; Cotton & Butselaar,

2013; Tucker et al., 2013; Vankanegan et al., 2019). The use of separate control groups could allow future studies to see the overall effectiveness compared to no treatment and alternative treatment groups thus giving Adventure Therapy the credibility that it needs to be considered as an effective form of treatment.

Lastly, the various programs, definitions, and research methods of adventure therapy show just how complex the issue of consistency from one program to the next can be. As Itin (2001) suggests, “there exists no single academic entity that represents adventure therapy” (p. 82). There is a need for generalizing applications and their effectiveness versus individual program designs in order to be able to replicate and focus on what specifically is causing change (Norton et al., 2014). Further to this is the lack of training for supervisors and therapists in Adventure Therapy due to the variance in program delivery which puts participants’ safety at risk. Using untrained or unqualified professionals in Adventure Therapy program models delegitimizes the therapeutic processes and potentially puts at-risk youth in further risk (Davis-Berman & Berman, 1993). However, the Association for Experiential Education (2021) is an organization that can give accreditation and certification to potential programs to ensure set standards of practice in North America. This has enabled Adventure Therapy to become more standardized in its operation as well as creating an overarching entity to oversee programs and promote it as a viable option for therapy. It is these programs that future research should be coming out of as there are standards of practice and delivery that must be adhered. Unfortunately, this still does not satisfy the concern regarding one entity to represent Adventure Therapy worldwide. There needs to be more done to connect the different organizations worldwide to create a global perspective and set of standards that must be followed in order for a program to be considered Adventure Therapy.

Adventure Therapy & Depression

This section will review nature, physical activity, and groups as key pieces for supporting depression amongst adolescents. These three factors are integral components of Adventure Therapy and are beneficial in supporting depression. Nature provides both physiological mental health benefits to an individual in a less restrictive setting which may promote greater engagement in the therapeutic process. Physical activity also provides physiological health benefits in the release of the feel-good hormone serotonin which can help combat feelings of hopelessness and despair. Additionally, mastery of skills through physical activity allows one to improve their self-concept and gain resilience in that they can get through when things are tough. An added benefit is that both nature and physical activity are readily available for anyone to use at any time and with no cost. It is available post-therapy and can be used as a self-coping resource on its own. The third factor of being in a group is specifically related to improving one's social skills to help them fight feelings of isolation associated with depression. This can support a youth in creating social connections and dealing with conflict in their future.

Nature

There has long been a connection between humans and nature, one that goes far back in our history and continues in research today. Nature has been viewed as a place for healing and wisdom for a long time and can be seen in the way that "shamans seek wilderness, yogis enter the forest, Christian Fathers retreat to the desert, and American Indians go on nature vision quests" (Walsh, 2011, p. 583). The fact that nature is viewed positively by such diverse communities shows its cross-cultural relevance. Humans have spent most of their time on earth living in the natural environment, however, we are getting farther away from these natural settings with more time now being spent in our current modern surroundings (Song et al., 2016).

This isolation may be leading to widespread depression and is something that should be paid attention to, especially our youth who are enamored with technology and appear to be more disconnected than ever.

Nature has the potential to provide mental health benefits. Natural settings have the ability to enhance both mental and physical health with enhancements in greater cognitive, emotional, and subjective well-being (Walsh, 2011). Adventure Therapy uses the power of the outdoors in combination with clinical interventions to promote healing, personal growth, and a sense of hope that may benefit the emotional state of an individual (Norton, 2010). A key feeling associated with depression is that of hopelessness and that nothing will get better. This may create behaviors of social and physical isolation where adolescents do not want to leave their own bedrooms. When engaged in Adventure Therapy, adolescents are taken outside and into the restorative space of nature. It provides a unique and immersive alternative for adolescents that allows for less restrictive settings than traditional therapy (Davis-Berman & Berman, 1993). As most forms of therapy are found to be indoors and in a confined office, this alternative setting creates opportunities to get out and try something new that may be more interesting and engaging in terms of therapy. Norton (2007) found that participants of AT stated that one of the most important aspects of the program was just being in nature. Additionally, Thomsen et al. (2018) found the largest influencing factor in improved mental health was from the physical setting and being in a natural environment away from distractions. Further to this factor of being in nature, Thomsen et al. (2018), found in their review of studies that there were improvements to feelings of hopelessness and depression, albeit small, but still present. This points to the positive effect that being in nature can have for individuals suffering from depression.

The use of therapy in outdoor settings also provides physical benefits that may help adolescents suffering from depression. Nature therapy is seen as the ability of natural stimuli, such as forests, urban green spaces, and natural wooded materials to create a heightened state of physiological relaxation in the body to maintain and promote health (Song et al., 2016). In their study, Song et al. (2016) found that walking around in a forest environment for a 15-minute session of forest therapy induced a state of physiological relaxation, decreased salivary cortisol which is a typical stress hormone, lowered pulse rates, and decreased blood pressure. Although they may use different techniques within their respective therapies, the mental and physical health benefits present in nature therapy are also present in adventure therapy and therefore may provide similar benefits. With respect to depression, the stress of feeling sad, isolated, and hopeless can become overwhelming. If going outside for just 15 minutes of therapy can have such a positive effect on reducing stress levels in the body, Adventure Therapy, which is typically 60 minutes or longer, may offer the same stress reducing benefits.

Physical Activity

Physical activity and exercise have been shown to have positive effects on one’s mental and physical health. Routine exercise has proven to be an effective treatment for mild to moderate forms of depression among adolescents aged six and 17 years (Badri et al., 2021). Both forms of aerobic and nonaerobic weight training, especially high intensity, are effective preventative and maintenance measures in terms of dealing with low to moderate depression (Walsh, 2011). The release of serotonin, which provides improved sleep, endorphins, which provide happy feelings from exercise, and possible breakdown of muscular armor that creates psychosomatic muscle tension patterns (Walsh, 2011) are just some of the benefits that can help mitigate the lack of sleep, unhappiness, and somatic symptoms that come from depression.

Additionally, Walsh (2011) suggests that an increase of 30 minutes of activity per day over the course of a month can improve one's cognition. He further states that when these changes occur six months or more the benefits are even greater. This suggests that an Adventure Therapy program extended over a longer period may potentially offer similar or greater benefits. Additionally, physical activity has been shown to be an effective preventative and therapeutic measure with similar benefits to psychotherapy and pharmacotherapy (Walsh, 2011). Parents and adolescents may be more willing to try something that will benefit their child holistically due to the potential for similar results and benefits. Adventure Therapy offers both the physical activity and psychotherapy component therefore providing a combination effect which could create stronger outcomes. Furthermore, when Adventure Therapy has concluded, there is the possibility for future lifestyle changes and adopting some of the adventure activities into one's daily life. Whether this is on their own or with friends and family, these activities may provide further benefits and support in reducing or treating future symptoms of depression.

Positive self-concept in adolescents is often possible through the participation in sports or physical activities. Self-concept is the perception of one's own abilities, and, unfortunately, perception is a key factor in depression. When one perceives themselves to not be as good or competent in something, feelings of inadequacy and despair can reign over them. With low self-esteem being associated with depression, the physicality of Adventure Therapy offers an opportunity for adolescents to develop positive self-esteem to counteract depressive feelings. Dishman et al. (2006) found that an increase in physical activity and sport participation allowed for an improved physical self-concept among female adolescents which was inversely related to depression symptoms. They further suggest that sport or activity competence did not have a strong relationship, signaling that adolescents do not need to have any prior experience or skill to

experience improved physical self-concept. This is the perfect environment for Adventure Therapy with adolescents as many of the activities provide novel experiences and create opportunities for improvements in one's self-concept. An important aspect of Adventure Therapy is the successful achievement of skills and activities that can help depressed adolescents create a new narrative, one of mastery which, in turn, can provide a sense of future and psychosocial development (Norton, 2010). Through the mastery of skills, clients may improve their self-concept and perception that they can do more than they think, thus giving them more confidence and resilience for the future. As evidenced by Russell (2001), completing an Adventure Therapy program creates a sense of accomplishment to draw strength from, produces improvements in physical health and well-being that can increase self-esteem, and can lead towards personal growth. Ultimately, it is this level of personal growth that develops resilience and coping skills to deal with future feelings of depression.

When physical activity is fun and enjoyable, people often want to engage and continue to do it because it makes them feel good. Activities in Adventure Therapy involve play which can foster social skills, enhance well-being, reduce defensiveness, and involve humor which can mitigate stress and enhance mood (Walsh, 2011). This requires creative planning to ensure a level of fun, especially early in therapy, to build social connectedness and group trust. The enjoyment may help break the cycle of sadness that a depressed adolescent has been experiencing, especially when in a group.

Group Process

One of the direct benefits of Adventure Therapy to adolescents suffering from depression is the development of interpersonal skills. A social learning perspective suggests that "adolescents learn social skills by being given opportunity to observe others performing these

behaviors, then modeling these behaviors, and being reinforced for these behaviors (Tucker, 2009, p. 319). As discussed earlier poor social skills and a lack of engagement with peers may result in feelings of isolation for many adolescents. Group settings were found to increase friendships and connectedness, but also provided the ability for further communication and social skill development (Cotton & Butselaar, 2013). Due to the various teamwork and problem-solving activities incorporated in Adventure Therapy, social skills become one of the most important skills for participants to develop. Adolescents that have a sense of isolation get to develop social skills due to the opportunities for corrective relationships that present themselves in group work and prove to be beneficial (Cotton & Butselaar, 2013; Norton, 2010). With stronger social skills, adolescents may feel accepted which could change their perceptions of rejection to perceptions of inclusion and connectedness. This is evidenced in Cotton and Butselaar's (2013) study where some participants made comments such as "I can fit in" and "I learned to enjoy the company of others" (p. 357). It is these perceptual changes that may help move a depressed adolescent out of isolation and into a more social environment thus reducing their negative thought patterns.

Group therapy requires a strong level of trust for participants to actively engage in therapy. As evidenced in the study by Badri et al. (2021), a lack of generalized trust in others has the potential to lead to greater feelings of loneliness and negative self-perceptions. Trust of school-aged teenagers is a key component in fighting adolescent depression and the group interaction, problem solving skills, and inherent trust needed to complete some of the activities in Adventure Therapy leads to this important formation (Norton, 2010). Not only must there be trust among the participants of the group, but there must also be trust in the leaders. The group leader acts as a participant-observer and can be viewed as an extension of the familial object of a

parent with whom the client can work out their past conflicts (Norton, 2010). Taken even further, group members may even be seen as siblings or friends in a similar context to work out those problems. The therapeutic relationship developed between a client and a leader helps foster future development of enhanced relationships with family, friends, and community (Walsh, 2011). A study by van Harmelen et al. (2016) found that family support during adolescence could potentially reduce depressive symptoms in boys and girls who have been exposed to early life stress. Therefore, it is important that trust in the group is achieved for therapy to be beneficial. This would allow clients to reap the benefits of stronger relationships with their friends and family which have been shown to be protective factors. It is the development of these social skills that improves trust amongst peers which may have positive mental health benefits related to depression.

Social support and helping others often make people feel good about themselves. Being in a group offers the benefit of positive psychological changes that one experiences when they perform altruistic activities (Walsh, 2011). The nature of helping others in the group, whether it is in a physical activity they are trying to accomplish as a group or the sharing of similar feelings and experiences that allow others to open up, produces a “helpers’ high” that can create a positive social contagion on the rest of the group (Walsh, 2011). Activities in Adventure Therapy are designed for group members to support each other and work through their problems. When working together in activities that require non-competitive cooperation through teamwork and focused on the goals of personal and group improvement, there is the potential for greater social support, self-esteem, and pro-social behavior (Klussman et al., 2021). When others around you are more positive and encouraging, as stated above, it becomes contagious to the group. This newfound sense of support and interpersonal competence can then translate back into the regular

lives of participants, creating stronger social networks. In school settings, this may create a newfound support group, with people who can be trusted and are able to provide support due to the shared experiences and knowledge they shared during Adventure Therapy.

Summary

Adolescent depression has high prevalence rates and is connected to suicidal ideation, and youth's feelings of isolation. Typical forms of therapy have been shown to be mildly effective for adolescents and for support within schools while universal and brief-interventions have had moderate to no effects at all. This points to the need for the inclusion of alternative methods of supporting adolescents with depression. Adventure Therapy has been shown to have positive effects on adolescent's mental health and overall functioning with the ability to decrease feelings of depression. The adventure aspect of Adventure Therapy provides a unique experience that is different than traditional forms of therapy and may interest and engage adolescents in a more meaningful manner. The next chapter will propose an Adventure Therapy program for high school counsellors and district staff to support adolescents with depression.

Chapter 3: Summary, Recommendations and Conclusions

Summary

Depression amongst adolescents is of great concern due to the negative long-term effects it plays on one's future. With high prevalence rates, feelings of isolation, and suicidal ideation being connected to depression, it is vital that we find ways to support our youth. Traditional forms of psychotherapy, pharmacotherapy, and universal delivery systems of mental health education vary in their efficacy from moderate benefits to no benefits at all. A need for alternative methods of treatment that may prove beneficial to some youth should be explored. Adventure Therapy offers one such alternative that has shown to be beneficial in supporting adolescents suffering from depression. This paper has sought to explore whether Adventure Therapy could be a useful program in a school setting to support adolescent depression.

Adventure Therapy involves the use of specific adventure activities performed in nature or the wilderness combined with a psychotherapy focus to develop personal growth towards one's goals. Though not necessarily for everyone, Adventure Therapy offers a unique and alternative form of therapy that focuses the client on developing strengths, resilience, overall functioning, social skills, self-confidence, and general physical health benefits from being active. For adolescents suffering from depression where isolation, a lack of enjoyment in life, and feelings of hopelessness reign supreme, Adventure Therapy can offer a glimpse of hope, excitement, and connectedness that could prove beneficial. Although long-term effects tend to be difficult to assess due to a lack of follow-up in many programs, providing an Adventure Therapy program in a school setting may provide counsellors the ability to continue follow-up over the course of an adolescent's five years in high school, potentially creating longer lasting effects of

the program. Therefore, I am proposing an Adventure Therapy program that could be used in a high school setting to support adolescents suffering from depression.

Implications

Based on the current research and sobering statistics related to the prevalence of adolescent depression, suicidal ideation, and under-diagnoses, there is an urgent need to address this in our schools and homes. Early identification and effective preventative interventions and treatments for adolescents must be a focus in both our medical and educational systems. However, depression is difficult to diagnose due to the similarities of the signs and symptoms associated with it and general adolescent development and behaviour. Adolescents displaying boredom, irritability, difficulty experiencing joy or pleasure, and somatic symptoms (Bohman et al., 2012; Brent & Birmaher, 2002; Norton, 2010) can all be mistaken as the adolescent experience of growing up. Therefore, more thorough education for counsellors, teachers, students, and parents must be implemented to ensure we can identify and treat it earlier. Mental health education needs to be a larger focus within our classrooms to help educate children on the signs, symptoms, and strategies that can be used to support and treat mental health issues such as depression. It needs to be more than just a one-off professional development day, but an ongoing delivery to ensure up-to-date information is constantly being delivered.

Adding to the difficulties of being an adolescent is the effect of current technology. The increase in youths dependency on technology and social media has led to a decrease in their mental health with weakened social skills, less quality time with family and friends, and exposure to more violence and bullying (Badri et al., 2021). The experiences students share with me, their teacher, these days centers around the use of technology; what shows they are watching, what video games they are playing, the latest and best apps for their phones, and their

social media accounts. Fewer students are sharing their experiences of being outdoors and in nature. There appears to be a large disconnect from the world around them and it is starting at an early age as parents are using technology as a baby-sitter. We need to be more aware of this disconnect and start bringing these experiences back into the lives of adolescents as the literature shows just how powerful and beneficial nature can be for one's mental and physical well-being.

Furthermore, I am noticing a lack of social skills amongst youth. Technology has allowed students to work in groups via Facetime or Zoom chats instead of in person. Adolescents often only want to work with their friends, or on their own. They are lacking face-to-face interactions and are very uncomfortable when put into these situations with people they do not know. Creating new social connections is one of the most difficult things for adolescents to do due to a fear of rejection. Therefore, teenagers may have fewer social connections and are likely experiencing deeper feelings of isolation. If a student is already feeling depressed due to a lack of social connections, they are going to have even greater difficulties trying to break those feelings of hopelessness and despair. It is for this reason that a group setting would be most beneficial. These adolescents need a safe place to develop their social skills with others in similar situations and work through their individual problems. A group Adventure Therapy program could provide just that opportunity for these adolescents to develop their social skills, build trust in others, create a social network of support, and gain self-confidence. It is the group setting that may allow an individual to see that they are not isolated and alone in their struggles and that there is hope for things to get better.

With so much of the research and psychotherapy in schools focusing on CBT, there is a lack of research that looks at alternative forms of therapy that may be beneficial to adolescents. It is imperative that counsellors have different tricks in the bag that may reach a broader or more

specific range of students. Not every student wants to sit in an office and do talk therapy one-on-one with a counsellor. Adventure Therapy offers the opportunity for counsellors to provide treatment at the same time as doing activities with groups of students in an interactive format that may be more beneficial to some adolescents. It has the ability to take away the pressure of sitting down face-to-face and talking with a therapist. By providing group Adventure Therapy programs in our schools, we could contribute to the existing research by evaluating the effectiveness of Adventure Therapy across various demographics and with larger sample sizes.

I work as a Physical and Health Education teacher in British Columbia, Canada, and within the British Columbia educational system, mental health falls under the Physical and Health Education (PHE) curriculum. Many of my PHE colleagues often state they do not have the time or space to provide the mental health education of the curriculum. However, with the proven benefits of using nature as a tool for healing and the outdoors being one of the teaching settings for PHE teachers, there appears to be a perfect setting for delivery. A lack of knowledge could be mitigated by working directly with school counsellors to create useful mental health lessons for our students. It could be taken further by applying some concepts of Adventure Therapy into the PHE classroom. This may provide a starting point to assess interest in such a program at the school as well. The knowledge of physical activity, growth, development, and safety around activity a PHE teacher has could be a great match for development and co-facilitation of an Adventure Therapy program in schools. This becomes especially true if there is an Outdoor Education program at the school as well.

One of the biggest issues of Adventure Therapy presented in research focuses on the lack of consistent delivery of programs. The need for generalized applications and their effectiveness to replicate and focus on what specifically is causing change is evident (Norton et al., 2014). An

over-arching entity that oversees Adventure Therapy programs to ensure appropriate development and delivery is a must. With so many pop-up programs being offered, it can be incredibly difficult to research, assess, and recreate beneficial programs and ensure that clients' physical and emotional safety are being looked after. An accreditation board for practitioners would also help ensure appropriate training, supervision, and continual progression of current practices is in effect. Additionally, this could help keep programs more consistent and provide more accurate research as stated earlier. For programming within schools, this type of system would help with liability issues around implementation for both practitioners and school districts

Recommendations

The following recommendations are for an eight-week group Adventure Therapy program that could be delivered to high school students suffering from depression. A detailed plan of the program is outlined in Appendix A. I will start with the rationale for the program to explain why there is a need for such a program. The next section will provide the objectives for the program followed by the practical considerations for implementation. Additionally, the main topics for sessions and the reasoning behind them will be explained. Furthermore, ethical and cultural considerations will be reviewed with the final section focusing on evaluation processes of the program.

Rationale

The prevalence of depression in adolescents is of great concern and based on the research there is a lack of alternative forms of therapy outside of traditional psychotherapy such as talk therapy and the use of CBT. Traditional therapy in an office can be intimidating for some students, and providing a group Adventure Therapy program that is more engaging, fun, and has similar outcomes to that of traditional therapy may prove beneficial in providing the support

those students are lacking. Another benefit to the program is that it does not discount other forms of therapy. The processing that occurs specifically from Adventure Therapy is a large component of the program, but the use of other therapies within the program, such as CBT, can complement the overall delivery as well.

The group would consist of approximately eight students in grades eight to 10, with two students from grades 11 and 12 as mentors. The rationale for selecting this age group is, as the World Health Organization (2020) states, depression constitutes half of all mental health conditions that start before the age of 14 years. With a program starting at this point, we can help students at the earliest stages of depression to stop their symptoms from getting worse and develop strategies to prevent the progression or future episodes of depression. The grade 11 or 12 participants would include the students who needed further work in their own fight against depression, as follow-up sessions for further support, or previous participants to provide mentorship to the younger students.

This group is needed to help students suffering from depression at an early age and to give them hope and self-confidence. Going into high school is a big change with new peer groups and feelings of isolation and rejection accompanying these changes. The skills they receive from the program will be applicable to them in the rest of their high school journey and beyond and will help them to connect with others and feel hope for their future. With the program being delivered at an earlier age, it also provides the opportunity for a longer period of follow-up. As Bowen et al. (2016) suggest, it can be unclear if these changes have the ability to remain over time due to the lack of long-term follow-up data. However, with younger students still having a minimum of two more years within the school setting, long-term follow-up becomes easier to establish and maintain.

The use of a group allows for adolescents who feel isolated to be a part of a social group that may facilitate social skill development. As participants share their experiences with the group, they may see that they are not alone in their battle as others are dealing with similar situations. Developing social skills, conflict resolution, and trust will allow members to apply these skills in sessions successfully and will be reinforced doing so. As Tucker (2009) suggests, “these reinforcements can increase an individuals’ likelihood of repeating these behaviors and trying new behaviors” (p. 319). They can then take these new behaviours into their daily lives outside of sessions.

Objectives

There are three main objectives of this group: to decrease the symptoms of depression; to build strengths, skills, strategies, and knowledge to support adolescent depression; and to create social connection. By engaging in this program, students will improve their overall functioning, resilience, social skills, and physical health. They will also be able to identify personal strengths, develop conflict resolution skills, and have a deeper connection with nature and the outdoors. All of these skills can be key in the fight against depression and will be readily available to them upon completion. Through improved self-confidence and resilience, students will be able to adapt to change and difficult times more easily. They will also have the trust and bond with their group members should they need additional support from someone other than a school counsellor in the future.

Practical Considerations

Selection into this program would be based upon recommendations from the school counsellors, youth-at-risk team, administrators, teachers, parents, and students. Using all of these resources would provide various perspectives on the best fit for each candidate. Ultimately,

voluntary involvement from the student would improve buy in to the program and may result in stronger benefits, therefore, if a student is not interested, they would be withdrawn from consideration. Parents would also have a significant impact on the involvement of their child in such a program. Depending on the level of depression of their child, family doctors and therapist should be consulted about appropriate fit as well and be encouraged to provide any insight as they see appropriate. The program would be a closed group due to the sequential nature of the challenges and skills the students would be learning. It would be both impractical and unsafe to add a new participant part way through a program.

The program, as stated earlier, would include eight students in grades eight to 10 with two additional students from grades 11 and 12, making a total of 10 possible participants. This makes the group both manageable in terms of therapy group size, personal safety issues, and involvement required for some outdoor activities. The program would run for approximately two months with sessions running every two weeks.

There would be a combination of in-school and after-school information sessions for those selected into the program delivered by the Adventure Therapy team. These would provide information to the students and parents of objectives, outcomes, expectations, field trips, safety, confidentiality, and consent forms that would need to be completed. Students and parents would also have the ability to withdraw from the program at any time. Confirmed students will complete the Becks Depression Inventory (Indiana State Medical Association, 2021) (included in Appendix B) prior to beginning the program as an assessment of their current level of depression. This is one of the most widely used and easily self-scored Depression assessments. It would also make it easier for a school counsellor to be able to maintain these records with their large caseloads.

Topics

Adventure Therapy uses processing as its main perspective and approach of therapy. Throughout the adventure experiences, participants are constantly being questioned and asked to reflect on their role in activities, their experiences, the strategies they used, what worked, what did not work, and how they can transfer these skills into their daily lives. It is both a personal and a group journey as the reflective activities tend to be personal in nature, but also relate to the process as a group towards particular goals for each session. The use of natural and concrete consequences within the activities and challenges provides both positive and negative outcomes. As Newes and Bandoroff (2004) suggest, "consequences at the group level may provide an opportunity for important developmental learning for individual clients" (p. 21). It is at these points that the processing of events becomes increasingly important to help participants find meaning in their decisions and correct these behaviours moving forward. Processing occurs throughout all of the sessions and happens at various points in each. It is the role of the therapist to be attuned to this and meet the individual and group where they are at.

An additional skill that is attached to many of the early sessions is that of knot tying. This skill will become paramount when doing some of the future challenges that require the participants to take responsibility for their own safety by knowing how to tie knots that will be used in rock climbing, high ropes, courses, and setting up a campsite.

The first two sessions of the program are all about building connectedness to themselves, the group, and nature. The use of group activities and challenges provides the opportunity to develop teamwork, trust, conflict resolution, and the compromising of individual success for the success of the group. Additionally, these sessions provide the opportunity for participants to become more aware of one's place in nature and one's interactions with it.

The third session of the program focuses on trust and progresses in terms of the challenge presented from the earlier sessions. The nature setting provides more difficult scenarios and real consequences while working on trust, social skills, and problem-solving skills. Trust is an important factor of depression and participants both learn about it and develop it within the group through trust falls and guided blindfold exercises. Newes and Bandoroff (2004) suggest that Adventure Therapy programs begin with gradual trust building processes as they may feel more natural to clients than traditional psychotherapy. These challenges are specifically put here as trust takes time to build and could have negative ramifications if it was broken in earlier sessions.

A field trip for a nature walk or backpacking trip is offered in the fourth session as an opportunity to provide new environments and contexts. Although not necessarily more physically challenging than previous sessions, mental and personal reflections are presented, which can be more challenging for some. This session focuses on being present in the moment and developing mindfulness strategies to help when in states of depression. It also pushes participants into sharing situations with partners to learn about each other and build awareness of those around them. This session also presents the opportunity for personal metaphors, a particularly useful processing skill, as participants find objects in nature that reflect who they are.

Rock-climbing is used in the fifth session which offers the first real physical challenge and risk to the group and uses skills developed from earlier sessions. It is typically a new and unique experience for many youths as well, especially if it can be done on a real mountain. The perceived risks associated with rock climbing presents the opportunity for overcoming fears and irrational thoughts for some. It creates opportunities for personal growth, overcoming fears, and the development of successful behaviours (Newes & Bandoroff, 2004). This session also allows

for the integration of CBT, which has been shown to be a moderately effective treatment of depression. The skills of thought stopping, thought challenging, and reframing are taught to participants and then used during the session where appropriate.

Designed more as a physical challenge, the sixth session uses a physically demanding hike to develop resilience. Although physically difficult, hiking a tough mountain presents plenty of opportunities for mental growth through thought challenging, reframing, determination, and perseverance. Participants work in pairs on their venture up the mountain using teamwork, positive reinforcement, and drawing upon personal strengths and times they have overcome difficulties in the past to complete the hike. The processing during this session is backloaded at the end of the hike to review what was needed to make it to the top. It provides an example of personal resilience to achieve a goal and can be drawn upon during future times of difficulty.

The seventh session offers an opportunity for mastery of skills as the use of a high ropes course allows individuals to see how much they have grown and developed since the beginning of the program. All of the skills they have learned throughout the program are used to aid in both individual and group achievement. High ropes offer a fun and engaging avenue for the group to connect.

Finally, the last session of the group is an overnight camping trip that ties all of the skills together again in a culminating activity that shows personal growth, mastery of skills, individuation, and future planning. This session focuses the participants on their personal growth over the course of the program and their future directions. The group must work together to set up their campsite and make meals. Group sharing at the campfire provides an opportunity for others to share their experiences, their personal growth, the growth of others, and ways they can support themselves moving forward.

Ethical & Cultural Considerations

One of the most pertinent issues of ensuring the ethical practice of an Adventure Therapy program is ensuring that the program operators are competent and adhere to standards. The issues of camp leaders and counselors lacking appropriate training and professionalism dates back to the early formulations of adventure programs and are still prominent in today's programs (Davis-Berman & Berman, 1993). At the very least, a school Adventure Therapy program must include a school counsellor with a master's degree in counselling and a qualified Physical Health and Education teacher or Outdoor Education teacher as the primary program leaders. It would be advisable for both to seek further outdoor educational professional development opportunities and Adventure Therapy training. This would ensure both the physical and emotional safety of the participants of the program. However, I feel it would be extremely important to become certified by the Association for Experiential Education (2021) to be a Certified Clinical Adventure Therapist (CCAT) to ensure the utmost standards of Adventure Therapy are being upheld.

As there are many liability issues with such a program due to the adventure aspect and associated high risk field trips, it is important that the program is supported by the school district and the school's administration. All of the appropriate field trip application forms would need to be completed and sent to the district. Parent communication and consent forms would be an integral part of this as well. Providing information sessions for all people involved, as stated earlier, would be a must.

The concepts of informed consent and confidentiality are also key factors to be considered. Due to the group setting it is important that participants respect each other's right to confidentiality and the consequences associated with breaking that. They must also be aware of the limits to confidentiality to ensure the safety of all participants involved in the program.

Ensuring the physical safety of the clients is required by the group leaders. If programs are using their own equipment, they must ensure that it is safe for use, especially when it comes to using ropes and climbing gear. They must also ensure they have all the required certifications for activities that require them, such as a belaying certification for climbing. It is also the responsibility of the facilitators to ensure they have their first aid and cardiopulmonary resuscitation (CPR) certifications in case of an emergency.

Finally, it is important to have cultural awareness of the participants. Some students may not feel comfortable with particular activities; therefore, it is important to be open and adaptable to these differences when they arise. An attitude of respect, honesty, and understanding is imperative in delivering an inclusive program that supports everyone.

Evaluation

Prior to beginning this program, all participants will complete the Beck's Depression Inventory (Appendix B) to assess their current level of depression. This will give a baseline assessment that can then be used in the future to assess whether group members have improved or not. As part of the evaluation process for participants, they will again be given the Beck's Depression Inventory post-program and at a six-month follow-up to assess long term gains. Another piece of feedback will be subjective data through journal reflections and interviews from each of the participants. This may provide the qualitative data that provides more feedback on what specifically helped the participants in the program. Additionally, having follow-up sessions with each participant and their parents to assess the changes they have noticed since they began the program may also provide deeper evaluation of the program. This would provide participants the opportunity to see their personal growth and strengths over the course of the program and what they have done to sustain any positive changes and what may be causing any

negative ones. The grade 11 and 12 students would go through the same process as the younger grades to assess their growth and progression. If there were any serious concerns, especially for those students who will be graduating, they could be referred to an outside agency for further support, which would also apply to the younger students.

Results of the tests and feedback will be shared with the participants to see their progression, regression, or static nature of their results. They will also be shared amongst fellow counsellors to assess the efficacy of the program. This would have been informed to the participants prior to commencing the program to make them aware. Allowing fellow school counsellors to review the results may potentially provide a better understanding of how this program may be beneficial for others in the future. It would also provide counsellors with more information on how to support the students that participated in the program who are on their caseloads. This would enable deeper follow-up sessions as students' progress through high school. The follow-up sessions would allow the counsellor to see if the positive gains had been maintained by continuing to use the Becks Depression Inventory. If a decline was noticed in follow-up sessions, it would help indicate that there may need to be a change in prescribed therapy. This could then be another recommendation in the group Adventure Therapy program if results were positive for the student or even a referral to an outside agency.

Conclusions

In conclusion, Adventure Therapy may offer support to those adolescents suffering form depression. Although not necessarily for everyone, it does offer an alternative form of therapy that does not take place in an office. This may create more engagement in the therapy due to its fun and adventurous nature. Considering the rise of depression amongst adolescents and the lack of alternative forms of therapy offered in schools, it is critical to look at something different that

may offer similar benefits to traditional therapy. Research suggests that Adventure Therapy may be beneficial to the overall functioning of adolescents, improve their social skills, and gain self-confidence. All of these are key in the battle against depression. Furthermore, if schools can begin to implement standardized Adventure Therapy programs, it may help provide more reliable and valid research, with larger sample sizes, on the efficacy of these program and future growth in their use. In summary, Adventure Therapy can provide the opportunity for adolescents to connect with nature, their peers and themselves, creating holistic changes in their emotional functioning while helping suppress their feelings of depression and should be considered as a viable option of therapy within schools.

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Appendix A

Adventure Therapy School Program

Session 1 – Introduction / Team Building – Forest/Park Location

Objectives:

- Get to know each other
- Build connectedness to group and nature
- Identify individual goals of therapy

Agenda:

- Introductions
- Icebreaker activity
- Social contract and confidentiality
- Safety
- Grounding exercise: 5, 4, 3, 2, 1 and share with the group
- Teamwork/co-operative exercises
- Goal setting
- Sharing of goals/problems
- Future directions of sessions

Session 2 – Problem Solving & Social Skills – Forest Location or Gym

Objectives:

- Develop conflict resolution skills
- Develop positive social skills

- Learn how to tie different kinds of knots that will be used in future rock-climbing sessions

Agenda:

- Icebreaker activity
- Review from last session, thoughts, feelings, check-ins (scaling), social contract, safety
- Discussion of problem-solving & social skills
- Knot tying workshop: Figure eight knot, clove hitch, girth hitch, double fisherman's knot, and barrel knot
- Obstacle course:
  - Use of poly-dots and team must traverse from one side of gym to other only touching the poly-dots
- Building a miniature nature house out of twigs, leaves, vines, etc. in partners or groups of 4
- Processing of what went well and where we need work individually and as a group, planning, individual role, etc.
- Homework: Write down the conflicts you have and how you reacted & could have reacted more positively

Session 3 – Trust Building – Forest Location

Objectives:

- Develop trust within the group & familiarity
- Understand the importance of trust in a relationship
- Reinforce knot tying skills

Agenda:

- Review: Sharing of homework or process & direction of the day
- Discussion on trust and its importance in life and relationships
    - Identify who you trust and why
    - How do we build trust, lose trust, gain trust
- Trust leans and falls
- Guided blindfold exercise
- Knot tying practice: Figure eight knot, clove hitch, girth hitch, double fisherman's knot, and barrel knot
- Processing of the trust exercises: How did you work with others? What could you have done differently, how could others make you feel more trust in them?

Session 4 –Mindfulness Practices & Identifying Strengths– Backpacking/Nature Walk (Local Park with Trail Access)

<u>Objectives:</u>

- Develop the ability to be present and not thinking about the future or past
- Identify personal strengths
- Create a deeper connection to nature
- Learn new forms of mindfulness practices

<u>Agenda:</u>

- Review of Trust discussions and if anyone has anything to add
- What is mindfulness?
- Personal & nature awareness: During the nature walk, let nature do the talking (i.e.: silence and observation)
- Sharing experiences & mindfulness exercise

- Partner walking and sharing of personal strengths
- Mindfulness exercise: Eyes closed breathing exercise
- Silent knot tying practice in nature: Figure eight knot, clove hitch, girth hitch, double fisherman's knot, and barrel knot
- Scavenger hunt & share: Find three artifacts in nature that say something about you
- Processing: How do you feel in nature? How do you connect to nature? What are your thoughts about nature? How do the artifacts you found represent you in your daily life? Why do you feel that way about these artifacts?

Session 5 – Thought Challenging - Rock Climbing (Local Rock-Climbing Gym)

Objectives:

- Understand thoughts, feelings, and behaviours their interactions with each other
- Understand how our experiences affect our future behaviours
- Be able to identify our negative thoughts & to challenge and reframe them
- Improve the trust and support of the group through rock-climbing

Agenda:

- Review of mindfulness strategies from last session: Did anyone use these since last meeting? Using our strengths to get through tough times.
- Review of knot tying and its application to rock-climbing
- Safety instructions for climbing and belaying
- Rock climbing: Identifying and challenging thoughts during the climb
- Psychoeducation on thoughts, feelings, and behaviours (CBT) and how they affect us, how we can change them

- Processing: Reviewing the experience and the thoughts experienced during the climbing, make connections to our everyday lives in this process. How could the difficulties you faced today reflect the difficulties you have experienced in your everyday life? What skills from this activity could you use to help resolve the issues you are currently experiencing?

Session 6 – Resilience - Hiking (Stawamus Chief, Grouse Grind, Dog Mountain, Mystery Lake, Quarry Rock)

Objectives:

- Develop personal resilience
- Improve personal fitness levels
- Develop the ability to draw upon personal strengths to push through

Agenda:

- Review of thoughts, feelings, and behaviours and how they are always involved in our everyday lives
- Debrief of using our strengths and thought challenging when things get tough to find resilience, how to support each other
- Partner hike: Support each other through the process of a tough hike
- Processing: How did you get through? What do you feel now that you made it to the top of the mountain? How could you apply the skills you needed to get through this hike into your everyday life?

Session 7 – Over-coming Fears, Teamwork, & Mastery of Skills - High Ropes (Trinity Western Ropes Course, PAL Ropes Course UBC, WildPlay Aerial Adventure Courses – Maple Ridge, Mountain Ropes Adventure - Grouse Mountain)

Objectives:

- Challenge irrational thoughts and create new ways of thinking
- Develop teamwork, social, and problem-solving skills

Agenda:

- Review of skills (social skills, problem-solving, trust, resilience, strengths, thought challenging/reframing, knot tying skills, teamwork, mindfulness)
- Group ropes course: Support everyone through the entire course
- Processing: How did you use the skills we learned in certain situations in the course? What was it like to work with other group members during this activity? What skills were most important to be successful? What did you learn about yourself?
- Homework: Plan meals for camping trip, gear needed, clothes needed

Session 8 – Tying it All Together, Reflections & Future Planning – Two Night Camping Trip

Objectives:

- Create a plan to deal with future situations of depression
- Be able to reflect upon their experiences and what they have learned about themselves
- Develop basic life skill they will use later in life

Agenda:

- Meet at school and go to campsite
- Teamwork discussion
- Set up campsite, tents, tarps, etc.
- Meals: Students prepare own meals
- Campfire sharing:

  - Journaling: Where we were, where we are, and where we are going?
  - Create plans for dealing with depression & being in nature in the future
  - Assessment on what they have learned
  - How useful was the program for everyone?
  - Future supports & giving back to the program
- Reunion session in one to two months
- Clean-up and check-out

Reunion Session: Reflections, Strengths, & Needs for Growth –Beach/Lake/River/Stream Walk

Objectives:

- Reflect on the Adventure Therapy program and their personal growth
- Identify skills they have used since the program for support
- Identify areas where there is still a need for growth
- Re-kindle friendships from program

Agenda:

- Ice breaker activity
- Review of social contract, confidentiality, and safety
- Nature hike/walk – paying attention to your surroundings and being in the moment
- Mindfulness exercise – guided relaxation focusing on their surroundings and immersion into nature
- Pair and share: fun experiences, personal growth, group growth

- Scavenger hunt and share: Find three nature artifacts the reflect who you were at the beginning of the program, who you were at the end of the program, and who you are right now
- Processing: Where are you now? What skills have you continued to use since the program? What activities have you done to support yourself since the program ended? Where are the areas in your life where you still need work?
- Review of supports available to them in the school and community

Appendix B

Beck's Depression Inventory

This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire.

1.
- 0 I do not feel sad.
- 1 I feel sad
- 2 I am sad all the time and I can't snap out of it.
- 3 I am so sad and unhappy that I can't stand it.

2.
- 0 I am not particularly discouraged about the future.
- 1 I feel discouraged about the future.
- 2 I feel I have nothing to look forward to.
- 3 I feel the future is hopeless and that things cannot improve.

3.
- 0 I do not feel like a failure.
- 1 I feel I have failed more than the average person.
- 2 As I look back on my life, all I can see is a lot of failures.
- 3 I feel I am a complete failure as a person.

4.
- 0 I get as much satisfaction out of things as I used to.
- 1 I don't enjoy things the way I used to.
- 2 I don't get real satisfaction out of anything anymore.
- 3 I am dissatisfied or bored with everything.

5.
- 0 I don't feel particularly guilty
- 1 I feel guilty a good part of the time.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6.
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7.
- 0 I don't feel disappointed in myself.
- 1 I am disappointed in myself.
- 2 I am disgusted with myself.
- 3 I hate myself.

8.
- 0 I don't feel I am any worse than anybody else.
- 1 I am critical of myself for my weaknesses or mistakes.
- 2 I blame myself all the time for my faults.
- 3 I blame myself for everything bad that happens.

9.
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10.
- 0 I don't cry any more than usual.
- 1 I cry more now than I used to.
- 2 I cry all the time now.
- 3 I used to be able to cry, but now I can't cry even though I want to.

11.
0 I am no more irritated by things than I ever was.
1 I am slightly more irritated now than usual.
2 I am quite annoyed or irritated a good deal of the time.
3 I feel irritated all the time.

12.
0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13.
0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions more than I used to.
3 I can't make decisions at all anymore.

14.
0 I don't feel that I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel there are permanent changes in my appearance that make me look unattractive
3 I believe that I look ugly.

15.
0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16.
0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17.
0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18.
0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19.
0 I haven't lost much weight, if any, lately.
1 I have lost more than five pounds.
2 I have lost more than ten pounds.
3 I have lost more than fifteen pounds.

20.
- 0 I am no more worried about my health than usual.
- 1 I am worried about physical problems like aches, pains, upset stomach, or constipation.
- 2 I am very worried about physical problems and it's hard to think of much else.
- 3 I am so worried about my physical problems that I cannot think of anything else.

21.
- 0 I have not noticed any recent change in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I have almost no interest in sex.
- 3 I have lost interest in sex completely.

INTERPRETING THE BECK DEPRESSION INVENTORY

Now that you have completed the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three. This would mean you circled number three on all twenty-one questions. Since the lowest possible score for each question is zero, the lowest possible score for the test would be zero. This would mean you circles zero on each question. You can evaluate your depression according to the Table below.

Total Score	Levels of Depression
1-10	These ups and downs are considered normal
11-16	Mild mood disturbance
17-20	Borderline clinical depression
21-30	Moderate depression
31-40	Severe depression
over 40	Extreme depression

http://www.med.navy.mil/sites/NMCP2/PatientServices/SleepClinicLab/Documents/Beck_Depression_Inventory.pdf

(Indiana State Medical Association, 2021)