The Effect of a Therapy Dog on the Effectiveness of a Child Life Intervention with Adolescents Experiencing Grief and Loss

by

Jenna Teso

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

Approved April 2011 by the
Graduate Supervisory Committee:

Craig LeCroy, Chair
Jane Holschuh
Jannice Dedios-Goodwin

ARIZONA STATE UNIVERSITY
May 2011

ABSTRACT

The experience of grief and loss is a process that can be extremely distressing to anyone, regardless of age. This may be especially true for youth. This study was designed and conducted to determine the effects of a therapy dog as a therapeutic adjunct in Child Life interventions with adolescents experiencing grief and loss. Subjects were randomly assigned to one of two groups. The intervention consisted of 3 sessions with a Certified Child Life Specialist (CCLS) to address grief. Group 1 (N=14) was the control group, meeting only with the CCLS. Group 2 (N=13) was the experimental group and met with the CCLS with a therapy dog present during the sessions. Participants completed a pre-test and post-test of the Children's Mood Questionnaire. At the end of each session, subjects completed a Therapeutic Engagement Questionnaire. The pet therapy group experienced a significant improvement in mood scores on the Children's Mood Questionnaire following the intervention. However, there were no significant differences between groups on the Therapeutic Engagement Questionnaire during any of the 3 sessions. The data collected from this study indicate that the addition of a therapy dog in grief interventions with adolescents may improve mood outcomes.

TABLE OF CONTENTS

Page

LIST OF TABLES

Table Page

Introduction

The field of Child Life is a fairly new one. The Child Life Council (CLC) was established a mere 3 decades ago, in 1982. Certified Child Life Specialists (CCLS) are professionals who are experts in child development and helping children and adolescents cope with difficult healthcare experiences. Child Life Specialists can be found in hospitals, doctor's offices, dentist's offices, cancer camps, and hospices. Among the most important roles of a Child Life Specialist is guiding a child through the serious illness and/or death of a significant person.

Experiencing the serious illness and/or death of a loved one is a difficult experience for anyone, regardless of age. Adolescents dealing with the death of a loved one have some unique issues to face. Adolescents are already going through a developmental stage that requires them to navigate a series of significant changes. This can make the transition that naturally comes with an illness or death even more difficult.

The prevalence rate of grief and loss in adolescence is not as low as one may assume. Statistically, 3.4% of children and teens younger than 18 have experienced the death of at least one biological parent (Christ, Siegel & Christ, 2002). It is especially important to provide appropriate assistance to adolescents experiencing grief and loss. Adolescents may be at a higher risk of reacting negatively to stressors than other age groups. Adolescents, in general, are more likely to engage in risk-taking behaviors (Noppe & Noppe, 2004). Loss and grief can set off this propensity. Effective therapeutic interventions are needed to

reduce this risk.

Due to the unique developmental aspects of adolescence, teenagers can be a difficult group to engage in therapeutic interventions. This age group presents a unique challenge to practitioners. Teens are going through a stage in which they want to appear "cool" and "grown-up." The desire to maintain this image can be a real hindrance to the therapeutic process. Many teens feel a sense of self-consciousness when asked to discuss their feelings. Therefore, engaging teens in the therapeutic process is of the utmost importance. If a client is not as engaged as possible in the therapeutic process, it is possible that the outcome of the intervention will not be as positive as it could be. Child Life Specialists and other practitioners working with adolescents must find ways to engage their teenage clients in the therapeutic process in order to obtain the best possible therapeutic outcomes.

The use of animals as therapeutic adjuncts is a promising new approach that requires more research to demonstrate its efficacy. The physical benefits of owning or being around animals has been well-documented (Brodie & Biley, 1999; Mallon, 1992; Allen, 2003). Less has been studied about the emotional and psychological impact of animals. However, the little research that has been done has yielded encouraging results (Brodie & Biley, 1999).

This study seeks to determine if the presence of a therapy dog during an intervention with a Child Life Specialist can increase the therapeutic engagement during, and positive change after, these interventions.

Review of Literature

Coping

There are many ways to define "coping." According to Lazarus (1993), “coping consists of cognitive and behavioral efforts to manage psychological stress” (p. 237) It must be noted that people are consistently under some level of stress as they go about their daily lives, though the level may be minimal. Adverse events will result in higher stress levels. People naturally utilize coping techniques to navigate through these stressors. Coping does not remain steady over time for each person. Instead, each stressful event triggers a different type and intensity of coping. The coping factors generally will fluctuate even within the same situation (Lazarus, 1993).

Whether negative or positive ways of coping exist is a matter of some debate among theorists and practitioners. According to Lazarus (1993), there may be no “universally good or bad” ways to cope. Rather, depending on the situation, one technique will be more or less advantageous than others. Melvin & Lukeman (2000) identified two features of positive coping and adjustment. One is the ability to express one's feelings and emotions. The other is being given an explanation of the situation, if required.

Negative thoughts can be at the forefront when a person is facing an extremely stressful situation (Schwartz, 1986). A coping strategy utilized by youth to combat negative cognitions is “wishful thinking.” This can be described as "positive daydreaming." When engaged in wishful thinking, the positive

thoughts are comforting to the person under stress (Thastum, Birkelend-Johansen, Gubba, Berg-Oleson, & Romer, 2008). However, Lazarus (1993) states that "wishful thinking" may be one of the only universally harmful coping techniques, as the person is not learning to cope with the reality of the situation. If they are engaged in excessive wishful thinking, moving forward may become increasingly difficult (Lazarus, 1993).

People will engage in more focused coping when they are dealing with a particularly difficult stressor. There are two central types of coping that people use when faced with an adverse situation: "problem-focused," in which a person strives to deal with the more practical issues causing the problem, and "emotion-focused," in which one deals with the emotional consequences surrounding the issue or stressor (Lazarus, 1993; Melvin & Lukeman, 2000).

Depending upon their developmental level, youth may not cope in the same way as adults. Children and adolescents use a number of techniques to cope with chronic stressful situations. One of these is what Thastum et. al. (2008) call "keep it in the head." This involves a very conscious effort to keep the situation to oneself, striving not to tell anyone else about it. This may be why so many youth appear "shut down" when dealing with an emotionally stressful situation.

Death in American Society

America is a society that emphasizes curing disease. Death can be a taboo subject in this culture; discussions about death are often unwelcome. This can make the bereavement process much more difficult (Melvin & Lukeman, 2000).

The portrayal of death in the media must be considered when working with bereaved people, especially children. Death occurs on television often, sometimes as the result of violence. Usually, seeing these deaths played out on TV does not evoke a true emotional response from the viewer (Melvin & Lukeman, 2000). This disconnect and desensitization can affect the way one responds to a death in reality (Melvin & Lukeman, 2000).

Typical Grief and Bereavement

Grief is defined as "deep mental anguish or sorrow over a loss" (Cohen, Mannarino, Greenberg, Padlo, & Shipley, 2002). "Mourning" is a verb that is defined as the "process of adapting to a loss" (Cohen et al., 2002). Grief is usually at its most intense in the first month after the death (Zisook & Shuchter, 2001).

Grief is an ongoing process, not a state of being (Inger-Ringdal, Jordhoy, Ringdal & Kassa, 2001). This process requires participation on the part of the bereaved (Moules, Simonson, Fleiszer, Prins, & Glasgow 2007). While in mourning, the person may experience anger, sadness, difficulty concentrating, weight loss, and a preoccupation with the deceased and the circumstances surrounding their death (Cohen et al., 2002). Many people view mourning as unhealthy. In fact, bereavement can generally be a healthy process (Giovanola, 2005). There are four categories of reactions to loss. These are: physical, emotional, cognitive, and social (Allen-Heath, Leavy, Hansen, Ryan, Lawrence & Gerritson, 2008).

According to Giovanola (2005), healthy bereavement requires three

things. First, the pain associated with the loss must be acknowledged. Next, the bereaved must readjust to daily life without the deceased. Finally, the bereaved must detach from the deceased (Giovanola, 2005).

Grief will usually become resolved with time. After the loss is accepted, the child will return to a state of general well-being. The child is aware that they went through a grieving process, and they can think about the deceased without experiencing intense negative emotions (Inger-Ringdal et al., 2001).

Cohen et al. (2002) define reconciliation as "the process that occurs as the bereaved child works to integrate the new reality of moving forward in life without the physical presence of the person who died" (p. 309). After reconciliation is achieved, the bereaved will have more confidence, higher energy levels, and will once again become involved in daily activities (Cohen et al., 2002). The bereaved can reorganize their life to one without the presence of the deceased (Auman, 2007).

There are events that occur after the death that can cause temporary feelings of increased sorrow. Some of the most common events are anniversaries, role changes, and loss of traditions (Burke, Eakes & Hainsworth, 1999). The anniversary of the death is often an event that reignites feelings of grief (Burke et al., 1999). Even happy memories can lead to feelings of grief (Burke et al., 1999).

Complicated Bereavement and Traumatic Grief

“Complicated Bereavement” occurs when one has difficulty with the bereavement and grief process (Auman, 2007). The grief emotions tend to wear

down on the individual, and progresses to a point that they cannot help themselves pull out of the persistent intense feelings of grief (Auman, 2007). Complicated grief is more likely to occur when there is a long illness prior to the death, or if the death was a result of murder or suicide (Marsden-Ashton, 2008).

Complicated grief leads to maladaptive behaviors (Marsden-Ashton, 2008). Some of the symptoms of complicated grief are irritability and agitation, a sense of meaninglessness and emptiness, feelings of numbness and/or detachment, extreme anger, and an inability to move forward with life due to guilt (Marsden-Ashton, 2008). Many of these problems are very intense because the griever waits until they are very severe before they seek help dealing with the grief and loss, but researchers find that those who seek help early have a lower incidence of developing complicated grief symptoms (Marsden-Ashton, 2008).

"Traumatic Grief" occurs when the bereaved experiences the death as a traumatic event (Cohen et al., 2002). This does not necessarily mean that the cause of death was a trauma; "traumatic grief" refers to the how the death is subjectively perceived by the bereaved. Children and adults with traumatic grief often experience intense physical reactions when they recall the death. These can include tachycardia, shaking, dizziness, and headaches (Cohen et al., 2002). Additionally, thinking about the death causes extreme psychological anxiety to people struggling with traumatic grief (Cohen et al., 2002).

Children experiencing traumatic grief hold the belief that life is unfair to them in particular (Cohen et al., 2002). An important task in overcoming

traumatic grief is finding meaning in the death (Cohen et al., 2002). If meaning is not found, feelings of anger tend to intensify (Cohen et al., 2002).

Symptoms of traumatic grief can be eased with therapy (Zisook & Schuchter, 2001). Encouraging the bereaved to speak about the actual death experience from their unique perspective appears to help them gain mastery over the event, as does allowing them to discuss bereavement issues (Cohen et al., 2002).

Grief Intensity

People do not feel the same level of grief after each loss. The closer the griever perceives the relationship with the deceased was, the more intense their grief will be (Servaty-Seib & Burleson, 2007). For instance, if a close friend dies, the grief will feel more intense than if an acquaintance dies. The “type” of death also affects the intensity of grief. If a death is the result of murder or suicide, the grief felt is usually very intense (Marsden-Ashton, 2008).

"Anticipatory grief" occurs when people begin grieving the loss of the sick person before the actual death occurs. Some researchers conclude that if an illness is very prolonged, the grief appears to be more intense (Marsden-Ashton, 2008). When there is a prolonged illness, the stress response continues on and on for the duration of the illness, and can have a negative cumulative effect (Auman, 2007). Others have found that when a death is unexpected, grief and stress may be more extreme (Auman, 2007). It appears that people cope best with death when it is

not completely unexpected, yet the illness and/or decline is not prolonged.

Some practitioners would argue that there is truly no "right" or "wrong" way to grieve. However, some researchers suggest that dysfunctional grief is characterized by persistent irrational feelings and thoughts of grief that do not subside naturally over time (Malkinson, 2001). These thoughts can be expressed and addressed in grief therapy, resulting in a healthier grieving process (Zisook & Schuchter, 2001).

Depression can develop as a result of intense grief (Zisook & Shuchter, 2001). Several factors are associated with a higher risk of developing depression following a loss. Low socioeconomic status and the lack of a supportive family are two risk factors for depression after loss (Zisook & Shuchter, 2001). If a person is clinging to the sick person prior to the death, they are also more likely to experience depression following the death (Zisook & Shuchter, 2001). The younger the bereaved is, the more likely they are to experience depression (Zisook & Shuchter, 2001).

For youth, the loss of a peer may be especially devastating. Youth who have lost a friend are more likely to suffer from physical ailments than youth who have not experienced this type of loss. They are also more likely to develop a psychiatric illness and to commit suicide as adults (Ringler & Hayden, 2000). If it is a parent who dies, children will tend to grieve with more intensity if it is the parent of the same gender (Thastum et al., 2008).

Grief and Loss in Children and Adolescent

Children respond to grief in ways quite different from adults. Special considerations must be made when working with grieving youth. Children's outward expression of grief is very different from that of adults. Children may actually appear to feel indifferent about the death, going on with their daily routines as usual. Sometimes, they will act as if the person is still alive, especially if it is a younger child. Some children incessantly ask questions about the death, while others will ask no questions at all (Melvin & Lukeman, 2000). Many youth feel a sense of responsibility for the death; they tend to wonder about the actions that they could have taken to prevent the death (Melvin & Lukeman, 2000). Youth will “mask” their feelings about the illness or death to avoid causing distress to others (Barerra, 2000).

Children are unable to control their mourning; it is a process that must happen naturally and at each child's own pace(Lehna, 1995). Children express their grief through a number of different outlets. Some of the most common are crying, praying, and psychosomatic complaints (Lehna, 1995).

Children experiencing grief will often take "mourning breaks." These are periods of time in which the child stops actively mourning and is distracted by an outside stimulus (Nolbris & Hellstrom, 2005). For instance, while at school or at a party, the child can focus on the current situation without persistent thoughts about the deceased. Once they are done, they immediately return to the grieving process (Nolbris & Hellstrom, 2005).

It is important to include children in the rituals of grief and educate them about what to expect. Children of all ages respond more favorably to loss when they are informed about what is happening. When they are excluded, they begin to distrust the adults around them (Riely, 2003). Children tend to see death as mysterious, frightening, and even traumatic (Riely, 2003). Providing clear explanations may reduce the negative emotions and cognitions youth associate with death.

Children and adolescents usually use behavior to express their grief, rather than emotions (Giovanola, 2005). Behaviorally, there may be many changes that appear to be destructive, but are actually quite typical of grieving youth. Many youth will begin to experience troubles in school following a loss, but this is generally short-lived and will improve as the most intense feelings of grief begin to subside. Youth often feel a loss of control after a death. They will engage in certain behaviors to gain a sense of control again. For instance, they may defy rules, restrict eating, or adopt a very regimented and structured routine (Melvin & Lukeman, 2000). In a study conducted by Lehna (1995), children's teachers observed that students experiencing grief appear more tired in class. Teachers also observed that these students are more disruptive and engage in attention-seeking behaviors. Other mourning children became more withdrawn and inhibited after their loss (Lehna, 1995).

Youth will usually experience psychological symptoms following a significant loss (Ringler & Hayden, 2000). “Survivor guilt” is not uncommon.

Additionally, many fears can be reignited, even irrational ones. Many children and teens begin to fear their own death or the death of other loved ones (Ringler & Hayden, 2000).

Thastum et al. (2008) studied the reactions of children with a terminally ill parent. During the Latency Stage (the Freudian Stage typically between age 3 and 7), children tend to express fear of the symptoms
and eventual death of the sick parent, worry about the well parent, and are more likely than other age groups to feel guilt associated with the situation (Thastum et al,. 2008). It is also during this stage that children have many misconceptions about illness and death. Parents tend to misinform children in this stage in an attempt to protect the child from the emotional circumstances (Thastum et al., 2008). However, this approach can result in increased confusion and fear in the child.

When a family is coping with a cancer diagnosis, children tend to utilize unique coping techniques (Thastum, et al, 2008). According to Thastum et al. (2008), youth tend to utilize five coping strategies when a parent has cancer. They take on a helping role. They engage in behaviors that they perceive as “helpful” to the family, such as doing extra chores, running errands, or helping to prepare meals. Being able to assist the sick parent or other family members can reduce feelings of guilt and anxiety. Youth with an ill parent will also take on the role of a parent in the relationship. This is called "parentification." Youth will also use many forms of distraction in order to take a break from the psychological tolls of

the illness. Finally, youth with a sick parent engage in a great deal of wishful thinking. This can be wishing for a cure, divine intervention, or wishing that they could do something to make the illness go away (Thastum et al., 2008).

As children mature, their capacity for empathy increases (Giovanola, 2005). Unlike younger children, adolescents will tend to imagine what the death experience is like and

can more abstractly theorize about what may happen to a person after death (Giovanola, 2005). Older children will cognitively think about the illness and wish that new treatments will be developed. This is one way that they retain a sense of hope (Thastum et al., 2008).

The death of a parent causes extreme disruption to any child's daily life (Melvin & Lukeman, 2000). When losing a parent, a child also loses one of their strongest supporters (Allen-Heath et al., 2008). Following the death of a parent, the child experiences many practical changes in addition to intense grief. Children who have lost a parent often experience changes in their own self-concept. Changes in economic status often eventually follow the death of a parent. This can be very difficult to adjust to, especially for adolescents, who tend to be very concerned with image. Additionally, many peers feel uncomfortable around someone who has experienced such a significant loss. Because they do not know how to address the situation, they may withdraw from the grieving peer. This sudden change in the grieving teen's social circumstances can be very upsetting, adding to the stress and grief that is already present (Auman, 2007).

Many teens dealing with the serious illness of a family member worry about having to take on more responsibilities (Thastum et al., 2008). When the family is under such intense stress already, children and adolescents worry about expressing their own needs (Melvin & Lukeman, 2000). Adolescents often feel guilty about the resentment they feel about having to take on additional responsibilities (Thastum et al., 2008).

The teen's role within the family may change after the death of a parent (Auman, 2007). They will likely have to take on additional household responsibilities, perhaps even assuming a caregiving role for younger siblings. Depending upon the family's financial situation, teens may be expected to begin bringing in an additional source of income (Auman, 2007).

Many variables affect how an adolescent will cope with a loss. The closer the relationship to the deceased, the more intense the feelings of grief will be. The adolescents own physical and mental health impacts how well they will be able to cope. If there is a strong family support system, all family members tend to have an easier time coping with the loss. One's own personality style and temperament also affects how they will cope with a significant loss (Marsden-Ashton, 2008).

Adolescence is a period of numerous transitions, and conflicts with school and parents are common among adolescents even under the best of circumstances (Cohen et al., 2002). Stressful situations can exacerbate these tendencies. Adolescents experiencing grief may be more prone to exhibit such behaviors (Cohen et al., 2002).

Due to their increased emotional maturity level, adolescents are more able to feel empathy for the ill person (Thastum et al., 2008). However, they are also more likely to experience conflict with the sick person, especially if it is a parent (Thastum et al., 2008). This creates a stressful environment for the entire family and can ultimately lead to increased feelings of guilt.

Distraction is an important coping technique used by older children and adolescents. This allows them to enter into a period of time in which the stressful situation does not seem to exist (Thastum et al., 2008). Researchers believe that this is a defensive strategy that allows them to be “in denial” for a small portion of time (Thastum et al., 2008).

Adolescents tend to utilize “intellectual defenses.” They are also more likely to proactively search for information to better their own understanding of the situation. Often, they will seek help for themselves without prompting from others (Thastum et al., 2008). However, some adolescents can be difficult to engage in treatment (Sommers-Flanagan & Sommers-Flanagan, 1995).

Unlike younger children, adolescents are able to cognitively understand what the implications of death are (Cohen et al., 2002). Adolescents have reached the Piagetian stage of Formal Operational Thought, so their ability to cognitively understand what is happening is intact (Giovanola, 2005). The stage of Formal Operational Thought is the last stage of development according to Jean Piaget, and is characterized by more "adult" thinking paterns, increased reasoning ability, and the ability to form abstract thoughts (Shayer, 1979). Because adolescents can

engage in abstract thinking, they are able to attach meaning to death (Giovanola, 2005). However, they still struggle with the more existential questions regarding life and death (Cohen et al., 2002). Teenagers tend to be fascinated by death, but they may still think of themselves as being invincible, explaining the often risky behaviors that they engage in (Cohen et al., 2002; Giovanola, 2005).

Although adolescents are able to cognitively grasp the concept of death, they may still regress to younger ways of thinking while actively in the grieving process. When teenagers are coping with a death, they are hyper-aware of the mortality of themselves and others (Melvin & Lukeman, 2008). The magical thinking that is so prevalent in younger years can be "reactivated," leading to irrational fears (Melvin & Lukeman, 2000). Adolescents report that they have intense emotions regarding death, but they do little to try to deal with these emotions (Melvin & Lukeman, 2000).

According to Cohen et al. (2002), there are six tasks that a grieving child must complete. Task one is to accept that the loss has really occurred. Depending upon the child's developmental level, this can be more difficult for some children than others. Task two is to experience the pain associated with the loss. If the pain is pushed aside and not dealt with, long-term negative consequences may develop. Task three is to adjust to a new environment and identity without the deceased. To do this well, they should integrate the positive qualities of the deceased into their new sense of identity. Task four is to establish a new relationship with the deceased through memories. Task five is to attach meaning to the death. Task six

is to establish a relationship with a supportive adult that remains consistently supportive over time.

In order to accomplish these tasks, there are several things that the child must be capable of doing. They must be able to think about the deceased for long periods of time without feeling extreme negative emotions. The child also must be able to remember all the things about the deceased person, not just the circumstances of the death or only the positive qualities that the person possessed (Cohen et al., 2002).

Grief Interventions with Youth

Some practitioners and researchers question whether children need assistance coping with loss. What researchers do know for certain is that there are potential long-term effects if a child does not cope well with a loss. Children who do not effectively cope with a loss have been found to have increased relationship and vocational problems as adults (Riely, 2003). They are also more likely to experience generalized depression symptoms as adults (Riely, 2003).

Some circumstances may be more stressful for youth than others. For adolescents, the loss of a peer is devastating; it can be just as traumatizing as the death of an immediate family member, as they often feel that they have no one that they can turn to for help or support (Ringler & Hayden, 2000). Among adolescents who have lost a peer, 76% state that they do not have someone to talk to about the loss (Ringler & Hayden, 2000).

Parents may try to hide information from their children. This is a

significant source of upset for children experiencing grief (Giovanola, 2005). Not only does concealing information lead to feelings of distrust for the child, but also fosters the development of misconceptions that can complicate the grieving process (Giovanola, 2005). Facilitating grief interventions with youth may be able to reduce these negative outcomes.

Children of terminally ill patients have to cope with a number of stressors. Among the most stressful are overall lifestyle changes, trying to learn about the illness, visiting the parent in the hospital, and dealing with the parent's changed appearance (Thastum et al. 2008).

When asked what could help them cope when a parent has terminal cancer, many children expressed that they needed a better understanding of the disease. This was true for children of all ages (Thastum et al., 2008). Although the details of the disease may be frightening, it is usually less distressing for the child than wondering about what "could be" wrong (Thastum et al., 2008). All parents who chose to delay telling the children the truth about the sick parent's illness regretted this decision (Thastum et al., 2008).

Many parents feel that children do not express enough to them when they are dealing with grief and loss, especially after the death of a parent (Thastum et al., 2008). From the child's perspective, the healthy parent is often perceived as being unapproachable when it comes to discussing the illness (Thastum et al., 2008). Children often express that they do not have someone that they can specifically talk to about the illness and death (Barerra, 2000). Clearly, it is

difficult for family members to create an environment of open and honest communication (Thastum et al., 2008). A therapist can serve as an unbiased party to facilitate healthy communication among family members. Families who do report that they have open communication have several benefits. Adolescents who say that have good communication with their parents also score higher on self-esteem, happiness, and overall life satisfaction scales (Thastum et al., 2008).

Nolbris and Hellstrum (2005) studied the experiences of well siblings of children with a cancer diagnosis. When asked about visiting the sibling in the hospital, many well siblings reported that they did not feel that the hospital staff thought they were important. Siblings reported that the staff did not explain what was happening to the ill sibling. Every sibling involved in this study reported that they were not given enough information about the illness. Youth with an ill family member want to learn more about the illness (Bererra, 2000).

Children are better able to engage in the grieving process when adults around them recognize that the child is grieving and gives them “permission” to grieve the loss (Giovanola, 2005). Because parents are often deeply involved in their own grieving process, a practitioner can take on this role effectively. When both informal and formal supports are available, children appear to exhibit fewer negative consequences associated with the loss (Lehna, 1995).

Following a death, the bereaved must adjust both cognitively and behaviorally to life without the deceased (Malkinson, 2001). This can be difficult, because people's emotions are more influential than their cognitions (Malkinson,

2001). Therapeutic interventions may be able to facilitate the development of more rational cognitions.

According to Riely (2003), helping children to navigate the grief process is important in preventing long-term negative consequences associated with loss. Grieving children have many needs that must be met in order to facilitate positive coping with the loss. They need a foundation of security and stability in a predictable environment. They need to feel that it is acceptable to be curious about the situation, and feel comfortable asking questions. Grieving youth must feel that it is safe to express anger, to cry, to express themselves, and to talk about feelings of guilt and emotional pain (Riely, 2003).

A solid grief intervention with youth includes three key elements. These are listening, giving accurate information to the child, and adapting the information so that it is developmentally-appropriate (Allen-Heath et al., 2008). Neimeyer & Currier (2009) found that the timing of grief therapy does not have a significant impact on the outcome of the therapy.

According to Riely (2003) primary prevention with grieving children can reduce long-term negative consequences associated with a loss. This primary prevention involved several components. First, preparing children for bereavement before the death actually occurs can be very beneficial to the child. Talking freely and honestly with children is a key component of helping them cope with loss. Children need thorough explanations in order to disprove their misconceptions about the death. Involving a professional early on in the process

appears to be very beneficial for grieving youth (Riely, 2003). Research identified several therapeutic modalities that can be effective when used with grieving youth. These include allowing for personal story-telling, answering questions, art therapy, play therapy, bibliotherapy, music therapy, journaling, and legacy building (Riely, 2003).

Riely (2003) identified potential long-term effects of not helping a child navigate the grieving process. These include later difficulties with intimate relationships, lower career success, and experiencing less general joy in life

Thastum et al. (2006) evaluated a short-term preventive counseling program for the children of cancer patients. Parents expressed four main reasons that they chose to enroll their child(ren) in the program. First, parents revealed that they were not confident that they could provide the best support to the children. Secondly, parents felt that the family was not communicating effectively, especially about the most negative aspects of the illness. Parents also expressed that there were increased conflict levels between all family members since the cancer diagnosis. Finally, parents wanted to address the family members' role changes since the diagnosis (Thastum et al., 2006).

Wilkinson, Croy, King & Barker (2007) conducted a study of a children's bereavement support program associated with a hospice. The researchers interviewed the parents of the children enrolled in the program. When asked why they chose to enroll their child in the program, parents listed four central themes. Theme One was wondering whether they were helping the child grieve in the

right ways. Many parents were not sure exactly what they should tell the child or how detailed the explanations should be. Theme Two was feeling unable to emotionally support the child. Parents themselves were also grieving the loss, making it difficult to fully support the child. Many parents expressed that they felt the children did not want to talk about the death because they wanted to protect the parent from feeling more grief. Theme Three was that the child was exhibiting behavior problems. Theme Four was centered on the children's problems at school, including an increase in conflicts with peers and lower grades. Parents also felt that there was not adequate communication between themselves and the school.

Wilkinson et al. (2007) also interviewed parents who chose not to enroll their children in the program. The two most common reasons were that the child did not seem to be having any difficulty coping with the loss, and parents felt that there may be others better suited to help their child deal with the grief.

Parents of the enrolled children were asked to share how they perceived the service. Many parents expressed that they felt that the staff running the program were very flexible and tried to meet the children's individual needs. Parents appreciated that the staff was available to see the child away from the hospice setting. Parents reported that their children appeared to be less socially isolated (Wilkinson et al., 2007).

Parents of children involved in the counseling program listed 4 main advantages of the program. First, the program increased the confidence levels of

the parents. The program staff was able to reassure parents that they were adept at helping their own children cope with the loss. Secondly, parents expressed that they felt more aware of what their children were thinking and feeling in regards to the loss. Parents also reported that they felt that the family was a more cohesive unit as a result of going through the counseling program. Finally, they felt that the program reassured them that their own feelings about the loss were normal and valid (Thastum et al., 2006).

Families involved in this study presented with a diverse set of problems. Many families reported that they did not feel comfortable speaking to each other about the loss. Parents were unsure of how to help their children as they grieved the loss. Since parents were often not discussing the loss with the children, they desired the involvement of someone who could do this with their children. Families also experienced increased levels of conflict after the loss. While some families became too enmeshed with each other, others grew emotionally distant. Finally, if couples had been having marital issues prior to the loss, the loss tended to exacerbate these issues (Thastum et al., 2006). Children who completed the program showed significantly reduced depression symptoms at the conclusion of the program (Thastum et al., 2006).

For bereaved persons, going into detail about the death in therapy can be cathartic (Malkinson, 2001). While exploring the death, they are given the opportunity to verbalize the irrational cognitions that they may have developed regarding the situation (Malkinson, 2001).

According to Neimeyer & Currier (2009), evidence-based grief interventions have three common components. These are: allowing the bereaved to repeatedly retell the story of the loss from their own perspective, the facilitator guiding the client through memories, and promoting restoration-oriented coping (Neimeyer & Currier, 2009).

History of Animal-Assisted Therapy (AAT)

Animal-Assisted Therapy (AAT) evolved from simple pet visitation (Jorgenson, 1997). Pet visitation is only the presence of an animal, with no therapeutic agenda involved. The therapeutic use of animals has been practiced as far back as 800 a.d.

In the 9th century, animals were included in the treatment plans for people with disabilities in Ghere, Belgium (Morrison, 2007). This is the first recorded use of animals as therapeutic adjuncts. Animals were also utilized therapeutically at the York Retreat in England. The Quakers began using animals as therapeutic agents with the mentally ill in 1792 (Mellon, 1992). Later, in 1867, animals were used in Germany as therapy for people with epilepsy (Mallon, 1992). Pawling Air Force Convalescent Hospital was using therapeutic animals in the 1940's (Mallon, 1992). Florence Nightingale advised that even the presence of a bird could be helpful for the ill (Jorgenson, 1997).

Benefits of Animal-Assisted Therapy

Most people are drawn to animals, regardless of race, age, or gender. People of all backgrounds enjoy animals and choose to own them as pets. There

do not appear to be any significant differences in the ways that men and women show physical affection towards animals (Mallon, 1992). Gender also does not appear to affect how "attached" owners become to their pets (Mallon, 1992).

Ninety percent of pet owners consider their animals to be a part of the family, rather than just an animal that happens to live in their home or yard (Allen, 2003). The pets often take part in many "family" activities, such as vacations, hikes, and picnics. Many owners report that they utilize their pets as trusted confidante. Some pet owners will share food with their animals on a daily basis and allow them to sleep in their bed each night. Some families even celebrate their pets' birthdays (Risley-Curtiss, 2010).

Simply being a pet owner has benefits. The health benefits of pet ownership are well-documented. Numerous studies have concluded that pet ownership is correlated with lower cholesterol and blood pressure, as well as an overall decrease in cardiovascular risk factors (Brodie & Biley, 1999; Mallon, 1992; Allen, 2003). Reading to animals has been found to decrease children's blood pressure (Allen, 2003).

Pet ownership also has emotional and psychological impacts. Animals can make their owners feel calmer, happier, and better equipped to handle stress (Allen, 2003). Some of the positive things that owners report as a result of companion pet ownership are unconditional love, feelings of acceptance, and a sense of serenity (Eckstein, 2000).

Owners of companion animals report lower levels of generalized anxiety

(Mallon, 1992). Pets are calming and can even be a support for their owners. Many pet owners list their animals when asked who is in their "social support" system (Mallon, 1992). Studies reveal that owners use their ets as a source of comfort in times of stress and often act as a buffer against all types of stressors present in their lives (Jorgenson, 1997).

Pet owners list a multitude of benefits that their animals add to their lives. Many pet owners report that the simple presence of their pet can improve their morale (Mallon, 1992). Owning a pet can also provide benefits to family life. For families, owning a pet can improve healthy communication between family members (Mallon, 1992).

Pet ownership can help people to develop certain skills. Among the many benefits of pet ownership is an increase in "responsible independent behavior" (Mallon, 1992). Having a pet requires the owner to be responsible for another living thing; caring for it is not a choice, but an obligation and a responsibility that can have many personal rewards. Children with animals in the home appear to have accelerated communication development (Beck & Katcher, 2003). This may be because the other family members speak regularly to the animals, resulting in the child hearing more language in the home.

The presence of an animal can make a person seem more approachable. Researchers have found that people who own companion animals receive more frequent social support (Beck & Katcher, 2003). It is unclear whether this can be attributed to the animal itself, or whether there is a quality present in the pet

owner that draws social support. Pet ownership can be beneficial for isolated people (Allen, 2003). When one has a pet (especially a dog) they are more likely to venture out of their home on outings with the pet. These simple outings, combined with the increased social contacts while the pet is present, can decrease the person's feelings of isolation (Mallon, 1992).

Pet ownership has emotional benefits. Pets give their owners feelings of being needed, as well as unlimited love and affection (Jorgenson, 1997). They provide people with affection that is both unconditional and non-judgmental (Mallon, 1992). These are needs that most humans cannot easily fulfill.

Practitioners are using animals as therapeutic adjuncts in the clinical setting. Researchers have identified several areas in which animals can be a useful therapeutic tool. Researchers are striving to discover what it is about the animal that leads to the therapeutic effect. One thought is that the animal is a completely non-threatening entity, creating a “safe zone” for the client (Brodie & Biley, 1999). Because they are non-verbal creatures, they cannot interrupt their human companion. This creates an environment in which the person feels “listened to,” even though the animal is not truly listening to and processing what is being said (Brodie & Biley, 1999). This feeling of acceptance may encourage the person to reveal more within the therapeutic relationship.

Studies have found that the presence of animals can reduce stress in both children and adults. Demello (1997) conducted a study examining the physiological effects of companion animals following a cognitive stressor.

Half of the study participants reported increased relaxation while in the presence of the animal (Demello, 1997).

Therapy animals are used in a multitude of settings with people of all ages. Animals have been used in schools to facilitate learning and reduce stress. Researchers have found that when a dog is present during a math test, students perform faster and make fewer errors (Allen, 2003). This is likely due to the animal's inability to judge the student, as well as their stress-reducing capabilities.

Service animals, such as guide dogs, can also serve a therapeutic social purpose. The presence of a service animal has appeared to draw strangers to people with handicaps in numerous studies (Jorgenson, 1997). The therapy animal seems to break down social barriers that can lead to isolation among children with disabilities (Mader & Hart, 1989). The presence of a service animal facilitates conversation and enhances how others perceive the child with a disability (Mader and Hart, 1989). In fact, when the animal is present, the child will usually be the recipient of a greater number of “friendly approaches,” with four times the social acknowledgements than they experience without the service animal, perhaps because the animal makes the observer feel as if approaching or looking at the person with a disability is more acceptable (Mader & Hart, 1989). Additionally, the interactions tend to be longer in duration when the service animal is with the owner (Mader & Hart, 1989).

Animals have been used when working with autistic children and children with Pervasive Developmental Disorder. Practitioners have found that interacting

with an animal improves the child's connection with reality (Mallon, 1992; Martin & Farnum, 2002). This has also been found when utilizing AAT with people suffering from Schizophrenia (Barker & Dawson, 1998). The animal is a tangible presence that can be touched and interacted with, encouraging the person to be focused on the present moment. Children with Pervasive Developmental Disorders are observed to be more focused on and interested in the task at hand when there is a therapy animal present (Martin & Farnum, 2002). During actual sessions, therapists observed that when a child was working with a therapy animal, they were less likely to ignore questions directed toward them by the therapist and more likely to comply with requests from the therapist (Martin & Farnum, 2002).

Many hospitals implement a "pet therapy" program of some type. While some of these are simply "pet visitations," some hospitals utilize the animals for more focused therapeutic reasons, such as encouraging patients to reach their physical therapy goals. In the general hospital setting, AAT has been found to be beneficial in helping patients who have become withdrawn and uncommunicative (Brodie & Biley, 1999).

Animals can also be used in the hospital setting to assist patients in achieving goals. Miller, Connor, Deal & Weber-Duke (2003) studied whether AAT can affect discharge teaching at the end of a hospitalization. The study concluded that adults appeared to exhibit increased attention during discharge teaching if a therapy dog was present during the teaching, and scored higher in

both short-term and long-term retention of the discharge information (Miller et al., 2003). Additionally, the AAT group was better able to verbalize what they had learned and they also reported that their anxiety level during medical procedures was lower when the animal was there (Miller et al., 2003). Finally, the AAT group reported that they felt more motivated to engage in physical and occupational therapy sessions (Miller et al. 2003).

Multiple studies have been conducted in nursing homes using therapy dogs with seniors who are suffering from dementia. When a dog is present, elderly with dementia are more likely to independently initiate conversations with other people (Marx, Cohen-Mansfield, Regier, Dakheel-Ali, Srihare & Thien, 2010). Additionally, observers note that people with dementia show signs of true pleasure while interacting with a therapy dog (Marx et al., 2010).

AAT can also be beneficial for general nursing home residents without dementia. Elderly people in nursing homes express that they are able to talk to the dog about anything, including any problems that they are facing, during AAT sessions (Morrison, 2007). When utilizing AAT with the elderly in nursing homes patients who receive AAT visits show improvement in overall cognitive functioning (Morrison, 2007). In addition, elderly patients receiving regular AAT visits show improved morale and reduced symptoms of stress (Morrison, 2007).

In a study conducted by Phear (1996), the effects of a companion animal's presence in an inpatient hospice unit was examined. Both patients and staff reported that the animal helped them to feel more relaxed in the hospice setting,

as the dog was friendly and seemed to “lighten the mood.” Patients expressed that the dog made the hospice seem more like home. The dog provided an interested audience and the opportunity for mutual affection. Almost every single patient involved in the study expressed that they enjoyed the dog's presence in the hospice. Phear also noted that children visiting the hospice drew great joy from the dog visits, but were also drawn to a parakeet and a simple aquarium with fish.

Not all patients agreed, however, as Phear also found some disadvantages of having an animal in hospice. Some patients complained that they felt it was unhygienic to have an animal around. Others were allergic to dogs and were not able to be close to the animal. Some patients had a fear of dogs and felt nervous while the animal was present.

Therapy dogs have also been used and studied in work with hospitalized psychiatric patients of all ages. One study found that the presence of a therapy animal resulted in lower state anxiety levels than a control group that did not receive animal-assisted therapy (Barker & Dawson, 1998).

In the psychiatric setting, therapy animals have been found to be especially beneficial among people with dissociative disorders. Overall, the dog appears to have a calming effect on these patients. As with the dementia patients, the animals seem to encourage human interactions. The dog can assist the client in opening up and discussing more sensitive issues with the therapist. If a patient is in distress, the dog can pick up on subtle changes in body language and alert the therapist (Barker & Dawson, 1998).

It must be noted that dogs are not the only animals that are promising as therapeutic adjuncts. Dolphins have been used in work with mentally disabled children. Children working with the dolphins exhibited as much as ten times the language skills and attention length as mentally disabled children not working with dolphins (Jorgenson, 1997). Farm animals were utilized by Berget, Ekeberg, & Braastad (2008) in a study with people diagnosed with psychiatric disorders. They found a significant increase in self-efficacy among participants in the AAT group following the intervention (Berget et al., 2008). However, during the intervention there were no significant differences between the AAT group and the control group. Even the simple act of watching fish swim around in a tank has been found to have therapeutic effects (Eckstein, 2000). An interesting take on AAT that is currently being studied is "virtual pet therapy," which involves caring for a "pet" through a computer device (Morrison, 2007). This is an area that still needs research.

There are many identified benefits of AAT. Among these benefits are greater empathy, a more outward focus, a more nurturing attitude, feeling entertained increased mental stimulation, lower stress levels, lower blood pressure during sessions, increased rapport with the therapist, and feelings of acceptance (Eckstein, 2000). Brodie & Biley (1999) found that some benefits of AAT also include a decrease in hopelessness, social withdrawal, and loneliness. They also discovered that the presence of a dog could help to regulate a person's emotions (Brodie & Biley, 1999). Other researchers have found support for the claims that

animals can help to reduce stress levels, improve social competence, increase self-confidence, and result in an overall better quality of life (Berget et al., 2008). Animals satisfy our human needs for both affection and affiliation (Mallon, 1992). Companion animals have been found to cheer people up, often evoking smiles, laughter, and positive interaction (Mallon, 1992).

Researchers have discovered that there are certain times when animals are most crucial in facilitating positive coping. Among these are: periods of unemployment, moving, times of depression or loneliness, and times of crisis (Risley-Curtiss, 2010). AAT can be therapeutic for people of all ages (Risley-Curtiss, 2010).

Most people are at least mildly drawn to animals. Therefore, an animal's presence can remove some of the barriers that constrict interaction between humans (Brodie & Biley, 1999). Animals often engage in behaviors that people describe as “cute” or “funny,” which inspires humor in the humans around (Mallon, 1992). This "comic relief" can serve as a social lubricant during human interactions.

Beginning therapy and trying to build a therapeutic relationship with a therapist can be intimidating for clients. Animals can improve the confidence of clients because they provide ongoing companionship as well as a sense of security (Brodie & Biley, 1999).

Building rapport is a basic task that therapists must accomplish in order to work effectively with any client. This can be a difficult task, depending upon

numerous variables. The presence of an animal may be beneficial in building rapport between client and therapist because it creates an environment of "mutual trust" (Brodie & Biley, 1999). When the therapist arrives with the animal, the client perceives the therapist as friendly and accepting as well (Mallon, 1992). According to Mallon (1992), using a therapy animal is an effective tool in breaking down the initial barriers that exist between the therapist and adolescent. An animal can serve as a conversation starter and a type of "social lubricant," easing the transition into a therapeutic relationship (Mallon, 1992). This can be an effective tool in speeding up the development of the therapy, allowing progress to be made more quickly (Mallon, 1992).

Clients expressed that the presence of the therapy animal led to an increased sense of well-being (Brodie & Biley, 1999). In human relationships, there is a need for respect, trust, and loyalty. Animals provide these aspects to humans almost without fail (Mallon 1992). The animal provides an environment of acceptance, not unlike that of being in the presence of a trusted friend, because the animal will usually hold the person in complete and unconditional positive regard (Mallon, 1992; Allen, 2003). Some people perceive even their closest friends to be judgmental, but regard a dog as completely friendly (Allen, 2003). The presence of an animal can be complimentary to human relationships (Mallon, 1992). Animals can promote healthy relationships by facilitating positive interactions between humans (Brodie et al., 1999). One of the most therapeutic aspects of using animals is that they will mirror tensions in the room (Risley-

Curtiss, 2010). Animals help people to communicate because they can enter into a more emotionally comfortable and accepting environment (Mallon, 1992).

Studies with children have shown that youth will naturally utilize their dog as a confidante (Mallon, 1992). There is a higher level of trust placed with the animal, because what is told to the dog is guaranteed to be absolutely confidential (Mallon, 1992). In the therapy setting, the animal may still be viewed as a trustworthy confidante, which may help the young client to engage more readily in the therapeutic process.

Speaking to an animal may be less threatening than interacting with a new person (Allen, 2003). This is likely because of several factors, including the animal's inability to judge and interrupt, as well as their comforting presence (Mallon, 1992). The presence of the animal can facilitate smoother interactions with a new person (Allen, 2003).

One of the draws of confiding in an animal is that animal is responsive, yet never judgmental, which is comforting to children and adolescents (Mallon, 1992). Animals are much better than humans at picking up on very subtle changes in body language, and the animal is a more “psychological” presence(Mallon, 1992). They will not try to provide the person with a “practical” response, as another person might. They simply appear to “listen” attentively (Mallon, 1992).

The ability to physically interact and show affection to the animal also contributes to the sense of well-being associated with the presence of the animal.

Being able to freely touch the animal can be very comforting (Brodie & Biley, 1999). The animal provides an outlet for idle play, which can be both a distraction and a tension-releaser (Brodie & Biley, 1999; Allen, 2003). Petting an animal distracts one's attention, making it easier to open up in conversation (Mallon, 1992). The repetitive movement of one's hands as they pet the animal may serve as an outlet for nervous energy during sessions (Mallon, 1992).

The Child Life Profession

Child Life Specialists are professionals trained in helping children cope with stressful events, especially having to do with healthcare experiences. Child Life Specialists utilize a variety of techniques to assist children in coping with these events. These activities include psychosocial education, procedural preparation and support, play (including "medical play" with real medical equipment), and self-expression activities. There are over 400 active Child Life programs in healthcare centers across the United States and Canada (Child Life Council, n.d.). While most Child Life Specialists work with child and adolescent patients, they also provide support and education to the siblings, children, or other relatives of patients, even adult patients.

Child Life and Animal-Assisted Therapy

Kaminski, Pellino & Wish (2010) conducted a study comparing the effectiveness of Child Life versus pet therapy on the physiological and emotional impact of stress on hospitalized children. A total of 70 hospitalized children, ages 5 and older, were assigned to one of two groups: a pet therapy group meeting with

a therapy dog, or a Child Life group. Each group met in the hospital playroom. There were 40 children assigned to the Child Life group, 30 to the pet therapy group. Following the sessions, children were asked to self-report by filling out a mood scale with questions taken from the Reynolds Child Depression Scale (Reynolds, 1989). Parents were also asked to complete a mood scale based on their observations of their child following the intervention. The researchers also measured salivary cortisol, blood pressure, and pulse rate to gauge physiological signs of stress immediately following the intervention.

While there were no significantly significant differences between the two groups, the researchers did find some findings worth noting. In both groups, parents rated a more positive mood following the therapy session. Parents rated their child's "happiness" as higher following the pet therapy sessions. Additionally, salivary cortisol levels were slightly lower in the pet therapy group compared to the Child Life group. The researchers concluded that, although more research is needed, pet therapy may be beneficial for children in the hospital setting (Kaminski, 2010).

Methods

Subjects

Study protocol and procedures involving human subjects were approved and conducted in accordance with the Arizona State University Institutional Review Board. Adolescents between the ages of 12 and 18 were recruited via Tucson Medical Center and Tu Nidito in Tucson, Arizona. Recruitment took

place from November, 2010 until March, 2011. All subjects either had a friend or family member with a serious illness, or had experienced the death of a friend or family member in the previous 12 months. Subjects were recruited via referrals from the agencies. If a potential subject met the study criteria, a staff member (social worker, nurse, etc.) gave a brief verbal explanation of the study to the youth and parent (if the child was a minor). If they were interested in participating in the study, the staff member gave them the researcher's contact information or asked permission to give the researcher the client's contact information. The researcher then made phone contact with the potential subjects and parents (if applicable). The researcher thoroughly explained what participation in the study would entail. If the youth and parent both agreed that they would like to participate, consent and assent forms were signed and the subject was enrolled in the study.

There were 16 females and 11 males enrolled in this study. The age of participants ranged from 12 to 18 years. The mean age of participants was 15 years.

Subjects were randomly assigned to one of two groups, the “pet therapy group” or the “control group.” As subjects enrolled in the study, they were alternately assigned to the pet therapy group or the control group. The first subject to enroll in the study was assigned to the pet therapy group, the second to the control group, the third to the pet therapy group, and so on. There were 14 subjects assigned to the pet therapy group, 5 male and 9 female. The control

group consisted of 13 subjects, 6 male and 7 female. A chi-square test determined that this gender distribution difference between the groups was not significant (P=0.304). The mean age of subjects in the pet therapy group was 15.43 years; mean age in the control group was 14.46. A t-test determined that this mean age difference between groups was not statistically significant (P=0.2335).

Intervention

The control group received the Child Life intervention as usual. The pet therapy group received the same intervention as the control group, with a therapy dog present during the sessions.

The intervention included 3 one-hour sessions with a Certified Child Life Specialist (CCLS). Subjects met with the CCLS weekly for 3 consecutive weeks. These sessions were approximately one hour in length. Each session centered around a specific therapeutic goal, regardless of the particulars of each subject's situation. The goal of Session 1 was to allow the subject to tell the story of the illness and/or death from their perspective. Subjects were asked to describe the illness or death and how it was affecting them. The CCLS encouraged and validated self-expression throughout the session.

The goal of Session 2 was to review and develop coping skills in regard to the illness and/or death. The subjects were asked open-ended questions regarding coping, such as “What have you been doing to cope with this situation? Is that working?” After assessing the coping skills of the subject, the CCLS assisted the subjects in identifying coping strategies that could be utilized.

The goal of Session 3 was to create a "Coping Plan" and for the subject to participate in a positive memory-making activity. To formulate the Coping Plan, subjects collaborated with the CCLS to identify events that may trigger stress and decide what coping techniques would work best for them when that event took place. For instance, a common stress point might be the birthday of someone who has died. A part of the Coping Plan for this event might be to plan a positive way to remember the person, perhaps by cooking their favorite meal, for example. Additionally, each subject and their parents were given appropriate information about and referrals to other community agencies.

In Session 3, subjects were free to choose a memory-making technique to honor their loved one, whether they had passed away or were battling an illness. Some of these included: writing a letter to their loved one, making a scrapbook page, writing in a journal, or doing a balloon release. Participation in this activity was designed to end the sessions on a positive note and with a sense of closure.

Subjects assigned to the pet therapy group had a therapy dog present with the CCLS during all 3 sessions. Two different dogs were utilized in this study, but each subject met with the same dog during all 3 sessions. A Dachshund was used with 10 of the subjects, a Golden Retriever with 4 subjects. There were not significant differences in Mood scores based on which dog was assigned to the subjects ($P=0.8095$).

Subjects were not given any instruction as to whether or how to interact with the dog. This was decided because past research examining Child Life and

pet therapy utilized a similar technique, with subjects free to engage with the animal at will and in a way of their own choosing. Additionally, because "therapeutic engagement" was the goal, the researcher opted not to instruct the subjects on how to interact with the dog so that they could interact in the way that was more personally comfortable for them. Subjects were free to pet or talk to the dog at will. If they chose not to interact with the dog, they were not told that they had to. Most subjects opted to pet the dog intermittently throughout the sessions.

Subjects were also able to choose where the sessions would take place. Most (N=24) chose to have the CCLS come to thier home, others chose to meet at a school (N=1), park (N=1), or coffee shop (N=1). For each subject, each of the 3 sessions was conducted in the same chosen location. All 3 who chose not to conduct the intervention at home were in the control group. There were no significant differences between the mood scores of these 3 subjects and the others in the control group (P=0.3092).

Measures

Measures utilized in this study were the Children's Mood Questionnaire (Radloff, 1977) and a Therapeutic Engagement Questionnaire created by the author. Each study participant completed the Children's Mood Questionnaire at the beginning of Session 1 and three weeks after Session 3. The Children's Mood Questionnaire is a 20-item questionnaire adapted from the Center for Epidemiological Studies Depression Scale (Radloff, 1977). This scale was developed to measure a person's depressive symptoms over time (Rush,

2000). It has been found to be highly reliable (r=0.85) when utilized with community samples (Rush, 2000) To complete this questionnaire, participants are asked to rate how often in the past week each item on the scale was true for them. Each item on the questionnaire has 4 possible answers: “rarely or none of the time” (less than 1 day), “some or a little of the time” (1-2 days), “occasionally or a moderate amount of the time” (3-4 days), or “most or all of the time” (5-7 days). Each answer has a number associated with it (0,1,2, or 3) indicating the intensity of depressive symptoms, with “0” indicating no depressive symptoms, and “4” indicating severe depressive symptoms.

Examples of the 20 questions asked on the Children’s Mood Questionnaire are “I felt that I couldn’t shake off the blues, even with the help of my family and friends,” “I had trouble keeping my mind on what I was doing,” “I felt that everything I did was an effort,” and “I was happy.”

Each study participant completed the Therapeutic Engagement Questionnaire at the end of each of the 3 sessions. The Therapeutic Engagement Questionnaire consists of 10 items and is intended to measure the participant’s interest and engagement in the therapeutic process. A Cronbach’s alpha test determined this measurement tool to be reliable at 0.878. For each question, study participants chose from a scale of 1-5, with “1” indicating “very false,” “2” indicating “sort of false,” “3” indicating “not true or false,” “4” indicating “sort of true,” and “5” indicating “very true.”

Examples of items included in the Therapeutic Engagement Questionnaire are “I felt like talking about my feelings today,” “I feel ‘stuck’ after today’s session,” and “this is a safe place to share my feelings.”

Results

Given that analysis required the comparison of 2 independent samples, a Mann-Whitney test was used to analyze the data. The Mann-Whitney test determined that mood score post-tests were significantly more improved among participants in the pet therapy group (P= 0.02). The mean pre-test score for this group was 15.35. The mean post-test score for the pet therapy group was 6.28, representing a 59% improvement in mood scores. The mean pre-test score for the control group was 10.76; post-test mean score was 7.15. This represents a 34% improvement in mood scores for the control group. Results for the Children’s Mood Questionnaire are presented in Table 1. An independent t-test compared the means of the gain scores of the pet therapy and the control groups. The mean scores of the pet therapy group were significantly more improved than the scores of the control group (P=0.007). Results of the t-test are presented in Table 3.

The effect size was calculated at 1.175.

Table 1: Children’s Mood Questionnaire results

	Pet therapy group	Control group
Pre-test Mean Score	15.35	10.76
Post-test Mean Score	6.28	7.15
Standard Deviation	2.97	6.31
Mann-Whitney Significance	0.02	

Table 2: Independent t-test for Equality of Means: Children's Mood Questionnaire

Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
	Pet Therapy	14	9.0714	2.97332	.79465
	Control	13	3.6154	6.30527	1.74877

Independent Samples Test

		Levene's Test for Equality of Variances		***t-test for Equality of Means***						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
CMQ Gain Scores	Equal variances assumed	2.068	.163	2.911	25	.007	5.45604	1.87430	1.59585	9.31624
	Equal variances not assumed			2.840	16.806	.011	5.45604	1.92085	1.39984	9.51225

While Therapeutic Engagement scores were slightly higher in the pet therapy group (M=4.2) than the control group (M=4.06), the difference was not

statistically significant (P= 0.6010). Results for the Therapeutic Engagement scores are presented in Table 3.

Table 3: Therapeutic Engagement Questionnaire results

	Pet therapy group	Control group
Session 1 Mean	4.00	4.04
Session 2 Mean	4.21	3.95
Session 3 Mean	4.42	4.20
Mean of all sessions	4.21	4.06
Standard Deviation	0.5665	0.5038
Mann-Whitney Significance	0.6010	

An ANOVA test was conducted on each group to determine if there were significant changes in the Therapeutic Engagement scores in relation to time over sessions 1, 2, and 3. In the pet therapy group, there was a significant increase in scores between Sessions 1 and 3 ($P<.01$). Changes in scores between Sessions 1 and 2 and Sessions 2 and 3 were not found to be significant. In the control group, there was also a significant increase in scores between Sessions 1 and 3 ($P<0.05$). As in the pet therapy group, changes in scores between Sessions 1 and 2 and Sessions 2 and 3 were not significant.

Discussion

Although there were no statistically significant differences between the two groups on the Therapeutic Engagement scale, participation in the pet therapy group resulted in significantly improved mood scores at 3 weeks post-intervention. This indicates that the incorporation of pet therapy into existing grief and loss interventions may increase the effectiveness of the intervention in

improving mood and lowering depressive symptoms associated with the loss.

In this study, the theory that the addition of a therapy dog to the Child Life intervention would increase therapeutic engagement was disproved. While the Mood scores significantly improved, the real reason behind these improvements remains in question. Other possible explanations should be explored in future studies. The presence of animals has been found to have a calming physiological effect on people of all ages, reducing blood pressure and heart rate (Allen, 2003). Perhaps the presence of the animal had a calming physiological effect in the participants, causing them to be more relaxed and focused on the therapeutic intervention.

Grief and loss can lead to extreme negative emotional, psychological, and emotional symptoms. While experiencing the mourning process, a person may report anger, sadness, difficulty concentrating, weight loss, and a preoccupation with the deceased and the circumstances surrounding their death (Cohen et al., 2002). These can all be depressive symptoms induced by loss. The Mood scores for the pet therapy group in this study indicate that the intervention was successful in reducing some of these symptoms 3 weeks following the conclusion of the intervention.

According to Riely (2003), helping children to navigate the grief process is important in preventing long-term negative consequences associated with loss. Results of this study suggest that the interventions utilized with the youth were both engaging and effective in reducing depressive symptoms associated with loss

at 3 weeks post-intervention. These effects may be more long-term, but additional research that allows for more longitudinal follow-up is warranted to confirm this.

Children are better able to engage in the grieving process when adults around them recognize that the child is grieving and gives them "permission" to grieve the loss (Giovanola, 2005). The interventions that were delivered in this study may have been successful in giving the study participants perceived "permission" to grieve, based on the relatively high Therapeutic Engagement scores present in both groups. Although there were no significant differences between the two groups on this scale, the high scores in both groups suggest that the actual intervention method used by the Child Life Specialist was effective in engaging subjects in the therapeutic activities.

Youth who do not effectively cope with a major loss are more likely to experience generalized depression symptoms as adults (Riely, 2003). The results of the Mood Questionnaire in this study are encouraging. Participants in the pet therapy group reported fewer depressive symptoms at 3 weeks post-intervention. This may indicate that the pet therapy intervention could result in lower levels of depressive symptoms in the long-term. Future research should seek to determine if there are longitudinal benefits associated with utilizing AAT in grief interventions with youth.

In a study conducted by Phear (1996), the effects of a companion animal's presence in an inpatient hospice unit was examined. Both patients and staff

reported that the animal helped them to feel more relaxed in the hospice setting, as the dog was friendly and seemed to “lighten the mood.” Patients involved in that study expressed that the dog made the hospice seem more like home. It is possible that the adolescents who participated in the pet therapy intervention felt similarly while participating in this study's interventions. The creation of a more "home-like" atmosphere subsequent feelings of relaxation may have put the subjects into a more positive and relaxed state of mind, making them more receptive to the therapeutic interventions delivered by the Child Life Specialist.

The results of this study are similar to the findings of many studies that have been conducted in nursing homes. Elderly patients receiving regular AAT visits at nursing homes show improved morale and reduced symptoms of stress (Morrison, 2007). This and other studies suggest that animals may have a general positive impact on clients dealing with a number of diverse issues.

Animals have been found to lower people’s general levels of anxiety (Mallon, 1992). Engaging in therapeutic intervention with a professional practitioner is an event that could plausibly elicit a certain level of anxiety and nervousness from clients, particularly young clients. It is possible that the therapy dogs utilized in this study lowered anxiety levels among the participants in the pet therapy group, perhaps resulting in increased perceived rapport with the CCLS. This may have made the subjects in the pet therapy group more receptive to the intervention and education delivered by the CCLS, perhaps resulting in the improved Mood scores.

Finally, studies have also found that pet owners are more likely to elicit social contact from others when they are with the animal (Beck & Katcher, 2003). The dogs in this study may have had a similar effect, eliciting more response from the subject in reaction to the CCLS. It is possible that the fact that the CCLS arrived to the sessions with a dog made the subjects perceive the CCLS as more friendly, approachable, and "safe."

Limitations

This study had a relatively low number of subjects. The time constraint involved in this study affected the number of participants that were able to be recruited into the study. This low number may have affected the outcome of the study, as outlying data points may have influenced the outcomes more than in a study with a larger number of subjects.

Another limitation in this study was a lack of consistency in study protocol with each subject. Subjects in the pet therapy group were not instructed in any way reading how to interact with the therapy dog. Some subjects engaged more fully with the therapy dogs than others. If each subject had been told how to interact with the dog (ie: give the dog a treat, ask the dog to sit, pet the dog while talking with the CCLS), the outcomes of the intervention could be more confidently connected to the presence of and interaction with the therapy dog.

Additionally, each subject did not complete exactly the same interventions in each of the sessions. While the goals of each sessions were the same, the actual activities completed in each session was not the exact same across subjects.

Because the subjects ranged in age from 12 to 18, and were dealing with circumstances that were not uniform. For instance, some were dealing with the death of a friend, some with a sibling, others a parent or grandparent. Some subjects were coping with the anticipated loss of someone who was terminally ill, while others had already experienced the death. Due to these variations, administering a completely standardized intervention would not have been practical. However, this may have affected the outcome, as each subject's experience was slightly different. A study with more standardized protocol would have been more consistent.

The subjects completed the Therapeutic Engagement Questionnaire a total of 3 times throughout the course of the study. The repeated use of this measure over time may have affected the responses to the questionnaire. It is unclear whether utilizing this measurement tool repeatedly had an effect on the scores.

As with most studies, researcher bias is an issue that can affect the outcome of the study. In this study, it is possible that even an unconscious bias may have caused the CCLS to interact differently with the pet therapy group than the control group. While bias is a potential in most studies and in many cases cannot be completely avoided, it is important to consider the effects of biases when interpreting study results.

Implications

Additional research needs to be conducted in this specific area as well as other application areas of AAT. While a number of studies have been conducted

examining the physiological effects of AAT, more studies exploring the mental, psychological, and emotional benefits of AAT are needed. In particular, very few studies have been conducted examining the effectiveness of AAT in grief therapy. There were limitations present in this study that future researchers can seek to avoid. First, there was a time constraint limitation that restricted the number of participants in this study. Data collection should span a period of time that allows for maximum exposure to potential subjects. This study found that the participants in the pet therapy group experienced significantly improved scores on the Children's Mood Questionnaire at 3 weeks post-intervention. Additionally, the time constraint present in this study did not allow for longitudinal follow-up with the participants. Ideally, subjects would participate in a follow-up measure at least 6 months following the conclusion of sessions. An optimal study would follow the subjects over several years to determine the long-term benefits of AAT as it applies to grief and loss interventions. This will allow for a more comprehensive interpretation of results. Studies that allowed for longer-term follow-up could help to determine whether the effects of the intervention were more far-reaching.

It is difficult to make conclusions about the true effectiveness of an intervention without longitudinal follow-up with subjects. Given that the present study followed up with the subjects after only 3 weeks, whether the improvements in depressive symptoms among the pet therapy group were lasting is unknown. Future studies in this area should follow the subjects into adulthood to determine

if there are lasting positive effects of the intervention.

While many studies have concluded that the use of AAT in the therapeutic setting is beneficial, the actual qualities of AAT that result in the therapeutic effect have not been concretely defined. The Therapeutic Engagement Questionnaire utilized in this study was administered in the attempt to determine if the presence of the animals caused the subjects to feel more engaged in the therapeutic process, resulting in a more effective therapeutic intervention. However, the Therapeutic Engagement Questionnaire did not measure a statistically significant difference between the pet therapy group and the control group. Theoretically, the therapeutic effect could be the result of a combination of factors and characteristics of AAT. Future researchers should continue to strive to discover the qualities of AAT that create the therapeutic effect.

References

Allen, K. (2003). Are pets a healthy pleasure? The influence of pets on blood pressure. *Current Directions in Psychological Science, 12,* 236-239.

Allen-Heath, M., Leavy, D., Hansen, K., Ryan, K., Lawrence, L. &Gerritson, A. (2008). Coping with grief: Guidelines and resources for assisting children. *Intervention in School and Clinic, 43,* 259-269.

Auman, M.J. (2007). Bereavement support for children.*The Journal of School Nursing, 27, 34-39.*

Barerra, M. (2000). Brief clinical report: Procedural pain and anxiety management with mother and sibling as co-therapists. *Journal of Pediatric Psychology, 25,* 117-121.

Barker, S. B. & Dawson, K. S. (1998). The effects on animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services, 49(6),* 797-801.

Beck, A.M. &Katcher, A.H. (2003). Future directions in human-animal bond research. *American Behavioral Scientist, 47,* 79-93.

Berget, B., Ekeberg, O., &Braastad, B. (2008). Animal-assisted therapy with farm animals for persons with psychiatric disorders: effects on self-efficacy, coping ability and quality of life, a randomized controlled trial. *Clinical Practice and Epidemiology in Mental Health, 4,* 9-21.

Bjork, M., Wiebe, T., &Hallstrom, I. (2005). Striving to survive: Families' lived experiences when a child is diagnosed with cancer. *Journal of Pediatric Oncology Nursing, 22,* 265-275.

Brodie, S. &Biley, F. (1999). An exploration of the potential benefits of pet-facilitated therapy.*Journal of Clinical Nursing, 8,*329-337.

Burke, M. L., Eakes, G. G., &Hainsworth, M. A. (1999). Milestones of chronic sorrow: Perspectives of chronically ill and bereaved persons and family caregivers. *Journal of Family Nursing, 5,* 374-387.

Child Life Council.(n.d.).The Child Life Profession.www.childlife.org.

Christ, G.H., Seigel, K. & Christ, A.E. (2002). Adolescent grief. *The Journal of the American Medical Association, 288(10), 1269-1278.*

Cohen, J.A., Mannarino, A.P., Greenberg, T., Padlo, S. & Shipley, C. (2002). Childhood traumatic grief: concepts and controversies. *Trauma, Violence, and Abuse, 3,* 307-327.

Demello, L. (1997). The effect of the presence of a companion-animal on physiological changes following the termination of a cognitive stressor. *Psychology and Health, 14,* 859-868.

Eckstein, D. (2000). The pet relationship impact inventory.*The Family Journal, 8, 192-198.*

Giovanola, J. (2005). Sibling involvement at the end of life. *Journal of Pediatric Oncology Nursing, 22, 222-226.*

Havener, L., Gentes, L., Thaler, B., Megel, M., Baun, M.M., Driscoll, F.A., Beiraghi, S. &Agrawal, S. (2001). The effects of a companion animal on distress in children undergoing dental procedures. *Issues in Comprehensive Pediatric Nursing, 24,* 137-152.

Hines, L.M. (2003). Historical perspectives on the human-animal bond.*American Behavioral Scientist, 47, 7-15.*

Inger-Ringdal, G., Jordhoy, M.;,Ringdal, K. &Kassa, S. (2001). The first year of grief and bereavement in close family members to individuals who have died of cancer. *Palliative Medicine, 15,* 91-105.

Jorgenson, J. (1997). Therapeutic use of companion animals in healthcare. *Journal of Nursing Scholarship, 29,* 249-254.

Kaminski, M.,Pellino, T. & Wish, J. (2002) Play and pets: The physical and emotional impact of child-life and pet therapy on hospitalized children. *Children's Health Care, 31(4),* 321-335.

Lazarus, R.S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine, 55,* 234-247.

Lehna, C.R. (1995). Children's descriptions of their feelings and what they found helpful during bereavement. *American Journal of Hospice and Palliative Medicine, 12,* 24-30.

Mader, M. & Hart, L.A. (1989). Social acknowledgements for children with disabilities: Effects of service dogs. *Child Development, 60(6*), 1529-1534.

Malkinson, R. (2001). Cognitive Behavioral Therapy of grief: A review and application. *Research on Social Work Practice, 11*, 671-698.

Mallon, G.P. (1992). Utilization of animals as therapeutic adjuncts with children and youth: a review of the literature. *Child and Youth Care Forum, 21*, 53-67.

Marsden-Ashton, J. (2008). Bereavement care in home care and hospice. *Home Health Care Management and Practice, 20, 394-399.*

Martin, F. &Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research, 24*, 657-670.

Marx, M. S., Cohen-Mansfield, J., Regier, N., Dakheel-Ali, M., Srihare, A., & Thien, K. (2010). The impact of different dog-related stimuli on engagement of persons with dementia. *American Journal of Alzheimer's Disease and Other Dementias, 25,* 37-45.

Melvin, D. &Lukeman, D. (2000). Bereavement: A framework for those working with children. *Clinical Child Psychology and Psychiatry, 5,* 521-539.

Miller, J., Connor, K., Deal, B., & Weber-Duke, G. (2003). How animal-assisted therapy affects discharge teaching: a pilot study. *Nursing Management.* 36-42.

Morrison, M. (2007). Health benefits of animal-assisted interventions. *Complementary Health Practice Review, 12,* 51-62.

Moules, N.J., Simonson, K., Fleiszer, A.R., Prins, M. & Glasgow, B.(2007). The soul of sorrow work: grief and therapeutic interventions with the families. *Journal of Family Nursing, 13,* 117-141.

Neimeyer, R. & Currier, J.M. (2009). Grief therapy: Evidence of efficacy and emerging directions. *Directions in Psychological Science, 18,* 352-356.

Nolbris, M. &Hellstrom, A. (2005). Siblings' needs when a brother or sister dies of cancer. *Journal of Pediatric Oncology Nursing, 22,* 227-233.

Noppe, I.C. &Noppe, L.D. (2004). Adolescent experiences with death: Letting go of immortality. *Journal of Mental Health Counseling, 26,* 146-167.

Phear, D.N. (1996). A study of animal companionship in a day hospice.*Palliative Medicine, 10, 336-338.*

Radloff, L.S. (1977). *The Center for Epidemiological Sudies Depression Scale*.

Riely, M. (2003).Facilitating children's grief. *The Journal of School Nursing, 19*, 212-218.

Ringler, L. L. & Hayden, D. C. (2000). Adolescent bereavement and social support: peer loss compared to other losses. *Journal of Adolescent Research, 15*, 209-230.

Risley-Curtiss, C. (2010). Social Work practitioners and the human-animal bond: A national study.*Social Work.*

Roberts, A. &McGilloway, S. (2008). The nature and use of bereavement support services in a hospice setting. *Palliative Medicine, 22,* 612-625.

Rush J. (2000). *Psychiatric Measures*. Washington, DC: American Psychological Association.

Schwartz, R.M. (1986). The internal dialogue: On the asymmetry between positive and negative coping thoughts. *Cognitive Therapy and Research, 10*, 591-605.

Servaty-Seib, H. L. & Burleson, B. R. (2007). Bereaved adolescents' evaluations of the helpfulness of support-intended statements: associations with person centeredness and contextual factors. *Journal of Social and Personal Relationships, 24,* 207- 223.

Shayer, M. (1979). Has Piaget's construct of formal operational thinking any utility? *British Journal of Educational Psychology, 49*, 265-276.

Sidhu, R., Passmore, A. & Baker, D. An investigation into parent perceptions of the needs of siblings of children with cancer. *Journal of Pediatric Oncology Nursing, 22*, 276-287.

Sommers-Flanagan, J. & Sommers-Flanagan, R. (1995). Psychotherapeutic techniques with resistant adolescents. *Psychotherapy: Theory, Research, Practice, Training, 31*, 131-140.

Thastum, M., Birkelend-Johansen, M., Gubba, L., Berg-Oleson, L. &Romer, G. (2008). Coping, social relations, and communication: A qualitative exploratory study of children of parents with cancer. *Clinical Child Psychology and Psychiatry, 13*, 123-138.

Thastum, M., Munch-Hansen, A., Wiell, A. &Romer, G. (2006). Evaluation of a focused short-term preventive counseling project for families with a parent with cancer. *Clinical Child Psychology and Psychiatry, 11*, 529-542.

Wilkinson, S., Croy, P., King, M., & Barker, J. (2007). Are we getting it right? Parents' perceptions of hospice child bereavement support services. *Palliative Medicine. 21*, 401-407.

Zisook, S. &Schuchter, S. (2001). Treatment of the depressions of bereavement. *American Behavioral Scientist, 44*, 782-797.

APPENDICES

Appendix 1: Institutional Review Board Approval Form

ASU Knowledge Enterprise Development

Office of Research Integrity and Assurance

To:	Craig Lecroy UCENT 800
From:	Mark Roosa, Chair Soc Beh IRB
Date:	11/19/2010
Committee Action:	**Expedited Approval**
Approval Date:	11/19/2010
Review Type:	Expedited F7
IRB Protocol #:	1011005685
Study Title:	The Effect of a Therapy Dog on Child Life Interventions with Adolescents Experiencing Grief and Loss
Expiration Date:	11/18/2011

The above-referenced protocol was approved following expedited review by the Institutional Review Board.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date. You may not continue any research activity beyond the expiration date without approval by the Institutional Review Board.

Adverse Reactions: If any untoward incidents or severe reactions should develop as a result of this study, you are required to notify the Soc Beh IRB immediately. If necessary a member of the IRB will be assigned to look into the matter. If the problem is serious, approval may be withdrawn pending IRB review.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, or the investigators, please communicate your requested changes to the Soc Beh IRB. The new procedure is not to be initiated until the IRB approval has been given.

Please retain a copy of this letter with your approved protocol.

Appendix 2: Therapeutic Engagement Questionnaire

Therapeutic Engagement Questionnaire

Subject Code:_____

Date:_____

Circle the number that best describes how you felt during today's session.

1. It was easy to talk about my feelings today.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

2. I feel more “open” after today's session.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

3. I did not want to talk about my feelings during this session.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

4. This is a safe place to share my feelings.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

5. I was focused on my feelings today.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

6. I was afraid to talk about my feelings today.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

7. I feel “stuck” after our session.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

8. After today, I think I will be more motivated to work on my problems.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

9. I think I will use the coping skills I learned today.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

10. After today's session, I feel less like talking about my feelings.

1	2	3	4	5
Very False	Sort of False	Not True or False	Sort of True	Very True

Appendix 3: Children's Mood Questionnaire

Beginning of the Course

MOOD QUESTIONNAIRE

(adapted from CES-D; Radloff, 1977)*

Student's Name _____ Course/Instructor _____

Circle the number for each statement that best describes how often you felt this way *during the past week.*

DURING THE PAST WEEK	Rarely or None of the Time (less than 1 day)	Some or a Little of the Time (1-2 days)	Occasionally or a Moderate Amount of Time (3-4 days)	Most or All of the Time (5-7 days)
1. I was bothered by things that usually don't bother me.	0	1	2	3
2. I didn't feel like eating; my appetite was poor.	0	1	2	3
3. I felt that I couldn't shake off the blues, even with help from my family or friends.	0	1	2	3
4. I felt that I was just as good as other people.	3	2	1	0
5. I had trouble keeping my mind on what I was doing.	0	1	2	3
6. I felt depressed.	0	1	2	3
7. I felt that everything I did was an effort.	0	1	2	3
8. I felt hopeful about the future.	3	2	1	0

*The authors wish to thank Lenore Radloff for granting permission to reprint this version of the CES-D.

DURING THE PAST WEEK	Rarely or None of the Time (less than 1 day)	Some or a Little of the Time (1-2 days)	Occasionally or a Moderate Amount of Time (3-4 days)	Most or All of the Time (5-7 days)
9. I thought life had been a failure.	0	1	2	3
10. I felt fearful.	0	1	2	3
11. My sleep was restless.	0	1	2	3
12. I was happy.	3	2	1	0
13. I talked less than usual.	0	1	2	3
14. I felt lonely.	0	1	2	3
15. People were unfriendly.	0	1	2	3
16. I enjoyed life.	3	2	1	0
17. I had crying spells.	0	1	2	3
18. I felt sad.	0	1	2	3
19. I felt that people disliked me.	0	1	2	3
20. I could not "get going."	0	1	2	3

Scoring

Add up all of the numbers you have circled. If you have circled more than one number for a statement, add only the largest number to your score.

You may notice that the numbers for your responses on four of the statements (#4, #8, #12, and #16) are listed in reverse order. This has been done on purpose, and your score will be correct if you simply add up all the numbers you have circled.

Total Score: _____