

LIFESPAN INTEGRATION THERAPY WITH TRAUMA-EXPOSED CHILDREN:

A HERMENEUTIC SINGLE CASE EFFICACY STUDY

by

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ABSTRACT

Trauma in children is a devastating reality with immense psychological impact on the child. Numbers indicate that millions of children experience trauma every year. Outcome research therapy with trauma-exposed children is scarce and mostly focuses on cognitive and behavioural changes. Anecdotal evidence suggests that Lifespan Integration (LI) therapy integrates traumatic experiences into other life experiences leaving them feeling more congruent and renewed. In this research study, we investigate the efficacy of Lifespan Integration with children by means of careful examination of one participant. We applied Robert Elliott's Hermeneutic Single Case Efficacy Research Design (2002, 2014), which uses quantitative and qualitative data to argue for and against therapy efficacy. The 12-year-old research participant received 8 sessions of LI over three months, and data was collected before, throughout, and after therapy. The extent of the client's change over the course of therapy was investigated, as well as LI's contribution to the change, and what parts of LI were most helpful in bringing about change. Findings indicate that the client changed substantially over the course of therapy with lasting effects at follow-up, LI was substantially responsible for this change, and the timeline as an LI specific modality helped to bring this change. Details about trauma-exposed children, the theoretical underpinnings of LI, a detailed description of the HSCED procedure, as well as further directions of LI and HSCED are discussed.

Keywords: Lifespan Integration, HSCED, Psychotherapy Outcome Research, Evidence-Based Treatment, Trauma-Exposed Children, Case Study

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CHAPTER 1: INTRODUCTION

*I've heard there are troubles of more than one kind;
some come from ahead, and some come from behind.
But I've brought a big bat. I'm all ready, you see;
now my troubles are going to have troubles with me!*
~ Dr. Seuss (2015a, para. 1)

Children worldwide (Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2014; Pereda, Guilera, Forns, & Gómez-Benito, 2009; Rosner, König, Neuner, Schmidt, & Steil, 2014) are plagued by all kinds of human made and nature-caused disasters and traumas from the devastating effects of things such as hurricanes, shootings in schools, incest, relational trauma from caregivers, and bullying. In the U.S. alone, more than half a million reports were made of children affected by maltreatment (and the dark figures are much higher; U.S. Department of Health and Human Services, 2013). The psychological consequences of these traumas are devastating: victims are at risk for negative events such as future substance abuse, mental health problems, emotional dysregulation, re-victimization, and parenting difficulties Rosner et al., 2014; Gilbert et al., 2009; Hendricks, 2009).

There are a few psychological interventions for children exposed to trauma; however, only within the last few decades have some of them received more empirical attention (Mash, 2006). Therapies such as Trauma-Focused Cognitive Behaviour Therapy (TF-CBT), Prolonged Exposure Therapy (PE), and Developmentally Adapted Cognitive Processing Therapy (D-CPT) have been increasingly researched and have gained credibility. Unfortunately, these therapies focus mainly on cognitive aspects of trauma and some might also re-traumatize the child by

revisiting traumatic experiences without sufficient buffering. Interventions that are less cognitively focused have not yet received the same kind of research-attention.

Lifespan Integration (LI), one intervention that focuses less on the cognitive parts and uses a gentle approach to trauma recovery, still needs substantial empirical evidence. LI is a relatively new approach to psychotherapy, developed in 2002 by Peggy Pace. Pace developed it mainly because she saw other interventions lacking the gentleness to revisit the trauma without the need for an emotional intense experience, as well as a whole-brain perspective. Using a variety of treatment protocols, LI aims to heal trauma and build self-structure by facilitating neural integration (Thorpe, 2012). The primary therapeutic mechanism of LI is a timeline with memories of the client's life. By repeatedly and sequentially going through these memories, the client would experience a coherent whole of her or his life story by integrating different states of mind across time (Thorpe, 2012). The movement through the timeline is quick in order to avoid intense emotions to rise up from these memories.

Anecdotal evidence from clients and parents of clients speak for LI's efficacy without the need for protection against retraumatization (Thorpe, 2012). These clients also report that they experienced change in other behaviours that were not specifically targeted by LI. Unfortunately, there is a lack of empirical research to support LI's efficacy with children, and thus LI is not yet established as an evidence-based psychotherapy. This, appropriately, precludes it from being utilized in many treatment contexts. However, anecdotal evidence from over ten years of clinical practice and with over 1,000 therapists (Thorpe, 2012) supports the promise of LI and warrants systematic research into the efficacy and mechanisms of LI.

This research project aims to contribute to the empirical evidence regarding LI efficacy; with the help of a thorough mixed method case study research design, this study sheds light on

the potential for LI to help trauma-exposed children. For this, Robert Elliott's (2009, 2014) Hermeneutic Single Case Efficacy Design (HSCED) is used. This method uses a series of qualitative and quantitative data to argue for and against the efficacy of a therapy. It is based on the assumption that, just as in US law and in day-to-day situations, decisions are often based on arguments supporting the case and arguments against it.

As the name implies, HSCED is an in-depth study of one client's experience of change and therapy. The type of data the HSCED includes but is not limited to the client's view on whether therapy helped, which aspects of therapy were most helpful, as well as results from any kind of qualitative or quantitative assessments that might be relevant to the topic of research. This information, combined with therapist notes and researcher observation notes, is handed to a research team as a "rich case record". The research team, divided into two groups, scours the rich case record for evidence pointing to therapy efficacy as well as evidence pointing to other factors that might have influenced change in the client. Both teams debate their sides, and outside judges are given their summaries, together with the rich case record, in order to come to an overall conclusion about the therapy's efficacy. These judges are professionals and specialists from the field.

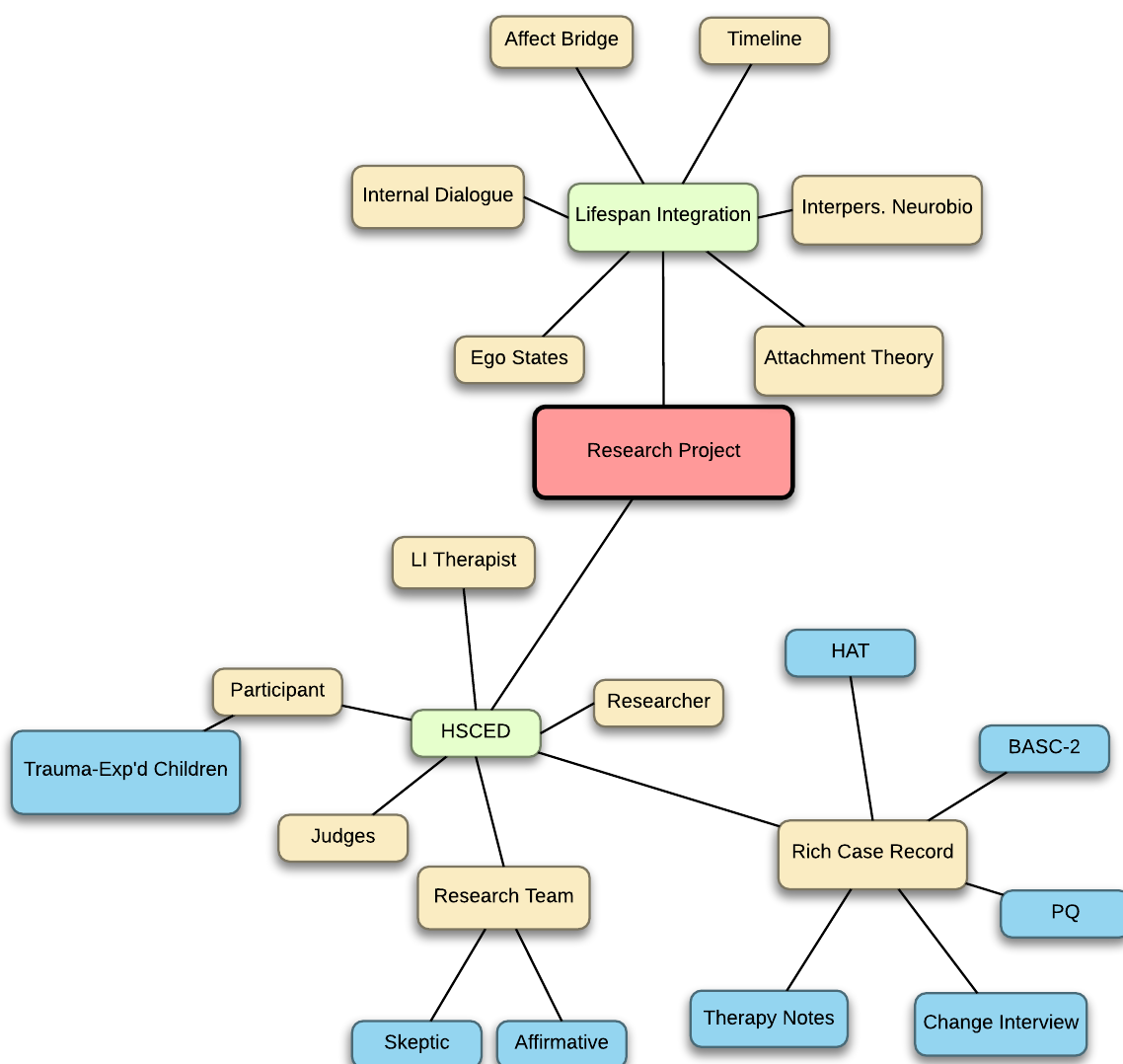
HSCED has some distinct advantages over other single case designs because the design demands a thorough investigation of evidence from two different perspectives and input from multiple experts – strengthening arguments for ruling out alternative explanations. It also holds advantages over randomized clinical trials (RCT), the standard in therapy outcome research. For example, RCTs are "limited in their ability to capture the idiographic complexity inherent in the therapy process" (Wall, Rensch, Hu, McDonald, & Kwee, 2015).

With this systematic case study, the hope is that Lifespan Integration can be shown to be

efficacious with one trauma-exposed child. More globally, the hope is that with this research LI receives more efficacy evidence so that eventually LI can reach the status of evidence-based therapy for children and adults. Also, this research project might shed light on the usage of HSCED with children. (For a conceptual overview of this project, see Figure 1.)

Figure 1

Overview of HSCED Research Project



CHAPTER 2: LITERATURE REVIEW

According to the Convention on the Rights of the Child and other human rights documents (as cited in United Nations Children's Fund [UNICEF], 2014), children have the right to be protected from all forms of violence. Yet, all too often children are denied these fundamental human rights, and they experience a huge array of atrocities. Children who were exposed to traumatic events often suffer from delayed development, learning difficulties, low self-esteem, and depression, which can lead to risky and self-harming behaviour (UNICEF, 2014). This chapter will review some of the pertinent literature in regards to childhood trauma, its prevalence, its psychological impact, and it will give an overview of evidence-based therapies for trauma-exposed children, as well as an overview of Lifespan Integration therapy. It will conclude with a rationale for pursuing this study.

Trauma-Exposed Children

The term *trauma-exposed children* is used in this paper to refer to children who have either experienced trauma themselves or witnessed trauma in somebody close to them. This section will focus and discuss possible ways to define trauma and give a rough overview on the various traumas children can be exposed to, including their prevalence and some impacts traumas can have.

Definition of trauma. Trauma has been defined in many different ways and by many different authorities. In the field of counselling psychology the most commonly used clinical definition of trauma in North America can be found in the Diagnostic and Statistical Manual (4th ed., text rev.; American Psychiatric Association [APA], 2000). Though now replaced by its successor the DSM 5 (APA, 2013), the DSM-IV definition is still in use, and because of its

historical importance, the definition and a brief discussion are included here. The DSM-IV defines an extreme traumatic stressor as

an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate . . . The person's response to the event must involve intense fear, helplessness, or horror (or in children, the response to the event must involve disorganized or agitated behavior). (p. 463)

The recently released DSM 5 (APA, 2013) defines traumatic stressor in a similar way to its predecessor: "Any event (or events) that may cause or threaten death, serious injury, or sexual violence to an individual, a close family member, or a close friend" (p. 830).

Authors Briere and Scott (2012) argue that this definition of trauma is too narrow since it does not allow for situations to be traumatic but not life-threatening. They list extreme emotional abuse, major losses or separations, degradation or humiliation, and coerced (but not physically threatened or forced) sexual experiences as situations that are not immediately life-threatening but could yet be traumatic. Hence, they classify an event as traumatic "if it is extremely upsetting, at least temporarily overwhelms the individual's internal resources, and produces lasting psychological symptoms" (p. 14).

Similar to Briere and Scott, Bessel van der Kolk (2006) argues that in psychiatric circles trauma is often simply referred to as an accumulation of physiological symptoms. He emphasizes that "trauma is not simply a physiological response. The essence of trauma is *utter helplessness* combined with abandonment by potentially protective caregivers" (italics added, p.

xxi).

For purposes of this study, these two definitions by Briere and Scott and van der Kolk seem to capture the essence of children's traumatic experiences: extremely upsetting, overwhelms internal resources, produces lasting psychological symptoms, marked by utter helplessness, and a possible abandonment by protective caregivers.

Kinds of trauma. Trauma-exposed children are exposed a multitude of experiences, which can have negative impacts on a child's psyche. The National Child Traumatic Stress Network (NCTSN; 2014) gives examples of what kind of trauma children can be exposed to. For example: (a) Domestic violence, which includes actual or threatened physical, sexual, or emotional abuse and violence between adults; (b) medical trauma, which refers to "reactions that children and their family may have to pain, injury, and serious illness . . . [which] can affect the mind as well as the body" (Medical Trauma, para. 5); (c) neglect, which occurs when a caregiver does not provide age appropriate care for their child; (d) physical abuse, which is defined as causing or attempting to cause physical pain or injury, such as punching, beating, kicking, burning, etc.; (e) school violence, which includes disruptive and violent behaviour against persons or property; (f) sexual abuse, which includes a wide range of sexual behaviours between an adult or older child and a child, including fondling of genitals, flashing, touching, exploitation for pornography, etc; and (g) childhood traumatic grief, which is marked by an inability of the child to go through the typical process of bereavement.

Neither the DSM-IV nor the DSM-5 offer a category for multiple or complex trauma, which describes the experience of most trauma-exposed children. Multiple authors (Briere & Spinazzola, 2009; Herman, 1992a, 1992b; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005) advocate for the addition of complex Post Traumatic Stress Disorder and complex stress

(Briere & Scott, 2013). They assert that “complex stress effects are thought to arise from severe, prolonged, and repeated trauma, almost always of an interpersonal nature, often beginning early in life” (p. 56). That is to say that children often experience not only one single incidence of trauma, but often experience complex situations in which there are multiple traumas intertwined with interpersonal trauma.

Prevalence. It is impossible to know the exact numbers of trauma-exposed children since not every trauma is reported to authorities. Issues such as shame, safety, amnesia, etc. affect the gap between reported and estimated numbers (Gilbert et al., 2009). The NCTSN (2014), for example, estimates that 3-10 million children in the United States are exposed to domestic violence. Assuming a population of 73.9 million children in the US (Federal Interagency Forum on Child and Family Statistics, 2015), these numbers correlate to 4-14% of all children in the United States. Reported numbers, however, are only a fraction of this estimation. The U.S. Department of Health and Human Services (HHS; 2013) writes that in 2012 about 679,000 children (about 1% of all children) in the United States were reported victims of at least one maltreatment; the NCTSN predicts at least 5-15 times as much. This goes to show that the gap between reported and estimated numbers is quite substantial. About 45% of reported victims in the US were younger than six years old, the vast majority of all victims experienced neglect (78.3%), while 18.3% were physically abused, and 9.3% were sexually abused (HSS, 2013).

In Canada, Sinha (2012) asserts that in 2010, about 74,000 reports were made of criminal violence against children. With the population of children in Canada at 7.8 million in 2011 (Statistics Canada, 2011), this accounts for 0.9% of all children. Girls were 1.5 times more likely than boys to be victims of family violence and four times more likely to be victim of

sexual abuse. As in the United States, these numbers, only show a fraction of actual incidences. In addition to the above mentioned reasons for the gap between reported and estimated numbers, Sinha (2012) asserts that in Canada there is no system of collecting data about crimes towards children; data about children are lumped in with data about family violence. Thus, the reported numbers in Canada may be proportionally smaller than other countries.

Experts and studies in this field estimate that, in Western Countries, between 14% and 67% of children experience at least one kind of trauma, and nearly 20% of women and 8% of men experience sexual abuse as children (Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2014; Pereda, Guilera, Forns, & Gómez-Benito, 2009; Rosner, König, Neuner, Schmidt, & Steil, 2014). For an overview of estimated and reported prevalence of trauma in children, see Table 1.

Table 1.

Prevalence of select traumas in children

Kind of trauma	Estimated Prevalence	Reports
Any kind, at least one	14-67% of children in US and Europe ^a	1% of children in US (678,810 reports) ^b 1% of children in Canada (73,883 reports) ^c
Domestic Violence/ Physical Abuse	4%-14% in US ^d 3.6% - 16.3% in Western countries ^e	0.2% of children in US (124,544 reports) ^b 0.5% of children in Canada (39,046 reports) ^c
Neglect		0.7% of children in US (531,241) ^b
CSA of girls	20% of girls in Western countries ^{ef}	0.15% of children in Canada (11,772 reports) ^c
CSA of boys	8% of boys in Western countries ^{ef}	0.05% of children in Canada (2,736 reports) ^c

^aDiehle, Opmeer, Boer, Mannarino, & Lindauer (2014). ^bHSS (2013). ^cSinha (2012). ^dNCTSN (2014). ^eRosner, König, Neuner, Schmidt, & Steil (2014). ^fPereda, Guilera, Forns, & Gómez-Benito (2009).

Psychological impact of trauma. Whether or not the above-mentioned estimations about prevalence are accurate, the psychological impact on those who have experienced trauma can be devastating (Diehle et al., 2014). Noting the possible impacts of childhood trauma, the NCTSN Core Curriculum on Childhood Trauma Task Force (2012) asserts that “trauma exposure and its aftermath can lead to developmental disruptions in the form of regressive behavior, reluctance, or inability to participate in developmentally appropriate activities, and developmental accelerations such as leaving home at an early age and engagement in precocious sexual behavior” (p. 5).

Neuropsychologist Allan Schore (2003) emphasizes that relational trauma—that is to say, trauma that involves a disruption of interpersonal relationships—will especially negatively impact a child’s mental health on many levels, including neurological, relational, attachment-related, and affective. He states that “in line with the established general principle that childhood abuse is a major threat to children’s mental health ... a context of very early relational trauma serves as a matrix for maladaptive infant (and later adult) mental health” (p. 181). He adds that “there is extensive evidence that trauma in early life impairs the development of the capacities of maintaining interpersonal relationships, coping with stressful stimuli, and regulating emotion” (p. 185). This shows that trauma, especially early relational trauma, can have detrimental effects on a child’s mental health.

Other authors add to the list of potential psychological impacts. John Bowlby (1988) acknowledges that trauma-exposed children are more likely to develop amnesia and personality disorders, especially if they receive mixed messages from their parents about the validity of these events. Ogden, Minton, and Pain (2006) add that trauma can also affect the body and might impair its alarm systems. They write that “past and present have become somatically,

emotionally, and cognitively confused: reactivated traumatic memories in the form of intrusive affects and body sensations signal danger even in peaceful moments” (p. 206). This, in turn, results in constant hyperactivation and exhaustion.

The list of trauma consequences is long. Among them are psychological disorders, such as major depression, anxiety, PTSD, successful or attempted suicide, substance abuse, self-harming behaviour (Rosner et al., 2014), as well as physiological diseases, such as heart disease, cancer, obesity, chronic pain, and sexually transmitted illnesses. Social problems can emerge as well, such as homelessness, overt and intrusive sexualized behaviour, prostitution, teenage pregnancy, criminal behaviour, family violence, and intergenerational transmission of abuse (Gilbert et al., 2009; Hendricks, 2009). Children who are maltreated are also more likely to have long-term deficits in educational achievements and have menial and semi-skilled occupations in the future (Rosner et al., 2014).

Childhood sexual abuse (CSA) specific impacts on children include “a 2.4 heightened risk for the development of psychopathology compared to those without such experiences [and] a particularly high probability for the development of post-traumatic stress disorders (PTSD) - exposure to CSA leads to an increased PTSD risk of 5.6 compared to non-CSA exposure” (pp. 1-2).

Some children, however, show less intense reactions to traumas than others. Some resilience factors include secure attachment to primary caregiver, emotional regulation, social network, and psychological makeup (Siegel, 2012), which might influence the impact trauma has on an individual child. The NCTSN Core Curriculum on Childhood Trauma Task Force (2012) differentiates between child-intrinsic resilience factors—such as high self-esteem, self-efficacy, and possessing a repertoire of adaptive coping skills—and child-extrinsic factors—such as

secure attachment with caregiver, strong social support network, presence of reliable adult mentors, and a supportive school and community environment. These factors help trauma-exposed children to ‘bounce back’ quicker than children who do not have these factors in their lives. Unfortunately, most children who are brought to counselling do not necessarily have these resilience factors in place.

Evidence-based Therapies for Trauma-Exposed Children

Given the need for healing in trauma-exposed children as evidenced by the statistical occurrences and displayed consequences of trauma, clinicians can choose from among a plethora of treatment modalities. Kazdin (2000, as cited in Weisz, Yi Ng, Rutt, Lau, & Masland (2013) found at least 551 different therapies being used with children and adolescents; however, only a few have systematic evidence of their efficacy and effectiveness in forms of randomized clinical trials (RCTs) and other outcome research (Azar & Wolfe, 2006; Rosner et al., 2014; Weisz, Yi Ng, Rutt, Lau, & Masland, 2013). Authors Azar and Wolfe (2006) correctly assert, “further work needs to be directed toward gathering information on how best to deal with a maltreated child's problem” (p. 631). Currently only Trauma-Focused Behavioral Therapy (TF-CBT) has the evidence-based label of 'well-established therapy' to be used with trauma-exposed children (Weisz, Yi Ng, Rutt, Lau, & Masland, 2013).

Generally speaking, trauma therapy can be divided into three phases: (1) establishing safety and stability, (2) trauma processing, including remembrance and mourning, and (3) cognitive-affective integration with focus on reconnecting with ordinary life (Herman, 1997). Among the most prominent trauma treatments for children are Trauma-Focused Cognitive Behavioural Therapy (TF-CBT), Developmentally Adjusted Cognitive Processing Therapy (D-CPT), Prolonged Exposure Therapy, and Expressive Therapy. Less researched modalities

include Lifespan Integration therapy (LI), eye movement desensitization and reprocessing (EMDR), and Observed Experiential Integration (OEI). While these therapies have no known RCTs with child subjects, all of them have anecdotal evidence to support their effectiveness and positive impact on children. In the following pages I will provide an overview of these therapies. For an overview of trauma therapies with their level of intervention and how they fit with the trauma therapy phases, see Table 2.

Table 2.

Overview of Interventions for Trauma-Exposed Children

Intervention	Age	Research Evidence	Level of Intervention (cognitive, affective, somatic, neurological, relational, meaning/spiritual)	Trauma Therapy Phase. 1: Safety, 2: Trauma processing, 3: Cog/aff integration
TF-CBT	3-17	Multiple RCTs	mainly cog., some aff. and rela.	All, focus on 1 and 2
D-CPT	14-21	1 RCT for D-CPT, multiple for CPT	mainly cog., some aff. regulation	1 and some 2
PE-A	13+		cog.	2
Expressive/ Play Therapy	1+		aff., rela., meaning	1, 2, and 3
LI	at least verbal	No research for children, 1 RCT for adults	cog., aff. , som., neuro.	2 and 3
OEI	18 mo +	No RCTs for children, some for adults	cog., aff., neuro.	2 and 3
EMDR	?	Some RCTs for children; no evidence based status, yet	cog., aff., and neuro.	2 and 3

Trauma-Focused Cognitive Behavioural Therapy (TF-CBT). Trauma-Focused Cognitive Behavioural Therapy, developed by Cohen and Mannarino (2008), has received the most research attention among trauma therapies for children and has been shown to be effective with a variety of different age ranges and traumas (Diehle et al., 2014; Little & Akin-Little, 2008; Matulis, Resick, Rosner, & Steil, 2014). Its efficacy is well established and has been shown to reduce trauma symptoms in 80% of participants (Diehle et al. 2014). TF-CBT treats the parents/caregivers as well as the child and has been shown to work with effects of sexual abuse, domestic violence, traumatic grief, terrorism, disasters, and multiple traumas (Cohen & Mannarino, 2008; Little & Akin-Little, 2008). TF-CBT's target population are children and adolescents from 3 to 17 years of age.

In terms of treatment content, TF-CBT follows the PPRACTICE model, which stands for Psychoeducation, Parenting skills training, Relaxation, Affective modulation skills training, Cognitive coping skills, Trauma narrative and processing, In vivo exposure, Conjoint child-parent sessions, and Enhancing safety and future developmental trajectory (Cohen & Mannarino, 2008). It is usually administered in 12 sessions but can be easily adjusted if clients need more time to process (Diehle et al., 2014).

Cohen, Mannarino, and Knudsen (2005) investigated whether TF-CBT could produce lasting improvements in sexually abused children over a 12 months period. They randomly assigned 82 sexually abused children (age 8-15 years; 56 girls, 26 boys) to either TF-CBT or a non-directive supportive therapy (NST) and assessed their symptomatology pre-therapy, post-therapy, at 6 months follow-up, and at 12 months follow-up. Measures included the Children's Depression Inventory, the Trauma Symptom Checklist for Children, the State-Trait Anxiety Inventory for Children, the Child Sexual Behavior Inventory, and the Child Behavior Checklist.

Results seem to indicate that TF-CBT was superior to NST in producing lasting improvements at 12-months follow-up in depression, anxiety and sexual concern symptoms, as well as improvement in PTSD and dissociation symptoms.

Diehle et al. (2014) compared TF-CBT to EMDR in children who experienced posttraumatic stress symptoms (PTSS) in a Dutch outpatient facility. In their randomized open label blinded endpoint study design, forty-eight children were screened for PTSS and randomly assigned to either EMDR (n=25) or TF-CBT (n=23). The Clinician Administered PTSD scale for Children and Adolescents and the Children's Revised Impact of Event Scale were used at pre-treatment and post-treatment to assess PTSS. Results seem to indicate that TF-CBT and EMDR significantly reduce PTSS within children in outpatient settings. However, there was no significant difference between EMDR and TF-CBT in effectiveness.

Developmentally adapted CPT (D-CPT). One rather recent development in therapies for physically and sexually abused children is Developmentally-Adapted Cognitive Processing Therapy (D-CPT). The original version of CPT was developed to improve Post Traumatic Stress Disorder (PTSD) symptoms in adult survivors of CSA (Matulis et al. 2014). It is based on the cognitive assumptions that PTSD is not a self-recovery disease and that stuck beliefs need to be challenged with Socratic dialogue to overcome PTSD (Matulis et al. 2014). Rosner and all (2014), as well as Matulis et al. (2014) use an adapted version of CPT for adolescents and young adults with PTSD symptoms after CSA and childhood physical abuse (CPA). They describe four phases of D-CPT: (1) Planning-and-Preparation Phase, which involves 5 sessions in 4 weeks to develop a therapy contract, therapy goals, a safety plan, and therapeutic alliance; (2) Emotion Regulation Training, which includes 6 sessions in 4 weeks to monitor and identify dysfunctional behaviour and its long term consequences, education about emotions, as well as learning to

tolerate intense emotions; (3) Intensive CPT, which involves 15 session in 4 weeks to identify maladaptive beliefs, remembering the traumatic event through written accounts, and focusing on themes such as safety, trust, control, and esteem; (4) Developmental tasks (DT), which involves 4 sessions in 4 weeks and includes minimization of re-victimization by means of education about potentially abusive partners, education focused help, inclusion of social network, as well as a therapy review.

Compared to the original version, D-CPT has 4 main adaptations (Matulis et al., 2014; Rosner et al., 2014). First, the treatment frequency is increased especially in the emotion regulation training (phase 2) in order to increase the youth's therapy motivation; second, the commitment phase (phase 1) is added to enhance motivation; third, Dialectical Behaviour Therapy for PTSD (DBT-PTSD) is integrated to address behaviour and emotion management difficulties; and fourth, developmental tasks, such as career choice, individuation, and romantic relationships are given special consideration.

Researchers Narimani, Basharpour, Gamarigive, and Abolgasemi (2013) conducted a randomized controlled trial in Urmia, Iran to assess efficacy of CPT compared to holographic reprocessing. From a random sample of N=1000 high school students, 129 showed symptoms of PTSD according to results on the Traumatic Events Screening Inventory and the Symptom Checklist-Revised. Sixty participants were randomly selected and assigned to either CPT, holographic reprocessing, or a control group. Results seem to indicate that CPT is more effective in treating trauma related depression, while holographic reprocessing is a better fit for treating trauma related anxiety and dissociative symptoms.

Matulis et al. (2014) conducted research on the efficacy of D-CPT on adolescents who experienced CSA and/or CPA. Their design was a pre-test/post-test/follow-up design with no

control group or randomization. The twelve participants were diagnosed with PTSD secondary to CSA and/or CPA and were given the Structured Clinical Interview for DSM-IV Axis I and Axis II, the Diagnostic Interview for Mental Disorders in Childhood and Adolescence, the Interview for Traumatic Events in Childhood, the Culture-Fair Intelligence Test, the UCLA PTSD Reaction Index, the Depression Inventory for Children and Adolescents, the Adolescent Dissociative Experience Scale, and the Borderline Symptom List. Results seem to indicate that after administering D-CPT in 30 sessions there was a significant drop in PTSD symptoms as well as improvement of depressive symptoms, dissociative symptoms, and emotion regulation deficits at post-treatment and 6 weeks follow-up.

Prolonged Exposure Therapy for Adolescents (PE-A). PE-A is another often used treatment for children and adolescents who experience trauma. It is based on the assumption that people avoid situations, feelings, and thoughts associated with a traumatic incident in order to avoid anxiety; yet, avoidance only temporarily decreases the discomfort level (Foa, Chrestman, & Gilboa-Schechtman, 2009). With PE-A, clinicians help clients stop their avoidance of thoughts and situations that remind them of the trauma and help them develop better coping skills to confront these anxiety provoking situations. In their PE-A with PTSD handbook, authors Foa, Chrestman, and Gilboa-Schechtman (2009) offer tools to fulfill this goal by using in-vivo exposures called *real life experiments*. Clients are first educated in how habituation helps decrease anxiety and are then asked to draft a hierarchy of ‘scary things’. The therapist and client then conduct a few experiments in session, which involves facing these scary things in an increasing intensity before the client will be given homework to conduct carefully planned experiments throughout the week that relate to the hierarchy of scary things.

Efficacy studies seem to indicate that PE-A is superior to other, non-trauma focused

therapies. In their outcome study, authors Gilboa-Schechtman et al. (2010) compared PE-A to Time Limited Dynamic Therapy (TDLA) by randomly assigning 38 adolescents (age 12-18, 24 female and 14 male) to either therapy. At post-treatment, 6 months follow-up, and 17 months follow-up the following measures were assessed: Schedule of Affective Disorders and Schizophrenia for School-Aged Children, Children's Global Assessment Scale, Child PTSD Symptom Scale, and the Beck Depression Inventory. Results seem to indicate that both interventions reduced distress and increased functioning at both follow-ups; yet PE-A was more efficacious in reducing symptoms of PTSD and depression.

Expressive/Play therapy. Even though expressive therapy has not received as much research attention and is usually not used as a primary trauma-treatment, it is included in this list based on a rationale by Klorer (2005). She describes in her paper that trauma memories are stored mainly in the right brain hemisphere. The right hemisphere's function is predominantly based on sensations and images, and mainly responsible for creativity (Siegel, 2012), "which would make verbal declarative memory of the trauma more difficult" (Klorer, 2005, p. 216). Klorer goes on to say that "it makes sense to help the child make use of right-brain functions where the trauma memories are stored to express and work through issues of severe maltreatment in a way that supports the child's cognitive, developmental, and emotional levels" (p. 217).

By means of a case study, Klorer gives an example in which expressive therapy was used to process trauma without using words. Tammy, a 4-year-old with history of severe abuse and neglect, was not able to talk about the trauma her biological mother caused because Tammy saw talking about it as a betrayal of the mother. In therapy, Tammy built a life-size doll of a sister. She used this sister to express feelings towards her foster mother without betraying her biological mother. Tammy used this art to overcome a barrier of attachment trauma and was able to form a

bond with her foster family without the need of talking about the trauma itself. This example indicates that expressive therapy can help children to overcome their trauma without the need to verbalize it.

Lyshak-Stelzer, Singer, St. John, and Chemtob (2007) compared Trauma-focused art therapy (TF-ART) with a treatment as usual (TAU) to assess its efficacy in reducing PTSD symptoms in youth in an inpatient psychiatric facility. TF-ART followed a 16 session group protocol of art and discussion topics, while TAU was an art group with no trauma-focus. Both therapies were administered in group settings. Twentynine participants were randomly assigned to either condition and were given the UCLA PTSD Reaction Index to assess PTSD levels pre- and post-therapy. Results seem to indicate that TF-ART reduced PTSD symptoms significantly compared to TAU and pre-therapy scores.

Eye Movement Desensitization Reprocessing (EMDR). Authors Tinker and Wilson (1999) were interested in using eye movement desensitization reprocessing (EMDR) with children. They assert that, according to anecdotal evidence, EMDR works with children. Depending on the age of the child it needs a few changes from the standard EMDR protocol for adults. For example, in EMDR, clients are asked to think of an upsetting thought and a positive thought from the presenting problem and then to rate them on a 1-10 scale. Children might have problems coming up with these thoughts and might not know how to rate these feelings. Other steps in the protocol are to follow the finger of the therapist and to check for somatic problems after the EMDR. The authors mention that this might be problematic for some children. Additionally, while EMDR is considered an evidence based treatment for adults, EMDR for children has not yet achieved this status (Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2014).

Observed & Experiential Integration (OEI). Observed & Experiential Integration (OEI) is another intervention that, so far, has only received anecdotal evidence to support its efficacy with children. Bradshaw and Cook developed this method to help clients integrate their traumatic experiences neurologically. OEI itself is still considered an experimental therapy and OEI-work with children is still in the process of being documented. Cook (2014) gives examples of approaches to work with trauma-exposed children as early as 18 months, yet there has been no formal research study on this.

Conclusion. As can be seen, the availability of evidence-based treatments for trauma-exposed children is slim; the choice seems to be either cognitive focused therapy, which might circumvent trauma that is stored in the right brain hemisphere, or exposure therapy, which might re-traumatize children. Azar and Wolfe (2006) emphasize this by stating that “the limited child-focused treatment outcome research continues to be striking” (p. 631), which leads to a limited availability of evidence for other, non CBT-based therapies.

Additionally, most of these interventions are geared towards older children (eight years and older), which leaves younger children without proof for effective trauma therapy. Schore (2003) asserts that “developmental models suggest that psychotherapeutic treatment for severe attachment disorders should begin as early in the life span as possible” (p. 231). Though Schore explicitly mentions attachment disorders, elsewhere he argues that traumatic stress is most often a relational issue.

Lifespan Integration Therapy

As shown above, the availability of evidence-based trauma therapies for children is limited, while the prevalence of trauma-exposed children indicates that more efficacy research needs to be conducted, especially with therapies that focus on involving both brain hemispheres

and do not re-traumatize clients. Anecdotal evidence seems to suggest that Lifespan Integration Therapy (LI) can facilitate neural integration, without prolonged exposure or re-traumatization, as well as long-term success even if the client only participated in a few sessions.

LI is based on the assumption that traumatic events in a client's life are not fully integrated with other life events and therefore leave a residue feeling that the event is not over yet. The therapist helps the client to integrate these traumatic events with the use of a client specific timeline of life events. After briefly addressing the traumatic experience, the therapist reads the timeline to the client so that the client can briefly visualize other life events in order to help integrate the traumatic event. After repeating this timeline up to 8 times per session, adult clients report a sense of integration, being able to experience oneself more fully, exhaustion, and relief (Pace, 2012; Thorpe, 2012).

LI is a relatively new therapy and thus incorporates parts from other therapies, which have shown to be effective. LI was developed in 2002 by Peggy Pace who realized that she used one approach over and over with most of her clients because it seemed to bring quick and lasting changes in her clients. She used an internal dialogue between the client's current self and their child self in order to convince the child self that the traumatic event is over by going through the timeline over and over again. The first therapist Pace trained was Cathy Thorpe who then, together with Pace, refined the therapy and also started using LI with children (Thorpe, 2012).

LI makes use of several proven therapeutic techniques and assumptions, such as attunement of the therapist to the client, neurological integration through repetition, internal attachment between ego states, and healing through habituation. However, LI is different than other therapies in several ways: First, it uses a client-created timeline of their life. This timeline is repeatedly read to the client so that the client can imagine these events briefly in order to

briefly activate the neural patterns associated with these memories and eventually, through repetition, achieve stronger neural integration between these memories. Second, LI is not a talk therapy, per se; rather than talking about a traumatic topic to work through with the timeline, it uses a body-mind affect bridge, which uses somatic markers to find traumatic events that are not integrated. Third, it helps clients without the need of re-traumatization (Thorpe, 2012).

In her book *The Success and Strategies of Lifespan Integration*, Thorpe (2012) describes three outcomes from LI, which she sees consistently in her clients: First, repetition of the timeline reduces distress from any remembered event; second, repetition of the timeline can resolve unconscious, body-based memories; and third, clients change their way they relate to others. Based on integration taking place within LI, the following three categories of change can be observed: “1) The presenting problem resolves ... 2) Clients increase their emotional and cognitive awareness [and] 3) Positive results begin to appear in areas that seem unrelated to the presenting issue” (p. 14-5).

According to Thorpe (2012), the foundational hypothesis of LI is twofold: “1) Earlier memories influence how the brain processes current events, and 2) A client who is stuck in troubling thoughts, feelings, and behaviors can solve current situations by resolving earlier memories” (p. 27). LI achieves this resolve by using timeline repetitions.

Timeline. The timeline is at the heart of Lifespan Integration. It is “the unique, therapeutic change agent of Lifespan Integration and is the main component of LI therapy” (Thorpe, 2012, p. 18). Clients are asked to prepare a list of events for their entire lifespan. In adult clients, one event per year from the earliest memory on is usually the standard. For child clients, about 2-3 events per year are considered to be enough. These events do not necessarily have to be traumatic or of utmost importance in any way. It is important that the client actually

remembers these events, as opposed to stories or photographs about these events, and can include anything from “the house I lived in when I was 4” or “The green bicycle” or “When my boyfriend broke up with me” (See APPENDIX A for instructions how to create a timeline). The idea behind this timeline is that through repetition of these life events, a coherence and integration can be established.

When the timeline is read, the client is asked to imagine each cue only briefly to bring up some emotional connection but not long enough for these emotions to get overwhelming. If the client gets overly emotional while imagining the events, integration is not as effective (Pace, 2012).

The problem that the timeline addresses is the lack of integration of various memories and states of mind across time. As Siegel (2009) explains: “certain suboptimal attachment experiences produce multiple, incoherent working models of attachment and engrained and inflexible states of mind that remain unintegrated across time within specialized and potentially dysfunctional self-states” (p. 306, as cited in Pace, 2012). Siegel (2012) also emphasized the need for the idea of a timeline in another work. He asserts that “as we accumulate lived moments across time, we are capable of recalling not as one self, but as the many types of selves that have existed in the past. Narrative recollection, then, is the opportunity for those varied states to be created anew in the present” (p. 89). He goes on to say that if people have difficulties connecting their inner selves because of conflict or maladaptation, “then the development of a specific process that integrates the selves across time may become important” (p. 211). It seems that the LI timeline could offer such an opportunity to integrate ego states through time.

Another reason why repetitions of a timeline is important, especially when working with trauma victims, is that trauma is stored in the brain in isolation and without time reference. Ogden, Minton, and Pain (2006) emphasize that “important components of traumatic events are encoded and processed at a subcortical level. Past, present, and future are not differentiated, and aspects of previous traumatic experience are confused with current reality” (p. 165). LI’s timeline helps to prove to the body that the traumatic event is over by repeating life events from after the trauma over and over again.

Ego states. The term *ego states* is used in many theoretical approaches. In LI, ego states are like snapshots of a person at a specific moment in time. Thorpe (2012) explains it this way: “in Lifespan Integration ego states are thought of as self-states that hold emotional, mental, and sometimes physical,[sic] experiences” (p. 19). For example, as adults we can often ‘go back in time’ and remember a specific event, such as a birthday party when we were young. We might even remember sounds, smells, emotions, what we thought, and maybe even sensations. This would be considered an ego state. Each ego state is considered part of the whole person, yet some states might be less integrated in the whole as others. Siegel (2012) describes these states the following way: “A person’s mental life as a whole functions as a system that exists across time and is composed of many relatively distinct but interdependent states” (p. 210).

Affect bridge / Body-mind integration. Lifespan Integration is not a talking therapy, per se; clients do not talk about their problem in order to find relief. LI assumes that the body and mind are able to point the client and the therapist to problems from the past that are related to the current presenting problem. Thorpe (2012) defines the affect bridge this way: “The process in which a client identifies a current problem and its associated body feelings, and then

follows the mind-body system to the appropriate neural networks associated with the problem” (p. 21). Often these feelings are experienced in the body core.

LI’s assumption that the body and mind are able to find problems this way is based on the idea that the mind and the body are one interconnected entity. Thorpe (2012) asserts that “the brain and body are one interrelated system considered the mind” (p. 31-2). Siegel (2014) adds similar thoughts: “Embodied means that the mind is more than simply what happens in your head—it extends to at least the whole of the body in which ‘you’ live” (para. 3). He argues elsewhere (2012) that from a neurological point of view, the mind, brain, and the body are inseparable. The mind is more than just an output of the brain; and even the brain is not only restricted to the skull. He asserts that

the body proper is intimately integrated with skull-based neural tissue. ... When we use the term ‘brain’, we can now see that it makes no sense in our conceptualization to separate this skull-based structure from the body as a whole. (p. 17)

Authors Lanius, Lanius, Fisher, and Ogden (2006) add to this by stating that body-mind integration in therapy “may facilitate the integration of traumatic material sequestered in subcortical or right brain areas by working bottom-up [emotion first, then cognitive], deepening mindfulness (which may increase cortical activity), evoking and studying trauma-related fixed action tendencies, and then experimenting with the practice of new actions” (p. 161)

Internal dialogue. Another important technique in LI is the internal dialogue between the various ego states. The therapist coaches the client to have a conversation between the current ego state and the younger self (Thorpe, 2012). Depending on the protocol used, the therapist asks the adult client to imagine her current self to help her younger self with the traumatic experience. The therapist will coach the client to do and say helpful things to her

younger self. This internal dialogue is used to strengthen internal attachment between various selves, increase integration of the selves, and to prove to the younger self, by means of the timeline, that the traumatic event is over.

Protocols. LI uses a variety of different protocols, which give clinicians the opportunity to address various presenting issues. Most protocols were developed for adult clients, though Thorpe (2012) developed a child specific protocol and adapted others, which will be described below. The standard protocol is often used to help clients overcome a situation that they are currently stuck in. The Birth-to-Present protocol helps clients who have experienced attachment problems or more complex issues that cannot be narrowed down to one single incident. It also helps client with insecure attachments to improve affect regulation. The PTSD protocol is used with clients who have a single traumatic incident, such as a car accident. The following information is taken from Pace's (2012) *Lifespan Integration* and is mainly focused on work with adults; a section on LI with children is presented afterwards.

Standard protocol. The standard protocol (SP) consists of 9 steps. Steps 1 and 2 are done only once, steps 3 to 7 are the timeline repetitions, and steps 8 to 9 is to close the session. In step 1 the client is asked to focus on bodily sensations when discussion the presenting problem to explore what past memories come up with these sensations. In step 2 this so-called source memory is then briefly discussed. If the client comes to session with a problem from the past, the therapist will start there. Step 3 involves the client to close her eyes, go back to this memory scene, be the self of that memory, and point to where she feels this sensation in her body. The therapist then guides the client to imagine that her current self enters the memory scene to tell her younger self that she has grown up and that the current self is here to help the younger self. In step 4 the therapist coaches the client to take her younger self away from the memory scene to

a peaceful place. This place can be imagined or real but should be in the past or time-less. Often clients imagine a beach or a peaceful forest. In step 5, the therapist coaches the client to speak to her younger self to make her feel safe and that the event she was rescued from happened a long time ago. It is crucial that the therapist stays attuned to the client and the younger self and anticipates what they need in order to coach the client through this exercise and to make the younger self feel safe.

In step 6 the therapist asks the client to show her younger self the life that she will have. The therapist reads the cues from the client's timeline out loud and the client is asked to imagine the events together with the younger self. This is often compared to watching a picture slide show or a movie together. Step 7: When the client reaches the current age, she is asked to bring her younger self into her current home and show her around. The therapist coaches the client to tell the younger self that she is safe and to ask whether she has any questions about what she saw. After a brief break and checking in with the client, the protocol starts again at step 3, in which the client imagines the source memory.

The amount of repetitions depends on the intensity of the somatic feelings expressed in step 3. Once the feeling is gone, this indicates that the memory is integrated and the protocol can continue with step 8, checking with the client about the source memory, and step 9, checking with the client about the presenting problem.

Birth to Present Protocol. The birth to present protocol (BP) is used with clients who have experienced attachment ruptures, have difficulty with affect regulation, or have experienced birth trauma. The BP starts with the therapist holding an infant doll and asking the client to close her eyes and imagining going back in time to her own birth. The therapist at this point narrates a birth as it would have happened around the time when the client was born, starting with the last

contractions of her mother. The therapist is in the room with the client and is given the baby once it is born, holds her safely, and asks the client to imagine that the therapist cares for the baby as she bathes and dresses her. Then the client, the therapist, and the baby go to a safe place and the therapist narrates a normal development to the client up onto where the client's earliest memories from the timeline starts. Once at the end of the timeline, client and therapist take a little break to check in and eventually repeat this protocol several times.

The main difference to SP is that in BP there is no memory scene the client floats back to but rather her own birth. Thorpe calls this imagining of a normal development 'putting good stuff in'. Rather than trying to convince that this was actually what happened, by taking the client through a normal development, she can experience an attachment with herself that she could not have before.

PTSD protocol. This protocol is another variation of LI. The timeline for this protocol is more detailed and the focus is only on the trauma. Each memory cue is only visited briefly to not flood the client with emotions. The cues start just before the traumatic event and then goes moment by moment. The therapist creates the timeline together with the client by asking, "and then?". For the days and weeks after the trauma, one cue per day is sufficient. If it has been several years since the incident, the cue list goes day by day and week by week for the first months, and then month by month for the first year or so. The PTSD protocol is different in that there is no internal dialogue between ego states and no coaching by the therapist.

LI with children. Lifespan Integration therapy seems to be especially suitable for children. They seem to engage easily in the process of LI with its timeline and imagining their life events. Pace (2012) mentions three advantages children and youth have over adults in regards to responsiveness to LI: First, their brains are still more malleable; second, they have not

built up as many defenses; third, they enjoy the imagination required by the timeline and that they can help their younger selves. In terms of practicalities of LI with children, there are a few differences compared to the adult protocols. Firstly, according to Thorpe (2012), children under the age of 12 are not being asked to enter with their current self the trauma scene to help the younger self. Rather, a safe adult is being imagined to come into the scene to rescue the child and take her to the peaceful place. Secondly, the timeline needs to contain more cues per year, since it will be substantially shorter to adults. Thorpe (2012), who focused on refining LI for children suggests 2 cues per year in approximately 6 months interval; Pace (2012) suggest 3-4 cues per year.

LI has been used with several kinds of presenting issues, including children who have anxiety, ADHD, have experienced birth trauma, early surgeries, sexual abuse, car accidents, adoption issues, and other concerns. When attempting to heal trauma-exposed children with LI, it is important to keep a two-step process in mind (Thorpe, 2012): First, the actual trauma memory needs to be addressed and healed with repetitions of the timeline, mainly to prove to younger states that the trauma is over. Once the child has less somatic expressions about the trauma memory, the second step is to coping mechanisms that the child developed as a result of the trauma. In order for a child to deal with the conflicting and intense emotions from a trauma, the child often comes up with ways to avoid the memory of the trauma in order to build resources to function in spite of it (Thorpe, 2012).

There are also a few practical differences in using the PTSD protocol with children. First of all, the child sits in the lap of her caregiver throughout the whole session. This is also true for the other protocols. Next, instead of having the child visualize the memories of the traumatic event, in especially traumatic situation it can help to use projective play; the therapist can use

stuffed animals and dolls to act out the memory cues. The child chooses the animals and dolls that best represent the real person. In addition to these characters, a police figure can be introduced to punish the perpetrator and create a sense of retribution and safety.

To underline the efficacy of Lifespan Integration Therapy with children, Thorpe (2012) asserts this:

Treating a child's trauma with Lifespan Integration is almost miraculous. Within a few sessions, most trauma symptoms completely disappear when targeted with LI. Unlike other therapies, with LI, children do not have to share very much about their trauma in order to heal it. They are remarkably capable of finding younger states within themselves that need healing, and integrating those states through the timeline. (p. 234)

Hybrid Protocol. Thorpe (2015) created a special protocol to be used with children who have difficulties coming up with a source memory. She calls this protocol the hybrid model since it combines elements of the Birth-to-Present Protocol with focus on a presenting feeling. The client is asked to focus on the presenting feeling while the therapist does a BP. If the client has difficulties or is too young to engage in finding source memories for a standard protocol (SP), the client can also bring up a particular feeling that is negatively affecting her, while the therapist does a BP. Thorpe's rationale is that while the child might not be able to remember a specific situation of an upsetting feeling, the child might connect with a certain memory while holding on to the presenting feeling and going through the whole timeline, including birth, the feeling will most likely be 'picked up'

Conceptual Underpinnings of Lifespan Integration Therapy

When Pace first developed Lifespan Integration therapy, she was influenced by contemporary research findings from attachment theory, interpersonal neurobiology including

neural integration and neuroplasticity, as well as ego-state therapy, body-mind integration, and imagery guidance (Thorpe, 2012). Pace (2012) states that “Lifespan Integration ... is a new therapy which integrates neural structures and firing patterns throughout the body-mind, and across the lifespan [and] is based on the hypothesis that much psychological dysfunction results from insufficient neural organization” (p. 15-25). In the following pages the above mentioned theories will be explained and analyzed in more details in regards to their influence on LI.

Attachment. LI draws on attachment theory in three regards: First, the therapist needs to be attuned to the client’s state of mind at every moment of the protocols; second, the therapist needs to create a secure base for the client to explore her life from; and third, the client builds secure attachments to her younger selves. This part will first briefly provide an overview of attachment theory and then describe the specific constructs mentioned above.

Attachment is part of our human nature and necessary for mental health. Bowlby (1988), the pioneer of attachment research, asserts that “the capacity to make intimate emotional bonds with other individuals is regarded as a principal feature of effective personality functioning and mental health” (p. 121). Siegel (2001) adds to this by stating that “though the attachment system is ‘hard-wired’ in the brain, the experiences that an infant has will directly shape the organization of that system” (Siegel, 2001, p. 69).

There are three principal patterns of attachment: Secure attachment, anxious resistant attachment, and anxious avoidant attachment. Secure attachment can develop when a child knows that her parents are “available, responsive, and helpful should she encounter adverse or frightening situations” (Bowlby, 1988, p. 124). In the anxious resistant attachment children are uncertain whether they can rely on their caregivers to be available, responsive, or helpful to them in times of needs and are thus more prone to separation anxiety. In the anxious avoidant

attachment children know that their caregiver will not be available, responsive, or helpful. On top of that they can expect to be treated adversely in times of needs. Bowlby adds a 4th category for children who were difficult to classify as one of the three above mentioned styles. Since relationships in this 4th category are marked by chaotic, disorganized, and unpredictable behaviour from the child towards her caregiver, this category was called disorganized (p. 127).

Siegel (2012) asserts that “[r]epeated experiences become encoded in implicit memory as expectations and then as mental models or schemata of attachment” (p. 91). These models serve as the foundation of all of our subsequent relationships as well as our internal pattern of relating to the self. Siegel lists the following domains as being influenced by attachment styles: “overt behavior, interpersonal communication, emotional regulation, autobiographical memory, and narrative processes” (p. 96).

Bowlby (1988) asserts that

attachment theory emphasizes: (a) the primary status of biological function of intimate emotional bonds between individuals, the making and maintaining of which are postulated to be controlled by a cybernetic system situated within the central nervous system, utilizing working models of self and attachment figure in relationship with each other. (b) the powerful influence on a child’s development of the ways he is treated by his parents, especially his mother-figure. (p. 120)

Even in the 1980s and earlier, Bowlby was aware that there are neurological underpinnings to attachment theory and it was only after the decade of the brain between 1990 and 2000 that researchers such as Siegel, Schore and others were able to explain attachment theory’s underpinnings neurologically.

Attunement. The term attunement is usually used in regards to an attachment relationship between a child and a caregiver; however, the relationship between a therapist and a client can be seen in a similar way. The therapist needs to be emotionally attuned to her client's needs at every moment in order to be able to provide the help the client and the younger self needs. Pace (2013) asserts that in LI, "the therapist's attunement with the client is very much like the attunement between a parent and an infant" (p. 4). Siegel (2007) explains attunement this way:

When relationships between parent and child are attuned, a child is able to feel felt by a caregiver and has a sense of stability in the present moment. During that here-and-now interaction, the child feels good, connected, and loved. The child's internal world is seen with clarity by the parent, and the parent comes to resonate with the child's state. (p. 27)

Along the same lines, psychologist Cozolino (2010) describes attunement this way:

The combined sense of safety, freedom from anxiety, and excitement generated via attunement provides the affective background for the experience of vitality and spontaneous expression. ... This safe emotional background created by proper attunement, reciprocity, and loving kindness parallels an optimal educational and psychotherapeutic relationship. (p. 181-2)

When the therapist stays attuned to her clients needs on a moment to moment basis, the client will be able to experience a sense of safety and feeling of security.

Secure base. In the standard protocol and birth to present protocol, before the actual timeline-works can begin, the therapist needs to create a secure base (also known as safe holding environment) for the client. By going back to a traumatic event, the client might re-experience and show behaviour patterns that seem discomforting. Thus, it is of utmost importance that the

therapist acts as a safe and secure place for the client to explore these memories. Ogden, Minton, and Pain (2006) describe the holding environment in terms of an infant/mother relationship.

They assert that by

containing the child and providing a *holding environment*, the mother is able to hold the child both literally and in her mind in such a way that demonstrates her recognition of the child's physiological and affective states and also her ability to deal with them effectively. She can tolerate and 'stay with' the child through his or her dysregulated states. (italics from source, p. 40)

In terms of LI, it is the therapist's role to provide such a holding environment by being attuned to the needs of the client on a moment by moment basis and be able to tolerate various emotional states.

Similarly, Bowlby (1988) asserts that the role of a caregiver in providing a secure base is "one of being available, ready to respond when called upon to encourage and perhaps assist, but to intervene actively only when clearly necessary" (p. 11). He goes on to say that one of the therapist's tasks is "to provide the patient with a secure base from which he can explore the various unhappy and painful aspects of his life, past and present, many of which he finds it difficult or perhaps impossible to think about and reconsider without a trusted companion to provide support, encouragement, sympathy, and, on occasion, guidance" (p. 138).

Internal attachment. One of the steps in the standard protocol is to revisit a traumatic scene as the younger self and then to enter it as the current self to help and support the younger self. This step, the coming for rescue, seems to be in and of itself healing and restorative.

Bowlby (1988) seems to think similarly: "Whilst attachment behaviour is at its most obvious in early childhood, it can be observed throughout the life cycle, especially in emergencies. ... To

remain within easy access of a familiar individual known to be ready and willing to come to our aid in an emergency is clearly a good insurance policy - what ever our age” (p. 27). While he was not specifically talking about internal attachment, even this imagined attachment between the two selves seems to be helpful.

Interpersonal Neurobiology. Interpersonal Neurobiology (IPNB) is a term coined by Daniel J. Siegel to denote his research efforts into the study of the mind and brain by drawing from various scientific fields, such as neurobiology, genetics, memory, attachment, complex systems, anthropology, and evolutionary psychology (Siegel, 2001). Siegel (2012) explains that IPNB

seeks to create an understanding of the interconnections among the brain, the mind, and our interpersonal relationships ... To put simply, human connections shape neural connections, and each contributes to mind. Relationships and neural linkages together shape the mind. It is more than the sum of its parts; this is the essence of emergence. (p. 3)

Lifespan Integration draws on three principles from IPNB: (a) neuroplasticity; (b) neurons that fire together, wire together; and (c) neural integration. In the following paragraphs each of these principles will be briefly addressed.

Neuroplasticity. Neuroplasticity describes the concept that the brain is able to continuously develop and change through experience. This understanding is rather new; up until a few decades ago, scientists believed that the brain, after its full development in childhood, would not be able to change afterwards. Neuroplasticity explains that our brains are not static; it is possible for new neurons to develop and for existing brain regions to take on a new role. Siegel (2012) describes it this way:

The vast numbers of neural connections are not static; the brain continually changes its synaptic interconnections in response to experience. This means that the number of firing patterns possible across a lifespan is virtually infinite. The number of ‘on-off’ patterns of neuronal firing even in a given moment of time is immense, estimated as a staggering ten times ten one million times. (p. 16)

He also asserts that it is “experience [that] shapes the function of neural activity in the moment, and can potentially shape the continually changing structure of the brain throughout the lifespan (Siegel, 2001, p. 70).

Neurons that fire together, wire together. This principle basically asserts that when two independent neural circuits are activated together on a repeated basis, they will start to associate with each other and activate at the same time. Neurologist Donald Hebb was one of the leading scientists to first observe this pattern. He states that “any two cells or systems of cells that are repeatedly active at the same time will tend to become ‘associated’ so that activity in one facilitates activity in the other” (as cited in Siegel, 2012, p. 49). Lifespan Integration therapy repeatedly pairs memory cues with each other that might not have been activated together before. Thus, by repeating the timeline over and over again, the memories integrate on a neurological level. Despite of the lack of neuro-imaging of LI therapy, “the lasting emotional improvement reported by clients, in addition to the scientific research available on brain change, implies that their brain has changed [because of LI]” (Thorpe, 2012, p. 40).

Integration. Integration is at the crux of mental health and is needed to create a coherent and cohesive state of mind. Siegel (2012) explains that the brain is a complex and self-organizing system; it always wants to make sense of the data that it receives and integrate it into information that is already available. He argues that “coherence [of states of mind] emerges with

increasing complexity - an outcome of integration and mental health” (p. 187). Additionally, Ogden, Minton, and Pain (2006) assert that “without this integration, the flow of our minds moves towards rigidity and chaos. In this way, trauma can be seen to fundamentally impair integration within an individual, dyad, family, or community” (p. xiv).

In her effort to find a therapy approach that would be able to foster such integration, Pace (2012) posed these questions: “When working with adults who were traumatized during developmental stages, how can we best help them to repair neural systems that were damaged? How can we help them to integrate neural networks that remain isolated from each other?” (p. 20). Siegel (2012) seems to be offering her a direct answer. He asserts that “regulation results from integration ... When the brain links its differentiated circuits to each other, the nervous system achieves homeostasis and develops new levels of intricacy in its functions” (p. 36).

Siegel (2014) asserts that “In Interpersonal Neurobiology we say that integration is the basis of health. Integration is defined quite simply as ‘the linkage of differentiated parts.’ With integration emerges coherence and harmony; when integration is impaired, chaos or rigidity ensues” (para. 7). He goes on to say that

how we learn to focus attention can activate specific [neural] circuits. Where attention goes, neural firing occurs. And where neural firing happens, neural structure can be strengthened. When that firing is integrative, then we can see how using our attention in integrative ways can actually reinforce coherent integrative functioning in the moment and grow integrative fibers for future functioning to be more balanced, coherent, and harmonious. (para. 7)

Lifespan Integration uses these concepts to form its foundation. Attachment theory and Interpersonal Neurobiology are established theories and therapeutic approaches; they possess

evidence for their efficacy. While LI is still in need for empirical evidence, the foundational design features are based on empirically informed rationales.

Current State of LI Research

As mentioned above, current evidence to support LI's efficacy is scant and exists almost exclusively in anecdotal form. To my knowledge, there has been one unpublished clinical trial in the US by Balkus (2012), a HSCED outcome study with three participants by Hu (2014), which is in process of publishing, a research project in Sweden on the efficacy of LI compared to treatment as usual with rape victims by Rajan (personal communication, May 22, 2014), and a research study on LI with Münchhausen disorder (Binet, E., & Tarquinio, C., 2015) that is also in process of being published. Anecdotal evidence consists in form of published books by the authors and two books from clients about their experience with LI (Sprout, 2015; Whitacre, 2014); as well as discussions on LI's electronic mailing list and in conversations with locally established therapists.

In her research, Balkus (2012) investigated the effectiveness of treating traumatized women with LI and hypothesized that LI treatment will decrease avoidance and intrusion and that it will persist for at least a month period. Balkus recruited 22 women from a rehabilitation centre for women and children in Seattle, out of which 17 completed the study. Participants' level of trauma was assessed three times (prior to session 1, prior to session 2, and 1-month follow-up) by means of the Impact Events Scale (IES), which were administered by three certified LI counsellors. The treatment consisted of 2 sessions each one hour to one and a half long. Data analysis was completed with repeated measures analyses of variance to compare participants' avoidance and intrusion responses over time. Results indicate that there was significant decrease in avoidance and intrusion scores after two sessions and at the follow-up.

Hu (2014) researched the efficacy of LI on basis of three individual HSCED studies with participants who experienced sub-optimal attachment patterns. The three participants, age approximately 20, 40, and 60, were treated by three different experienced LI therapists. Presenting issues in the participants were linked to chronic issues stemming from childhood abuse and trauma. To inform the Rich Case Records, Hu used the CORE-OM, the Personal Questionnaire, the Adult Attachment Interview, the Helpful Aspects of Therapy form, and the Change Interview. Results from the adjudication process suggest that all three clients experienced clinically significant improvement over the course of therapy.

With this therapy we have a promising clinical innovation because of its conceptual integration of empirically based principles, in combination with clinical evidence from therapists and clients. Lifespan Integration is based on evidence based principles, which still need to be researched in this constellation. With Hu's and Balkus' research the first step was made towards finding empirical evidence for LI's efficacy. This current research project will add to this base of evidence to support LI's conceptual integration.

Purpose and Rationale of Study

There are two main reasons that led me to decide to research Lifespan Integration Therapy with trauma-exposed children. First and foremost, I have a strong commitment to pursuing and promoting researching effective trauma therapies for children on a professional and personal level. I work with trauma-exposed children and as an evidence-based practitioner, I want to ensure that the treatments I use are empirically supported. I use LI as one of many treatment modalities and have seen improvements in my clients that suggest LI to be efficacious.

On a more personal level, I experienced complex trauma in my life as a young child and its effects are still showing today. Which makes me wonder, if I would have had the option to

receive an evidence based, trauma-focused therapy, whether I would have been experiencing the same intensely negative emotions. While this question is a futile one, since there is no sense in discussing ‘what ifs’, the desire to find a therapy that works for other children is deeply engraved on my heart. My passion is with the many children who have been exposed to events that are beyond their control and impact their emotional, behavioural, and other kinds of well-being in a detrimental way. As a clinician I want to provide these children with the best tools available that have a strong evidence base for their efficacy.

Secondly, Lifespan Integration Therapy promises to offer distinctively effective approaches for treatment of trauma-exposed children, at least according to clients’ stories. Combined with the fact that there is extremely little research on this therapy and none on LI with children, I felt the urge to provide empirical evidence that will help to distinguish whether LI works and what it is that makes it work. As elaborated on above, LI is a gentle and non-intrusive way without the need to revisit traumatic memories in an emotionally intense manner; however, the mechanisms of therapy have only been examined in two studies (Balkus, 2012; Hu, 2014).

With the above in mind, I decided to utilize a thorough single case research method that would help shed light into LI’s early beginnings of research. Based on the design, I pose the following research questions: (1) Did the client change substantially over the course of therapy?; (2) Is this change substantially due to the effect of therapy?; and (3) What factors may be responsible for the change? To put it in Siegel’s (2001) words: “If we can find a way to facilitate neural integration within the minds of individuals across the lifespan, we may be able to promote a more compassionate world of human connections” (p. 90).

CHAPTER 3: METHOD

Thorpe (2012) asserts that Lifespan Integration has an extremely high efficacy in clinical practice. She explains that it works fast, with a wide variety of presenting problems, helps solve problems, which were not directly addressed in session, that clients do not have to work through emotions to find relief, and that there is no retraumatization. She also mentions that in her experience as LI therapist, she did not have one client with whom LI did not work. These are strong claims and so far anecdotal evidence is the main kind of evidence supporting such claims. For LI to gain acceptance among other therapies, a different kind of evidence is needed in addition to the anecdotal evidence. In order to gain some more systematic evidence, this present research study was conducted as a Hermeneutic Single Case Efficacy Design study (HSCED) with one 12-year-old client. Through intense study of affirming and contradicting evidence from LI sessions with the child client, it was my aim to shed light on whether the client changed, whether the change was due to therapy, and which aspects of therapy were most helpful.

Research Design

This research study used Robert Elliott's Hermeneutic Single Case Efficacy Design (HSCED; 2002, 2012, 2014), an adjudicated, mixed-method case study research method. Based on a rich case record of quantitative and qualitative data from the therapist and the client, an outside jury of research and therapy specialists argued for and against LI's efficacy. Additionally, HSCED shed light on which aspects of LI worked in this case and which were hindering. As indicated by its title, HSCED uses an hermeneutic approach to discover knowledge; by interpretive and in-depth readings of the outcomes, an approximation of knowledge about the client's change can be gleaned.

HSCED is a comprehensive design, which gives the researcher enough systematic

structure to produce evidence for and against therapy outcome, while at the same time being flexible enough to allow for individual differences in research scopes (Elliott, 2002; Elliott, 2012; Partyka, 2010). While the adjudication process is prescribed by the design, the kinds of assessments that are being used are up to the discretion of the researchers. Elliott (2002) suggests several measures to use; yet even in his own research he changed some of the assessments to individual client needs. Nonetheless, the Helpful Aspects of Therapy form (HAT), the Personal Questionnaire (PQ), as well as the Change Interview are typically employed in HSCED studies (Elliott, 2002; Elliott, Partyka, Alperin, Dobrenski, Wagner, Messer, et al., 2009; MacLeod, Elliott, & Rodgers, 2012; McLeod & Elliott, 2011).

HSCED aims to answer three research questions: (1) Did the client change substantially over the course of therapy? (2) Is this change substantially due to the effect of therapy? and (3) What factors (including mediator and moderator variables) may be responsible for the change? (Partyka, 2010; Stephen, Elliott, & Macleod, 2011). These questions lend themselves well “for making initial claims of causal status for new therapies or the application of existing therapies to new client populations” (Elliott et al., 2009).

One of the reasons for developing HSCED are the shortcomings of randomized clinical trials (RCT), in particular its causal emptiness, as well as the shortcomings of traditional N=1 case studies, such as reliance on anecdotal evidence, confirmatory bias, and narrative smoothing (Stephen & Elliott, 2011; Stephen, Elliott, & Macleod, 2011). Elliott’s concern from the beginning was to build a research design that could easily be used in a naturalistic setting (i.e. counselling practice) while providing solid and replicable evidence for therapy outcome (Partyka, 2010). HSCED gives the flexibility from being a method that one researcher/practitioner could conduct alone to a design that involves two research teams and

external judges. The first can easily be used in an informal research setting, in which the therapist is interested in the efficacy of her therapy approach. The latter, also known as adjudicated HSCED, removes the possibility of researcher bias by using two teams of researchers that argue for and against client change due to therapy, as well as outside judges.

HSCED compared to RCTs. Traditionally, the *modus operandi* for outcome research has been and still is the randomized controlled trial design (RCT). As briefly alluded to above, RCTs come with inherent problems, which make it more difficult to conduct outcome research with new therapies or new clientele. Elliott (2002) lists several difficulties with many RCT studies, such as poor statistical power, differential attrition, and poor generalizability due to restricted samples. Elsewhere Elliott (2012) argues that RCTs are not sufficient to establish evidence-based practice because of causal emptiness. He asserts that “[RCTs] focus narrowly on establishing the *existence* of a causal relationship between a mental health intervention and client change, but do not specify the *nature* of that relationship” (emphasis is original, pp. 78-9). RCTs do not lend themselves to explore the complexity and subtleties of an individual client and the therapy process, “making it impossible to explain the causal relationship between the client, therapy and any change that may have occurred” (Stephen, Elliott, & Macleod, 2011, p. 57). Even when RCTs show efficacy on a general term, out-of therapy influences are usually not paid attention to (Elliott, 2002).

Another shortcoming of RCT is its reliance on laboratory settings and focus on randomization. In natural clinical settings, both of these characteristics are usually not found; clients usually do not pick their therapists and/or therapeutic orientation by random, nor are the sessions conducted in laboratories. RCTs need to control for many variables, which creates the need to conduct the research in settings that allows researchers to control variables such as

adherence to treatment protocol, characteristics of the clients, and the same setting for each session. Unfortunately, in order to control these variable, the research settings can become quite different to a typical therapy setting a client is likely to encounter. This, then, seems to beg the question of external validity of RCTs if the settings are different to therapy offices. (Carvalho, Faustino, Nascimento, & Sales, 2008; Westen, Stirman, & DeRubeis, 2006). Weisz, Yi Ng, Rutt, Lau, and Masland (2013) emphasize this point by stating that only 1% of RCTs "included clinically referred youths, at least one practicing clinician, and some treatment in a service setting" (p. 564). The authors go on to say that when comparing evidence based psychotherapies (EBP; i.e. those with established efficacy outcome from RCTs) to usual care, EBP did not significantly outperform usual care.

Often researchers propose case studies as an alternative to RCTs in order to gain insight into clinical details of the therapy process. McLeod and Elliott (2011) list the following characteristics as strengths of case studies: Complexity, longitudinal sensitivity, appreciation of context, and narrative knowing. They go on to argue that while RCTs are the gold standard for research studies, there needs to be a balance of different kinds of evidence to support the conclusive efficacy of a treatment. They assert that

in addition to RCT evidence, [a methodologically pluralistic approach to accumulating knowledge about the processes and outcomes of therapy] would make use of practice-based evidence, qualitative research, critical conceptual analysis, consumer satisfaction studies, and systematic case studies to provide a more secure platform for therapy policy and practice. (p. 1)

Research Design Rationale

Several reasons guided my decision to use the adjudicated version of HSCED: First, to

my knowledge, this study will be the first to conduct therapy outcome research with Lifespan Integration for children. Thus, I wanted to use an in-depth design, which sheds light on whether LI works and what mechanisms seem to be the helpful to create client change. Second, the systematic approach in HSCED involves effort to find evidence against the therapy efficacy, thus building a strong case for its decision outcome. Third, HSCED is a practical and applied design rather than one that is removed from the ‘front line’ that is the therapy offices. My personal preference aligns with this practical approach; I favour information that is highly geared towards application.

Fourth, and most importantly, HSCED seems to be able to shed more light on the above questions (i.e. Does LI work, and what works) than traditional case studies or RCTs as a first means of research. Eventually, the evidence found through multiple HSCED studies will help to focus RCT studies to supply the quantitative and other evidence needed for LI to become an evidence based practice.

Participants

In this section, an overview will be given about the people involved in the HSCED process. First, I will introduce the research participant, then the researcher, the therapist, the research teams, and lastly the judges.

Research participant. Since HSCED is a single case design, we recruited one child participant. Additionally, since HSCED is flexible in terms of which measures will be used, I was able to gather data from the participant’s caregivers and teachers, as well.

Criteria for case selection included (1) the parent was not the perpetrator, (2) the child was considered trauma-exposed and are currently experiencing related symptoms, (3) the child had not received LI in the past, (4) the child was not receiving any other counselling at the same

time, (5) the child and caregiver were available and willing to participate for the length of the study (nine sessions over the course of three months), (6) they were willing to complete the measures, (7) they did not come to session intoxicated with alcohol and have used recreational drugs for at least 6 weeks prior to treatment, (8) and they were not on benzodiazepines. Inclusion characteristics were (1) proficiency of English and (2) being 3 years or older and verbal.

The research participant, Kelly (all names have been changed to protect privacy), was 12 years old at the time of research and attended Grade 6 for the time of therapy and Grade 7 at the time of follow-up. Kelly's mother reported at intake that Kelly carried guilt and responsibilities that were not hers, had trouble expressing her emotions in time (rather than bottling them up until they explode), and had trouble with conceptual thinking. Mother said that Kelly's brother has had and still had medical emergencies, which in the past could have been traumatic for Kelly. She lived with her mother and her brother, while her father lived four hours away for work reasons and whom she would see usually every weekend. When staying at her father's place, the maternal grandmother became a parenting figure, too. This living arrangement was largely to accommodate for Kelly's brother's academic needs, since he has been diagnosed with Autism Spectrum Disorder (ASD). Kelly had been exposed to situations that could have been a setback for Kelly or objectively could be called trauma. Most of them happened from age 9 onwards and centred around Ben's health and medical emergencies. (For more information about Kelly including a summary of Kelly's trauma history, see APPENDIX B).

Participant recruitment. Recruitment for this project was set out to be representing a naturalistic situation. The identified research therapist for this project offered new clients and clients on her waitlist the opportunity to be part of this research project. Kelly's brother was

already a client of the therapist and Kelly's mother was open to have her daughter participate in this research project. Additionally, Kelly's mom decided to receive therapy, too, which resulted in two parallel studies: one for Kelly and one for her mother.

Researcher. The principal investigator for Kelly's project was me, Christian Rensch, a Master's student in counselling psychology at Trinity Western University. The thesis supervisor, Janelle Kwee, was instrumental in providing help in this process as well as guiding the overall LI research project with Kelly and her mother. Also instrumental was the supervisor's research assistant, Elizabeth Chan, who conducted weekly outcome measures, and ensured a smooth intersection between research and therapy.

In terms of characteristics for the researchers, Elliott (2012) suggests that researchers take a person-centred approach in interaction with the client. He asserts that in order to increase the research alliance between researcher and client, the researcher needs to use principles such as empathy, unconditional positive regard, genuineness, and flexibility (p. 72).

Research teams. The research teams who analyzed the rich case records were a combination of Master's level graduate students, professors of counselling psychology, as well as practitioners in counselling psychology with experience in Lifespan Integration, other trauma therapy, and/or child therapy. Prior knowledge of LI was not necessary for participation, since there was a brief introduction of the research project and the therapy before the analyzing process. This variety also controlled for possible bias towards an affirmative stance. Members of the research teams were assigned to either skeptical or affirmative based on their experience to have two balanced teams. The researcher was not part of either team, while the thesis supervisor was part of the skeptic team and the research assistant part of the affirmative team. The decision

to use the supervisor and research assistant was to provide more information to the teams if needed and in order to control for biases, they were part of opposing teams.

Therapist. A local therapist agreed to be the therapist for this study. She has a Master's degree in Applied Behavioural Science – Systems Counselling, is a Level 2 trained LI-therapist, has received additional training in LI with children, is highly experienced in other kinds of trauma therapies with children, has an understanding of neurological processes in trauma and LI, and was willing to provide extensive quantitative and qualitative data of the sessions. Additionally, the therapist consulted several times about the cases with Cathy Thorpe, who has adapted LI to be used with children.

Judges. In HSCED, the judges, who make the final decision, are asked to come to an answer in regards to two main questions: 'To what degree did the client change?' and 'To what degree was therapy responsible?' (Elliott, 2012; for more details, see section HSCED analysis procedure).

Stephen and Elliott (2011) propose to include "judges of roughly the same professional status as the researchers or therapists, thus beginning to approximate the traditional concept of a jury of one's peers" (p. 239). In their own study, Elliott et al. (2009) chose three distinguished psychotherapy researchers with each different theoretical approaches as their judges. Thurston, McLeod, and Thurston (2013) used 4 independent judges to evaluate efficacy of counselling for people with sight loss. All of them were chosen based on their individual expertise: one was a university professor with expertise in case-study methodology, the other was expert in field of sight loss, another was a counselling practitioner, and one was a researcher, not a counsellor.

For this research project, judges were selected based on the following criteria: Judges had either or a combination of (1) a doctorate in counselling psychology or a similar field, (2)

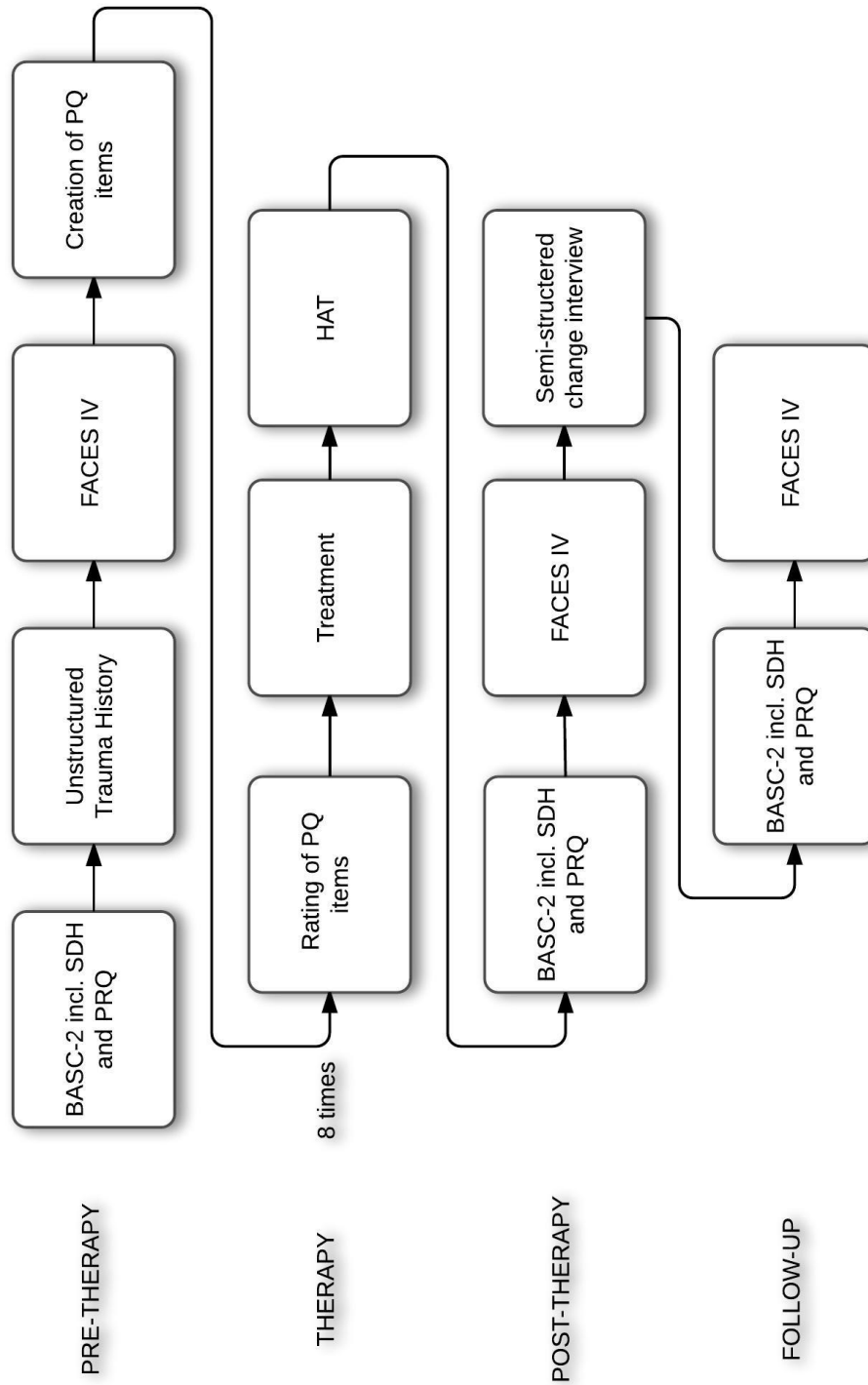
extensive experience (at least 5-10 years) in trauma therapy with children, (3) extensive knowledge of Lifespan Integration, and/or (4) have teaching experience in counselling psychology. Candidates were recruited based on existing professional relationships with the researchers; however, none of them had any pre-existing relationship with the LI research programme. The three judges who agreed to be part of this project had the following relevant characteristics: Judge A held a Doctorate degree in Educational Leadership with more than 20 years of experience in counselling trauma-exposed children. Judge B held a Master's degree in Counselling Psychology, has training in LI, and had extensive knowledge in trauma therapy with adults. Judge C held a Master's degree in Counselling Psychology, worked with children for more than 14 years, and had extensive LI training.

Materials and Procedure

Kelly's mother was asked to provide informed consent (see APPENDIX C) and verbal assent from Kelly to be part of this research study. After that, the researcher conducted an intake interview with the mother collecting data about developmental and trauma history. During Kelly's first session, the therapist and her created a list of 12 items that Kelly wanted to address in counselling. These items became the basis for her Personal Questionnaire (PQ). Kelly received 9 session of Lifespan Integration and was asked to rate her PQ items before each session and complete a Helpful Aspect of Therapy (HAT) form at the end of each session. After the last session, there was a semi-structured change interview with the mother and an adapted version with Kelly. At pre-therapy, post-therapy, and follow-up the following quantitative assessments were given, as well: (1) Behavioral Assessment System for Children (BASC-2) including the Structured Development History, (2) Parenting Relationship Questionnaire, (3) Family Adaptability and Cohesion Scales (FACES-IV), and (4) Trauma Symptom Checklist for

Children. The therapist kept thorough counselling notes and completed a Therapy Session Notes Questionnaire (TSNQ) for each session. Additionally, the researcher provided weekly data on Session Observation Notes, from watching the taped sessions after the fact. For a detailed overview of the process of client data collection, see Figure 2.

Figure 2.

Overview of Client Data Collection

Rich case record. The rich case record is at the heart of HSCED; it incorporates all the necessary information about the client, the client's process and experience, and the therapy sessions. It serves as the basis for the research team and then the judges to come to their conclusion about therapy efficacy. In this research, the rich case record describes basic information about the client and includes data from the BASC-2, PQ, Change Interview, therapy notes, and session video observation notes. Following are descriptions of each of the measures.

Behavioral Assessment System for Children (BASC-2). The Behavior Assessment System for Children, Second Edition (BASC-2; Reynolds & Kamphaus, 2004) was used as the main tool to assess Kelly's behaviour systematically across various environments. The BASC-2 provides a comprehensive and multidimensional picture of the child's behaviours in areas such as externalizing problems, internalizing problems, school problems, and personal adjustment. Both parents and the grandmother filled out the caregiver reports (Parent Rating Scale; PRS), Kelly used the self report of personality (SRP), and three teachers were asked to provide their observations on the Teacher Rating Scale (TRS). Additionally, Structured Developmental History (SDH) was used as a guide when conducting the intake interview with Kelly's mother. These assessments provided a developmentally sensitive picture of the Kelly's functioning, and assessed for changes in specific symptom areas (Reynolds & Kamphaus, 2004). The BASC-2 offers different levels depending on the age of the child. Since Kelly was 12 at the age of this research, the most appropriate level was the adolescent level for ages 12 through 21.

All items on the TRS and PRS are based on a 4-point rating scale (from never to almost always) and consisted of 139 and 160 items respectively. The SRP consists of 176 items, some of which required a True or False response, while others also had a 4-point rating scale. For our research, the BASC-2 was administered pre-therapy, post-therapy, and at follow-up.

Parenting Relationship Questionnaire (PRQ). The Parenting Relationship Questionnaire (PRQ) provides information on the parental relationship from the perspective of the caregiver. It assesses attachment and parent-involvement, as well as provides information about parenting style, parenting confidence, stress, and satisfaction with the child's school (Kamphaus & Reynolds, 2006). The PRQ is offered in two different levels; for ages 2-5 and ages 6-18. The latter one, which was used in this research study, consists of 71 items which are on a 4 level rating scale (from never to almost always). This assessment was administered at pre-therapy, post-therapy, and follow-up

Trauma Symptom Checklist for Children (TSCC). The TSCC is used to assess children age 8-16 for posttraumatic stress and related symptomatology. For this research project, we administered the full version at pre-therapy and when it became clear that Kelly omitted all questions in regards to sexuality, we administered the adapted version at post-therapy. However, the results were not valid since too many other items were omitted, as well. We decided to not administer the TSCC again and rely on information about trauma from the unstructured trauma history instead.

Family Adaptability and Cohesion Scales (FACES-IV). The FACES IV is a tool to assess family functioning in terms of family cohesion and flexibility. It uses six different scales; two to assess balanced functioning, including family cohesion and family flexibility, as well as four scales to assess unbalanced functioning, including disengaged and enmeshed cohesion, as well as rigid and chaotic flexibility (Olson, 2010). In addition, the FACES IV also assess family communication and family satisfaction.

Simplified Personal Questionnaire (PQ). The PQ is an instrument developed by Elliott, Mack, and Shapiro (1999), which captures the idiographic presenting problems of each client

and turns it into a weekly rating scale from which change in presenting problems can be observed. (For a blank PQ see APPENDIX D.) Kelly's PQ was created during the first session and consists of problems Kelly was facing then. From that, a weekly document was created, which Kelly was asked to fill out before session to indicate how much these issues have bugged her in the last week. Items included instances of bullying, fear for her father's health, annoyance because of her brother's ASD, and so on. For a complete, see the rich case record in APPENDIX B.

Helpful Aspects of Therapy form (HAT). The Helpful Aspects of Therapy form (HAT) is an assessment developed by Llewelyn et al. (as cited in Elliott, 2012), which focuses on significantly helpful events in therapy instead of a global influence of therapy on change. The HAT is filled out by the client within a week from the respective session. It consists of open ended questions, in which the client is asked to list the helpful events, explain why it was helpful, rate how helpful it was, and give other information on where in the session the event occurred, length of event, and whether there were other helpful events or hindering events. For the researcher, this information gives insight into which aspects of the therapeutic approach actually were seen as helpful to the client. Elliott (2012) asserts that while it takes about 5-10 minutes to complete and might be seen as a hassle, many clients find it helpful to review the session. For a blank sample of the HAT, see APPENDIX E.

Change Interview. The semi-structured Change Interview was developed by Elliott, Slatick, and Urman (2001, as cited in Elliott in 2012) to assess the client's view of therapy process at various points throughout therapy and/or at post-therapy and follow-up. While it is geared to assess the client's understanding of what kind of change occurred and to what they attribute the change, the Change Interview also assesses factors that might have been hindering

to the client and asks the client about other non-therapy factors (Elliott, 2012). For this research study, the Change Interview was conducted by the researcher with the mother (see APPENDIX F, and a language adapted, more casual version was conducted with Kelly (see APPENDIX G).

With the Change Interview, the researcher elicits the client's experience about the whole therapy, rather than one singular session. It is structured with nine topics/questions, which include (1) General experience of therapy, (2) changes, (3) change ratings, (4) attributions, (5) resources, (6) limitations, (7) helpful aspects, (8) problematic aspects, and (9) research aspects (Elliott, 2012). Even though these topics are prescribed, the researcher is asked to keep an open mind and curious stance while interviewing to follow the client's answers (Elliott, 2012).

In terms of analysis of the HAT and the Change Interview, the HSCED does not call for a specialized data analysis. The information gained from these measures were analyzed by the researcher for themes and helpful/hindering aspects in therapy

Therapy notes and video observations. In addition to the therapist's usual session notes, the therapist completed the Therapist Session Notes Questionnaire (TSNQ) to systematically collect helpful and hindering aspects from the therapist perspective. It closely resembles the HAT form (see APPENDIX H for a blank TSNQ). In order to describe the video observations, the same form was used.

HSCED analysis procedure. As mentioned above, HSCED is a structured, adjudicated case study resembling similarities from daily decision making processes and courtroom decisions. This section briefly delineates the step by step procedure to carry out the HSCED.

Affirmative case. Just as in US case law, the affirmative team carries the burden of proof and its purpose is to convince the judges that the client changed substantially because of therapy (Stephen, Elliott, & Macleod, 2011). The affirmative team rests its case predominantly on direct

evidence from the rich case record that change occurred through therapy. Elliott (2014) proposes four direct evidence methods to prove therapy efficacy and adds that at least two of them are needed to prove change. The direct evidence methods are as follows: (1) Change in long-standing problems: Therapy efficacy can be inferred when the client experiences steady change in longstanding problems over the course of therapy by assessing the PQ scores over time; (2) Attribution of post-therapy change to therapy: these come mainly from the client's 'likelihood without therapy' ratings in the Change Interview, as well as in session comments about the helpfulness of therapy; (3) Helpful Aspects: describe a link between therapy specific processes and post-therapy change; (4) Covariation between week to week changes in the client's life and specific therapeutic interventions/events.

Skeptic case. The task of the skeptic team is to find indirect evidence in the RCR that change either did not occur or could be attributed to factors other than therapy. They actively and "systematically evaluate and support alternative interpretations of the rich case record" (Stephen, Elliott, & Macleod, 2011, p. 59), through application of a "good-faith effort to find nontherapy processes that could account for an observed or reported client change" (Elliot, 2002, p. 7). To do this, the team uses eight methods of indirect evidence as proposed by Elliott (2002): (1) Nonimprovement: this can be due to trivial change, which suggests that change was only minor, or negative change as evident on their PQ/HAT and/or quantitative data; (2) Statistical artifacts: these include measurement errors, regression to the mean by using extreme values from measurements with less-than perfect reliability, and experimentwise error by using multiple significance tests on change measures; (3) Relational Artifacts: this includes the client's attempts to please the therapist (i.e. appear extremely distressed at the beginning of therapy and much better at the end); (4) Expectancy Artifacts: these include personal or cultural expectancies and

scripts (for example, at the end of therapy, a client might overemphasize the value of therapy, since it is culturally expected to be doing better after therapy); (5) Self-correction: this includes situations, which resolve themselves after a while with or without therapy, as well as developmental trend in form of maturation of the client; (6) Extratherapy events: these events include changes in relationships, such as death, divorce, dating, marriage, etc., as well as any changes in jobs, recreational activities, and so on; (7) Psychobiological causes: these causes can lead to measurable changes in the client's PQ; however, they might be caused due to medication, hormones, and other psychophysiological processes; (8) Reactive effects of research: these effects refer to all the possible ways that the client improves because of the influence of the research itself. Some client's might be annoyed by taking many assessments, while others might build a relationship with the research staff.

Generally speaking, "the standard [with skeptic evidence] is that no nontherapy explanation can, by itself or in combination with other nontherapy explanations fully explain the client's change, although nontherapy explanations can and usually do play some role in accounting for change" (Elliott, 2002, p. 16).

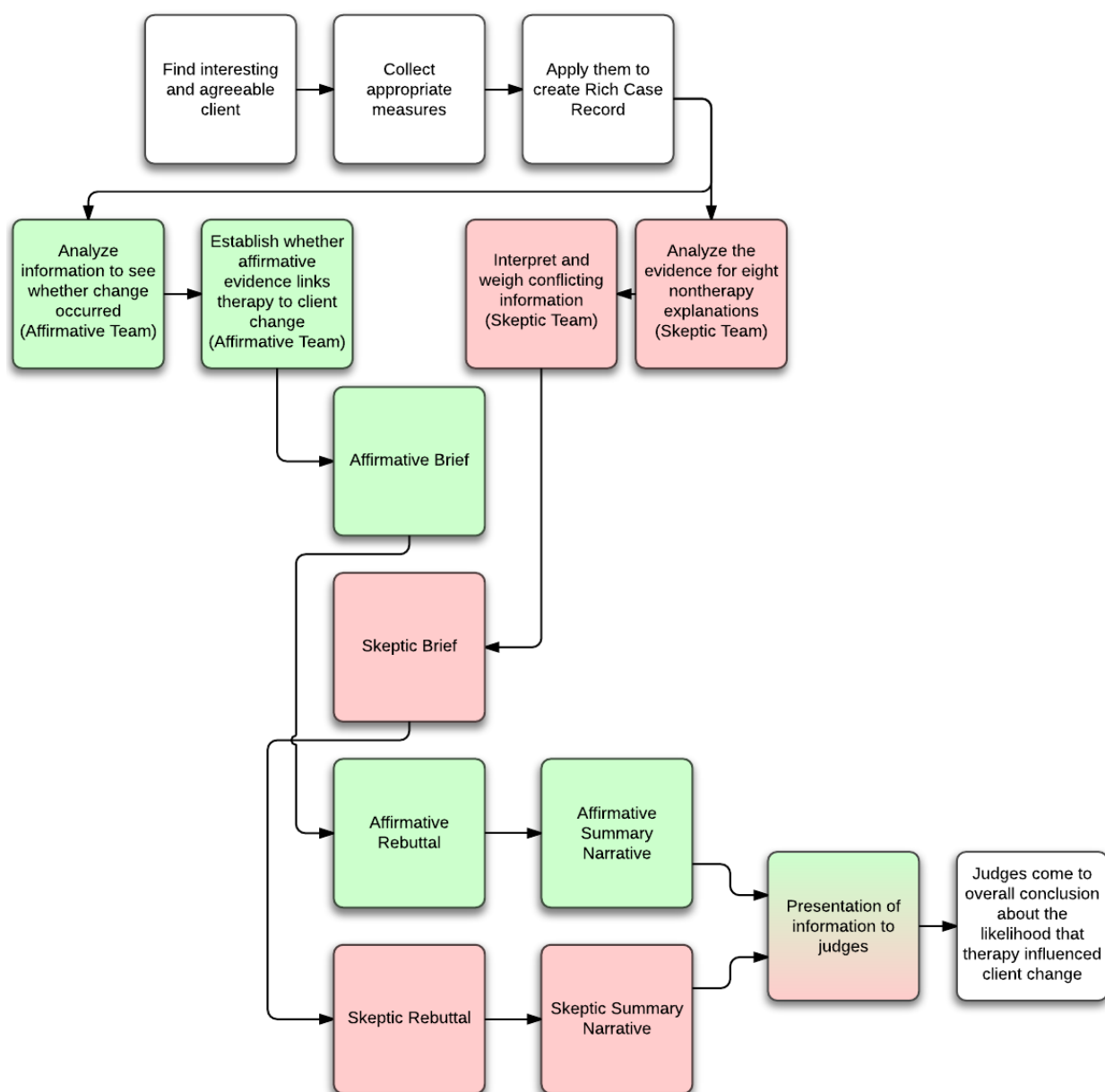
Adjudication procedure. The following steps are part of the adjudicated version of HSCED (Elliott, 2014; Elliott et al., 2009; Stephen & Elliott, 2011). The affirmative team presents their side first since they carry the burden of proof. Next, the skeptic team gives a brief followed by rebuttals from both sides. A summary of each team's brief and rebuttals is then given to the judges who take into account the rich case record, the briefs, rebuttals, and the summaries when making their decision. (For an in depth explanation about standard of proof, see Stephen & Elliott, 2011.) The judges are then asked to rate on a 0-100% scale their perception of client change, therapy's involvement in this change, and how certain they are about

their ratings. Additionally, judges are asked to give qualifying comments to support their rating (see APPENDIX H for a blank form). In regards to standard of proof, Elliott et al. (2009) decided to use an 80% probability as cut-off to be ‘beyond reasonable doubt’.

For an overview of the HSCED process, see Figure 3.

Figure 3.

HSCED Analysis Procedure



Rigour and Quality

In order to assess the rigour and quality of this mixed-methods design, Mertens (2010) suggests to assess each component from its own paradigm. That is to say, to judge the quantitative aspects from a more post-positivist approach, while judging the qualitative part from a constructivist or transformative lens. However, she adds that mixed-methods are more than the sum of its parts when it comes to paradigmatic discussions. In other words, mixed methods are not simply the combination of quantitative and qualitative measures but also create a different kind of research paradigm.

To my knowledge, Elliott and colleagues have not published data on the rigour or quality of the design, per se. However, they have pointed out the rigorous approach in regards to adjudication, the effort in finding evidences against the efficacy, and that the method itself has been enhanced several times in order to address possible shortcomings (Elliott, 2002; Elliott et al., 2009; Partyka, 2010; Stephen & Elliott, 2011; Stephen, Elliott, & Macleod 2011).

CHAPTER 4: OUTCOMES

So be sure when you step, step with care and great tact.

And remember that life's a great balancing act.

And will you succeed?

Yes! You will indeed! (98 and $\frac{3}{4}$ percent guaranteed)

Kid, you'll move mountains!

~ Dr. Seuss (2015b, para. 1)

In this chapter I will describe the results of this study; to what degree the client has changed, to what extent therapy was a factor in this change, and what other factors might have been helpful or hindering. These outcomes are based on information from the rich case record, the research team briefs and rebuttals, as well as the judges' opinions.

Rich Case Record

The following is a summary of the rich case record and highlights key features. For the full record, see APPENDIX B.

Contextual factors. This information is summarized from the SDH and the trauma interview. At the time of research, Kelly was 12 years old and in Grade 6. Kelly's mother reported that Kelly carried guilt and responsibilities that are were not hers, had trouble expressing her emotions in time (rather than bottling them up until they explode), and had trouble with conceptual thinking. Relevant family health concerns were: ADHD (father), dyslexia, (father), anxiety (mother and father), ASD and ticks (brother), as well as borderline and bipolar (father's mother). At intake, Kelly's mother reported that Kelly had a short attention span, a lack of self-control, seemed unhappy most of the time, and overreacted when faced with

a problem. Additionally, from observing Kelly in therapy, it seemed that her brother's ticks and her dad's accident in which he broke his back were most influential on Kelly's emotional life.

Trauma Exposure. Most events that could have been a setback for Kelly or objectively could be called trauma, happened from age 9 onwards. Exceptions include Kelly's birth, which was induced and both she and mom had to stay in the hospital for three days, as well as her brother's birth when Kelly was 18 months. Other events included her dad's accident, her parents' health situations, as well as ongoing, intermittent separation from dad.

Quantitative outcome data. Two notes need to be mentioned before presenting the results: (1) Kelly's father's ADHD and dyslexia made it difficult for him to fill out the many rating scales on the various assessments and he needed support from Kelly's mother throughout; (2) Kelly's mother reported that Kelly might have misunderstood the rating on the FACES-IV questionnaire at follow-up and scored them in reverse order.

The BASC-2 self reports (SRP) indicate a reduction in Social Stress and Interpersonal Relations from 'At Risk' at pre-therapy to 'Similar to others' at post-therapy and follow-up. Her results on Self-Esteem changed from 'Similar to others' at pre-therapy and post-therapy to 'At risk' at follow-up. The BASC-2 parent reports (PRS) results indicate an overall reduction from 'At risk' to 'Similar to others' in depression, anxiety, atypicality, attention problem, activities of daily living, as well as functional communication. Results for withdrawal indicate that Kelly changed from 'Similar to others' at pre-therapy and post-therapy to 'At risk'. The BASC-2 teacher reports (TRS) indicate an improvement in study skills and a decline in hyperactivity, attention problem, and adaptability. Unfortunately, not all teachers provided post-therapy results and/or follow-up results, making a pre-, post, and follow-up comparison less reliable. At follow-up two different teachers filled out the TRS; both of them saw Kelly on daily basis and one of

them knew Kelly for 12 months or more. Results from their assessments indicate no elevated subscales; they scored Kelly as 'similar to others' in all categories.

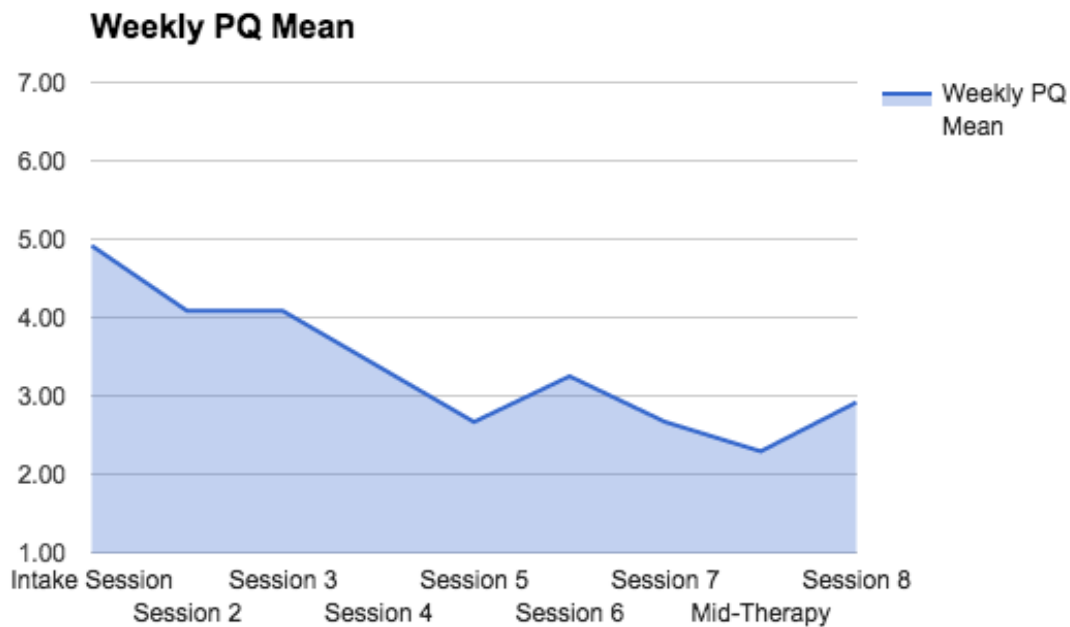
Results from the PRQ indicate low parenting confidence in Kelly's mother at pre-therapy and follow-up but not at post-therapy, and above average discipline practices in father at pre-therapy and follow-up but not at post-therapy. All other items were rated as average. Results from the FACES-IV seem to indicate a balanced family system, with only a few areas out of the ordinary: (1) Kelly's father's rating for Rigidity was 'High' at pre-therapy, 'Low' at post-therapy, and 'High' at follow-up. (2) Kelly's mother's rating for Family Satisfaction was 'Low' at pre-therapy and 'High' at post-therapy and follow-up. (3) Kelly's rating for Family Communication was 'Low' at pre-therapy and 'Very Low' at post-therapy and follow-up. (4) Kelly's rating for Family Satisfaction was 'Very Low' at pre-therapy, 'Moderate' at post-therapy, and 'Very Low' at follow-up.

In regards to her weekly PQ, results indicate an overall drop the mean score of 2 points from pre-therapy to post-therapy (unfortunately there is no data from follow-up). Two points decrease is considered a significant shift by the authors (Elliott, Wagner, Sales, Rodgers, Alves, & Café, 2015). Kelly's PQ items were as follows: (1) Being bullied on my birthday; (2) Being bullied for a whole year about a boy; (3) Being bullied about my body; (4) Being scared about Dad's safety; (5) Being bugged by an email from the teacher; (6) Being bugged by her brother's noise; (7) Being bugged at school about my brother; (8) Being bit by a dog; (9) Being separated from Dad; (10) Being bugged that family members go to the hospital; (11) Being bugged by having to move; and (12) Being bugged about going to people's houses when Ben had/has to go to the hospital. Seven PQ items shifted at least 2 points, one stayed the same (number 11), and 2 shifted 1 point to the worse (numbers 6 and 9), and 1 item shifted 3 points to the worse (number

10). See figure 4 for the progression of the mean PQ score.

Figure 4

Progression of PQ mean



Qualitative outcome data. At the outset of the study, we offered Kelly a journal, in which she could express her feelings and thoughts about therapy. Unfortunately, we did not receive any information through this avenue; the therapist, however, said that Kelly showed her some pictures she drew in their last session that indicated an increase in self-acceptance. Results from the HAT forms were seemingly not informative about the process of therapy; Kelly's answers seemed to indicate that she did not like to fill out these forms or that she did not understand what was asked of her. Her mother mentioned at post-therapy, that Kelly did not take these forms seriously in the beginning and more so towards the end. Information from the HAT forms indicated that Kelly was very happy that her parents let her have a room away from her brother's room so that she could have more privacy. In terms of helpfulness of therapeutic modality there was not much information other than that talking to the therapist helped.

In the adapted Change Interview with Kelly, she mentioned that she saw changes in her life since therapy started, such as being bugged less about being bullied, being less scared for her father's health, remodelling of the house to comply with her need for privacy and physical distance from her brother, as well as being worried less about having to move schools again. She attributed these changes mainly to 'it just happened', rather than to therapy. Kelly said that it helped to talk about her feelings and that sometimes the timeline was difficult for her.

Kelly's mother reported in her Change Interview about Kelly that she saw seven areas in which daughter's life changed since the beginning of therapy. All of these changes were reported to be a surprise, most of them unlikely to have happened without therapy, and most of them were extremely important to Rachelle. See table 3 for an overview of the seven changes.

Table 3

Changes observed in Kelly by her mother with attributions

Change	Change was: 1 - expected 3 - either 5 - surprised by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1 - not at all 2 - slightly 3 - moderately 4 - very 5 - extremely
1. Discovered her backbone	5	1	5
2. Gained Maturity	5	1	5
3. Communicates better	5	2	5
4. Taking downtime	5	1	5
5. Improved sleeping pattern	5	3	3
6. Increased self-confidence	4	1	5
7. Emotional awareness/expression	4	1	5

Over the course of the research project, several informal qualitative sources were identified. Kelly's therapist offered insights into the possible reasons why Kelly's experience of trauma was not easily identifiable through the quantitative measures. She said that some of the assessments would have needed some adjustments, since Kelly seemed to be overwhelmed with some of the questions. Also, she adds, that Kelly shows signs of a learning disability, which could have influenced her understanding of bigger concepts. Other informal data include an email from the mother to the therapist at about mid-therapy indicating that she saw change in Kelly already and a letter at the end of therapy, in which she delineated several facets in which Kelly has changed.

Adjudication Process

For the case development period of the research, two teams argued for and against change in the client and therapy's role in change. Below are summaries of each team's briefs and rebuttals.

Affirmative Brief. Generally speaking, the affirmative team found three out of four evidences for change and therapy's involvement in that change. For change in long-standing problems, the team pointed towards Change Interview with the mother, the improvements seen on the teacher, parents, and self reports, as well as evidences from the mother's email and letter. In terms of attributing change to therapy, the team argued that the mother's Change Interview indicated several changes that would not have happened without therapy. They also pointed to the mid-therapy email and post-therapy letters, which commented on the fact that Kelly sleeps more and has more tolerance for her brother that was not there when she was not in therapy. In regards to helpful aspects of therapy, the team pointed to comments made in the client's HAT forms, the therapist notes, and the video observation notes that identified helpful aspects, such as

talking about feelings, Kelly getting her own room, Kelly talking about her bullying experiences, and Kelly's involvement in some of the timeline repetitions. In terms of covariation evidence, the team was not able to find a session-by-session link; however an overall improvement could be seen in seven out of twelve PQ items. For the full brief, see APPENDIX J.

Skeptic Brief. The skeptic team argued that there were some evidences pointing towards non-improvement, including that Kelly's score on anxiety and self-esteem in the BASC-2 got worse. The team also pointed out that many of the apparent improvements on the BASC-2 were in fact not improvements if the standard error of measure was taken into account. (Note: After this was brought to the attention of the researcher, the data was carefully re-evaluated and changed accordingly. In order not to confuse readers, any data presented in this paper and arguments based on this data reflect these changes. Arguments from the affirmative side that were initially based on inaccurate data were omitted from this paper.) The skeptic team also pointed out that in a large dataset like the BASC-2, some of the improvements could also represent a fluke in the data.

In terms of relationship artefacts and expectancy, the team pointed out that the mother's previous relationship with the therapist through her son's therapy could have influenced her perception on Kelly's changes. They continued by stating that there could have been a self-generated return to the baseline since there had not been many crises for one and a half years. Also, extra-therapy events, such as that the bullies moved away, that her father's health had been stable, and that she saw her father more often could have caused a return to baseline without therapy. In terms of psychobiological changes, it was pointed out that Kelly was most likely undergoing hormonal changes, which could have affected and improved her sleeping patterns. Similarly to the relational artefacts, the team pointed out that Kelly might have wanted to please

the researchers since this was the first research study of its kind. For the full brief, see APPENDIX K.

Affirmative Rebuttal. The affirmative team pointed out that there was a substantial amount of evidence through the BASC-2, FACES-IV, and the qualitative measure to indicate that change occurred. They also argued that Kelly's mother was unlikely to have wanted to please the researchers or therapist. This was based on the therapist's description of the mother as a strong advocate for her children. Also, contrary to what the skeptic team pointed out, there had been a few minor crises in the last years, which could have prevented a self-generated return to baseline. Additionally, the team pointed out that since the bullying had been going on for years and at two different schools, it could be expected that Kelly's fear of being bullied would have stayed even though those particular bullies left. In terms of reactive effects of research, the team pointed to a few results, which indicate the opposite, such as Kelly's willingness to inform the researcher about parts of therapy that she did not like. For the full rebuttal, see APPENDIX L.

Skeptic Rebuttal. In the skeptics' rebuttal, the team mainly offered alternative explanations for some of the affirmative team's arguments, such as that Kelly's calmness and patience towards her could also be due to Kelly's increased need to sleep. For the full rebuttal, see APPENDIX M.

Adjudication. While the case development with its briefs and rebuttals took place in one 3-hour session, the judges received the write-ups independently and apart from this meeting. An overview of their responses is given in table 4, in addition the mean and the median score of their results. Stephen, Elliott, and MacLeod (2011) propose to use the median to represent majority with three judges. Their full reports can be found in APPENDIX N (Judge A), APPENDIX O (Judge B), and APPENDIX P (Judge C).

Table 4.

Judges' rulings

	Judge A	Judge B	Judge C	Mean	Median
1a. To what extent did the client change over the course of therapy?	80%	20%	80%	60%	80%
1b. How certain are you?	95%	60%	80%	78%	80%
2a. To what extent is this due to therapy?	60%	80%	80%	73%	80%
2b. How certain are you?	80%	80%	80%	80%	80%

Note. Anchors for questions 1a and 2a: 0%: no change, 20%: slightly, 40%: moderately, 60%: considerably, 80%: substantially, 100%: completely.

Summary of opinions about change over course of therapy. Judge A mentioned that most of the qualitative reports of change were substantiated by assessment outcomes. Judge B mentioned that while they agreed that change occurred, they also agreed with the skeptical side that change was just slightly. Judge B relied mainly on the skeptic arguments about statistical insignificance of change and the lack of a self-reported change from Kelly. Judge C mentioned that they saw change from multiple perspectives, such as a shift in PQ scores, Kelly's mother's Change Interview, email and letter, as well as therapist notes. Judge C added that they did not consider Kelly's father's results on the quantitative measures because of possible confounding results. As a point for the skeptical side the point out that one PQ item increased towards the end of therapy after an initial decline at the beginning of therapy.

Summary of opinions about whether change was due to therapy. Judge A agreed with the skeptical team that most of the change that occurred was due to common factors of therapy, rather than specific LI modalities. Judge A adds, that LI has some influence on the change since the therapeutic alliance seemed not as strong as usual. Judge B mentioned that because Kelly's

mother attributed most changes to therapy and because all of the changes occurred within a short period of time, the change that did happen was fairly likely due to therapy. Judge B adds that LI seems to meet the same expectations in regards to common factors as other therapies. Judge C asserts that there were numerous reports that change happened and that they would have been unlikely to have happened without therapy. Additionally, the LI specific Timeline can be seen in three different places to have been crucial in bringing about change; however, most of the change that happened was most likely due to common factors.

Mediator factors. Judge A mentioned that the mother-child bond and the two doing therapy as a project together was helpful to the client. They add that LI must have been directly addressing the trauma, since something besides environmental changes, parental bonding, hope factor, and maturation had an impact. Judge B asserts that common factors, such as being the central figure and experiencing a supportive person were helpful to the client, as well as being offered some coping tools by the therapist, and neural processing due to LI. Judge C adds by pointing out that talking helped, as well as expressing her feelings, having her timeline read to her, spending more time with her mother and having a shared experience, and solving problems.

Moderator factors. Judge A mentioned that the mother-daughter bonding were factors that enabled Kelly to make best use of therapy. Judge B mentioned Kelly's supportive parents, ability to cope with crises, her people-pleasing tendencies, and her explosive tendencies to be personal resources that helped the client with therapy. Judge C added Kelly's willingness to come to therapy and her perseverance despite uncomfortable readings of her timeline.

To sum it all up, the judges agreed that Kelly's experience in therapy resulted in change in her presenting issues. Results from the assessments brought varying degrees of evidence for and against client change, as well as for and against LI's involvement in the change. After

analyzing the data in affirmative arguing and skeptic arguing research teams, three experts came to the conclusion that Kelly changed significantly and that change was due to LI.

CHAPTER 5: DISCUSSION

As can be seen by the results from the various assessments, as well as the research teams' arguments, and the judges' rulings, Lifespan Integration appears to have been helpful in causing change in our participant's presenting problems. Overall, the judges concluded that the client changed substantially (80%) over the course of therapy with 80% certainty. They also concluded that therapy played a substantial part (80%) in the change and were unanimously 80% certain. It was evident that all judges based their decisions on their readings of the rich case record and the case development document with briefs and rebuttals and made use of both skeptical and affirmative arguments. All judges showed proof of an in-depth analysis of the available assessments and seemingly answered the questions in alignment with their area of expertise.

Stephen and Elliott (2011) discuss different standard of proof approaches in several parts of the world. They assert that in some legal systems >50% probability is considered acceptable proof, while in psychology often a 95% probability is used. Thus, they propose an 80% probability as a standard of proof to indicate 'clear and convincing evidence'. In this research study, the judges' summary conclusions passed this standard of proof in terms of the extent the client changed, as well as the extent that this change was due to LI. Through the use of HSCED, helpful insights could be gleaned into Kelly's process of change as well as the working mechanisms of LI.

Client Change

Every judge based their decisions on different kinds of evidence. One judge relied mainly on the qualitative data from Kelly's mother and asserted that it is quite normal for a 12-year-old not to see change in herself. Another judge focused on the quantitative data and the actual data patterns left too many areas as 'similar to others'. Still, another judge pointed out a variety of

qualitative evidences that supported the decision for substantial change. In particular, this judge drew from the PQ improvements, change interviews, emails, and therapist notes, as well as the positive changes visible in the BASC-2 SRP and PRS.

It needs to be taken into consideration that Kelly presented with some information processing issues. This may have influenced Kelly's answers on her BASC-2 SRP, PQs, HATs, and Change Interviews. According to the teachers and her mother, Kelly experienced some challenges at school in terms of understanding concepts. Additionally, Kelly's therapist observed that Kelly sometimes did not understand concepts and what was asked of her during therapy. It is a consideration in any kind of therapy where there is conversation and insight-orientation to be mindful of information processing and learning deficits. Having this challenge in mind is crucial to reading the data holistically, particularly in relation to the non-improvement hypothesis.

Developmental considerations were also taken into account by the judges during their interpretation of the case development and rich case record. Since Kelly was in the beginning stages of adolescence, she might have experienced developmentally normal challenges, such as social expectations, self-image, looking at other people's points of view, entering into formal operations (cognitive development), entering conventional moral development (Kohlberg), coping with withdrawal through aggression, humour, or diversion tactics, and the need for more sleep. It was noted in the case development that it is developmentally atypical for 12-year-old girls to "gain their voice" and increase confidence; they usually temporarily lose it.

There are also at least two environmental factors that need to be considered. First, Kelly's inattentiveness, hypervigilance, and hair-trigger annoyance could be symptoms of ADHD or coping mechanisms. The DSM 5 (APA, 2013) lists many of the same symptoms in

the ADHD classifications as well as the trauma for children category. Second, the teachers who rated Kelly with more 'At Risk' items were those teachers who had Kelly in a sit-still classroom, as opposed to the teachers who could give their students more opportunity for movement. Which means that teachers of sit-still classrooms would more likely see restlessness in Kelly than those teachers who see Kelly in physically active classes.

Therapeutic Processes

Overall, the judges concluded that most of the change in Kelly is attributable to Lifespan Integration. The judges pointed out several therapy processes that were helpful to the client. Some of these can be attributed to specific LI modalities, such as the use of the timeline and being 'pulled in' to the therapist's narrative about Kelly's birth. Other helpful processes belonged to the benefits that can be seen to be common factor in many therapies, such as being the central figure, talking about feelings, experiencing a supportive person, doing a project together with mom, and problem solving.

Timeline. All of the judges, even those with little or no experience with LI, attributed Kelly's change to LI specific modalities. One judge pointed out that there was possible neural processing because of the repetition of timelines, which could explain why there was no conscious awareness of change in Kelly or little self-reported initiative in her changed behaviour. Another judge added that the process of repeating the timeline helped Kelly to facilitate an emotional conversation about being bullied in the past, and created an integration of memories that allowed Kelly to more fluently move from earlier memories to newer memories and increased her recall of other memories. This judge also pointed out that the therapist's recounting of Kelly's birth was particularly captivating for Kelly and that it allowed her to show more emotions towards her infant-self compared to her older selves.

Judge A commented that it seemed that Kelly did not have a great connection to the therapist, leaving the therapeutic alliance less impactful. Judge A also noted that because of this smaller impact on therapeutic alliance on therapy efficacy, LI's impact must, therefore, have been more effective.

Common factors. As alluded to above, all judges agreed with the skeptical team that common factors of therapy were partly responsible for the change. This was to be expected and confirms that LI is, at the very least, just as helpful as other therapies because of shared common factors. From common factor research it becomes clear that there are few distinguishable differences between different therapies (Asay & Lambert, 1999; Wampold, 2010). LI incorporates common factors such as attunement to the client, building a strong therapeutic alliance, reliance on the client as an agent of change, reliance on the character of the therapist as a means to bring change, and an adherence to theoretical assumptions of the therapist's theoretical orientation. This indicates that the bounds of LI have not yet been tested to the fullest extent; LI is still in the beginning stages of efficacy research and results that support LI exhibiting traits of common factors is a step in the right direction.

Therapeutic Considerations and Future Directions of LI and Children

In Kelly we have a case that is not dissimilar to cases that would present in a natural counselling setting. She has experienced multiple smaller setbacks in her life, is struggling with onset of adolescence, has problems in school, and is annoyed by her brother. The therapist treated her in a naturalistic way by using LI in a similar way as she would have with non-research clients. The therapist spent time with the mother and the client separately to find out their goals for counselling and then asked them to create Kelly's timeline. Several times throughout the course of therapy, the therapist consulted with Cathy Thorpe about the case, in

order to ensure treatment fidelity, since Ms. Thorpe teaches the LI for children and adolescent workshops and is considered to be the main influence on LI with children, as well as her input on the case. In one of these consultations, Thorpe mentioned that it is common for youth to not attribute change to LI and rather to ‘it just happened’. She said that she observes this behaviour often in her own practice.

From the therapist notes and the TSNQs, as well as the video observation notes, we can glean a few insights into what effective LI with children can look like. The therapist mainly used the hybrid protocol because it became clear that Kelly was easily distracted and/or was not able to understand what was asked of her, to participate in a SP. The therapist usually started the sessions with discussions of either topics that were recent or topics she knew that impacted Kelly. The therapist usually briefly discussed the topic and tried to elicit a corresponding feeling. Sometimes it was easy for Kelly to connect to a feeling and sometimes the therapist did a hybrid protocol without a strong and explicit feeling.

In terms of future directions for LI research with children, several areas of improvement need to be mentioned. For example, an incorporation of visual cues into the reading of the timeline might improve focus. Upon reflection after therapy, the therapist mentioned that it might have been helpful to incorporate different kinds of cues, such as visual, to the verbal cue. She mentioned that Kelly had trouble focusing on the cues on her timeline and sometimes seemed disconnected and impartial to the process. Also, Kelly often interrupted the session with seemingly unrelated comments; it might have helped Kelly to stay more on track if the therapist could have shown Kelly visual cues. Secondly, LI therapy could perhaps include more activities to keep the client focused. It is common for children to have difficulties paying attention to

spoken words for a long period of time. In addition to visual cues, therapists could incorporate expressive therapy between repetitions of the timelines to reconnect with the child's feelings

Future LI Research Directions

As mentioned in the beginning, within the wider field of psychotherapy efficacy research, LI has received only limited attention. Many sources indicate anecdotal evidence of LI efficacy, such as discussions on LI's electronic mailing list, books written by clients who received LI (Sprout, 2015; Whitacre, 2014), books written by the developers (Pace, 2012, 2013; Thorpe, 2012, 2015), and conversations with local established therapists who use LI in their work with trauma-exposed adults and children. At this point, publicly available formal research has only been conducted by Balkus (2012), Hu (2014), and Binet and Tarquinio (2015). Balkus (2012) concluded that LI was effective in reducing intrusive symptoms in women who have experienced abuse, while Hu (2014) concluded that LI was efficacious in facilitating clinically significant change in three participants with sub-optimal attachment patterns. With the results from this current study, evidence seems to converge that LI is efficacious to bring about significant change over a period of 7-10 sessions, while offering a gentle and non-intrusive approach to trauma therapy.

This current research project was part of a bigger research programme looking at LI efficacy. Other projects that have been conducted and still need to be analyzed are: (1) another HSCED project with Kelly's mother, as well as (2) analysis of QEEG data that was collected throughout Kelly's and her mother's research (Kwee, 2014). Results from the first research will solidify LI's efficacy through a thorough, single case design, and results from the second research will correlate brain wave activities with LI sessions.

Future LI research with adults could come in various forms, since this is still the

beginning of LI research. HSCED research into LI with different demographics and different presenting issues could widen the evidence base and give insights into LI's efficacy with a variety of presenting issues. Additionally, research into deepening our understanding of the working mechanisms of LI is warranted. In this way, further LI improvements could be implemented with empirical support

HSCED Implementation and Enhancement

Child friendly. To our knowledge, there has been no other published research on using HSCED with children. An online post (Widdowson, 2015, September 7) indicated that an Italian team of researchers is in the process of publishing an HSCED study with adolescents. Since this study was one of the first of its kind, attempts were made to communicate with the developer about his view on whether HSCED can easily be used with children and, if so, what kinds of changes should be made. Elliott was unable to comment. Stephen (personal communication, July 4, 2014), however, reiterated that it should be straightforward to use HSCED with children because it is a framework to analyze data rather than a prescription of measures. She adds that “there are no specific measures that you must use for your investigation to be an HSCED. Rather, it is important that you choose measures that fit your client group and also the aspects of your therapy that you want to investigate” (personal communication, July 4, 2014). This confirmed our decision to use HSCED, despite its lack of evidence that it had been used successfully with children. From our study we can confirm and reiterate Stephen's comments: HSCED was easily adapted to incorporate the multitude of child specific assessments that were used. Integration of the BASC-2 assessments with the parent, teacher, and self reports, as well as the PRQ, FACES-IV and the trauma measure were seamless.

It came to light that the intake measurements, particularly those referring to possible influence of trauma, did not capture the full picture of Kelly's experience. Attempts were made

to add more child friendly qualitative measures, such as journaling. Although Kelly's mother reported that Kelly did not make use of the journal, Kelly excitedly shared computer based drawings about her experience of and feelings about therapy during a home visit with the therapist. This is consistent with observations that Kelly is visually oriented and artistic, and it may reflect a preferred processing style.

When it comes to the assessments that are usually applied in research with HSCED, the usefulness to our 12-year-old client was more limited. Adaptations were made to the creation of the PQ items and the Change Interview, while the HAT and the weekly PQ forms stayed the same version as the regular forms.

HAT Adaptations. We anticipated the 12-year-old to have enough cognitive capacities to be able to answer the questions on the HAT. In retrospect, an adaptation to the HAT would have been more helpful in receiving feedback from Kelly. It appeared that Kelly had difficulty answering the questions in a way that would have been useful for the research. In a future study, an adaptation of the HAT would be advisable. This could be done in several ways: first, the original HAT could be adapted by using child appropriate language and smiley faces Likert-scales; second, the HAT could be used as guide for a brief weekly interview of the child by the researchers; or third, another already established outcome form, such as the Child Session Rating Scale (Duncan, Miller, Sparks, & Johnson, 2003), could be used as a different way of getting session information from the child client.

PQ Adaptations. The recommended methods of administering the PQ would have worked if the participant would have been younger and the mother would have been involved in the goal setting process. However, based on Kelly's age, PQ items were decided with Kelly, rather than her mother, in order to give Kelly autonomy. The goals were set in the first session in

conjunction with the therapist. Kelly was asked to imagine what it must be like for other girls to live with a brother who has health issues and to guess what kinds of things would ‘bug’ this girl. Both the therapist and Kelly got to guess what issues that 12-year-old girl could have, and Kelly got to rate those on a scale of 0-10. By the end of this exercise, the therapist had a list of twelve items that Kelly wanted to work on with an initial rating included. This list with its rating became the basis for the weekly PQ forms and the pre-therapy rating of the PQ.

The weekly PQ forms were not adapted for this research and was used as proposed by the authors. To increase child-friendliness, future studies could make adaptations in form of a smiley face Likert scale, instead of a numbers rating scale. Also, the instructions on the sheet could be simplified and adapted with child appropriate language. With young children, a consideration could be made to include a caregiver rating of the PQ.

Change Interview Adaptation. The Change interview was considerably altered, which included age appropriate adaptation for the interview with the child in addition to an inclusion of an interview with the mother about her perceived changes in her child (see APPENDIX F and APPENDIX G). Changes made to the interview with the mother were, to a large degree, rewording of the questions to focus on the changes in the child, rather than the caregiver. For example, in the question ‘What changes, if any, have you noticed in yourself since therapy started?’ the word ‘yourself’ was substituted with ‘your child’. With changes like this, the meaning of the questions stayed the same, while the focus shifted from the interviewee to the child of the interviewee.

Adaptations made to the child interview were more involved. Some sections of the interview were omitted, such as the change ratings where the interviewee is asked to rate how likely changes would have occurred without therapy, and how important and surprising that

change was. Additionally, the language of the questions was slightly adapted to fit the vocabulary of a 12 year old to ensure questions were understood. In this research, the interview was conducted in a playroom to make the child more comfortable, and casual conversation was used while playing with the rice in the rice tray to reduce ADHD symptoms through tactile stimulation. Efforts were made to establish a rapport with the participant to provide more comfort. The language of the questions was adapted again in session to fit Kelly's mode of interaction and language; more casual words were used and emphasis was given that it is OK for her to give negative feedback, too. (See the rich case record in APPENDIX B for a summary of her answers to the Change Interview.)

Research team and judges. Research teams and judges were carefully and according to several criteria. Each team was to comprise one post-secondary student with child counselling experience, one experienced registered counsellor with experience in trauma counselling and/or Lifespan Integration, and one Ph.D. level counsellor with academic and counselling experience in either child counselling, trauma counselling, Lifespan Integration, or family systems counselling, as well as experience in academic research. Knowledge of LI or HSCED was not a prerequisite, though both teams had at least one member with LI experience and one member with HSCED experience.

MacLeod, Elliott, and Rodgers (2011) suggested in their research project to use judges who meet the legal definition of a reasonable person. In their case, three first-year post-graduate students with training in the approach under investigation, a general understanding of psychology and research methods, as well as non-involvement in the project. For our project we used a slightly different approach in selecting the judges; we established a panel of experts from various related fields. Following is a list of our criteria for this research project, and each of

these needed to be represented in at least one judge: (1) doctoral level education, (2) significant experience (5+ years) with trauma counselling, (3) significant experience with either child or family counselling, and (4) training and experience in LI. With these criteria, it was hoped that experience was spread wide enough to not exclude possible skeptic stances to LI, and narrow enough to ensure expertise in specific fields.

While this is a modification of the research done by the authors of HSCED, it was discovered that the expert panel was able to make judgements about the efficacy, as well as provide input on subtle nuances of therapy processes. Two of the three judges made inferences based on the evidence and their respective experiences that shed light into the possible influences of LI specific modalities. A panel of non-expert judges might not have easily spotted these nuances.

Limitations and future directions proposals for HSCED. While using and implementing HSCED, a few situations presented themselves that would warrant further investigation for a possibility of improvement. First, the adjudicators seemed to have worked with different definitions of the scope of client change; a formal definition was not provided and thus every judge used their own definition. This difference became evident in the sections of the adjudication form that asked the judges to provide comments about their decisions. On a similar note, Hu (2014) mentioned that the term ‘completely’ for 100% change would warrant revisiting and clarification. Saying that somebody ‘changed completely’ depends on a subjective view of the areas in which the client changed. For future studies, a literature review of client change could be conducted in order to come to a clear definition. This definition then could be better operationalized in the adjudication forms to avoid varying definitions.

Second, there seemed to have been a slight misunderstanding in regards to the second

question on the adjudication form. Judges were asked to answer to what degree therapy was responsible for the change, and at least two of the three judges seemed to have made their decision on an assumption that they were to look for LI specific traits as solely responsible for the change. These judges pointed out it was less LI and more common factors that were responsible for the change. As mentioned above, LI as a therapy is expected to use common factors just as other therapies. Thus a division between LI specific traits and common factors is misleading to consider when answering this question. To avoid similar confusions in the future, more specific instructions for this question might be of benefit. These instructions would need to include common factors of therapy as part of the therapy in question.

Third, as mentioned above, the PQ, HAT, and Change Interview seemed to have left gaps in the full assessment of Kelly's experience in therapy. For future studies, different kinds of expressive measures could be applied to inform the rich case record better about the child's experience. This could be done with adaptations to the assessments as discussed above, or it could include different kinds of expressive material, such as pictures for younger children, song lyrics for older children, etc. This would need to be incorporated on an individual basis to fit the client's way of expression.

Another limitation to this study was the data from the BASC-2 measures. As discussed in more details above, the automated results on the assessment reports did not take into account any Standard Error of Measure. Especially when comparing results longitudinally, what seemed like improvements were in fact not statistically significant improvements. Fortunately, these errors came to the attention of the researchers in the process of the case development and the judges could be presented with the proper results.

Another limitation is in regards to the lack of mapping specific LI mechanisms to the

outcome. In previous HSCED studies (e.g. Elliott et al., 2009; Hu, 2014; MacLeod, Elliott, & Rodgers, 2012; Wall, 2012), researchers were able to map information from the HAT and therapist forms to the weekly PQ score. They were able to compare changes in the PQ rating to specific session content and therapeutic modalities based on comments made by the client and observations by the therapist. Unfortunately, because of the lack of helpful and reliable information from the HAT, this mapping was not easily done.

Implications for Counselling Trauma-Exposed Children

In addition to the results' usefulness for further research, benefits can also be found for practical application in counselling trauma-exposed children. The judges concluded with 80% certainty that the therapeutic experience as a whole had a substantial influence on the changes in the client. This result is encouraging in that counsellors can be more certain that LI has the potential to help a child client. While this research focused on only one case, Kelly's presentation to counselling is not dissimilar to other clients that present to counsellors. Kelly had an idiographic history and experience of anxiety and hypervigilance; however, many children experience anxiety and hypervigilance as symptoms of exposure to trauma. The alignment of the results from this study with the results from previous LI research provides a modest convergence with LI rationales and thus strengthens clinically based observations.

In Kelly's case, she has experienced substantial change of her trauma symptoms over the course of therapy. People close to Kelly attribute this change to therapy, while Kelly did not make this attribution. This seems to indicate that Kelly's symptoms got better without Kelly realizing that she underwent trauma-therapy. In other words, she experienced relief of her symptoms from trauma without the need of an emotionally intense exposure or discussion of this trauma. By inference, one can conclude that Lifespan Integration is an effective and gentle

technique for trauma-therapists to use.

Conclusion

Trauma in children can have devastating effects and may influence their life well into adulthood if left untreated. Unfortunately, trauma therapy for children that omits the need for the client to re-experience the trauma has received little empirical research attention.” Lifespan Integration claims to be an effective trauma therapy without the need for a child to re-experience the trauma. The results from this research study seem to support this statement; the client’s presenting issues seemed to have changed substantially because of the client’s experience in Lifespan Integration and was not re-traumatized.

This project will most likely be beneficial for future research into efficacy of LI in general and efficacy of LI with children in particular. It seems to provide a basis of indications that supports LI as an efficacious therapy in treating trauma-exposed children and the use of the timeline as one of the mechanisms that seems to bring about this change. This study also might benefit future improvement and adaptation of the Hermeneutic Single-Case Efficacy design for work with children. With this information, LI might be one step closer to being accepted as an evidence based practice, in which the timeline plays a crucial part of its therapy. Results of this project may also have impact on counselling psychology as a profession; with more tools available to help trauma-exposed children, counsellors will have more tools to use in their endeavour to help overcome trauma challenges.

While we have not tested the bounds of Lifespan Integration with all its intricacies and working mechanisms, the results of this research study seems to provide indications that Lifespan Integration is helpful in providing gentle relief from trauma. To conclude with Siegel’s (2001) words: “If we can find a way to facilitate neural integration within the minds of

individuals across the lifespan, we may be able to promote a more compassionate world of human connections” (p. 90). With Lifespan Integration we might have found a way to help promote this more compassionate world.

REFERENCES

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Press, Inc.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Press, Inc..
- Asay, T., & Lambert, M. (1999). The empirical case for the common factors in therapy: Quantitative findings. In Hubble, M., Duncan, B., & Miller, S. (Eds), *The heart & soul of change: What works in therapy*. Washington, DC: American Psychological Association.
- Azar, S. T., & Wolfe, D. A. (2006). Child physical abuse and neglect. In E. J. Mash, & R. A. Barkley (Eds.), *Treatment of childhood disorders* [3rd ed]. New York: The Guilford Press.
- Balkus, B. (2012). *Lifespan Integration effectiveness in traumatized women* (Unpublished doctoral dissertation). Northwestern University: Seattle.
- Binet, E., & Tarquinio, C. (2015). Intérêt et limites de l'Intégration du Cycle de la Vie (Lifespan Integration) auprès d'adultes victimes du Syndrome de Münchhausen Par Procuration pendant leur enfance. *L'évolution Psychiatrique*, (Preprints).
- Bowlby, J. (1988). *A secure base*. London, UK: Routledge.
- Briere, J., & Scott, C. (2013) *Principles of trauma therapy: A guide to symptoms, evaluation, and treatment* (2nd ed). Thousand Oaks, CA: Sage.
- Carvalho, M. J., Faustino, I., Nascimento, A., & Sales, C. M. D. (2008). Understanding Pamina's recovery: An application of the hermeneutic single-case efficacy design. *Counselling & Psychotherapy Research*, 8(3), 166-173.
- Cohen, J. A., & Mannarino, A. P. (2008). Trauma-focused cognitive behavioural therapy for

- children and parents. *Child and Adolescent Mental Health*, 13(4), 158-162.
- Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2005). Treating sexually abused children: 1 year follow-up of a randomized controlled trial. *Child Abuse & Neglect*, 29(2), 135-145.
- Cook, A. (2014). Child work with OEI. In R. A. Bradshaw, & A. Cook (Eds.), *Toward integration: One eye at a time --- Clinical Applications*, Book in preparation.
- Cozolino, L. J. (2010). *The neuroscience of psychotherapy: Healing the social brain* (2nd ed). New York: W. W. Norton & Company.
- Diehle, J., Opmeer, B. C., Boer, F., Mannarino, A. P., & Lindauer, R. J. L. (2014). Trauma-focused cognitive behavioral therapy or eye movement desensitization and reprocessing: What works in children with posttraumatic stress symptoms? A randomized controlled trial. *European Child & Adolescent Psychiatry*, accepted June 4, 2014.
- Duncan, B., Miller, S. D., Sparks, J., & Johnson, L. D. (2003). Child session rating scale. *Ft. Lauderdale, FL: Authors*. Retrieved from http://www.easacommunity.org/shop/images/Miller_Duncan_Tool.pdf
- Elliott, R. (2002). Hermeneutic single-case efficacy design. *Psychotherapy Research*, 12(1), 1-21.
- Elliott, R. (2012). Qualitative methods for studying psychotherapy change processes. In D. Harper, & A. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. Malden, MA: John Wiley & Sons.
- Elliot, R. (2014). Hermeneutic single-case efficacy design: An overview. In K. Schneider, F. Fraser, & J. Bugental (Eds.). *The handbook of humanistic psychology*. Thousand Oaks: SAGE.
- Elliott, R., Mack, C., & Shapiro, D. (1999). *Simplified personal questionnaire procedure*.

- Unpublished manuscript. Retrieved from <http://www.experiential-researchers.org/instruments/elliott/pqprocedure.html>
- Elliott, R., Partyka, R., Alperin, R., Dobrenski, R., Wagner, J., Messer, S. B., . . . Castonguay, L. G. (2009). An adjudicated hermeneutic single-case efficacy design study of experiential therapy for panic/phobia. *Psychotherapy Research, 19*(4-5), 543-557.
- Elliott, R., Wagner, J., Sales, C. D., Rodgers, B., Alves, P., & Café, M. J. (2015). Psychometrics of the Personal Questionnaire: A Client-Generated Outcome Measure. *Psychological Assessment*, doi:10.1037/pas0000174
- Federal Interagency Forum on Child and Family Statistic. (2015). POP1 Child population: Number of children (in millions) ages 0-17 in the United States by age, 1950-2014 and projected 2015-2050). Retrieved from <http://www.childstats.gov/americaschildren/tables/pop1.asp>
- Foa, E. B., Chrestman, K. R., & Gilboa-Schechtman, E. (2009). *Prolonged exposure therapy for adolescents with PTSD: Emotional processing of traumatic experiences: Therapist guide*. Oxford: Oxford University Press.
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet, 373*(9657), 68-81. doi: 10.1016/S0140-6736(08)61706-7
- Gilboa-Schechtman, E., Foa, E. B., Shafran, N., Aderka, I. M., Powers, M. B., Rachamim, L., ... Apter, A. (2010). Prolonged exposure versus dynamic therapy for adolescent PTSD: A pilot randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 1034-1042. doi: 10.1016/j.jaac.2010.07.014
- Hendricks, A. (2013). *The revised child welfare trauma training toolkit: What's new in version*

- two?* [PowerPoint slides]. Retrieved May 28, 2014, from NCTSN learning center:
<http://learn.nctsn.org/course/view.php?id=12>
- Herman, J. (1997). *Trauma and recovery: The aftermath of violence - from domestic abuse to political terror*. New York: Basic Books.
- Hu, M. (2014). *Lifespan Integration efficacy: A mixed method multiple case study* (Unpublished Master's thesis). Langley, BC: Trinity Western University.
- Kamphaus, R., & Reynolds, C. (2004). *Parenting Relationship Questionnaire*. Bloomington, MN: Pearson.
- Klorer, P. G. (2005). Expressive therapy with severely maltreated children: Neuroscience Contributions. *Art Therapy, 22*(4), 213-220.
- Kwee, J. (2014). *REB Addendum and Request to Continuing Approval*. Unpublished manuscript, Department of Counselling Psychology, Trinity Western University, Langley, Canada.
- Lanius, R., Lanius, U., Fisher, J., & Ogden, P. (2006). Psychological trauma and the brain: Toward a neurobiological treatment model. In P. Ogden, K. Minton, & C. Pain (Eds.), *Trauma and the body* (pp. 139-161). New York: W. W. Norton & Company, LLC.
- Little, S. G., & Akin-Little, A. (2009). Trauma-focused cognitive behavior therapy. In A. Akin-Little, S. G. Little, M. A. Bray, & T. J. Kehle (Eds.), *Behavioral interventions in schools: Evidence-based positive strategies*. (pp. 325-333). Washington, DC: American Psychological Association.
- Lyshak-Stelzer, F., Singer, P., St. John, P., & Chemtob, C. M. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy, 24*(4), 163-169.
- Mash, E. J. (2006). Introduction. In E. J. Mash, & R. A. Barkley (Eds.), *Treatment of childhood*

- disorders* [3rd ed]. New York: The Guilford Press
- Matulis, S., Resick, P. A., Rosner, R., & Steil, R. (2014). Developmentally adapted cognitive processing therapy for adolescents suffering from posttraumatic stress disorder after childhood sexual or physical abuse: A pilot study. *Clinical Child and Family Psychology Review, 17*(2), 173-190.
- MacLeod, R., Elliott, R., & Rodgers., B. (2012): Process-experiential/emotion-focused therapy for social anxiety: A hermeneutic single-case efficacy design study. *Psychotherapy Research, 22*, 67-81. doi: 10.1080/10503307.2011.626805
- McLeod, J., & Elliott, R. (2011). Systematic case study research: A practice-oriented introduction to building an evidence base for counselling and psychotherapy. *Counselling & Psychotherapy Research, 11*(1), 1-10. doi: 10.1080/14733145.2011.548954
- Mertens, D. (2010). *Research and evaluation in education and psychology: Integrative diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage Publications.
- NCTSN. (2014). *Types of traumatic stress* [website]. Retrieved June 11, 2014, from <http://www.nctsnet.org/trauma-types>
- NCTSN Core Curriculum on Childhood Trauma Task Force. (2012). *The 12 core concepts: Concepts for understanding traumatic stress responses in children and families: Core Curriculum on Childhood Trauma*. Durham, NC: National Center for Child Traumatic Stress.
- Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the body*. New York: W.W. Norton & Company, Inc.
- Olson, D. (2010). *FACES IV Manual*. Minneapolis: Life Innovations.

- Pace, P. (2012). *Lifespan Integration: Connecting ego states through time* (5th ed.). Roslyn, WA: Lifespan Integration, LLC.
- Pace, P. (2013). *Lifespan Integration: Beginning Lifespan Integration Workshop Training Materials*. Roslyn, WA: Lifespan Integration, LLC.
- Partyka, R. (2010). Robert Elliott: Commitment to experience. In L. G. Castonguay, J. C. Muran, L. Angus, J. A. Hayes, N. Ladany, & T. Anderson (Eds.), *Bringing psychotherapy research to life: Understanding change through the work of leading clinical researchers* (pp. 283-293). Washington, DC, US: American Psychological Association.
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review*, 29(4), 328-338.
- Reynolds, C., & Kamphaus, R. (2004). Behavior Assessment System for Children, Second Edition (BASC-2). Bloomington, MN: Pearson.
- Rosner, R., König, H.-H., Neuner, F., Schmidt, U., & Steil, R. (2014). Developmentally adapted cognitive processing therapy for adolescents and young adults with PTSD symptoms after physical and sexual abuse: Study protocol for a randomized controlled trial. *Trials*, 15(1), 195-195.
- Schore, A. N. (2003). *Affect dysregulation & disorders of the self*. New York: W. W. Norton & Company, Inc.
- Seuss, Dr. (2015a, November 9). Goodreads quotes. Retrieved from www.goodreads.com/quotes/9787-i-have-heared-there-are-troubles-of-more-than-one
- Seuss, Dr. (2015b, November 9). Goodreads quotes. Retrieved from www.goodreads.com/quotes/26874-so-be-sure-when-you-step-step-with-care-and

- Siegel, D. J. (2001). Toward an interpersonal neurobiology of the developing mind: Attachment relationships, “mindsight,” and neural integration. *Infant Mental Health Journal*, 22, 67–94.
- Siegel, D. J. (2007). *The mindful brain*. New York: W. W. Norton & Company, Inc.
- Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.) New York: Guildford Press
- Siegel, D. J. (2014, September 2). Brain insights and well-being. [Web log post]. Retrieved from <http://www.psychologytoday.com/blog/inspire-rewire/201409/brain-insights-and-well-being>
- Sinha, M. (2012). Family violence in Canada: A statistical profile, 2010. *Statistics Canada catalogue no. 85-002-x*. Ottawa: Statistics Canada
- Sprout, S. (2015). *Naked in public: A memoir of recovery from sex addiction and other temporary insanities* [Kindle version]. Retrieved from <http://www.amazon.com>
- Statistics Canada. (2011). Children and youth. In *Canada Year Book 2011* (Catalogue number 11-402-X). Ottawa: Author.
- Stephen, S., & Elliott, R. (2011). Developing the adjudicated case study method. *Pragmatic Case Studies in Psychotherapy*, 7, 230-241.
- Stephen, S., Elliott, R., & Macleod, R. (2011). Person-centred therapy with a client experiencing social anxiety difficulties: A hermeneutic single case efficacy design. *Counselling & Psychotherapy Research*, 11(1), 55-66.
- Tinker, R. H., & Wilson, S. A. (1999). *Through the eyes of a child: EMDR with children*. New York: W. W. Norton & Company.
- Thorpe, C. (2012). *The success and strategies of Lifespan Integration: An overview and client*

- stories*. Bellevue, WA: TimeLine Press, LLC.
- Thorpe, C. (2015). *Notes from Lifespan Integration with Children and Adolescents*. Workshop, Everett, WA.
- Thurston, M., McLeod, J., & Thurston, A. (2013). Counselling for sight loss: Using systematic case study research to build a client informed practice model. *British Journal of Visual Impairment*, 31(2), 102-122.
- United Nations Children's Fund [UNICEF] (2014). *Hidden in plain sight: A statistical analysis of violence against children*. New York: Author.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2013). *Child maltreatment 2012*. Retrieved from <http://www.acf.hhs.gov/sites/default/files/cb/cm2012.pdf>
- van der Kolk, B. (2006). Foreword. In P. Ogden, K. Minton, & C. Pain (Eds.), *Trauma and the body* (pp. xvii-xxvi). New York: W. W. Norton & Company, LLC.
- van der Kolk, B., Roth, S., Pelcovitz, D, Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389-399.
- Wall, J. (2012). *Removing barriers to athlete performance enhancement: A hermeneutic case study of OEI* (Unpublished Master's thesis). Langley, BC: Trinity Western University.
- Wall, J., Rensch, C., Hu, M., McDonald, M., & Kwee, J. (2015, August). Poster session presented at the meeting of APA, Toronto.
- Wampold, B. (2010). The research evidence for the common factors models: A historically situated perspective. In B. Duncan, S. Miller, B. Wampold, & M. Hubble (Eds.), *The*

heart and soul of change: Delivering what works in therapy (2nd ed.) (pp. 49-81).

Washington, DC: American Psychological Association. doi:10.1037/12075-002

Weisz, J., Yi Ng, M., Rutt, C., Lau, N., & Masland, S. (2013). Psychotherapy for children and adolescents. In M. Lambert (Ed.), *Handbook of Psychotherapy and behavior change* (6th ed.) (pp. 541 -586). Hoboken, NJ: John Wiley & Sons.

Westen, D. I., Stirman, S. W., & DeRubeis, R. J. (2006). Are Research Patients and Clinical Trials Representative of Clinical Practice? In J. C. Norcross, L. E. Beutler, R. F. Levant, J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.), *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions* (pp. 161-189). Washington, DC, US: American Psychological Association. doi:10.1037/11265-004

Whitacre, S. (2014). *My father's prostitute: Story of a stolen childhood* [Kindle Edition].

Retrieved from <http://www.amazon.com>

Widdowson, M. (2015, September 7). Reply to: Has anyone used Hermeneutic Single Case Efficacy Design (HSCED) in research with children? [Online forum comment].

Retrieved from

https://www.researchgate.net/post/Has_anyone_used_Hermeneutic_Single_Case_Efficacy_Design_HSCED_in_research_with_children2#55edf1c660614b437a8b4602

APPENDIX A

Memory Cue Instructions by Peggy Pace

Preparing a memory cue list:

When first beginning to do Lifespan Integration therapy, many people are unable to get a spontaneous flow of memories during the Time Line step of the LI protocol. This is the step when the adult self proves to his or her inner child self that time has passed, and the child has grown up. Even people who have fluid memory recall for most years of their lives may have some gaps or stretches of years where memories are much harder to access. The memory cue list will allow you to recall visual and other sensory aspects of each memory from the right brain hemisphere; and this will improve your ability to recall more of your life. The goal for integration is to move you toward a more free association of memories as you go from year to year visually. You will notice as you experience a Lifespan Integration session, that when a memory cue is read to you, other memories from that same time frame will spontaneously begin to enter your mind.

To prepare the memory cue list, begin with your earliest memory. For most people the earliest memory will be of age 2 or 3. Try to remember at least one memory for each year of your life. For each cue, write down the calendar year, the age you were at the time of the memory, and a word or phrase that will remind you of the memory when your therapist reads the word or phrase to you. Your therapist doesn't have to understand what the cues stand for, however it is important for the therapist to be aware of any cues which will remind you of traumatic events. You will need only one cue for each year, however for variation it is helpful to have 2 or 3 cues for each year. Be sure to separate your cues with a * or / mark. Your therapist will read only one cue per year, but she may alternate cues used on different repetitions. The dates and ages will help you to organize the cues chronologically, but during LI your therapist will read only the cues.

Try to think of one memory for each year of your life, from your earliest memory all the way to the present. Cues which can evoke the memory of smells, tastes, sounds, and tactile sensations work best to promote integration. For example the cue: "learning to swim" could bring back the smell of the water or chlorine, the feel of the water, the sounds of splashing, etc. Memories used for cues should be specific to one year only. For example, "working at Microsoft" would be a confusing memory cue for someone who worked there for several years. In this case the cue would need to be more specific, as: "fender bender in Microsoft parking lot". Record your memory cues chronologically. Write legibly or type your memory cues on your computer. The cues should be events that you actually remember as opposed to a scene which you have seen in a photograph but when you look at the photo you don't recall having been in the scene. The cues can also be the name of a friend you spent time with at a certain age, or a place from the past which you remember.

The memories do not need to be significant in any way. Even remembering what a house or school building looked like is enough detail if that is all you remember. Be sure to include significant events which impacted your life such as deaths of people important to you, other traumatic events which affected you, marriages, divorces, births, etc. The memory cues should cover your entire life, from your earliest memory all the way to the present year.

Sample cues for ages 10 –13.

1989 Age 10 – best friend Gus

1990 Age 11 – moved to Chicago / started middle school

1991 Age 12 – summer camp with Will

1992 Age 13 – skiing with Jen / 8th grade graduation

APPENDIX B

Rich Case Record - Kelly

for Hermeneutic Single Case Efficacy Design Research Study on Efficacy of
Lifespan Integration with a Child

by Chris Rensch

Trinity Western University in October 2015

Content

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[Introduction and Summary](#)

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[BASC-2: Self Reports](#)

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Introduction and Summary

In this summary you will find a brief description of the client including developmental considerations and family environment as well as results from the pre-therapy, post-therapy, and follow-up assessments. Assessments and results thereof are briefly explained as well.

At the time of research, Kelly was 12 years old and in Grade 6 (Follow-up assessments were done in her 3rd week of Grade 7). She lives with her mom, Rachelle, and her brother, Ben, in Kamloops, while her dad, Mitch, lives at the Coast for work reasons. Dad usually comes home every other weekend and Kelly, Ben, and Rachelle travel to the Coast, too, to see dad and take care of medical appointments. When at the coast, the maternal grandmother becomes a parenting figure, too. This living arrangement is largely to accommodate Ben's academic needs, since he has been diagnosed with Autism Spectrum Disorder (ASD) and for Mitch to look after the family business at the Coast.

Kelly's mom became aware of this research project through her son's therapist, Gillian, who then also became the therapist for this project. Kelly's mom reports that Kelly carries guilt and responsibilities that are not hers, has trouble expressing her emotions in time (rather than bottling them up until they explode), and has trouble with conceptual thinking. Mom says that Ben had and still has medical emergencies, which in the past could have been traumatic for Kelly, too.

Kelly's birth was induced and both her and mom had to stay in the hospital for 3 days because of feeding and respiratory issues. In terms of developmental history, Kelly hit the milestones in a 'normal' time frame, with some minor difficulties in balancing her body. Her health is overall in good condition, with some minor respiratory problems. Relevant family health concerns are: ADHD (dad), dyslexia, (dad), anxiety (mom and dad), ASD and ticks (Ben), as well as borderline and bipolar (dad's mom). At intake, mom reports Kelly to have a short attention span, have lack of self-control, seems unhappy most of the time, and overreacts when faced with a problem.

Most events that could have been a setback for Kelly or objectively could be called trauma, happened from age 9 onwards. Most of them centred around Ben's health and medical emergencies. From observing Kelly in therapy it seems that Ben's ticks and her dad's accident in which he broke his back were most influential on Kelly's emotional life.

The following assessments were used at various points throughout the research project: (1) Behavioural Assessment System for Children, second edition (BASC-2) to assess behavioural issues and levels of functioning through teacher reports, parent reports, and self reports; (2) the Parenting Relationship Questionnaire (PRQ) to assess relationship between parents and Kelly; (3) the Family Adaptability and Cohesion Scale, fourth edition (FACES IV) to assess family functioning and cohesion; (4) Personal Questionnaire (PQ) to assess Kelly's problems that bugged her on a weekly basis throughout therapy; (5) Helpful Aspects of Therapy form (HAT), to assess client experiences in therapy sessions; as well as (6) Change Interview, a one time, post-therapy interview to assess change and attribution to therapy.

Two notes before the results will be presented: (1) Dad's ADHD and dyslexia made it difficult for him to fill out the many rating scales and he needed support from Rachelle throughout; (2) Rachelle reported that Kelly might have misunderstood the rating on the FACES questionnaire and scored them in reverse order.

The BASC-2 self reports (SRP) indicate an overall reduction in internalizing problems and inattention/hyperactivity. In terms of emotional symptom index and personal adjustment, the results are not conclusive. The BASC-2 teacher reports (TRS) show an overall reduction in internalizing problems, school problems, as well as behavioural problems. In terms of adaptive skills, the results are not conclusive. The BASC-2 parent reports (PRS) results seem to indicate an overall reduction in internalizing problems. Results from behavioural problems and adaptive skills are less conclusive.

Results from the PRQ indicate low parenting confidence in mom and above average discipline practices in dad. All other items are average. Results from the FACES are inconclusive and warrant a more in depth study than this summary allows for.

In terms of Change Interviews, Kelly saw changes in her life since therapy started, such as being bugged less about being bullied, being less scared for her father's health, remodelling of the house to comply with her need for privacy and physical distance from her brother, as well as being worried less about having to move schools again. She attributed these changes mainly to 'it just happened', rather than to therapy. Kelly said that it helped to talk about her feelings and that sometimes the timeline was difficult for her. Rachelle reported 7 changes in her daughter's life since therapy started and attribute most of them highly to therapy.

In regards to her weekly PQ, results seem to indicate a drop of her mean score of at least 2 points, which is considered significant by the authors.

Assessment Results

Structured Developmental History

This is a summary with only the pertinent information about Kelly's development. [For the full report, click here](#). At the time of interviewing the mother, Kelly was 12 years old and in Grade 6. All the information in this section comes from this interview.

Referral Information

Mom (Rachelle) reports that Kelly carries guilt that is not hers. Especially at school, she takes on responsibilities in regards to her autistic brother, Ben, that are not hers to carry. Because mom cannot be there all the time, Kelly feels responsible for and to her brother (see Trauma Interview for more details on the possible origins of this). Her mother describes Kelly as a fixer and a mother hen and also exhibiting some comprehension difficulties; she is not able to grasp bigger concepts, which, according to mom, might be because she cannot ground herself and has difficulties focusing on tasks.

Parents and Primary Caregivers/Living Arrangements

Currently, Mitch (dad) lives and works (heavy metal construction) on the Coast, while Rachelle and the children live fulltime in Kamloops. This arrangement is to accommodate for Ben to go to a school that fits his academic and developmental needs better. Usually, during the week Rachelle is alone with the children and Mitch comes home every other weekend. Rachelle describes this time as "Hurricane Dad" because he spends all his time intensely with the children and takes them on lots of outings. Sometimes, Rachelle and the children also drive to visit Mitch. While on the Coast, Mitch stays on the same property as Rachelle's parents.

Family History/Relations

Kelly is not necessarily closer to one parent than the other, mother reports. When she is in physical discomfort she seeks more mom's comfort, while when she wants to talk she usually would talk to her father. Her brother is 10 years old and they have a typical brother-sister relationship, which entails 'poking the bear' from both sides. Mom says that Kelly usually sees her grandparents (Rachelle's parents) once a week and that grandma plays a big role in Kelly's life.

Rachelle says that Kelly is nurturing, has a good heart, has not a mean bone in her, and is other-focused. When asked what she found most difficult raising Kelly, she said teaching her to put up boundaries to not get taken advantage off by other children. Kelly internalizes

everything and 'blows up' when it gets too much. Parents used to do time-outs while standing in the corner but it is not necessary anymore; now they use loss of screen-time

Pregnancy/Birth

Kelly was not a planned pregnancy mainly because Rachelle was told that she could not conceive children. Rachelle's first reaction was shock and both Rachelle and Mitch decided to move out for a while to figure out whether or not they should stay together. Even though physically separated, their relationship continued on and they eventually decided to get married. During this period, Rachelle went through emotional ups and downs.

Kelly was born in a hospital after 18 hours of induced labour, with a birth weight of 8 lbs and 11 oz. Mom and baby stayed in hospital for 3 days because Kelly had initial breathing and feeding problems. Kelly was given formula for the first four days until mother's breastmilk set in. She was breastfed until she was 4-5 months old.

Development

In terms of early childhood development, mother reports that Kelly hit all of them on a normal timeframe. She had some difficulty learning to ride her bike and appeared a bit clumsy. Mom describes Kelly as a generally 'easy kid' with no extra ordinary problems or setbacks, especially compared to her brother. Kelly experienced her first separation at 20 months, when her brother was born (see Trauma History Interview).

Medical History

Kelly has some respiratory problems (hay fever and sinus infections), some gastrointestinal problems ('rotten gut' and she does not use the bathroom for bowel movements anywhere but at home), some musculoskeletal problems (a bit clumsy, not the best coordinations, and some spine issues), some neurological problems (a bit accident prone, started biting nails with 3 years, and grinds teeth a little bit), some allergies (hay fever, gluten, and dairy), minor speech problems (she sometimes runs words together). According to mom, Kelly has never been physically or sexually abused.

Family Health

The following health concerns have been observed in the family: migraine headaches (Rachelle's mother), alcohol/drug abuse (Rachelle's father), ADHD (Mitch), bipolar disorder and borderline personality disorder (Mitch's mother), anxiety (Mitch and some Rachelle), dyslexia (Mitch), speech and language problems (Ben), autism spectrum disorder (Ben), and ticks (Ben). According to Rachelle, Mitch's overall present health is good, though he could lose some weight. Rachelle struggles with fibromyalgia, degenerative calcification of joints, and had a hysterectomy a few years ago. Mitch has been in special education for his dyslexia and Ben for

his struggles with ASD.

Friendships/Recreation and Interests

She says that Kelly makes friends easy and values friendship. With younger children, she usually takes on a leadership role, while she can be leader and follower with same aged children. She enjoys sports such as horseback riding and swimming, though her interest in horses declined a few years ago. She likes drawing and make-up.

Behaviour/Temperament

Mom reports the following behavioural observations: Kelly has a short attention span, especially with school work, lacks self-control with food, seems unhappy most of the time, sometimes withholds affection, has fears of disappointing others, especially dad, does not seem overly energetic in play, overreacts when faced with a problem, and cannot calm down, once she bursts with emotion. When asked what makes Kelly angry, mom replied with mean people and Ben.

Educational History

She attended part time daycare and Kindergarten with no problems. During elementary school she had to change schools because of her brother's health. She has some difficulty with math, and was on the honour roll last year; this year her academic performance is declining.

Unstructured Trauma History Interview

The following list of events is a selection of what was given to me during a phone interview with Rachelle, in which she was asked what kinds of events might have been traumatic or a setback for Kelly. The list was afterwards chronologically ordered. [The full interview can be found here.](#)

Birth (2003)

Kelly's birth had to be induced and when she was born she had respiratory issues, threw up a lot, and did not want to breastfeed. (See developmental section of SDH). Mom and child stayed in the hospital for 5 days but they were never separated.

Age 18 months (June 2004) - Traumatic Birth of Brother

Kelly had first separation from mom. Mom had to go to the hospital when Ben was born. There had been lots of chaos, mom was in the hospital, dad was leaving in the mornings and coming back at night, and Kelly lived with grandma in the meantime. Kelly went to the hospital once and saw mom attached to all the tubes. Stress continued when her brother came home. Mom mentioned "life was never the same again". Her brother was in and out of the hospital often and eventually diagnosed with ASD.

Age 20 months (January 2005) Hospitalization of Ben

Kelly was separated from Mitch, Rachelle and Ben for 1 week while Ben was in isolation in the hospital due to respiratory issues. Mitch and Rachelle only spent 1 night at home with Kelly that week. Kelly stayed with Grandma. Kelly never came to the hospital due to limited visitors allowed in isolation. Once Ben came home he required a lot of care for medical treatments and sometime multiple emergency room visits a week. It became "normal" for Kelly to wake to everyone gone but Mitch or Grandma home to take care of her. Sometimes Kelly was loaded up in car as well to be dropped off at grandma's place enroute to hospital during the night.

Age 9 (End of 2012) - Apple Incident at School

Her brother got triggered in school and threw an apple through the classroom. His teacher evacuated the classroom and Kelly had to observe that from her classroom across the hall. Her teacher then had a classroom discussion about Autism with her in the room. For the parents, this incident was the final and critical incident, which led them to decide to move to Kamloops in order for Ben to attend a school that is more capable to cater to his needs. This ended up being Kelly's and Ben's last day at that school.

Age 9 (Christmas 2012) - Sudden Move to Kamloops

The next few days after the school incident were chaotic: the children stayed with grandma while the parents drove to Kamloops to buy a new house, come back and sold their old family house. The movers came two days before Christmas to pack up their old house and the family lived in the new house within a week. Even though Kelly never expressed it verbatim, Rachelle said that she had to give up the life she knew for her brother. Kelly is now extremely concerned and worried about her brother's behaviour at school because that could mean that they would have to move again.

Age 9 or 10 (Grade 3) - Nana's Negative Bodyshape Comment

Mitch's mother, Nana, was not around the children a lot and around Grade 3 offered to do some baking and cooking with Kelly after school. At one of those cooking sessions, Nana told Kelly that she needs to lose some weight and that she should only cook the food and not eat it. Kelly did not seem to have been impacted immediately but Rachelle saw changes in her behaviour in school and she says things like "I don't wanna be the chubby one at school". Kelly is now more concerned about her weight than before Nana's comment.

Age 9 or 10 (Early 2013) - Dog's Surgery

When her favourite dog Trixie was just six months old she had to have an invasive surgery. On day three Kelly saw her 'baby' sitting at the treatment table with all the tubes hanging off her; Kelly was terrified. Trixie ended up living, but this experience was traumatic for Kelly.

Age 9 or 10 (Grade 3) - Ben's 911 Attack

During her Grade 3 year, Kelly and mom witnessed how her brother had a sudden respiratory attack. Rachelle had to call 911 and prepared to go to the hospital with Ben. Rachelle wanted to get Kelly out of the house so that she did not have to witness the chaos and how her brother was going to be hauled away with the ambulance. Rachelle did not know any of the neighbours, yet, and nobody from the family was close enough to look after Kelly. So she walked up to a neighbour's door, to ask whether they could look after Kelly until grandma could come to pick her up. Kelly was left with the neighbours for at least two and a half hours. When she was picked up, she seemed 'pretty bubbly'. Ever since this 911 attack, Kelly seems to have to be in the know about what is going on at all times.

Age 10 (July/August 2013) - Portugal Vacation With Consequences

During the summer break 2013, Kelly and her dad attended a wedding in Portugal and had a great time together. Everything was fine with Ben before they left; however, when they returned, Ben had developed extreme ticks, about 100/30sec. These ticks seemed to have

been triggered by his increased anxiety when Kelly left for Portugal. Up until then, they were never separated and she was his safe place at school and, to a certain degree, at home. Rachelle assumes that Kelly had been thinking “Did I cause it? Was it my fault? I should have stayed home”

Age 10 (September 2013) - Dad’s Accident

Three weeks after their return from Portugal, Mitch had a bad accident at work where he broke his back. At this time Mitch was not with the family in K, so Kelly was woken up by her mom frantically packing a suitcase to fly to him. There was chaos and panic because the information was limited about dad’s situation and it also triggered Rachelle because she grew up with a quadriplegic grandmother and experienced the impact that can have on a family. Kelly and Ben had to come along to the airport in K and saw their mom panic and on the phone with people that were with Mitch.

For about a week, Kelly and Ben had to stay at home with grandma, without really knowing how dad was going to be. Eventually, dad was allowed to come to home but the house had to be altered to accommodate his spinal injury. Kelly was extremely worried about her dad throughout this time, especially when she saw him for the first time after the accident because he looked so fragile. This was a huge family adjustment.

Age 10 (Fall 2013) - Mom’s Diagnosis of Fibromyalgia

While this new adjustment phase was going on, Rachelle got diagnosed with fibromyalgia. She said she had a hemorrhage, was in a general bad shape, and needed to have a hysterectomy. Because of Mitch’s situation, Rachelle decided to wait with the surgery and stay in ‘survival mode’ until everything was a bit less chaotic.

Age 10 (Christmas 2013) - Uncertainty About Parent’s Health

Christmas 2013 was tainted for Kelly and the family with uncertainty about Mitch’s back and Rachelle’s health. Mitch was not healing as fast as anticipated, had to stay in bed all Christmas and could not move with the possibility of Mitch having spinal surgery early January. January came and Mitch had healed, no surgery was needed.

Age 10 (February 2014) - Mom’s Hysterectomy

Rachelle had her hysterectomy with complications. Her pain medication did not work well and so Kelly saw her mom in lots of pain with all the tubes. Additionally, Kelly had to take on more responsibilities at home while mom was gone and when she came home to heal.

Ongoing since Christmas 2012 - Separation From Dad

To accommodate dad’s work, the family has two homes and during the week, Kelly is

usually separated from her dad. Additionally, when Mitch had to go to physio after his accident, it was usually Kelly, Rachelle, and Ben who commuted hours to see their dad. This also meant that Kelly could not spend any time with her friends in Kamloops on weekends. Now he commutes every other week to stay in Kamloops. In Rachelle's estimation, Kelly hates being separated from her dad and probably thought several times that it was because of Ben that they had to leave and move.

BASC-2: Self Reports¹

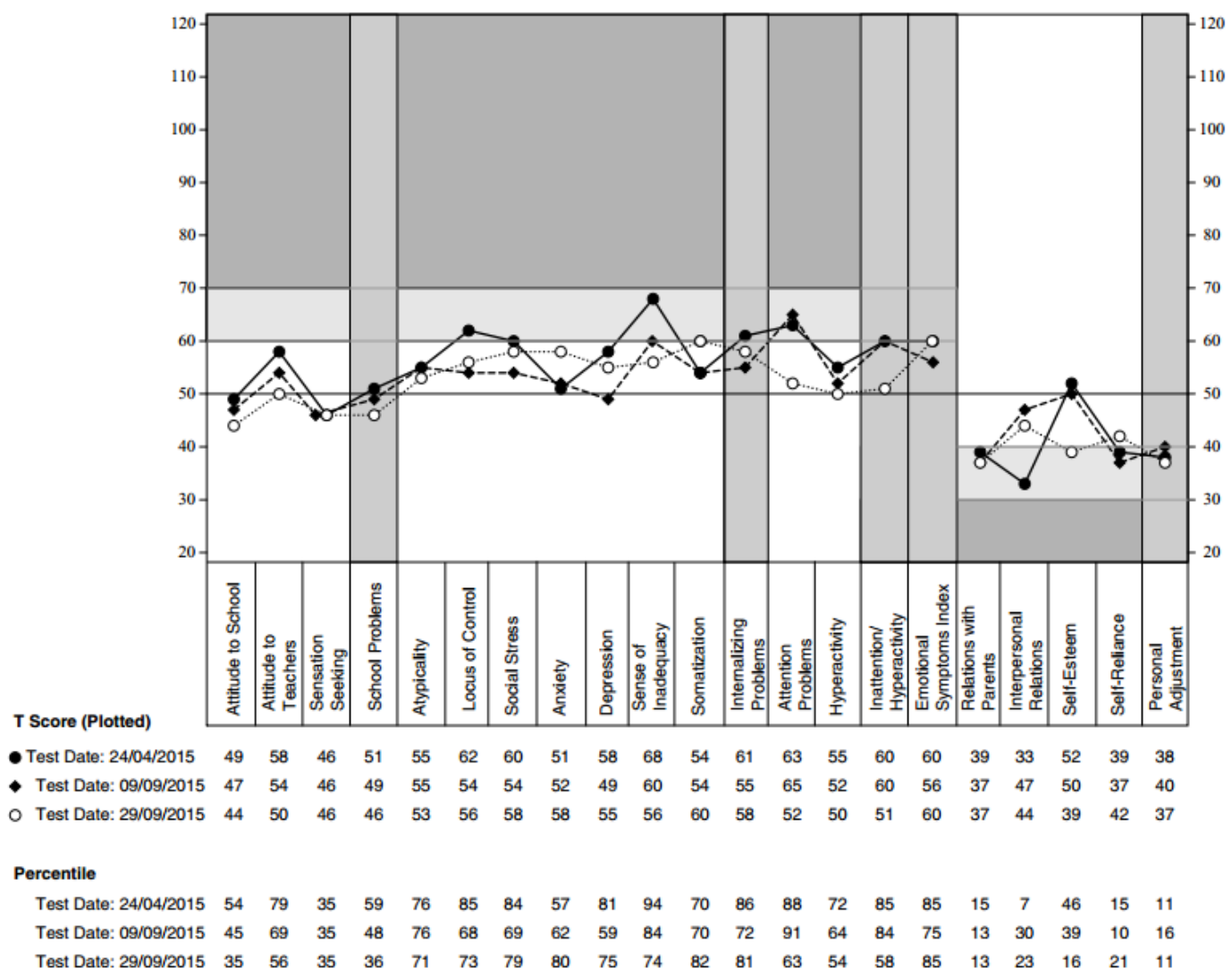
[Link to Kelly's full pre-therapy self-report](#)

[Link to Kelly's full post-therapy self-report](#)

[Link to Kelly's full follow-up self report](#)

See diagram below to find visual representation for pre-therapy, post-therapy, and follow-up

T-SCORE PROFILE



¹ All data from the BASC-2 SRP were valid in terms of F Index, Response Pattern, Consistency, L, and V.

	Pre	Post	Follow-up
School Problems	Similar to oth.	Similar to oth.	Similar to oth.
Attitude to School	Similar to oth.	Similar to oth.	Similar to oth.
Attitude to Teachers	Similar to oth.	Similar to oth.	Similar to oth.
Sensation Seeking	Similar to oth.	Similar to oth.	Similar to oth.
Internalizing Problems	Similar to oth. *	Similar to oth.	Similar to oth.
Atypicality	Similar to oth.	Similar to oth.	Similar to oth.
Locus of Control	Similar to oth. *	Similar to oth.	Similar to oth.
Social Stress	At Risk	Similar to oth.	Similar to oth.
Anxiety	Similar to oth.	Similar to oth.	Similar to oth.
Depression	Similar to oth.	Similar to oth.	Similar to oth.
Sense of Inadequacy	Similar to oth. *	Similar to oth.	Similar to oth.
Somatization	Similar to oth.	Similar to oth.	Similar to oth. *
Inattention/Hyperactivity	Similar to oth. *	Similar to oth.	Similar to oth.
Attention Problems	At Risk	At Risk	At Risk **
Hyperactivity	Similar to oth.	Similar to oth.	Similar to oth.
Emotional Symptom Index	Similar to oth. *	Similar to oth.	Similar to oth. *
Personal Adjustment	Similar to oth. *	Similar to oth.	Similar to oth. *
Relations with Parents	At Risk	At Risk	At Risk
Interpersonal Relations	At Risk	Similar to oth.	Similar to oth.
Self-Esteem	Similar to oth.	Similar to oth.	At Risk
Self-Reliance	Similar to oth. *	Similar to oth. *	Similar to oth.

* Changed from “At Risk” to “Similar to others” after case development meeting because of misleading automatic categorization in the report despite statistical insignificance.

** Changed from “Similar to others” to “At Risk” after case development meeting because of misleading automatic categorization in the report despite statistical insignificance.

At pre-therapy, Kelly's BASC-2 profile was also characterized by an elevated Social Stress scale, which suggests that her social interactions may be characterized by tension, pressure, and a lack of social coping resources, which are common issues in individuals with internalizing problems. **At post-therapy and follow-up**, she exhibited levels similar to other children her age.

At pre-therapy, post-therapy, and follow-up, the BASC-2 items endorsed by Kelly resulted in an at-risk elevation on the Attention Problems scale. Individuals with elevations on this scale likely struggle to remain focused and on-task for sustained periods of time. They may be easily distractible, forgetful, and disorganized.

At pre-therapy, Kelly's pattern of endorsements on the BASC-2 resulted in an at-risk Interpersonal Relations scale. Low scores on this scale may indicate difficulties with social skills. Individuals who endorse problems in this area are typically interested in developing

relationships, but they are unsuccessful and they may blame themselves for these failures. **At post-therapy and follow-up**, she exhibited levels similar to other children her age.

At pre-therapy, post-therapy, and follow-up, Kelly's score on Relations with Parents fell in the At-Risk classification range. Kelly reports having a strained relationship with her parents. She may report having little trust in her parents, and she may feel incidental to family life and decision making.

At follow-up only, Kelly's score on Self-Esteem fell in the At-Risk classification range, and follow-up may be necessary. Kelly reports a lower self-image than others her age.

BASC-2: Parent Reports²

Overview

	Mom Pre	Mom Post	Mom F/U	Dad Pre	Dad Post	Dad F/U	Grand ma Pre	Grand ma Post	Grandm a F/U
Externalizing									
Hyperactivity	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	At Risk	At Risk	S.t.O.	S.t.O.
Aggression	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.
Conduct Prob.	S.t.O.	S.t.O.	S.t.O.	At Risk	S.t.O.	At Risk	S.t.O.	S.t.O.	S.t.O.
Internalizing									
Anxiety	At Risk*	S.t.O.**	S.t.O.	S.t.O.	S.t.O.	S.t.O.	At Risk	S.t.O.	S.t.O.
Depression	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	At Risk	S.t.O.	S.t.O.
Somatization	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.
Behavioural									
Atypicality	S.t.O.	S.t.O.	S.t.O.	At Risk	S.t.O.	At Risk	At Risk	S.t.O.	S.t.O.
Withdrawal	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	At Risk
Attention Prob.	At Risk	S.t.O.	S.t.O.**	At Risk	S.t.O.	At Risk	At Risk	S.t.O.	S.t.O.
Adaptive Skills									
Adaptability	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	At Risk	S.t.O.	S.t.O.	S.t.O.
Social skills	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.
Leadership	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.	S.t.O.
Activities of Daily Living	At Risk	S.t.O.	S.t.O.	At Risk	S.t.O.	S.t.O.	At Risk	S.t.O.	S.t.O.
Functional Comm.	At Risk	S.t.O.	S.t.O.	S.t.O.	At Risk	At Risk	At Risk	S.t.O.	S.t.O.

S.t.O= Similar to others

* Changed from “Clinically Significant” to “At Risk” after case development meeting because of misleading automatic categorization in the report despite statistical insignificance.

** Changed from “At Risk” to “Similar to others” after case development meeting because of misleading automatic categorization in the report despite statistical insignificance.

PRS Mother

[Link to full pre-therapy report](#)

[Link to full post-therapy report](#)

[Link to full follow-up report](#)

² All data from the BASC-2 PRS were valid in terms of *F* Index, Response Pattern, Consistency, *L*, and *V*.

At pre-therapy, Kelly's score on Anxiety fell in the At-Risk classification range, and follow-up may be necessary. Kelly's mother reports that Kelly sometimes displays behaviors stemming from worry, nervousness, and/or fear. **At post-therapy and follow-up**, Kelly's mother reports that Kelly displays anxiety-based behaviors no more often than others her age.

At pre-therapy, Kelly's profile was characterized by an at-risk Attention Problems scale score in addition to an average or below average Hyperactivity scale score. In making diagnostic considerations regarding the possibility of ADHD, such a profile is probably more consistent with a diagnosis of ADHD - inattentive type, as opposed to primary hyperactive/impulsive or combined type. **At post-therapy and follow-up**, Kelly's Attention Problem scale was similar to other children her age.

At pre-therapy, Kelly's score on Activities of Daily Living fell in the At-Risk classification range, and follow-up may be necessary. Kelly's mother reports that Kelly has difficulty performing simple daily tasks in a safe and efficient manner. **At post-therapy as well as follow-up**, Kelly's mother reports that Kelly is able to adequately perform simple daily tasks, in a safe and efficient manner.

At pre-therapy, Kelly's score on Functional Communication fell in the At-Risk classification range. Kelly's mother reports that Kelly demonstrates poor expressive and receptive communication skills, and that Kelly has difficulty seeking out and finding information on her own. **At post-therapy and follow-up**, Kelly's mother reports that Kelly generally exhibits adequate expressive and receptive communication skills, and that Kelly is usually able to seek out and find new information when needed.

PRS Father

[Follow this link to the full pre-therapy report](#)

[Follow this link to the full post-therapy report](#)

[Follow this link to the full follow-up report](#)

At follow-up only, Kelly's score on Hyperactivity fell in the At-Risk classification range. Kelly's father reports that Kelly displays a moderately high number of disruptive, impulsive, and uncontrolled behaviors.

At pre-therapy and follow-up, the BASC-2 items endorsed by Kelly's father resulted in an at-risk Attention Problems scale. Children with elevations on this scale likely struggle to remain focused and on-task for sustained periods of time. They may be easily distractible, forgetful, and disorganized. **At post-therapy**, Kelly's father reports that Kelly maintains an attention level similar to that of others her age.

At pre-therapy and follow-up, the BASC-2 items endorsed by Kelly's father resulted in

an elevation on the Conduct Problems scale. **At post-therapy**, Kelly's father reports that Kelly demonstrates rule-breaking behavior no more often than others her age.

At pre-therapy, Kelly's score on Activities of Daily Living fell in the At-Risk classification range. Kelly's father reports that Kelly has difficulty performing simple daily tasks in a safe and efficient manner. **At post-therapy and follow-up**, Kelly's father reports that Kelly is able to adequately perform simple daily tasks, in a safe and efficient manner.

At pre-therapy, Kelly's father reports that Kelly generally exhibits adequate expressive and receptive communication skills, and that Kelly is usually able to seek out and find new information when needed. **At post-therapy and follow-up**, Kelly's score on Functional Communication falls in the At-Risk classification range, and follow-up may be necessary. Kelly's father reports that Kelly demonstrates poor expressive and receptive communication skills, and that Kelly has difficulty seeking out and finding information on her own.

At follow-up only, Kelly's score on Adaptability fell in the At-Risk classification range. Kelly's father reports that Kelly has difficulty adapting to changing situations, and that Kelly takes longer to recover from difficult situations than most others her age.

PRS Grandma

[Follow this link for the full pre-therapy report](#)

[Follow this link for the full post-therapy report](#)

[Follow this link for the full follow-up report](#)

At pre-therapy, the BASC-2 items endorsed by Kelly's grandma resulted in a clinically significant Anxiety scale, a pattern that occurred in 4.4% of the standardization sample. This profile typically indicates high levels of internal distress such as excessive worry and nervousness, intrusive or obsessive thoughts, and negative self-appraisal. **At post-therapy and follow-up**, Kelly's grandma reports that Kelly displays anxiety-based behaviors no more often than others her age.

At pre-therapy, Kelly's BASC-2 profile is also characterized by an at-risk Depression scale. This suggests that in addition to anxiety, Kelly is also exhibiting depressed mood, and that depressive disorders such as major depression and bipolar disorder may be additional diagnostic considerations. **At post-therapy and follow-up**, Kelly's grandma reports that Kelly displays depressive behaviors no more often than others her age.

At pre-therapy, Kelly also exhibited elevations on the BASC-2 externalizing scales of Hyperactivity and Attention Problems, a pattern that occurred in 29.1% of the BASC-2 standardization sample with a clinically significant Anxiety scale. This suggests that she is exhibiting significant behavioral difficulties in conjunction with her emotional distress and

indicates that additional diagnostic considerations might include attention-deficit/hyperactivity disorder (ADHD). Children with these problems may exhibit inattention and restlessness, which may appear behaviorally similar to ADHD. Furthermore, it may be the case that emotional distress is causing Kelly to act out, or that negative feedback related to her behavioral issues is resulting in anxious mood or low self-esteem.

At post-therapy and follow-up, Kelly's grandma reports that Kelly displays these behaviors no more often than others her age.

At pre-therapy, Kelly's profile is characterized by an at-risk Attention Problems scale score in addition to an at-risk Hyperactivity scale score. **At post-therapy and follow-up,** Kelly's grandma reports that Kelly maintains an attention level similar to that of others her age.

Several parenting variables are associated with depression and anxiety. These include low levels of parental warmth and acceptance, poor communication, and increased familial conflict. Furthermore, harsh and rejecting parenting styles may be related to depression, and anxiety has been associated with overcontrolling and intrusive parenting. Furthermore, parents are often involved in the therapy process.

At pre-therapy, Kelly's T score on Activities of Daily Living is 40 and has a percentile rank of 16. This T score falls in the At-Risk classification range, and follow-up may be necessary. Kelly's parent/guardian reports that Kelly has difficulty performing simple daily tasks in a safe and efficient manner. **At post-therapy and follow-up,** Kelly's Grandma reports that Kelly is able to adequately perform simple daily tasks, in a safe and efficient manner.

At pre-therapy, Kelly's score on Functional Communication fell in the At-Risk classification range. Kelly's grandma reports that Kelly demonstrates poor expressive and receptive communication skills, and that Kelly has difficulty seeking out and finding information on her own. **At post-therapy and follow-up,** Kelly's Grandma reports that Kelly generally exhibits adequate expressive and receptive communication skills, and that Kelly is usually able to seek out and find new information when needed.

At follow-up only, Kelly's score on Withdrawal fell in the At-Risk classification range, and follow-up may be necessary. Kelly's grandma reports that Kelly is seemingly alone, has difficulty making friends, and/or is sometimes unwilling to join group activities

BASC-2: Teacher Reports³

Overview

	Mr G Pre	Mr G Post*	Mr G F/U	Ms C Pre	Ms C Post	Ms C F/U	Ms D Pre	Ms D Post	Ms D F/U
Externalizing	S.t.O.								
Hyperactivity	S.t.O.			S.t.O.	At Risk		S.t.O.	S.t.O.	S.t.O.
Aggression	S.t.O.			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
Conduct Problems	S.t.O.			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
Internalizing	At Risk								
Anxiety	At Risk			At Risk***	At Risk		S.t.O.	S.t.O.	S.t.O.
Depression	Clinically Sign.			At Risk	At Risk		S.t.O.	S.t.O.	S.t.O.
Somatization	S.t.O.			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
School Prob.	S.t.O.								
Attention Prob.	At Risk			S.t.O.	At Risk		S.t.O.	S.t.O.	S.t.O.
Learning Prob.	At Risk			At Risk***	At Risk		S.t.O.	S.t.O.	S.t.O.
Behavioural									
Atypicality	At Risk			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
Withdrawal	At Risk			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
Adaptive Skills									
Adaptability	At Risk			S.t.O.	At Risk		S.t.O.	S.t.O.	S.t.O.
Social skills	S.t.O.			S.t.O.	S.t.O.		S.t.O.	S.t.O.	S.t.O.
Leadership	S.t.O.			S.t.O.	S.t.O.		S.t.O.**	S.t.O.**	S.t.O.
Study Skills	At Risk			S.t.O.	S.t.O.		At Risk	At Risk	S.t.O.
Functional Comm.	S.t.O.			S.t.O.	S.t.O.**		S.t.O.	S.t.O.	S.t.O.

S.t.O. = Similar to Others

* Mr G's post-data was deleted after the case development meeting because of a scoring error.

** Changed from "At Risk" to "Similar to others" after case development meeting because of misleading automatic categorization in the report despite statistical insignificance.

*** Changed from "Similar to others" to "At Risk" after case development meeting because of

³ All data from the BASC-2 TRS were valid in terms of F Index, Response Pattern, Consistency, L, and V.

misleading automatic categorization in the report despite statistical insignificance.

Clinical Summary - Mr. G

[Follow this link to full pre-therapy report](#)

[Follow this link to full post-therapy report](#)

At pre-therapy, the BASC-2 items endorsed by Mr G resulted in clinically significant Depression and Anxiety scales, a pattern that occurred in 2% of the standardization sample. This profile typically indicates high levels of internal distress such as depressed mood, anxious distress, and low self-esteem, as well as physical complaints such as headaches, stomach aches, lethargy, and pain.

At pre-therapy, Kelly also exhibited an elevation on Attention Problems, a pattern that occurred in 50% of the BASC-2 standardization sample with clinically significant Depression and Anxiety scales. This suggests that she is exhibiting significant behavioral difficulties in conjunction with her emotional distress and indicates that additional diagnostic considerations might include attention-deficit/hyperactivity disorder (ADHD). Furthermore, it may be the case that emotional distress is causing Kelly to act out, or that negative feedback related to her behavioral issues is resulting in depressed or anxious mood.

At pre-therapy, the pattern of BASC-2 item endorsements by Mr G resulted in an at-risk Withdrawal scale. Items from the Withdrawal scale measure several core behaviors commonly described in autism spectrum disorders, but it is also possible for this scale to be elevated due to behavioral or mood difficulties. For children who are presenting with internalizing problems, elevated Withdrawal scores may reflect timidity, low prosocial drive, or peer rejection.

At pre-therapy, the pattern of BASC-2 item endorsements by Mr G resulted in an at-risk Learning Problems scale. Children with mood problems may struggle with attention and concentration, lack motivation, or record frequent absences due to physical symptoms such as fatigue, headaches, or stomachaches. Conversely, children with learning difficulties may develop feelings of anxiety, frustration, and poor self-esteem due to their academic inadequacies, and they may complain of somatic symptoms in order to avoid school..

At pre-therapy, the BASC-2 items endorsed by Mr G resulted in an at-risk Developmental Social Disorders content scale score. This suggests that Kelly may be exhibiting problems with self-stimulation, withdrawal, and inappropriate socialization. This is consistent with her elevated Atypicality and Withdrawal scale scores.

Clinical Summary - Ms. C

[Follow this link to full pre-therapy report](#)

[Follow this link to the full post-therapy report](#)

At pre- and post-therapy, the BASC-2 items endorsed by Ms. C resulted in an elevation on the Depression scale. It is important to note within this context that Kelly exhibits above average social skills as rated by her teacher. This suggests that her problems are not interfering with the skills necessary for adaptive social functioning. This is a good prognostic indicator of future adjustment and an area of functioning that parents and teachers can emphasize in order to promote self-esteem and feelings of adequacy.

At post-therapy only, Kelly's score on Hyperactivity fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly often engages in a number of behaviors that may be adversely affecting other children in the classroom. At times, Kelly is considered to be restless and impulsive, and has difficulty maintaining her self-control.

At post-therapy only, Kelly's score on Anxiety fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly sometimes displays behaviors stemming from worry, nervousness, and/or fear.

At post-therapy only, Kelly's score on Attention Problems fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly has difficulty maintaining necessary levels of attention at school. The problems experienced by Kelly might disrupt academic performance and functioning in other areas.

At post-therapy only, Kelly's score on Learning Problems fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly has difficulty comprehending and completing schoolwork in a variety of academic areas.

At post-therapy only, Kelly's score on Adaptability fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly has difficulty adapting to changing situations, and that Kelly takes longer to recover from difficult situations than most others her age.

At post-therapy only, Kelly's score on Functional Communication fell in the At-Risk classification range, and follow-up may be necessary. Ms C reports that Kelly demonstrates poor expressive and receptive communication skills, and that Kelly has difficulty seeking out and finding information on her own.

Clinical Summary - Ms. D

[Follow this link to the full pre-therapy report](#)

[Follow this link to the full post-therapy report](#)

[Follow this link to the full follow-up report](#)

At pre-therapy, post-therapy, and follow-up Kelly's profile of BASC-2 scale scores

does not indicate significant elevations on BASC-2 externalizing problems, internalizing problems, or Attention Problems scales. This suggests the absence of clinical syndromes associated with these scales.

At pre- and post-therapy, Kelly's score on Study Skills fell in the At-Risk classification range, and follow-up may be necessary. Ms D reports that Kelly demonstrates weak study skills, is poorly organized, and has difficulty turning in assignments on time. **At follow-up in the new Grade**, Ms D reports that Kelly generally exhibits adequate organizational and study skills, and she completes most homework in a timely fashion.

Parenting Relationship Questionnaire (PRQ)

The Parenting Relationship Questionnaire (PRQ) provides information on the relationship between a parent/caregiver and a child that can be used in a variety of school, clinical, and counseling settings.

PRQ Results Overview

<i>PRQ MATRIX</i>	Rachelle Pre	Rachelle Post	Rachelle Follow-up	Mitch Pre	Mitch Post	Mitch Follow-up	Grandma Pre	Grandma Post	Grandma Follow-up
Attachment Scale	Average	Average	Average	Average	Average	Average	Average	Average	Average
Communication Scale	Average	Average	Average	Average	Average	Average	Average	Average	Average
Discipline Practices	Average	Average	Average	Sign. Above Average	Average	Sign. Above Average	Sign. Below Average	Average	Average
Involvement	Average	Average	Average	Average	Average	Average	Average	Average	Average
Parenting Confidence	Sign. below Average	Average	Sign. below Average	Average	Average	Average	Average	Average	Average
Satisfaction with School	Average	Average	Average	Sign. Above Average	Average	Average	Average	Sign. Above Average	Average
Relational Frustration	Average	Average	Average	Average	Average	Average	Average	Average	Average

PRQ Mother

[Link to Rachelle's full pre-therapy PRQ report](#)

[Link to Rachelle's full post-therapy PRQ report](#)

[Link to Rachelle's full follow-up report](#)

At pre-therapy and follow-up, the score for Parenting Confidence fell in the **Significantly Below Average** classification range. Rachelle C reported a low level of confidence in her ability to make good parenting decisions, and she reports having difficulty establishing control in her household. **At post-therapy**, this score fell into the **Average** range, indicating that she has a typical amount confidence in her ability to make good parenting decisions

(Side note: This change could be due to her own therapy that was parallel to Kelly's therapy.)

PRQ Father

[Link to Mitch's full pre-therapy PRQ report](#)

[Link to Mitch's full post-therapy PRQ report](#)

[Link to Mitch's full follow-up PRQ report](#)

At pre-therapy and follow-up, the score for Discipline Practices fell in the Significantly Above Average classification range. Mitch reports being consistent when responding to Kelly's misbehaviour and indicates that establishing household rules is important. **At post-therapy**, this score fell into the Average range, indicating that Mitch is consistent when responding to Kelly's misbehaviour and establishing household rules is important.

At pre-therapy, the score for Satisfaction With School fell in the Significantly Above Average classification range. Mitch indicated that he was very pleased with the services his child's school provided. **At post-therapy and follow-up**, this score fell into the Average range, indicating that he is generally pleased with the services his child's school provides.

PRQ Grandma

[Link to Grandma's full pre-therapy PRQ report](#)

[Link to Grandma's full post-therapy PRQ report](#)

[Link to Grandma's full follow-up PRQ report](#)

At pre-therapy, the score for Discipline Practices fell in the **Significantly Below Average** classification range. Grandma reported being somewhat inconsistent when responding to a variety of common types of misbehaviour displayed Kelly, including breaking family rules, being disrespectful, and destroying other people's things. Such inconsistency may reflect an overly permissive parenting style, or it may be the result of caring for a child with significant behavioral problems. Further analysis of the child's behavior may be warranted.

At post-therapy and Follow-up, this score fell into the **Average** classification, which

indicates Grandma reports being consistent when responding to Kelly's misbehavior and indicates that establishing household rules is important.

At post-therapy, Grandma's score for Satisfaction with school moved from **Average** to **Significantly Above Average** classification, indicating that she is very pleased with the services Kelly's school provides. **At follow-up**, she rated it as average.

FACES IV (The Family Adaptability and Cohesion Scales)

The FACES IV is a tool to assess family functioning in terms of family cohesion and flexibility on 6 different scales; 2 to assess balanced functioning (family cohesion and family flexibility) and 4 to assess unbalanced functioning (disengaged and enmeshed cohesion, as well as rigid and chaotic flexibility). Additionally, the FACES IV also assess family communication and family satisfaction.

Kelly, Rachelle, and Mitch all filled out the FACES IV individually pre-therapy, post-therapy and at follow-up. Results seem to indicate that the family system is mainly balanced, with only a few areas out of the ordinary. Below is a list of these issues with changes from pre to post-therapy.

1. Mitch's rating for Rigidity was *High* at pre-therapy, *Low* at post-therapy, and *High* at follow-up.
2. Rachelle's rating for Family Satisfaction was *Low* at pre-therapy and *High* at post-therapy and follow-up.
3. Kelly's rating for Family Communication was *Low* at pre-therapy and *Very Low* at post-therapy and follow-up.
4. Kelly's rating for Family Satisfaction was *Very Low* at pre-therapy, *Moderate* at post-therapy, and *Very Low* at follow-up.

One possible explanation for Kelly's rating on Family Communication and Family Satisfaction could be that according to mom, Kelly became more assertive through therapy and speaks up for herself more often, rather than keeping peace and not upsetting anyone. Thus, with an increased self-awareness and self-confidence, her expression of family communication and satisfaction could have become less.

[Link to pre-therapy profile summary](#)

[Link to post-therapy profile summary](#)

[Link to follow-up profile summary](#)

[Link to pre-therapy Circumplex model](#)

[Link to post-therapy Circumplex model](#)

[Link to follow-up Circumplex model](#)

Change Interviews

Change Interviews were conducted at the end of therapy. Kelly, as well as her mom, were interviewed about their perception of what things have changed over the course of therapy. In Rachelle's interview, she was also asked how likely she thinks these changes were because of therapy. The interview with Kelly was conversational over playing in the rice tray while the interview with Rachelle was more formal, yet semi-structured. This section only represents pertinent parts of the interview. [For Kelly's full interview, click here.](#) [For Rachelle's interview about Kelly, click here.](#)

Kelly's Change Interview

1. General Questions:

1c. What has therapy been like for you? How have you felt to be in therapy?

She said that therapy was nothing new; it was like the feeling circle they do in school sometimes. She said that towards the end she felt a little bit bored, not a whole lot but also not very excited. She said, though, that Gillian sometimes mixed it up a bit so Kelly didn't always know what to expect

2. Description:

2a. How would you describe yourself?

She was very reluctant in answering this and eventually said that it depends on the day, whether she's happy or not. I asked how she would describe herself on a joyful day. She said happy and couldn't think of anything else

2b. How would your best friend describe you?

"I don't know how she would describe myself. Fun, I guess, loyal, calm"
She said several times that she never thinks of things like that and she seemed reluctant. She also said she doesn't like these kind of questions because it makes her uncomfortable. "It feels weird inside"

3. Changes:

3a. Have you noticed any changes in yourself since you started therapy?

- *She said that some of the bullying issues changed because of natural causes (people moving away, passing the grade, etc.)*
- *When asked whether she's still scared about her father's health/other people's health, she said 'not really'*
- *She said that they are remodelling the house because she asked to get her own room away from Ben and his ticking noises.*
- *She said that she is not so bugged anymore by dad being away because he's home more often.*
- *She said that family members going to the hospital doesn't bug her anymore because*

it doesn't happen as much anymore

- *She said that she is still a bit worried about having to move schools because Ben might misbehave or make too much noise.*

When asked what she thinks her mom would say if she has changed through therapy, she said that her mom would say that Kelly is happier now.

5. Helpful Aspects: Was there something that has been helpful about your therapy so far?

She said that there wasn't really something that was helpful. Talking helped a bit. "It's just normal to me, the talking". She said it wasn't boring but also not very exciting"

7a. What kinds of things about the therapy were not so helpful or even disappointing you?

She said it was hard for her with the timeline, because she does not remember many things from her early childhood. She said that friends her age remember more about their younger years than her. So that made it a bit difficult.

She said that talking about her life was sometimes not so nice because she doesn't like talking about herself, she said. She added that if she didn't know Gillian much and it was weird for them to talk about Kelly's life not knowing Gillian well enough.

7c. Has anything been missing from your time in therapy?

She said "not really . . . we talked about about everything that I wanted to talk about"

Rachelle's Interview about Kelly's Changes

Change	Change was: 1 - expected 3 - either 5 - surprised by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1 - not at all 2 - slightly 3 - moderately 4 - very 5 - extremely
1. Discovered her backbone	5	1	5
2. Gained Maturity	5	1	5
3. Communicates better	5	2	5
4. Taking downtime	5	1	5
5. Improved sleeping pattern	5	3	3
6. Increased self-confidence	4	1	5
7. Emotional awareness/expression	4	1	5

Comments to the changes:

- *Change 1: This is a big issue/change for mom. Kelly never spoke up for herself and always gave in. Now she stands up for her needs and doesn't easily give way. The family is doing reconstruction in their house because Kelly spoke up about her need for privacy and physical distance to her brother. She holds her ground, also according to Mitch, Grandma, and the school's principal. In front of the principal she told a fellow student what she thinks of him and how he treated her wrongly. That never happened before, according*

to mom.

- *Change 2: she's a pre-teen, so there might be some hormonal changes, too, she said. Mom adds that some of the change could have been because of mom's therapy. (Kelly observes her mom changing and changes as well) However, mom added that she was surprised by how quickly Kelly matured.*
- *Change 3: According to mom, in 12 years Kelly never spoke up for herself.*
- *Change 4: According to mom, Kelly is doing more of what her body needs and listens to her body. Mom said she never realized how little Kelly did it until it changed*
- *Change 5: Mom said that the change could be because of teenage years, but it started around one month into Kelly's therapy. Mom said, Kelly never slept in and now she does and she sleeps through the night.*
- *Change 6: Mom said she was surprised how little self-confidence Kelly actually had.*
- *Change 7: According to mom, Kelly gained more understanding of why the situation around her brother has to be the way it is.*

1c. What has therapy been like for your child so far?

Rachelle said that Kelly felt very good about therapy and that it was a very good outlet for her

3a. What changes, if any, have you noticed in your child since therapy started?

Rachelle said, Kelly changed from 'everything is fine' to speaking up and having a voice for herself. According to mom, she does not 'blow up' anymore because she talks about her feelings before it's too late

5. Attributions: In general, what do you think has caused these various changes?

According to mom, change was mainly due to therapy, in combination with some normal teenage development (such as being more assertive to talk back to parents, improved sleeping patterns, and increased self-confidence)

6. Helpful Aspects: Can you sum up what has been helpful about your child's therapy so far?

Having someone to talk to on a one-to-one basis with an adult outside of the family.

7a. What kinds of things about the therapy have been hindering, unhelpful, negative or disappointing for you or your child?

According to mom, scheduling was sometimes difficult. Also, now that Kelly has a backbone and speaks up for herself, the family has to readjust to a different dynamic; even Ben. She added that this is more a change they need to get used to, rather than anything unhelpful.

7c. Has anything been missing from your child's treatment?

Mom mentioned that more sessions might have been more helpful.

9a. In general, do you think that your child's ratings mean the same thing now that they did before therapy?

Mom mentioned that at the beginning Kelly didn't seem to understand what is asked of her

and maybe some of the ratings on the PQs and HATs might have been more uninformed. She added that towards the end of therapy, Kelly became more serious about the forms.

PQ Overview

The PQ (Personal Questionnaire) was created in the first session with Gillian and Kelly and consists of items that Kelly currently experiences of problems. From that a weekly document was created, which Kelly was asked to fill out before session to indicate how much these issues have bugged her in the last week.

PQ Items:

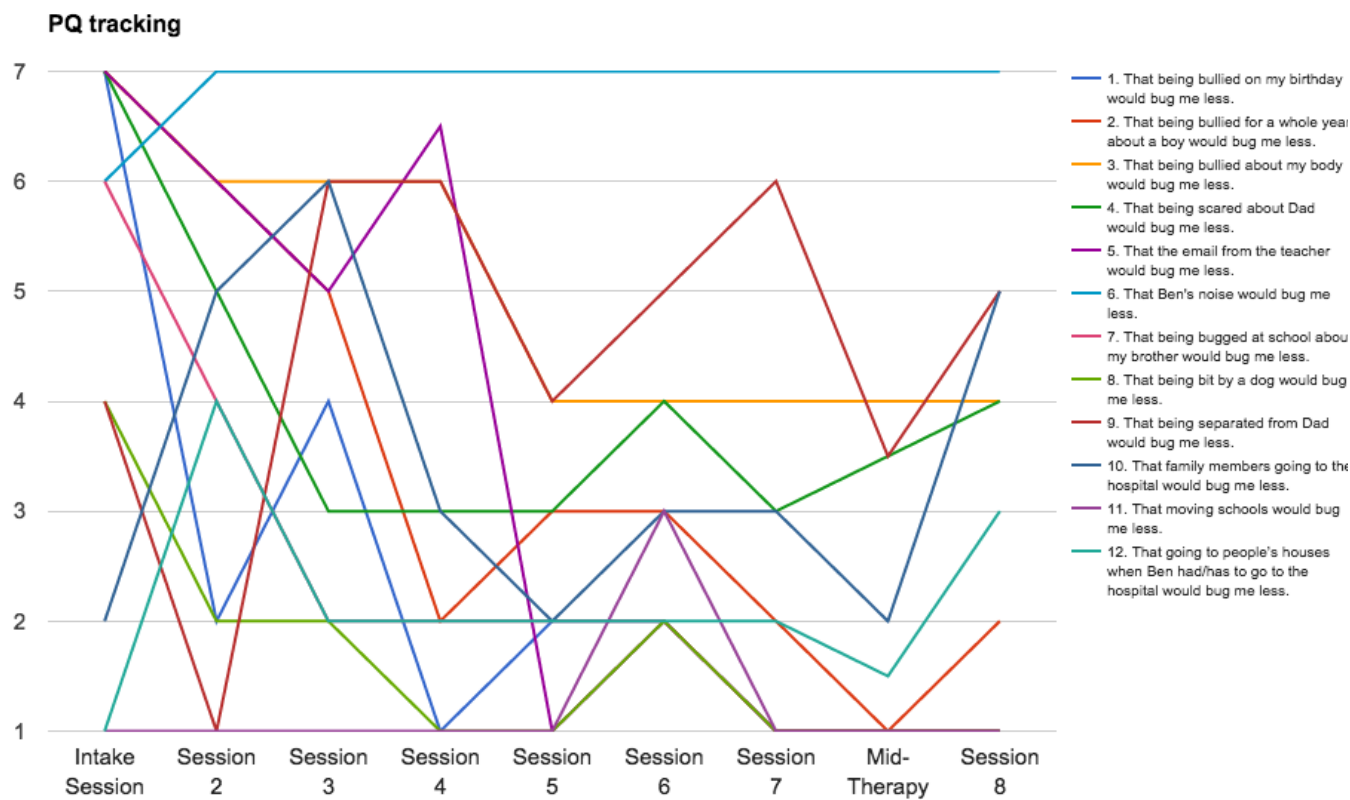
1. Being bullied on my birthday.
2. Being bullied for a whole year about a boy.
3. Being bullied about my body.
4. Being scared about Dad's safety.
5. Being bugged by the email from the teacher.
6. Being bugged by Ben's noise.
7. Being bugged at school about my brother.
8. Being bit by a dog would.
9. Being separated from Dad.
10. Being bugged that family members go to the hospital.
11. Being bugged by having to move.
12. Being bugged about going to people's houses when Ben had/has to go to the hospital.

Observations and comments about PQ scores over course of therapy

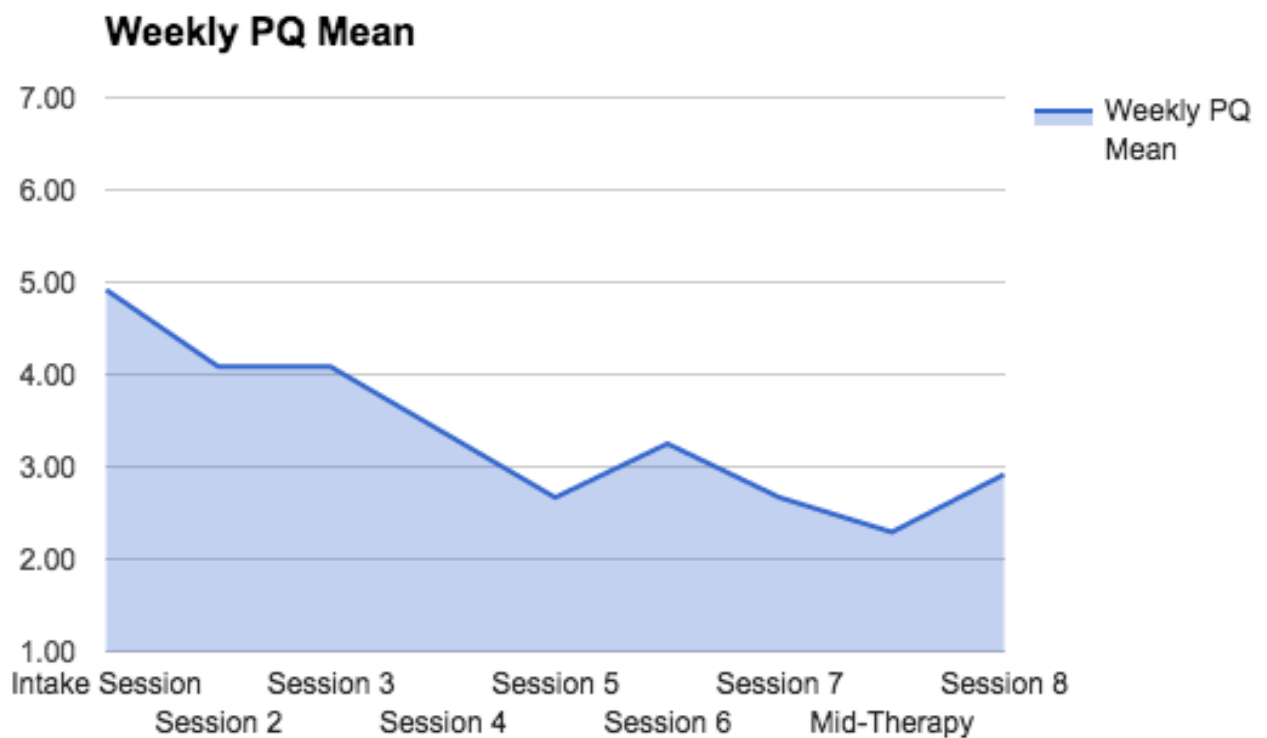
- All PQ items shifted at least 2 points, except for Ben's noises (2 points is considered by the developers a threshold to indicate a significant shift)
- Bullying doesn't bug her as much anymore, mainly because school is out now and all the people who bullied her won't come back
- She's not as worried about family's hospital visits because there haven't been any lately
- She is still worried a little but not as much as before about having to move schools again
- She is only half as worried for her dad's safety as before therapy

Tracking of all PQ items over the course of therapy:

Tr



Tracking of the PQ Mean throughout therapy



Links to therapy assessments

[Link to summary of all sessions and session assessments](#)

[Link to folder with all PQs](#)

[Link to folder with all HATs](#)

[Link to all clinical notes](#)

[Link to folder with all Therapist Session Notes Questionnaires \(TSNQ\)](#)

[Link to folder with weekly video observation notes](#)

Other Input

Final Case reflections regarding Kelly by Therapist:

In reflecting on the Lifespan Integration Therapy that was provided for Kelly over a period of 3 months, I would like to offer the following points as consideration for the ways in which LI was utilized, the process of data collection as well as outcome possibilities:

When initially considering potential clients for this study, an opportunity presented itself to be able to work with a Mother and Daughter, subjects who ultimately did become participants

in this study. The younger client, Kelly, was identified by her Mother as having experienced significant traumatic experiences as a result of her younger Brother's medical issues from birth. Due to ongoing serious medical concerns with both the client's Brother as well as her Mother (details that are extensively covered in the intake process notes), Kelly was left for extensive periods of time at a very early age and attachment issues as well as exposure to trauma at an early age and again later in life.

Initial assessment of trauma in Kelly's intake did not technically surface and as such the measureable outcomes of LI with a child dealing with trauma may not be as readily available and/or easily identifiable based on the measures that were used to capture the changes. However, as a clinician who has worked with trauma for many years and also engaged LI in some of those cases, I offer the following considerations with regards to what I consider a richness of data from this case and thoughts on further possible exploration:

- Kelly's changes as she went through the process were not captured in the HAT or in self-reports during session, however, Kelly's Mother was reporting significant changes. It would seem that the change reporting tools were not capturing the full picture and as such a shift occurred in that Mom began to email her observations to the team. For future research, exploration of change measures that more effectively capture what is occurring that may not be reported, reflected or registered by the child client will be beneficial so as to gain all relevant information which might otherwise be lost. The charting system that Cathy Thorpe utilizes to capture the child's issues was extremely helpful in this case and also provided for a useful measure towards termination of sessions as it was revisited and change vis a vis new ratings for identified issues were assigned.
- A critical consideration in my opinion in terms of linking a child's therapeutic outcome to the intervention used is the child's capacity to comprehend and process the concepts and reflections needed to engage in general, and in this case specifically to Lifespan Integration.. Kelly's QEEG revealed some information processing issues and this issue had been reported by her Mother as it has come up at school (teacher's reporting that Kelly "doesn't comprehend" concepts), and was also reflected in the sessions themselves when Kelly would divert regularly from queries or explorations presented to her. While there is also a questions as to whether these diversions in therapy were also avoidance behaviors, it is nonetheless worth considering that an information processing issues could have interfered with Kelly's ability to make meaning of some of the events in her life or piece together some of her felt experiences in the context of her memory

cues. Further exploration of a child's ability to process may be beneficial to further expand LI therapy in terms of efficacy (this could be just as true for adults).

- Kelly did seem to have learned some coping strategies from her Mother and at times would almost quote word for word her Mother's ways of dealing with difficult situations by "not thinking about it" or "shutting it down" the opportunity to have worked with both the mother and Daughter in this case is going to glean insights and information that might not otherwise have been accessed which I see as a big bonus in terms of assessing LI efficacy.

Interview with Therapist About Systematic Changes

- Question: "Tell us about the time when you met the family at their place towards the end of therapy sessions with them"
 - Kelly was keen to get to show therapist her world and frustrated that it took so long to deal with her brother's meetings. Gillian mentioned that she saw a desire in Kelly to be part of the whole research and therapy endeavour that she hasn't shown before.
 - At the same time she spoke up about her feelings and concerns about her dad. Dad had never heard it this way and was quite impacted by Kelly's concerns
 - There was an acknowledgement that Kelly's experience impacted the family just as much as Ben's experience
- Question: "Even though measures of trauma did not pick up on any trauma influences, were there any concerns that you saw in your work with her? "
 - There is a systemic influence in that Kelly copies and mirrors mom's crises responses
 - Also, there seems to be a developmental component, which seems to indicate information processing problems. Thus traumatic experience could have been processed differently
 - Or other way around, did early trauma cause information processing problems?
 - Along that, could the processing problem have influenced Kelly's experience of LI? Were some of the seeming disconnect to her timeline because of the information processing problems?
 - It was more likely an emotional disconnect to her memories than a dissociation. This might become clearer in working with her EEG
 - Kelly having problems with Ben's noises indicate a heightened nervous system,

which seems to stem from her anxiety about her dad's safety

- Question: "What are some of Kelly's therapy gains"
 - She was able to develop a voice and speak up for her.
 - She felt seen and validated
- Question: Is there anything that LI added to this gain/to what degree?
 - the mechanism of her cue list being centred around her own life and focus just on her experience was meaningful and helpful to Kelly
- Question: Are Kelly's changes secondary to Rachelle's changes through her own therapy. To what degree could mom's therapy have been a positive influence on Kelly?
 - them coming together to therapy was helpful so they could talk in the car and spend time together
 - Rachelle's changes were less outward than inward to Kelly might not have been able to observe changed behaviours in Rachelle
 - If there was an influence, then it was not overt but maybe through a less tense situation at home
 - Also, mom's report of Kelly's changes happened earlier in therapy than Rachelle's changes
- Questions: Did you observe any shifts in Kelly
 - towards the end there was more openness about her feelings towards her family as well as her interactions with me
- Question: any last comments
 - I wish I could have been more creative in ways to use other expressive ways of creating her timeline not just through words.
 - Is there a way to evolve LI to be less word-focused and spoken accounts of memories

Email from Mom July 5th

Date: July 5, 2015 at 3:26:15 PM PDT

To: "Gillian drader"

Subject: kelly

Hi.

[Kelly] spent last week on the coast with dad and grandma so I don't really have any input for that week. This week with having her home the full week has been interesting. I have noticed

that there seems to be a calmness after her sessions with Gillian. The calm last a good few days. It appears that she is less stressed and on edge with things. Her tolerance for her brother is a lot better after sessions. This week with her missing Monday with Gillian I can tell a difference. She seemed a little moody this week. I thought her mood would be better as school is officially done and she passed everything. Her sleeping is doing a lot better in the last few weeks. We were getting a lot of "I can't sleep" at night. this has decreased by about 50% i would say. She has never been one for sleeping in and she has actually started sleeping in. Normal wake up time is 7 am now sometimes she isn't up till 8:30 ish. This is a huge change for her. She is expressing her feelings more as well. Not only is she expressing them she is a lot more direct about it. Normally she doesn't say anything till she is really upset and then it is yelling. She is standing up for herself more as well which is nice to see as she has always been the one to be more quiet and let the other person have what they want. the other thing i have noticed is that she is starting to enjoy just relaxing. instead of staying in the pool to play all day sometimes she wants to relax on the chaise. Her taking time to just relax either outside or even in bed in the morning is a new thing. if i think of anything else I will let you know.

Thanks

Post-Therapy Letter From Mom About Kelly's Changes

Below you find excerpts from a letter by Rachelle, Kelly's mom and she perceives these changes in Kelly through therapy. [For the full letter, click here.](#)

"We have now finished the study and are pleased with the results that we can see and feel. Kelly was having struggles from emotional to comprehension to memory issue ... We noticed that before the study she was so concerned with others and not her own feelings. She would take a hit emotionally if it meant someone else didn't have to. Her memory was shockingly bad and her tolerance for her brother was very short, it concerned us.

"As we started this process I was very excited and proud to see her finally open up and start to talk about HER feelings. Some of the things that came up with her I expected and some I didn't. Having her do the session [and] after having to fill out the papers [HAT] I feel made her think a little more about herself and what her needs are. I have seen her become more confident with herself. She expresses herself with a maturity that wasn't there before the study . . . She has spoken with me about how things like being bullied by a boy doesn't [sic] bother her anymore. This is something she barely spoke to us about before the study . . . She now talks

about how she was bullied but is ok with it as she has now “dealt “ with it. I feel those are powerful words coming from her. This is a kid that would only respond “it's fine” if I had talked to her about it before ...Other moms that know Her well comment how mature she seems now and she seems to have a different calm about her . . .

“Her sleep has improved as well. For the first time this summer she started sleeping in. She has never slept in. The other day she had a issue with one of her best friends. She asked to talk to me in private and proceeded to tell me that she did not like the way her friend was acting. She was upset that her friend was being bossy and trying to show off. Kelly said that she still wants to be her friend but thinks that maybe she needs some space from her. It was a nice moment of having her reach out like that. She was actually pretty clear about what was bothering her and I think she was just looking for reassurance that she was making a good decision to take some space.

“She is really liking her quiet time now as well. She is just as likely to watch tv as she is to put music on and draw . . . Over all the experience of watching her go through this has been great. I am very pleased with who she is becoming and I feel that life span was a great way for her to start her teen years with a bit of her baggage cleaned up”

APPENDIX C**PARENT AGREEMENT TO PARTICIPATE**

Research Study Title: Lifespan Integration Efficacy

Principal Investigator: Janelle Kwee, Psy.D., R.Psych.
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Phone: 604-513-2034

Description of Lifespan Integration Therapy: Lifespan Integration (LI) is a therapy that aims to enable clients to integrate difficult past experiences that compromise current functioning into their lives through therapeutic work that includes repetitions of a timeline comprised of real memories from their lifespan. By integrating the real life memory, clients heal their previous hurts and spontaneously think, feel, and act in healthier ways regarding their presenting

problems. While LI has been used with adults and children with apparent success, this is the first formal study designed to investigate the efficacy of LI with children.

Purpose: The purpose of this research study is to learn about whether people receiving Lifespan Integration Therapy experience helpful change or not, and to learn about what happens in the process. The purpose includes gathering details about what was helpful or not helpful as well as information on how and when any changes were noticed or experienced. No matter what the specific results are, the purpose for gathering this information will contribute to the knowledge available regarding what makes for good therapy.

Procedures: There are four ‘parts’ to this study:

Shortly before your first therapy session, a research team member will meet with you and:

Conduct a neurofeedback assessment by attaching painless electrodes to your child’s scalp.

Complete a questionnaire about your child’s behaviour, called the Behavioural Assessment System for Children, Second Edition (BASC-2), including the Parent Relationship Questionnaire. There is a parent and teacher form of this questionnaire and a child form for participants over age 8.

work with you and your child to identify goals for your therapy

conduct an audio-recorded interview to gather background information.

(The interview is recorded to assist the researcher in not needing to take notes and will be kept strictly confidential and anonymous – see confidentiality section.)

This meeting will take approximately 1 ½ to 2 hours.

The three-month therapy phase where you have 6-12* therapy sessions with your therapist and:

- before each session you will be asked to rate how things are going with identified therapy goals

- during each session, your child will have electrodes attached to your scalp to measure brainwave activity

- after each session you will be asked to fill out a form about what was helpful/not helpful.

These will take approximately 30 minutes per therapy session (not during therapy time).

* The exact number/frequency of sessions between 6 and 12 will be decided between you and your therapist depending on your needs/situation and also allows for missed appointments if needed.

-as part of the data set about your experience with LI, therapists of participating clients will also be completing a “Therapist Session Note Questionnaire” which is a summary of their observations from your work together.

After the last therapy session for this study (i.e. after three months), a research

team member will meet with you again and:

Conduct a neurofeedback assessment by attaching painless electrodes to your scalp.

Complete the BASC-2 again.

ask you to fill out the 34-item check-box type questionnaire again

conduct another audio-recorded interview similar to the first as well as questions about noticing or experiencing change or other interesting events during the last three months.

This meeting will take approximately 1 ½ to 2 hours.

A final follow-up meeting very similar to the last one (#3) but after a little more time has passed – a month or so after the last meeting. Time will also be provided to debrief about the whole experience, discuss questions you may have about the study, and thank you for your participation.

This meeting will take approximately 1 ½ to 2 hours.

A summary of the results of this study will be available to you and mailed/emailed if requested approximately one to two months after the follow-up meeting.

Potential Risks and Discomforts: Participating in the procedures described above (questionnaires, forms, interviews) may stir up thoughts, memories or feelings that are uncomfortable or distressing. If this happens at a level beyond what you can manage during a meeting you can stop the process and/or discuss what is happening for you at any time. Nearby counselling resources, some of which offer sliding scale services, include the following: Fraser River Counselling (\$20-\$40/session), 604-513-2113; and Burnaby Counselling Group, 604-430-1303; New Life Christian Counselling, 604-856-2578. You may also withdraw from the study at any time (see below).

Potential Benefits: Beyond the benefits that come from the therapy directly, participating in this study provides more opportunity to learn about, reflect on, and discuss your situation and experiences. These sorts of opportunities may provide new perspectives, help solidify change, or offer unexpected experiences that may be beneficial to you.

Your participation in this study will also contribute to knowledge used in research as well as in professional therapy practice about how various treatment types work to help people. Indirectly, you will have contributed to the common good, especially to people with similar challenges as yourself.

Confidentiality: Your identity and any information that you provide in connection with this study will remain strictly confidential. Exclusion to this confidentiality is if you reveal intent to harm yourself or others, then we are required by law to inform the appropriate authorities. You will be given a pseudonym (of your choosing) that will be used on all documents and forms that are in use during this study. Electronic data will be securely encrypted, and all paper documents

will be kept in a locked filing cabinet. In accordance with research practices and standards, once the study is complete the data will be locked in a secure filing cabinet at the Counselling Psychology department at Trinity Western University for ten years after which it will be destroyed.

Remuneration/Compensation: Participants will be given a \$50 gift card. A sliding scale therapy rate may be arranged at the therapist's discretion.

Withdrawal: You may withdraw from the study at any time with notification to the principal investigator verbally or in writing. Upon withdrawal from the study any collected information pertaining to you will be deleted/shredded and will not be incorporated into the study results. If withdrawal occurs after the data analysis, anonymized non-identifying information incorporated into the results can no longer be removed.

Contacts (regarding this research study): If you have any questions or desire further information with respect to this study, you may contact Dr. Janelle Kwee at 604-513-2034 or janelle.kwee@twu.ca.

Contact (regarding the rights of research participants): If you have any concerns about your treatment or rights as a research participant, you may contact Ms. Sue Funk in the Office of Research, Trinity Western University at 604-513-2142 or sue.funk@twu.ca.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without jeopardy to your relationship with your Lifespan Integration therapist.

Signatures: Your signature below indicates that you have had your questions about the study answered to your satisfaction and have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study and that your responses may be put in anonymous form and kept for further use after the completion of the study.

Parent signature

Date

Printed name

Printed name of research participant

APPENDIX D

Simplified Personal Questionnaire, p. 4

PERSONAL QUESTIONNAIRE Client ID _____

Today's date: _____

Instructions: Please complete before each session. Rate each of the following problems according to how much it has bothered you during the past seven days, including today.

	Not At All	Ver y Littl e	Littl e	Mod erate ly	Consi derabl y	Very Consi derabl y	Maxim um Possibl e
1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7
4.	1	2	3	4	5	6	7
5.	1	2	3	4	5	6	7
6.	1	2	3	4	5	6	7
7.	1	2	3	4	5	6	7
8.	1	2	3	4	5	6	7
9.	1	2	3	4	5	6	7
10.	1	2	3	4	5	6	7
Additional Problems: 11.	1	2	3	4	5	6	7
12.	1	2	3	4	5	6	7

APPENDIX E

HELPFUL ASPECTS OF THERAPY FORM (H.A.T.) (10/93)

1. Of the events which occurred in this session, which one do you feel was the most **helpful** or **important** for you personally? (By "event" we mean something that happened in the session. It might be something you said or did, or something your therapist said or did.)

2. Please describe what made this event helpful/important and what you got out of it.

3. How helpful was this particular event? Rate it on the following scale. (Put an "X" at the appropriate point; half-point ratings are OK; e.g., 7.5.)

HINDERING <-----				Neutral	-----> HELPFUL			
1	2	3	4	5	6	7	8	9
---+---	---+---	---+---	---+---	---+---	---+---	---+---	---+---	
E	G	M	S		S	M	G	E
X	R	O	L		L	O	R	X
T	E	D	I		I	D	E	T
R	A	E	G		G	E	A	R
E	T	R	H		H	R	T	E
M	L	A	T		T	A	L	M
E	Y	T	L		L	T	Y	E
L		E	Y		Y	E		L
Y		L				L		Y
		Y				Y		

4. About where in the session did this event occur?

5. About how long did the event last?

6. Did anything else particularly **helpful** happen during this session?

YES NO

(a. If yes, please rate how helpful this event was: _____ 6. Slightly helpful
_____ 7. Moderately helpful
_____ 8. Greatly helpful
_____ 9. Extremely helpful

(b. Please describe the event briefly:

7. Did anything happen during the session which might have been **hindering**?

YES NO

(a. If yes, please rate how hindering the event was: _____ 1. Extremely hindering
_____ 2. Greatly hindering
_____ 3. Moderately hindering
_____ 4. Slightly hindering

(b. Please describe this event briefly:

APPENDIX F

Client Change Interview Protocol (CSEP, 9/99)

Adapted to interview a caregiver of a 12-year-old research participant

By Chris Rensch, Trinity Western University, August 2015

Instructions

Preparation: Give parent a copy of the interview schedule the week before, so that s/he can think about it beforehand.

Materials:

- This protocol, including Change Interview Record
- Release of Recordings (first mid-treatment and posttreatment interviews)
- Screening PQ data (posttreatment & follow-up interviews) or posttreatment PQ

(follow-up interviews) Recording device

Label notes & tape: Please label your notes and the interview tape with the following information: Client initials and case number; date of interview; your name; whether this is a midtreatment or posttreatment interview (including how many previous sessions the client has had).

Interview Strategy: This interview works best as a relatively unstructured empathic exploration of the parent's perception of the child's experience of therapy. Think of yourself as primarily trying to help the parent tell you the story of his or her child's therapy so far. It is best if you adopt an attitude of curiosity about the topics raised in the interview, using the suggested open-ended questions plus empathic understanding responses to help the parent elaborate on his/her perceptions. Thus, for each question, start out in a relatively unstructured manner and only impose structure as needed. For each question, a number of alternative wordings have been suggested, but keep in mind that these may not be needed.

- Ask parent to provide as many details as possible

- Use the "anything else" probe (e.g., "Are there any other changes that you have noticed?"): inquire in a nondemanding way until the client runs out of things to say

Introduction for Parent. Do some simpler version of the introduction given at the top of the Interview Schedule to introduce the interview.

Change Interview Record (7/99)

Adapted to interview a parent of a 12-year-old research participant

By Chris Rensch, Trinity Western University, August 2015

Client Initials _____

Case ID _____

Interviewer _____

Date _____

Assessment (circle one): mid post follow-up/6mo follow-up/18mo Other: _____

Number of previous sessions (circle one): 10 20 30 40 other: _____

Psychopharmacological Medication Record (incl. herbal remedies)

<u>Medication</u> Name	<u>For what</u> symptoms?	<u>Dose/</u> Frequency	<u>How long?</u>	<u>Last</u> Adjustment?

Change List

Change	Change was: 1 - <u>expected</u> 3 - <u>neither</u> 5 - <u>surprised</u> by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1-not at all 2-slightly 3-moderately 4-very 5-extremely
1.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Client Change Interview Schedule (9/99)

After each phase of treatment, clients and their parents are asked to come in for an hour-long semi-structured interview. The major topics of this interview are any changes you have noticed in your child since therapy began, what you believe may have brought about these changes, and helpful and unhelpful aspects of the therapy. The main purpose of this interview is to allow you to tell us about your child's therapy and the research in your own words. This information will help us to understand better how the therapy works; it will also help us to improve the therapy. This interview is tape-recorded for later transcription. Please provide as much detail as possible.

1. General Questions:

1a. What medication is your child currently on? (Researcher records on form, including dose, how long, last adjustment, herbal remedies)

1b. Review Release of Recordings form

1c. What has therapy been like for your child so far? How has s/he felt to be in therapy?

1d. How is your child doing now in general?

2. Description:

2a. How would you describe your child? (If role, describe what kind of ____? If brief/general, can you give me an example? For more: How else would you describe your child?)

2b. How would others who know your child well describe her/him? (How else?)

2c. If you could change something about your child, what would it be?

3. Changes:

3a. What changes, if any, have you noticed in your child since therapy started? (For example Is s/he doing, feeling, or thinking differently from the way s/he did before? What specific ideas, if any, has your child gotten from therapy so far, including ideas about her/himself or other people? Have any changes been brought to your attention by other people?) *[Interviewer: Jot changes down for later.]*

3b. Has anything changed for the worse for your child since therapy started?

3c. Is there anything that you wanted to change that hasn't since therapy started?

4. Change Ratings: (Go through each change and rate it on the following three scales:)

4a. For each change, please rate how much you expected it vs. were surprised by it?

(Use this rating scale:)

(1) Very much expected it

(2) Somewhat expected it

(3) Neither expected nor surprised by the change

(4) Somewhat surprised by it

(5) Very much surprised by it

4b. For each change, please rate how likely you think it would have been if your child hadn't been in therapy? (Use this rating scale:)

(1) Very unlikely without therapy (clearly would not have happened)

(2) Somewhat unlikely without therapy (probably would not have happened)

(3) Neither likely nor unlikely (no way of telling)

(4) Somewhat likely without therapy (probably would have happened)

(5) Very likely without therapy (clearly would have happened anyway)

4c. How important or significant to you personally do you consider this change to be?

(Use this rating scale:)

(1) Not at all important

(2) Slightly important

(3) Moderately important

(4) Very important

(5) Extremely important

5. Attributions: In general, what do you think has caused these various changes? In other

words, what do you think might have brought them about? (Including things both outside of therapy and in therapy)

6. Helpful Aspects: Can you sum up what has been helpful about your child's

therapy so far? Please give examples. (For example, general aspects, specific events)

7. Problematic Aspects:

7a. What kinds of things about the therapy have been hindering, unhelpful, negative or disappointing for you or your child? (For example, general aspects, specific events)

7b. To the best of your knowledge, were there things in the therapy which were difficult or painful but still OK or perhaps helpful? What were they?

7c. Has anything been missing from your child's treatment? (What would make/have made your therapy more effective or helpful?)

8. Suggestions . Do you have any suggestions for us, regarding the research or the therapy? Do you have anything else that you want to tell me?

9. Review Personal Questionnaire (PQ)

Instructions: Compare pre-therapy (screening) and post-therapy to current PQ ratings with parent, noting number of points changed for each problem. Tell parent: We are trying to understand how clients use the PQ, and what their ratings mean.

9a. In general, do you think that your child's ratings mean the same thing now that they did before therapy? If not, how has their meaning changed? (Sometimes clients change how they use the PQ rating scale; did that happen for you?)

9b. Identify each problem that has changed 2+ points:

(1) Compare each PQ problem change (2+ points) to the changes listed earlier in the interview.

(2) If the PQ problem change is not covered on the change list, ask: **Do you want to add this change to the list that you gave me earlier?**

•If yes -> go back to question 5 and obtain change ratings for this change.

•If no -> go on:

(3) For each PQ problem change (2+ points), ask: **Tell me about this change: What do you think it means? Do you feel that this change in PQ ratings is accurate?**

10. Review Pretherapy Self-description (only if pre-treatment self-description has been obtained)

- Show parent self- description summary from screening; ask:

- How does this compare with how you see your child now?** (What is similar? What is different? How do you understand these similarities and differences?)

APPENDIX G
Client Change Interview Protocol (CSEP, 9/99)

Adapted to interview a 12-year-old research participant
By Chris Rensch, Trinity Western University, August 2015

Instructions

Preparation: Let the parent know a week ahead of time to make some conversation about changes in therapy with their child.

Materials:

- This protocol, including Change Interview Record
- Release of Recordings (first mid-treatment and posttreatment interviews)
- Screening PQ data (posttreatment & follow-up interviews) or posttreatment PQ (follow-up interviews)
- Audio/Video Recording device

Label notes & tape: Please label your notes and the interview tape with the following information:

Client initials and case number; date of interview; your name; whether this is a midtreatment or posttreatment interview (including how many previous sessions the client has had).

Interview Strategy: This interview works best as a relatively unstructured empathic exploration of the child's experience of therapy. Think of yourself as primarily trying to help the child tell you the story of his or her therapy so far. It is best if you adopt an attitude of curiosity about the topics raised in the interview, using the suggested open-ended questions plus empathic understanding responses to help the child elaborate on his/her perceptions. Thus, for each question, start out in a relatively unstructured manner and only impose structure as needed. For each question, a number of alternative wordings have been suggested, but keep in mind that these may not be needed.

- Ask child to provide as many details as possible
- Use the "anything else" probe (e.g., "Are there any other changes that you have noticed?"): inquire in a nondemanding way until the client runs out of things to say

Introduction for child. "I'm wondering if we can have a little chat about how your therapy was going for you and whether you think it has helped you or not. I'm gonna ask you a few questions, but feel free to bring up whatever you feel is important for me to know".

Change Interview Record (7/99)

Adapted to interview a 12-year-old research participant
By Chris Rensch, Trinity Western University, August 2015

Client Initials _____ Case ID _____
Interviewer _____ Date _____
Assessment (circle one): mid post follow-up/6mo follow-up/18mo Other: _____
Number of previous sessions (circle one): 10 20 30 40 other: _____

Psychopharmacological Medication Record (incl. herbal remedies)

<u>Medication</u> <u>Name</u>	<u>For what</u> <u>symptoms?</u>	<u>Dose/</u> <u>Frequency</u>	<u>How long?</u>	<u>Last</u> <u>Adjustment?</u>

Change List

Change	Change was: 1 - <u>expected</u> 3 - <u>neither</u> 5 - <u>surprised</u> by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1 - not at all 2 - slightly 3 - moderately 4 - very 5 - extremely
1.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
2.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
3.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
4.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
5.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
6.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
7.	3 4 1 2 5	3 4 1 2 5	3 4 1 2 5
8.	1 2 3 4	1 2 3 4	1 3 4

Client Change Interview Schedule (9/99)

After each phase of treatment, clients are asked to come in for an hour-long semi-structured interview. The major topics of this interview are any changes you have noticed in yourself since therapy began, what you believe may have brought about these changes, and helpful and unhelpful aspects of the therapy. The main purpose of this interview is to allow you to tell us about your therapy and the research in your own words. This information will help us to understand better how the therapy works; it will also help us to improve the therapy. This interview is tape-recorded for later transcription. Please provide as much detail as possible.

1. General Questions:

1a. Do you take any medication? (Researcher records on form, including dose, how long, last adjustment, herbal remedies)

1c. What has therapy been like for you? How have you felt to be in therapy?

1d. How are you doing in general? Like with school, your family, your friends, and so on

2. Description:

2a. How would you describe yourself? Can you think of 5 words that describe yourself? (If role, describe what kind of ____? If brief/general, can you give me an example?)

2b. How would your best friend describe you? (How else?)

2c. If you could change something about yourself, what would it be?

3. Changes:

3a. Have you noticed any changes in yourself since you started therapy? (For example Are you doing, feeling, or thinking differently than before? *[Interviewer: Jot changes down for later.]*

3b. Has anything changed for the worse for you since therapy started?

3c. Is there anything that you wanted to change that hasn't since therapy started?

Helpful Aspects: Can you sum up what has been helpful about your therapy so far?
Please give examples. (For example, general aspects, specific events)

Problematic Aspects:

- 7a. What kinds of things about the therapy were not so helpful or even disappointing you? (For example, general aspects, specific events)
- 7b. Were there things in the therapy which were difficult or painful for you? Were they still OK or perhaps helpful? What were they?
- 7c. Has anything been missing from your time in therapy? (What would make/have made your therapy more effective or helpful?)
8. Suggestions . Do you have any suggestions for us, regarding the research or the therapy? Do you have anything else that you want to tell me?

9. Review Personal Questionnaire (PQ)

Instructions: Compare pre-therapy (screening) and post-therapy to current PQ ratings with parent, noting number of points changed for each problem. Tell parent: We are trying to understand how clients use the PQ, and what their ratings mean.

- 9a. In general, do you think that your ratings mean the same thing now that they did before therapy? If not, how has their meaning changed? (Sometimes clients change how they use the PQ rating scale; did that happen for you?)

9b. Identify each problem that has changed 2+ points:

Compare each PQ problem change (2+ points) to the changes listed earlier in the interview.

If the PQ problem change is not covered on the change list, ask: **Do you**

want to add this change to the list that you gave me earlier?

- If yes -> go back to question 5 and obtain change ratings for this change.
- If no -> go on:

For each PQ problem change (2+ points), ask: **Tell me about this change: What do you think it means? Do you feel that this change in PQ ratings is accurate?**

10. Review Pretherapy Self-description

- Has the way you view yourself changed since you started therapy? (The way you think, the way you think about yourself or others, etc)

APPENDIX H**THERAPIST SESSION NOTES QUESTIONNAIRE (TSNQ)**

Therapist Initials _____ Client (pseudonym) _____ Date _____

Session Notes

Protocol(s) used (# repetitions): _____ Length of session: _____

Most Helpful and/or Important Event (can be positive or negative): _____

Description of why this event was helpful and/or important.

Rating of how helpful and/or important this was (put an “X” at the appropriate point; half-points are ok, e.g. 7.5)

Hindering				Neutral	Helpful			
Extremel y	Greatly	Moderate ly	Slightly		Slightly	oderately	Greatly	Extremel y
1	2	3	4	5	6	7	8	9

At what point in the session did this event occur? Number of protocol repetitions/other? _____

Did anything else particularly helpful happen during this session? Please describe and give a rating between five and nine as per the scale above.

Did anything else particularly hindering happen during this session? Please describe and give a rating between one and five as per the scale above.

Therapeutic impressions at exit.

Other notes or observations regarding coherence/integration other progress/change.

APPENDIX I

(from Stephen, Elliott, & Macleod, 2011)

Completing the adjudication process

Please highlight your answers on the scales provided (for example, use your mouse to highlight the appropriate answer and change to bold type or a different colour.)

In answering the rest of the questions, please use whatever space you need in order to give a full response.

1. To what extent did the client change over the course of therapy?

No Change (0%)	Considerably (60%)
Slightly (20%)	Substantially (80%)
Moderately (40%)	Completely (100%)

1a. How certain are you?

100%	40%
80%	20%
60%	0%

1b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence?

2. To what extent is this change due to therapy?

No Change (0%)	Considerably (60%)
Slightly (20%)	Substantially (80%)
Moderately (40%)	Completely (100%)

2a. How certain are you?

100%	40%
80%	20%

60%

0%

2b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence?

3. Which therapy processes (mediator factors) do you feel were helpful to the client?

4. Which characteristics and/or personal resources of the client (moderator factors) do you feel enabled the client to make best use of her therapy?

APPENDIX J

1. Change in long-standing problems

- As reported by mom in the Change Interview, Kelly showed positive changes in seven different areas. All of these changes were reported to be a surprise to the mother, most of them unlikely to have happened without therapy, and were extremely important to the mother. ([See Change Interview section in RCR](#))
- Changes can also be observed in the results of the BASC-2 teacher reports. *(At the time of the case development meeting, there were statistical errors in the table, which indicated change in areas where it was statistically insignificant. This write-up reflects changes done to the RCR after the case development meeting. Additionally, it came to light after the meeting that there was a scoring error in Mr G's post-therapy assessment and thus these results are omitted in this write-up)*
 - Ms. D reported improvement in Kelly's study skills at follow-up
- When asked in the Change Interview, if Kelly was still scared for her father's health, which was a high ranked item on her PQ, she said "Not really". (This is also reflected in her PQ drop for this item $\Delta=-3$ points)
- In the change interview, Kelly made the remark that mom would say that she is happier now. The affirmative team noted that this is characteristic of trauma victims – they are unaware of changes that family members and others pick up on.
- From the mid-therapy email from mom to the therapist, it becomes clear that Kelly started to enjoy just relaxing, sleeping in (8.30am instead of 7am), and falling asleep. Mom reported Kelly's sleep to have improved 50% of the time.
- the mother also mentioned in this email that Kelly is expressing more feelings and she is expressing them more directly. Before she usually didn't say anything until she exploded and started yelling.
- the mother mentioned a teacher said that Kelly dealt maturely with a situation in a way she wouldn't have before.
- Generally speaking, on all BASC-2 reports is more improvement than decrease in functioning; generally in the direction of, from "at risk" to "similar to others".
- The positive changes on Kelly's BASC-2 self report are validated by scores on the

parents' and grandmother's assessments and comments.

- The therapist, mentioned that there was more openness towards the end of therapy about Kelly's feelings towards her family and the therapist.

2. Attribution

- Kelly is getting a room in a different part of the house to be away from her brother's noises because she stood up for herself. According to mom's change interview and therapist's comments, this would not have happened without therapy.
- the mother attributed five items of her perceived changes (discovered her backbone, gained maturity, takes downtime, increased self-confidence, and emotional awareness) as unlikely to have happened without therapy, one item (sleeping pattern) as neither likely nor unlikely, and one item (communicates better) in between the two categories.
- Mom mentioned in her mid-therapy email that "There is calmness after [Kelly's] session, more tolerance for her brother" that she didn't have when Kelly missed a session.
- Mom mentioned in her post-therapy letter that she sees a confidence that wasn't there before therapy

3. Helpful Aspects

- Both Kelly and the mother mentioned that talking to the therapist was helpful.
- Here are a few items of helpful aspects from Kelly's HAT forms
 - "talking to [the therapist] about my feelings"
 - "I said there was to [sic] much [sic] noise when I go to sleep. Know [sic] my mom/dad are going to build a bedroom in the basement"
- Here are a few items of helpful aspects from the therapist notes
 - Session 1: Kelly identifying and expressing her experiences of being bullied.
 - Session 2: A theme of bullying from the beginning years of school emerged and Kelly was also able to articulate the ways in which she needs to "lie" to her friends so that they won't reject her for speaking her truth about how she sees things.
 - This conversation would most likely not have come up if it wouldn't have been triggered by repetitions of her timeline. This way Kelly became aware of a pattern of bullying, which indicates an integration of her

memories and a more fluid back and forth between those memories

- Session 3: Kelly expressing with great animation how much her brother's "noise making" bothers her and being able to specifically point to a time when she was 10 yrs old when it first began to happen
- Session 4: Kelly discussing her desire to have a lock on her bedroom door so she can have some privacy
- Session 7: Kelly's expression of her level of stress and intolerance to noise in her life additional to that of her brother.
- Helpful aspects from the Video Observation notes:
 - Session 7: It seemed greatly helpful that the therapist helped Kelly to explore her lack of peace and quiet and did some problem solving around finding her times to relax and ways to relax
 - Session 8: Kelly seemed more open today in talking about her frustrations with her brother's noises. This was one of the first times that Kelly actually seemed to be emotionally involved in her listening to the timeline and allowed herself to be vulnerable by sharing it with the therapist.
 - This could reflect engagement in implicit processes specific to LI; by going through the timeline, clients are often 'pulled into' the timeline imaginally.

4. Covariation

- While over the course of therapy, 7 out of 12 PQ items reduced intensity by 2 points or more, there was no direct evidence for a session by session covariation between in-therapy processes and weekly shifts in Kelly's PQ.

APPENDIX K

Skeptic Brief

The skeptic team found several alternative explanations to why change occurred and pointed to several items in the RCR that indicated no change.

1. Non-improvement.

- There is some evidence that Kelly's anxiety gets worse. While all T-scores on her BASC-2 self-report fell into the 'similar to others' category (T= 51, 52, 58 respectively), there was a statistically significant increase from pre-therapy to follow-up. (There was no statistically distinguishable difference from pre-therapy to post, and post to follow-up.)
- Kelly's self-esteem on the BASC-2 self report goes down. While it was similar to others at pre- and post-therapy, at follow-up Kelly scored in the "At Risk" category (T=39).
- The apparent improvement in the teacher ratings was not significant anymore after applying the Standard Error of Measurement.

2. Statistical artifact.

The following statistical artifacts have been found to influence validity of the scores:

- In neither the BASC-2 assessments (PRS, SRP, and TRS), nor the PRQ was there any mentioning of the Standard error of measurement. This resulted in apparent positive changes; however, some of those were not statistically significant. (See footnotes in RCR, which reflect these changes now)
- In a large dataset like the BASC-2, family-wise error (or experiment-wise error) can account for several of the positive changes (i.e. positive changes could have been a statistical fluke)
- There were fewer scales on FACES-IV, which could have increased the likelihood of measurement error and could have been influenced by response tendencies.
- The father's dyslexia and ADHD may undermine the validity of his responses to many BASC-2 and PRQ items. the mother reported having to help him in filling out the assessments because he had difficulty understanding the questions properly.

3. Relational artifact.

- Mom's expectation that the therapist was a skilled therapist who could provide help to

Kelly may have influenced her perception of Kelly's positive changes.

- Kelly's eagerness to please her mom and the therapist could have had an influence on her participation and compliance in the therapy. As can be seen in the BASC-2 SRP results, her level of Social Stress and Interpersonal Relations were in the At-Risk category at pre-therapy assessment. This could indicate that Kelly wanted to conform to the expectancy of her mother and those of the therapist when she first started therapy. Her comments on the HATs, as well as in the Change Interview lead to similar conclusions: When asked what could have been different in therapy, she was always hesitant, yet after probing a bit in the Change Interview, she mentioned a few things that could have been improved. This seems to indicate that Kelly did not feel open enough to share her true experiences in therapy on the HAT forms.

4. Expectancy artifacts.

- Mom's hopes for Kelly to experience positive changes could have also influenced Kelly to expect change, too, or at least to behave in a way that change would be visible to mom.

5. Self-generated return to baseline.

- Over the last one and a half years, there were no imminent crises. A lack of new crises to stir things up could have meant a settling to a less intense baseline.

6. Extra-therapy events.

- Through Kelly's change interview it becomes clear that some of the stressors that were on her initial list of things that bugged her were not a problem anymore because of extra-therapy events. In particular,
 - Bullies went to a different school and were no longer around;
 - Dad's health was stable for a few years now;
 - Dad seems to be home more often;
 - The brother's health has been stable;

7. Unidirectional psychobiological causes.

- As a twelve year old girl, Kelly is going through hormonal changes, which may contribute to changes in her sleeping patterns.

8. Reactive effects of research.

- The process of identifying and reporting on her concerns and experiences of change could have contributed to Kelly's growth

- Mom reported that Kelly felt special that there was a researcher who was only looking at her data and nobody else's. This could have influenced Kelly to perform more as expected. Also, this imaginative relationship (the researcher did not actually meet Kelly until the change interview), could have been therapeutic in and of itself.

In addition to these eight categories of indirect evidence against LI's influence on Kelly's change, the skeptic team also pointed out that Common Therapy Factors influenced change, such as Kelly talking about herself, somebody giving her an hour of full attention, relationship to another adult outside of therapy, spending time with mom on this research project, and so on. These changes are not unique to Lifespan Integration Therapy but are common to any kind of therapy.

APPENDIX L

Affirmative Rebuttal

1. Nonimprovement

- Most PQ items did shift. Seven of them would be considered to meet the threshold for significant positive shift. The items with biggest change corresponded to what was talked about in therapy: being bullied (-6 and -5 points difference) and being worried about her brother at school (-5points), which was also targeted in session at one point.
- There is qualitative evidence from mom that change happened and that it is positive.
- The T-Scores for Social Stress and Interpersonal Relations improved significantly from pre to post, and pre to follow up.
- Note that Kelly's "discovering her own backbone" was identified by mom, dad, grandma, and school principal, and without therapy, considered unlikely and rated as extremely important
- She's showing evidence of getting a voice, which is not developmentally typical, and in fact directly contradicts the developmental trend for twelve year old girls. She got her own room, and became more aware of family needs.
- Seemingly contradictory evidence from FACES-IV is likely evidence that she has more awareness of family patterns, problems, and personal needs.
- Positive change processes pertaining to Kelly were reported by her mother, father, grandmother, and herself.
- There wasn't much self awareness at the beginning to be reflected in the items changing over time.

3. Relational artifact

- The affirmative team countered that the mother does not appear to be a "people-pleasing" individual, who would be likely to artificially elaborate positive change observations in order to please the therapist or the researchers. In fact, the therapist described the mother as a straightforward and direct person who will fight for her kids, including confronting others if she is not pleased with anything that may impact her children. For example, in the past, the mother took her kids out of school and made a significant relocation decision

in order to better accommodate her children's needs. This certainly does not reflect a pattern of acquiescing to authority figures, but a willingness to stand up to them. The affirmative team suggested that if Kelly's mother had any reason to doubt the helpfulness of Kelly's therapy, that she would have had no hesitation in withdrawing Kelly's participation.

- In addition, the affirmative team noted that mom gave specific feedback about Kelly's changes rather than speaking in positive generalities. For example, Kelly's changes in sleeping were noted specifically to have taken place after one month of therapy, showing improvement estimated at 50%.
- Finally, the affirmative team countered that not all life events were going smoothly during the time of the study and therapy, further showing evidence of the positive impact of the therapy process.

4. Expectancy

- The affirmative team noted that mom's expectancy that therapeutic support could positively benefit Kelly can be seen as a "common factor" contributing to positive therapeutic outcomes.

5. Self-generated return to baseline

- There is evidence that points to a different conclusion. Kelly's improvement could not have been simply a self-generated return to 'normal'. Throughout therapy, Ben's tics got worse, which should have been expected to correspond with worsening symptoms. Also, there was a major medical event in which Ben had to be taken to the ER just before Kelly's session.

6. Extratherapy events

- The above mentioned crisis with Ben, indicates that Ben's health was not stable as the skeptic team asserted. This points to the reality that not all extratherapy factors were positive, and could have reasonably been expected to interfere with Kelly's ability to participate in therapy. However, Kelly's mother still maintained a commitment for Kelly to be involved in the therapy process, further showing evidence that she perceived it to be helpful.

- In terms of the skeptic team's argument that the bullies moved away and thus the problem of bullying went away, it seems, though, that she has been bullied on several occasions and in different schools. Thus, bullying seems to be a pattern, which would most likely still 'bug' Kelly because of her expecting it to come again, based on previous accounts.

8. Reactive effects of research

The affirmative team countered that the trend in Kelly's responses to items cannot be explained consistently by reactive effects of research. For example, Kelly's ratings of items 3 and 4 on the FACES-IV suggest a more nuanced perception about family functioning. These items in fact reflect lower satisfaction in family communication. The affirmative team suggested that this could plausibly be explained by Kelly's increased self-awareness and self-confidence, and that speaking up for herself could result in less family satisfaction.

APPENDIX M

Skeptical Rebuttal

The affirmative team mentioned that the PQ item about her concern for her father's health decreased overall with a 3 point difference. While this is true, looking at this item in more detail, we see that there was a steady decline for a few weeks and then went up again towards the end of therapy. This indicates that while there was a positive change, this item could be unstable and increase again.

The affirmative side also mentioned that Kelly's mother attributed Kelly's calmness and tolerance for her brother to therapy. This, however, could be due to Kelly's increased need for sleep or could be attributed to Common Factors, rather than LI per se. Similarly, under section 3 (helpful aspects) most of the improvements seem to be not specific to LI but could be considered results of Common Factors. Exceptions are the therapist's notes from session 2, as well as from the video observations for Session 8.

APPENDIX N

Judge A Adjudication Response Form

Please highlight your answers on the scales provided (for example, use your mouse to highlight the appropriate answer and change to bold type or to a different colour). Choose only from the descriptors/percentage intervals provided. In answering the rest of the questions, please use whatever space is needed to give a full response.

1. To what extent did the client change over the course of therapy?

No change	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

1a. How certain are you?

100%	80%	60%	40%	20%	0%
95%					

1b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence? (*Use as much space as needed*).

The reports of the mother and the teachers more or less substantiated the assessment numbers. Kelly's self-report reflected change despite the fact that there was less awareness on her part of the change, which coming from a 12 year old doesn't surprise me. And while the skeptics noted reading the results should be with some reservation, the verbal report of the mother felt to me to address these reservations.

2. To what extent is this change due to therapy?

Not at all	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

2a. How certain are you?

100%	80%	60%	40%	20%	0%
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2b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence? (*Use as much space as needed*).

What was convincing from the skeptics was their observation that the change that occurred could be attributed to common therapy factors. The affirmatives did not respond to this in their rebuttal. That Kelly's symptoms were associated with trauma and that trauma symptoms for the most part do not

decrease without treatment indicate that the treatment Kelly experienced played an important part in her changes. I would suspect that some of the change likely came from common therapy factors, but not to the extent that was reported in this case. Kelly's self-reporting suggest that the client-therapist alliance wasn't as strong as usual, so that would be less of a factor. This would also indicate to me that the interventions played a stronger role than would be normally the case. I think it would be interesting to examine the extent to which the LI treatment, being a "procedure", impacts the depth of the client-therapist alliance.

I would conclude that the therapy was effective, and that this effectiveness was due in part to common therapy factors and partly to LI.

3. Which therapy processes (mediator factors) do you feel were helpful to the client? (*Use as much space as needed*).

I would agree with the skeptics in surmising that the mother-child bond was increased due to their involvement in this "project" together. I do not agree with them that this was not a function of the therapy, but an external factor. This would be too narrow a definition of therapy. I could not get enough of a sense of how the LI procedure was implemented, nor of the progression of the therapy, to be able to identify specific factors. What is evident from the decrease of trauma-related symptoms is that something besides environmental changes, parental bonding, the hope factor and maturation had an impact. I can only conclude that the LI interventions, in directly addressing the traumas, played a part in the change.

4. Which characteristics and/or personal resources of the client (moderator factors) do you feel enabled the client to make the best use of therapy? (*Use as much space as needed*).

Not much jumps out at me here. Perhaps the likely bonding/attachment with her mother and mother's expectancy of "things are going to get better" could be mentioned here. But that would be more the personal resource of the mother-daughter dyad rather than Kelly's individual resources.

APPENDIX O

Judge B Adjudication Response Form

Completing the adjudication process

Please highlight your answers on the scales provided (for example, use your mouse to highlight the appropriate answer and change to bold type or a different colour.)

In answering the rest of the questions, please use whatever space you need in order to give a full response.

1. To what extent did the client change over the course of therapy?

Not at all	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

1a. How certain are you?

100%	80%	60%	40%	20%	0%
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1b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence?

- The interview data with therapist and mom suggest change was observable to others.
- Both affirmative and skeptic teams suggest that some improvement is evident, although to varying degrees and for varying reasons. This suggests that change occurred.
- The skeptics presented the limitations of the assessment tools (error issues, etc.) and the limited ability to draw conclusions regarding significance of results. The fact that few results showed a level of significance suggests that any change that did occur was not sufficient to meet levels of significance.
- Kelly's own interview data that identifies little in the way of significant change from her own perception of self suggests that change, while observable to others, may not be significant/observable to the client.
- The affirmative team identifies that Kelly's BASC-2 scores generally denote improvement, however it is also true that most of the items present as "similar to others"

with only a few items being of concern to begin with – suggesting the few changes that were made, within a small group of changes needing to be made, would account for a “slight” change in the grand scheme of things.

2. To what extent is this change due to therapy?

No change	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

2a. How certain are you?

100%	80%	60%	40%	20%	0%
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2b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence?

- Mom’s attribution of perceived changes as being “unlikely without therapy” for 5 items seemed significant, particularly when taken in consideration alongside the affirmative teams rebuttal statement that Rachelle does not present as someone who would seek to be people-pleasing but rather a strong advocate for her children –suggesting that her rating can be considered relatively reliable.
- Both affirmative and skeptic briefs and rebuttals acknowledge several common therapeutic factors, which suggests that LI meets the same expectations as related therapeutic practices in achieving outcomes common to related standards of practice.
- The changes identified, including self-advocacy/boundary setting; sleep patterns; and taking more downtime are unlikely to have all surfaced simultaneously (to a degree that was observable to parents and therapist) within the relatively short period of time during which the study took place simply as a result of unidirectional psychobiological causes, reactive effects, self-generated return to baseline, or extra-
- therapy events. Suggesting that while the change may have been slight, it is fairly likely to have been a result of the therapeutic process.

3. Which therapy processes (mediator factors) do you feel were helpful to the client?

- Being the central figure

- Experiencing a supportive person (the therapist)
- Coping tools offered by the therapist (there is a reference to brainstorming ways to take time out for self with therapist) and feeling encouraged by therapist
- Possible neural processing suggested to be background to LI therapy process of timelines (might account for why change occurred to be observable to others but “under the radar” for Kelly, and for why her behavior changes with little active self-initiated effort to behave differently).

4. Which characteristics and/or personal resources of the client (moderator factors) do you feel enabled the client to make best use of her therapy?

- Supportive parents helping her to attend, advocating for support, building a room, etc.
- Ability to survive difficult life circumstances as indicated by her trauma history, would contribute to being adaptable and having strength to face difficulties in therapy
- People-pleasing tendencies may have contributed to her continued attendance in spite of feeling “bored” toward the end, also may have contributed to being attentive and taking information away from session in order to present as pleasing/polite toward therapist in session.
- explosive tendencies (after long build up) suggests an underlying ability to recognize and acknowledge her own needs – this likely helped her be able to communicate needs more readily as she developed the willingness to try setting boundaries before blowing up.

APPENDIX P

Judge C - Adjudication Response Form

Please highlight your answers on the scales provided (for example, use your mouse to highlight the appropriate answer and change to bold type or to a different colour). Choose only from the descriptors/percentage intervals provided. In answering the rest of the questions, please use whatever space is needed to give a full response.

1. To what extent did the client change over the course of therapy?

No change	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

1a. How certain are you?

100%	80%	60%	40%	20%	0%
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1b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence? (Use as much space as needed).

The evidence in the affirmative brief that was significant in making my conclusion were statements that spoke of Kelly's change in multiple environments by several different people who know Kelly well, as well as her own self-reports.

The specific items were:

Most of Kelly's PQ items did shift and seven of these items met the threshold for significant positive change. As well, the items with biggest change corresponded to what was being spoken about in therapy.

Kelly's mother's report in the change interview that Kelly had shown positive changes in seven different areas. One of those items was "discovering her own backbone" which was also identified by mom, grandma, and school principal. This change was considered unlikely without therapy and rated as extremely important.

There is also qualitative evidence from Kelly's mother that change happened and that it is positive.

Kelly's mother's email indicating that Kelly's sleep had improved 50% and that she was able to sleep in and fall asleep (which she previously was unable to do).

As well, Kelly's mother reported that Kelly was expressing more feelings, she was expressing them more directly and she was able to manage her emotions instead of exploding and yelling (a typical response previously).

All of the items of helpful aspects from the therapist's notes described how Kelly was able to express her emotions, experiences and desires during her therapy sessions.

The positive changes on Kelly's BASC-2 self-report were validated by scores on her mother and grandmother's assessments.

The above pieces of evidence speak to the consistent response from Kelly's self-report, her mother's reports, school principal's report and therapist's notes about the changes Kelly has experienced during the course of therapy.

Another piece of evidence that was important is that Kelly was getting a voice which is not developmentally typical and contradicts the developmental trend for a 12 year old girl.

Evidence provided by the skeptic cases shed light on a few areas where change may have resulted from other reasons. There were two specific areas within the skeptic case evidence that mattered to me most when making my conclusion. The first was Mitch's dyslexia and ADHD which may have undermined the validity of his responses to many of the BASC-2 and the PRQ questions. As well, the fact that Rachelle reported having to help him fill out the assessments because he had difficulty understanding the question further supports this. Due to this piece of evidence, I did not include Kelly's father's reports as evidence for Kelly's change. The second piece of evidence by the skeptic cases was that the PQ item about Kelly's concern for her father's health showed a steady decline for a few weeks and then went back up again near the end of therapy, showing that although there was positive change, this item could be unstable and increase again. Kelly reported 'not really' when asked if she was still worried about her father or other people's health but it is unclear the degree to which change has occurred with this item. There was far more evidence to support the fact that the client has experienced change over the course of therapy. Due to this, my conclusion to rate the extent of change at 80% is reflective of those points presented by the affirmative and skeptic cases.

2. To what extent is this change due to therapy?

Not at all	Slightly	Moderately	Considerably	Substantially	Completely
0%	20%	40%	60%	80%	100%

2a. How certain are you?

100%	80%	60%	40%	20%	0%
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2b. What evidence presented in the affirmative and skeptic cases mattered most to you in reaching this conclusion? How did you make use of this evidence? (Use as much space as

needed).

The evidence in the affirmative case that mattered most in reaching my conclusion were the numerous cases where change was reported to have been unlikely without therapy. Kelly's mother reported in her change interview that the positive changes she saw in Kelly in 7 areas were a surprise and that 5 of them (discovered her backbone, gained maturity, takes downtime, increased self-confidence and emotional awareness) would not have been likely without therapy. As well, under attribution, Kelly's mother and therapist agreed that Kelly would not have stood up for herself (and would not be getting a new room) without therapy. Kelly's mother also reported that there is a calmness after Kelly's sessions, more tolerance for her brother that she didn't have when she missed a session. Lastly, Kelly's mother reported that she sees a confidence in Kelly that wasn't there before therapy.

Another piece of evidence from the affirmative case is from the helpful aspects from the therapist's notes and the video observation notes. All of the sessions noted describe Kelly's expression of her feelings, experiences and desires (which were a struggle for her to express before therapy). As well, the notes for session 2 report how the timeline repetitions triggered a conversation that most likely would not have come up. Kelly's therapist also reported that Kelly was able to integrate her memories and to have a more fluid back and forth between the memories. For session 3, the notes stated that Kelly was expressing with great animation and that she was able to specifically point to a time when she was 10 years old which also shows how the use of timelines has increased Kelly's ability to recall memories (she reported that 'she does not remember many things from her early childhood'). In session 8 of the video observations, Kelly's therapist reports that Kelly is more open about being emotionally expressive and that she is emotionally involved in listening to her timeline and allowing herself to be vulnerable in sharing with Gillian which could reflect engagement in the implicit processes specific to LI by going through the timeline, clients are often pulled into the timeline imaginatively.

The evidence from the skeptic cases that mattered most to me were the common therapy factors that also influence change. The factors mentioned were Kelly talking about herself, somebody giving her an hour of full attention, relationship to another adult outside of therapy, and spending time with mom on this research project. As well, Kelly's mother's expectancy that therapeutic support could positively benefit Kelly (which was noted by the affirmative case).

So in considering both the affirmative and the skeptic cases, there was strong support by Kelly's mother that the therapy was the cause of the change. There were several points that spoke specifically about how the LI therapy was producing change. However, many of the factors mentioned were not specific to LI. Therefore, my conclusion was based on both the affirmative and skeptic cases.

3. Which therapy processes (mediator factors) do you feel were helpful to the client? (Use as much space as needed).

Talking to Gillian and building a therapeutic alliance, Expressing her feelings, experiences and desires and having them heard, Having her timeline read to her which increased awareness of

bullying patterns, increased memories and memory fluidity, and her vulnerability to engage in sharing with Gillian as she was 'pulled into' her timeline imaginally, Spending more time with her mother as they travelled to their appointments, Having a shared experience as her mother was also participating in LI therapy and Problem solving concerns that Kelly expressed.

4. Which characteristics and/or personal resources of the client (moderator factors) do you feel enabled the client to make the best use of therapy? (*Use as much space as needed*).

Kelly's supportive family who were receptive and encouraging of Kelly's new found voice and backbone. Kelly also showed a willingness to engage in the therapy despite the somewhat boring and not exciting aspects. She also reported that the timelines were sometimes difficult but continued to persevere and to bravely embrace her vulnerability by share her experience and emotions with Gillian (someone she did not know very well).