The Trauma and Attachment Group (TAG) program: An ethnographic exploration of an intensive dyad-based group intervention for traumatized youth

By

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Abstract

The notion that positive relationships between primary caregivers and children may mitigate the behavioural effects of early developmental trauma has been well detailed in the literature. More specifically, it has been suggested that for a child managing the adverse effects of early developmental trauma, working within a secure dyadic relationship (i.e. both the primary caregiver and the child) may aid in the development of healthier interpersonal relationships and social functioning. A complex clinical intervention titled the Trauma and Attachment Group (TAG) program was developed to address behavioural and relational impacts of early developmental trauma, but its efficacy has never been formally examined. This program appears to be unique in that it focuses on the caregiver/child dyad in a group setting. TAG was designed to impact 3 separate treatment outcomes: (1) to increase caregiver/child attachment; (2) to decrease trauma-related symptomology in children; and (3) to increase caregiver reflective functioning skills.

The overall ethnographic design of this research relied on several data collection strategies. The first involved quantitative research in which pre- and post-test data from cohorts enrolled in the program from September 2011-December 2014 was retrospectively analyzed. The second strategy was to carry out a detailed retrospective chart review on selected charts from the quantitative sample. The third method used was to carry out a focus group and informal interviews with those facilitating the TAG program, as well as individual interviews with caregivers who participated as a part of a dyad in the program during the years represented in the quantitative component of this study. Two initial research objectives were proposed: (1) To assess the effectiveness of the TAG Intervention in creating changes in attachment, trauma symptoms and caregiver reflective functioning. And (2) to learn more about the mechanisms of the program that may facilitate those changes.

The major findings from this evaluative, ethnographic investigation suggest that the TAG program may be effectively meeting its three major outcome goals. To answer the first research objective, analysis demonstrated a statistically significant increase in child/caregiver attachment and supported a trend towards a reduction in child-experienced trauma symptoms, after participation in the TAG program. Caregiver reported scores also revealed improvements in the caregivers' reflective functioning at the end of their involvement in the program.

To answer the second objective, thematic analysis of a focus group and interviews with TAG facilitators and interviews with caregiver participants of the program provided insight into 3 major themes that may substantiate changes reflected in TAG treatment outcomes: "Relationship as locus of change"; "Group process"; and "Psychoeducation-based content". Examination of the focus group transcripts also highlighted the way in which the relational approach embodied by the facilitators may have impacted the way they delivered the material (psychoeducation) to the dyads in the group. The effort facilitators appeared to place into creating "felt safety", a sense of belonging, and a purposeful coming together under a shared experience may, in fact, have modeled an environment that promoted change.

Therefore, in addition to providing support for the proposed effectiveness of relational intervention for healing attachment-related trauma with children aged 5-11, the results of this study contribute to current therapeutic recommendations that caregivers be included in treatment, that outcomes may be improved through group participation, and that facilitation of psychoeducation can improve outcomes. The TAG study suggests that an attachment-focused, multimodal, multi-level intervention, combined with the introduction of a healthy and focused relationship, may be the key to promoting change in relationships challenged by the adverse effects of early developmental trauma. Further evaluation may help more clearly define potential demographic and program components that contribute to the success of the program, as well as to explore the costs associated with the feasible provision of such care in the general population.

Preface

This thesis is an original work by Chandra Kirn Kaur Ashton, a PhD candidate.

The TAG background and Quantitative Results sections contain text and structure utilized, in part, in a previously published article: Ashton, C., O’Brien-Langer, A., & Silverstone, P. (2016). The CASA Trauma and Attachment Group (TAG) program for children who have attachment issues following early developmental trauma. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 25*(1). 35-42. The PhD candidate was responsible for concept formation, literature review, data collection and analysis, and manuscript composition. Silverstone, P., was the supervisory author. He and Ms. O’Brien-Langer contributed to study design, support with data collection, concept formation, and manuscript editing.

The focus group and interview results section also contains text and structure utilized, in part, in a manuscript recently submitted for publication: Ashton, C., O’Brien-Langer, A, Olson, K., & Silverstone, P., Qualitative reflections: CASA’s Trauma and Attachment Group (TAG) program for youth who have experienced early developmental trauma. The PhD candidate was responsible for study design, data collection and analysis, and manuscript composition. Silverstone, P. and Olson, K., were the supervisory authors. They and Ms. O’Brien-Langer contributed to study design, support with data collection and analysis, concept formation, and manuscript editing.

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1 Introduction

Advances in neuroscience since the early 1990s highlighted the impact of early trauma on human growth and development. Three conclusions from this research were: (1) appropriate early and healthy relationships may play a role in maximal brain and social development; (2) conversely, lack of these, or experiencing adversity during this early period, may lead to disrupted development of many brain systems as well as disruption of the body's stress response systems and regulatory controls; and (3) that such disruptions could lead to life-long impairments in physical and mental health (Spinazolla, et al., 2014; Anda, et al., 2010; Johnson, et al., 2013; Purvis, et al., 2013; Toth, et al., 2013; Delima & Vimpani 2011; Shonkoff, et al. 2012; Roth & Sweatt, 2011; Perry, 2009; Cook, et al., 2005; Schore, 2005, Schore, 2001; Felitti, et al., 1998).

The brain's ability for conscious self-awareness, authentic involvement with other people, and the ability to learn from and adapt experiences are all believed to require experience with healthy and adaptable relationships. Currently, child abuse and neglect perpetuate a costly burden to the public health sector (Gelles & Pearlman, 2012) with a total lifetime burden demonstrating a potential $124 billion impact on society (Fang, et al. 2012). To try and address this issue, a complex clinical program titled the Trauma and Attachment Group (TAG) program was developed over a decade ago. This program appears to be unique in that it delivers trauma-related psychoeducation and resolution activities in a group setting to both the child and the non-offending caregiver in a dyad-based treatment design.

This intensive treatment program was initially developed at CASA, Child, Adolescent, and Family Mental Health, an Edmonton-based provider of mental health services, and was based upon the perceived clinical need in a sub-population of children assessed and treated there. Currently, CASA serves 3,000 youth (aged 0-

18) per year through outreach, family, and mental health programs. Over the last decade, in addition to many in-patient and outpatient supports, CASA has offered support to children who have experienced early developmental trauma, through the TAG Program. Anecdotal feedback from patients and staff suggests that TAG has been a highly focused, trauma-informed practice, leading to positive clinical outcomes, although it has never been formally evaluated. There are many reasons to evaluate such a program including: that complex, intensive, and expensive programs (such as TAG) are both clinically effective and achieve their treatment goals (Cohen & Mannarino, 2010; Dopson, et al., 2002); and that scarce mental health care resources are utilized as effectively as possible (Catania, et al., 2011). As a result, the present PhD research was based upon the examination of the effectiveness of this intervention. To begin this process it was necessary to first explore the current research literature with regard to early attachment-related experiences.

1.1 Caregiver/Child Attachment

Most commonly, attachment is the term used to describe the relationship that develops between a caregiver and infant during the first years of life. Early global experiences of child/caregiver separation (child evacuees billeted with foster parents during the Second World War, and the Robertsons' work in the 1950s on child hospitalization) generated an enormous amount of interest in the processes of "forming, breaking and re-establishing attachments" (Rushton & Mayes, 1997).

Early attachment theory emphasized the developmental importance of relationship (Schore, 2012; Sroufe, 2005; George, 1996; Bowlby, 1973). It was proposed that caregivers nurture fundamental developmental and attachment needs through interaction, play, security, and support with the development of emotional regulation. Early instinctual behavioural patterns directed at securing attachment to a caregiver were believed to safeguard an infant's maturity and adaptation to life outside of that relationship (George, 1996; Kobak & Sceery, 1988). It was suggested that the primary goal of early attachment instincts was geared toward survival: to allow the infant when endangered, under stress or feeling threatened, to maintain proximity to the attachment figure (Bowlby, 1988; Bowlby, 1973).

More currently, healthy interactions between primary caregivers and infants are thought to promote regulatory capacities in the infant, and are believed to be imperative to healthy brain development (Schore, 2012; Delima & Vimpani, 2011; Roth & Sweatt, 2011; Schore, 2005; van der Kolk, 2005; Schore, 2001; Fonagy, et al., 1991; Kobak & Sceery, 1988). Though attachment behaviours will inevitably change throughout an individual's development, it is proposed that this biologically-driven engagement system might remain in this same protection-seeking state throughout an individual's development (Schore, 2012; King & Newnham 2008; George, 1996; Kobak & Sceery, 1988).

In addition, early experiences with quality primary relationships might conceivably lead to the creation of internal working models of attachment (Anderson & Gedo, 2013; Hughes, 2004; George, 1996; Kobak & Sceery, 1988; Bowlby, 1973) that the infant will use to appraise future attachment-related information (Anderson & Gedo, 2013). This information is believed to allow the infant (and later child and adult), to develop beliefs about the self and others with regard to care and protection needs (Arvidson, et. al., 2011; Schore, 2005; Schore, 2001; George 1996; Fonagy, et al., 1991; Kobak & Sceery, 1988). And it is proposed that providing this security in attachment allows the infant to focus on other developmental needs (King & Newnham 2008; Schore, 2005; Schore, 2001).

Developmental outcomes such as self-awareness, social competence, academic success, and the ability to make and maintain relationships, are all linked to the quality of early caregiver attachment relationships (Delima & Vimpani, 2011; Schore, 2005; Sroufe, 2005; Schore 2001; van der Kolk, 2005; Hughes, 2004; van der Kolk

& Fisler, 1994). Research also appears to be at a consensus that parent-child interactions are crucial for the healthy "experience-dependent maturation" (Schore, 2012; Perry, 2009) and development of the highest level of brain and central nervous system function (Schore, 2012; Arvidson, et al., 2011; Roth & Sweatt, 2011; Perry, 2009). By focusing on the concept of "attachment", researchers are better able to understand potential mediating factors, which explain, in part, the adverse consequences of early trauma and separation on physical, mental, and social development (Shonkoff, et al., 2012; King & Newnham, 2008; Schore, 2005; Hughes, 2004; Rushton & Mayes, 1997; George, 1996; Kobak & Sceery, 1988).

It is suggested that the same extraordinary malleability that allows the learning of language and sight may, somewhat ironically, make the brain more vulnerable to early stress (Perry & Szalavitz, 2006). Furthermore, it is possible that caregiver-related abuse is "qualitatively and quantitatively more potentially psychopathogenic than any other social or physical stressor (aside from those that directly target the developing brain)" (Schore, 2001). Thus, the role of attachment, and the impacts of unhealthy relationships between caregivers and infants, may conceivably have profound long-term impacts (Anda, et al., 2010; Perry, 2009; Sroufe, 2005; Felitti, et al., 1998; Fonagy, et al., 1991).

1.2 Trauma-related Symptomology

In addition to a variety of physical and psychological sequelae, research suggests that the effects of interpersonal trauma can extend from childhood through to adulthood. Problems with attachment relationships, dissociation, cognition, biology, affect regulation (van Dijke, et al., 2011; Kobak & Sceery, 1988), behavioural control, and self-concept (Cornett & Bratton, 2014) are all detailed in the literature (Spinazolla, et al., 2014; Anda et al., 2010; Knoverek, et al., 2013; Shonkoff, et al., 2012; Arvidson, et al., 2011; Cook, et al., 2005; Kaufman, et al., 2000; Felitti, et al., 1998). Supporting such suggestions were findings that when early developing brains lacked sufficient stimulating interactions, there was a measurable delay in myelination of axons (Schore, 2005). Others associate early trauma with the decreased size of some brain regions (Hart & Rubia, 2012; Anda, et al., 2010; Delima & Vimpani, 2011; Schore, 2005; Schore, 2001; Felitti, et al., 1998), as well as a subsequent loss of executive function capacity (Rhoades, et al., 2011) and an inability to develop healthy interpersonal relatedness (Cook, et al., 2005).

Research demonstrates that early trauma might also be involved in abnormalities of the hypothalamic-pituitary-adrenal axis (HPA) (Schore, 2012; Fisher, et al., 2006; Schore, 2005; Schore, 2001; van der Kolk & Fisler, 1994) particularly in those of children in the care of external authorities ("children in-care") (Gunnar, et al., 2006). Adverse early experiences are believed to influence early attachment relationships and subsequent social, cognitive, and emotional development. This impact can include social adaptation, affect regulation, and self-reliance (Sroufe, 2005; van der Kolk et al., 2005; Bremner, 2003; Kaufman, et al., 2000; Fonagy, et al., 1991; Kobak & Sceery, 1988); as well as physical effects like weight, height and head circumference (Rutter, et al., 1998).

Neuroscientists assert that patterned, repetitive experiences, at the right stage of development, lead to each region of the brain flourishing in a sequential manner (Schore, 2012; Perry, 2009; King & Newnham, 2008; Schore; 2005; Schore, 2001). Experiences are thought to be stored as templates to form the basis for future functioning (King & Newnham, 2008; Hughes, 2004), with these templates being subsequently used to understand new events experienced as part of day-to-day functioning. It is proposed that sequential, use-dependent development must occur at the time that particular region is primed to grow, or it may miss out on the ability to reach its full potential (Schore, 2012; Shonkoff, et al. 2012; Perry, 2009; King & Newnham, 2008; Schore, 2005; Perry, 2002).

As a part of childhood, individuals are typically subjected to stress and may learn to manage that stress within the context of their caregiving relationships (Perry, 2009; Centre on the Developing Child, 2007), however, when this stress is unable to be mediated, or coping resources are overwhelmed, trauma is purported to occur (van der Kolk, 1994; Herman, 1993). It is therefore suggested that it is not adverse experiences themselves that lead to impaired neurological development, but rather the lack of supportive, reciprocal relationships, since these may mitigate any negative impacts of excessive activation of the stress response system on brain development (Knoverek, et al., 2013; Shonkoff, et al., 2012; Gunnar, et al., 2006; Schore, 2005). This proposal has encouraged the exploration of the extent to which healthy adult relationships, introduced later in a child's life, may help facilitate an improvement in the child's adaptive coping and sense of control (Anderson & Gedo, 2013; Purvis, et al., 2013; Toth, et al., 2013; Shonkoff, et al. 2012; Sprang, 2009). Healthy, attuned interactions (i.e. being available and responsive to the child's needs or distress signals) with a "familiar, predictable, primary caregiver" may give a child the permission and safety to explore new surroundings and promote socio-emotional experiences (Arvidson, et al., 2011; Schore, 2001; Fonagy, et al., 1991) including the development of emotional regulation (Purvis, et al., 2013) and improved psychosocial functioning (Fisher, et al., 2006).

1.3 Interventions and Treatment

Despite awareness of the significant negative impact of disordered early attachments on child mental and physical wellness, there is a relative lack of evidence-based interventions, or successful treatment programs, that are specifically targeted to help children and youth with significant attachment disorders

(Spinazzola, et al., 2014; Lawson & Quinn, 2013; Catania, et al., 2011; Puckering, et al., 2011; Sprang, 2009; Barth, et al., 2005; Cicchetti, 2004). As mentioned, the *decade of the brain* (1990s) and the Adverse Childhood Experiences (ACE) studies (Felitti, et al, 1998) during the same decade, brought attention to the various negative outcomes of early developmental trauma. In an attempt to ameliorate long-term negative effects on physical and mental health, education, employment, and family stability, interventionists began meeting with caregivers during pregnancy and the earliest years of development with the goal of devising preventative psychoeducation and support strategies (Biglan, et al., 2012; Catania, et al., 2011; Olds, et al., 2010; Howard & Brooks-Gunn, 2009; Slade et al., 2005; Cicchetti, 2004).

The middle childhood population (children aged 5-11 years old) is underrepresented in the treatment literature, but arguably has an even greater potential to mitigate earlier negative experiences (Knoverek, et al., 2013; Puckering, et al., 2011; Catania, et al., 2011; Hughes, 2004; Jackson, et al., 2009; King & Newnham, 2008). In middle childhood, and early adolescence (children aged 11-14), the development of an individual’s capacity for executive function can begin to expose the consequences of early trauma (Cook, et al., 2005) as youth in these age groups are learning to read and write, beginning to develop independence from their families and to expand their social connections (Catania, et al., 2011). Previous attempts to intervene with this age group have met with some treatment success (Kagan, et al., 2013; Cohen, et al., 2012; Lanktree, et al., 2012; Puckering, et al., 2011; Kagan, et al., 2008; Purvis, et al., 2007) particularly in school settings (Catania, et al., 2011).

One approach utilized with this population is the integrated treatment of complex trauma (ITCT) (Lanktree, et al., 2012). This is a multi-modal, therapist driven treatment approach that aims to provide complex and individualized intervention to marginalized youth in southern California. Through its integrated approach to treatment that includes, where appropriate, sand tray and play therapy techniques with youth, its authors demonstrated effectiveness with youth aged 8-17 in reducing anxiety, depression and PTSD. These children were occasionally supported in their caregiving relationships where possible and in a group setting when appropriate, though the study authors' did not elucidate the extent to which both were attempted.

Another treatment approach called "Real Life Heroes" (RLH) (Kagan, et al., 2008) was designed for children between 8 and 11 years of age and aimed to treat post-traumatic stress disorder (PTSD) symptoms through reliance on cognitive behavioural therapy (CBT) models. It focused on "rebuilding attachments and restoring hope through nonverbal creative arts, narrative interventions, and gradual exposure to help process traumatic memories and bolster adaptive individual and interpersonal coping strategies". These authors presented RLH as a model that "works with the caregiver", though did not outline how this was executed. Children were guided though a self-discovery and learning journey with the development of an autobiographical account of their lives and future goals, aiming to ameliorate neurological effects of past adversity through the application of activities focused on engaging right and left-brain activation. Results after 4 months, for 41 children in home-based, foster care, residential treatment, and outpatient programs (Kagan, et al., 2008) indicated "a trend toward improved attachment with a primary caregiver over time" and "significant levels of improvement on child self-reports of trauma symptoms and fewer problem behaviours reported on caregiver checklists". Results at 12 months reportedly outlined a reduction of trauma symptoms on child self-report and parent rating scales, reduction of behavior problems on a parent rating scale, and increased feelings and perceptions by children of closeness towards primary caretakers.

This same program (RLH) was utilized in a residential treatment setting (Kagan, et al., 2013) with children and youth aged 8-15, (mean age 10.5) exhibiting similar behaviour challenges to those supported by the TAG program (i.e. significant levels of aggressive behaviour, and interpersonal deficits). The study's stated outcome goal with this population was reportedly to "foster enduring, emotionally supportive relationships" and to teach new skills to children affected by early trauma. While its authors' did not report on the level of involvement of the caregivers/staff, they reported a reduction in behaviours as indicated by the Child Behaviour Checklist (CBCL) (Achenbach & Edelbrock, 1983) and supported the importance of including psychoeducation on the effects of trauma on behaviour and relationship. The authors also recommended their treatment manual be used in other programs attempting the same treatment outcomes (Kagan, et al., 2013).

Another treatment approach, the Hope Connection Day camp in Austin, Texas, also made attempts to address early deprivation and relational trauma (Purvis, et al., 2007). This program supported families with adopted children (aged 4-14) who were demonstrating strained relationships due to effects of early relational deprivation. The children were enrolled in a day camp program with activities designed to promote the building of attachment, "felt safety", and practice cognitive behavioural strategies. Prior to initiating camp activities, each child was provided with an adult "buddy" (an undergraduate student at a linked local University) who was reportedly "trained in the therapeutic techniques employed and who would shadow, model behaviour and bond with the children". Parent report instruments that were completed as pre- and post-test measures included the Child Behaviour Checklist (CBCL) (Achenbach & Edelbrock, 1983), and Randolph Attachment Disorder Questionnaire (RADQ - Randolf, 2000). The 19 children participating in The Hope Connection reportedly made gains in their social and emotional functioning. Although these gains were more pronounced for children in the younger group, differences between the two groups were not statistically significant. Though the children's parents were not in attendance, the authors reported their inclusion as a future goal of the dissemination of their research findings.

A more widely studied, Trauma-Focused Cognitive Behavioural Therapy (TF-CBT), also demonstrated positive treatment outcomes with this population (Cohen, et al., 2012; Deblinger, et al., 2011) through individual and family-focused intervention. It was reported to be a phase-based treatment model (coping skills, trauma narration and processing, and consolidation and closure) including caregivers in treatment to "enhance and support a child's safety". This method also integrated the use of psychoeducation to enhance a caregiver's ability to support their child through the treatment process.

1.4 Relational Intervention

The notion that positive relationships between primary caregivers and children may mitigate the behavioural effects of early developmental trauma has been well detailed in the literature (Knoverek, et al., 2013; Toth, et al., 2013; Cocoran, 2011; Jackson, et al., 2009; Sprang, 2009; Kagan, et al., 2008; Fisher, et al., 2006; Gunnar, et al., 2006; Cook, et al., 2005; Marvin, et al., 2002; Rutter, et al., 1998; Rushton & Mayes, 1997; Skuse, 1984). More specifically, it has been suggested that for a child managing the adverse effects of early developmental trauma, working within a secure dyadic relationship (i.e. both the primary caregiver and the child) may encourage the re-working of attachment schema (Hughes, 2004) and aid in the development of more functional interpersonal relationships and improved social functioning (Anderson & Gedo, 2013; Dozier, et al., 2009; Fisher, et al., 2006; Cook, et al., 2005; George, 1996). These proposals form one the major theoretical underpinnings for the development of the TAG program some 10 years ago.

Within this context, it is also important to recognize that there is good evidence that a healthy caregiver/child relationship can provide a safe and supportive setting to build the skills and interpersonal reserves needed to restructure behavioural and relational effects of previous trauma (Perry, 2009; Sprang, 2009; Fisher, et al., 2006; Cook, et al., 2005; Hughes, 2004; Marvin, et al., 2002; Skuse, 1984). Such supports may also provide an opportunity for the child to begin to feel "safe at a sensory-affective level of experience" (Hughes, 2004). In addition, this strengthened relationship may promote the ability of the parent to cope with behavioural effects of previous trauma on their child in a more adaptable and less aversive manner (Sprang, 2009; Hughes, 2004; Rushton & Mayes, 1997).

1.5 Children in Care

It is likely that children who have been placed in the care of external authorities because of previous significant trauma, as well as the families who support them, comprise a particularly challenging population to treat (Kagan, & Spinazolla, 2013; Arvidson, et al., 2011; Dozier, et al., 2009; Purvis, et al., 2007). The underlying issues in attachment and behaviour may be further compounded by repeated changes in both places of residence and primary caregivers (Kagan & Spinazolla, 2013). It is not surprising therefore, that children in this situation may experience limited attachment ability with their new primary caregivers (Kinsey & Schlosser, 2012; Dozier, et al., 2009).

Disrupted and traumatic experiences with early attachment relationships may leave such children less likely to view new caregivers as a source of comfort and safety (Purvis, et al., 2007; Gunnar, et al., 2006; Rushton & Mayes, 1997) as their early working models of attachment may illicit similar responses of fear in children, causing them to react with escalated protective/survival behaviours (i.e. stealing, hoarding, lashing out, withdrawal) (Kinsey & Schlosser, 2012; Arvidson, et al., 2011;

Farina, et al., 2004; Hughes, 2004). However, despite these barriers to potentially successful outcomes, it has been repeatedly demonstrated that "late-placed" children can still develop healthy, satisfying, emotional attachments with new caregivers (Purvis, et al., 2007; Rushton, et al., 2003).

The impact of the caregiver's warmth and responsiveness toward the youth early in placement can also play a factor in the formation of this new relationship (Dozier, et al., 2009; Sprang, 2009; Rushton, et al., 2003). Overall, these studies support suggestions that there is significant longer-term flexibility of the attachment system, particularly when both the primary caregiver and the child ("dyad") have the opportunity to strengthen and develop positive feelings toward each other.

There is evidence that specific "attachment-promoting" interventions may help to improve long-term outcomes for children with early trauma histories. These interventions include: those designed to reduce behavioural problems, such as elevated levels of aggression (Kagan & Spinazolla, 2013); promote physical growth, general intellectual performance and language development (Rutter, et al., 1998; Beckett, et al., 2006); increase "felt safety" (predictability, structure, and routine) (Purvis, et al., 2007); and build healthy trusting relationships with caregivers (Purvis, et al., 2013; Rushton & Mayes, 1997). These interventions can improve positive engagement (Jackson, et al., 2009), decrease placement disruptions (Arvidson, et al., 2011; Rushton & Mayes, 1997), and help caregivers to understand trauma's impact on behaviour (Jackson, et al., 2009; Rushton, et al., 2003; Rushton & Mayes, 1997).

1.6 Conclusions

There is widespread evidence of the ubiquitous impacts of early caregiver-related trauma. Several investigations have offered intriguing insights into mechanisms that link early adversity to later impairments in learning, behaviour, and both physical and mental well-being. Recognizing that many of the impacts of early developmental trauma may have long-term effects on an individual's health and well-being, there was specific interest in exploring an individual's ability to develop and maintain attachment relationships in the hopes that these new relationships can help to buffer the long-term impacts of early trauma.

In the absence of caring, supportive, and nurturing relationships, early brain development may be impacted and later stages of brain development have the potential to be altered (Shonkoff, et al., 2012, Catania, et al., 2011; Roth & Sweatt, 2011; Perry & Szalavitz, 2006; Schore, 2005, Cook, et al., 2005; Schore, 2001). Though emphasis has traditionally been placed on early intervention, the current research will examine if meeting the needs of this population in middle childhood can potentially mitigate the behavioural and relational effects of previous maltreatment, through examining changes in their behaviour and caregiver/youth attachment relationships. The motivation to explore this topic is driven by the presupposition that strengthening the protective relationship can help to heal negative relational and behavioural effects caused by attachment trauma, even after the deleterious effects have potentially occurred.

The implementation of evidence-based treatment in programs that meet the needs of children in care often necessitates adaptation of more widely used research-based interventions (Spinazolla, et al., 2014; Kagan & Spinazolla, 2013). These adaptations are rarely evaluated for effectiveness. As a result, there tends to be a grievous lack of evidenced-based practice with regard to intervention in this age group (Catania, et al., 2011). However, research supports interventions that strengthen caregiving relationships, reduce parent/child stress, and teach new strategies for relational mediation of behaviour (Anderson & Gedo, 2013; Kagan, et al., 2013; Purvis, et al., 2013; Arvidson, et al., 2011; Dozier, et al., 2009; Kagan, et al., 2008; Cook, et al., 2005; Dozier, et al., 2001; George, 1996; James, 1989). This study aims to report on one such program attempting to meet this challenge.

2 CASA’s Trauma and Attachment Group (TAG) Programs

2.1 Background

CASA, Child, Adolescent, and Family Mental Health is an Edmonton-based provider of mental health services for families, children, and youth. It is a unique organization, and although publicly supported, it is run as an independent agency. Based on personal communication with CASA staff, it is reported that the Trauma and Attachment Group (TAG) program originated as a “highly structured training, support, and treatment program” for children (and their caregivers) who have experienced trauma and severely disrupted attachment. Its main purported goal was to “promote attachment behaviors in adopted or foster children suffering from attachment disorders”. It was intended to address the profound negative impact on the child’s ability to function in multiple environments, leading to unstable foster/adoptive placements, poor peer relations and poor school performance.

TAG initially aimed to focus on both increasing the attachment relationship and decreasing the behavioural symptoms of trauma (i.e. poor or indiscriminant attachments, aggressiveness, boundary problems, stealing, lying, destructive behaviours, delinquency, etc.). Drawing on publications available a that time from experts in the field (Perry, 2002; Schore, 2001; van der Kolk, 2003; van der Kolk & Fisler, 1994; Herman, 1993; Herman, 1992) TAG intended to address the various shortcomings and impairments caused by early developmental trauma. Through the use of “non-verbal techniques that require sensory input such as movement, music, arts, massage, yoga, and play” (obtained from TAG program documents) the intervention hoped to provide support and remediation to the areas of the brain presumed to be most vulnerable to early trauma (Perry, 2002; Schore, 2001; van der Kolk, 2003; Herman, 1993).

Conversations with CASA staff uncovered that based upon clinical necessity of CASA clients in the early 2000s; there was demand for a program to specifically meet the needs of school-aged children struggling with the behavioural and relational impacts of early trauma. Initially TAG was intended to treat the caregiver/child dyad with an emphasis on the children (aged 5-12). However, early adaptation leaned toward the inclusion of extra supports for parents as they listened to the various challenges caregivers experienced in their daily lives with these children. Initial reliance on evidence-based practice regarding the best interventions for developmental trauma, encouraged the multi-disciplinary approach, something that was also in place in other programs at CASA at the time (i.e. Family Team, a family-based psychotherapeutic intervention utilizing various disciplines to provide insight and intervention that best addresses the varied complex needs of a family).

Thus, the TAG Program Description document (provided by CASA Evaluation and Research team) states that: "TAG treatment is based primarily on the three-stage treatment model put forth by Bessel van der Kolk as well as Judith Herman (van der Kolk, 1994, 2003, 2005, 2007; Herman, 1992, 1993). This model includes three stages: Stabilization, Trauma Resolution and Recovery, and Generalization to Community, and is described in detail later in this chapter. This stage treatment approach integrates developmental, biological, psychodynamic and interpersonal perspectives. In actual practice, the three stages 'blur' and a child may regress or evolve to any of the three stages. The primary intervention focus of TAG I is stabilization and establishment of a "safe place" emotionally, while the main focus of TAG II is trauma resolution and reconnection."

In order to design a program that contained the 3-stage model of treatment (outlined in this chapter), program planning necessitated a two-step program, dividing treatment into TAG I and TAG II. This involved separate, but sequential, focus: stabilization in TAG I, working through trauma in both TAG I and TAG II, and integration in relationship and back into the community in TAG II. When it was recognized that further supports might be needed as the children moved into early adolescence and to meet the needs of children aging out of middle childhood, Teen TAG was developed with the same theoretical and structural curriculum for youth aged 11-17.

It is also important to note that there are two TAG programs run per year, one starting TAG I in September of one year, taking two weeks off over the school winter break and returning to complete TAG II from January to June of the following year. And a second group beginning in January, then taking 3 months off for the summer and returning to complete TAG II from September to December.

The current TAG program has maintained this early design approach, to help children in middle childhood diagnosed with attachment disorders following complex developmental trauma. It aims to promote healing through the development and strengthening of caregiver-child attachment relationships. The child TAG program has the capacity to treat a maximum of ten caregiver/youth dyads, during the eight-month course of treatment. Each of the TAG sections (I and II) lasts for four months, during which the TAG program dyads meet once a week, for 2 – 2.5 hours. During this time there are separate sessions for caregivers and children, as well as combined caregiver-child dyad sessions. Given the highly intensive nature of this program, validation of its effectiveness is critical to gain insights regarding its relative utility. The program has been essentially unchanged since September 2011 around when parental reflective functioning was identified as a treatment outcome. It is because of this, and the more complete availability of electronic outcome data, that this research is limited to data from the time period of 2011-2015.

2.2 Facilitation Team

TAG programs are delivered by an experienced multi-disciplinary team, which meets to review progress every two weeks, and includes a psychiatrist, a psychiatric nurse, a clinical support worker, psychologists, social workers, and a part-time occupational therapist. Because the program is carried out at a teaching facility, others may be involved in the program for educational purposes. In addition to group involvement, the team makes weekly support calls to families, and can provide collaboration with schools, and family community-care teams where necessary.

2.3 TAG Program Eligibility

The TAG program was designed for children with attachment related mental health needs. All of the children treated in the TAG program have either a confirmed, or suspected, diagnosis of post-traumatic stress disorder (PTSD) and/or developmental trauma, as well as a diagnosis of an attachment related disorder such as Reactive Attachment Disorder or Disinhibited Social Engagement Disorder. Children recommended for TAG have often been exposed to emotional, physical, and sexual abuse, as well as neglect. In addition, many have complex trauma symptoms (including dissociation and emotional dysregulation) and a wide range of problematic boundary and regulation related behaviours such as stealing, aggressiveness (to both peers and/or adults), food hoarding, and challenges with emotion/affect.

Children demonstrating these challenges are referred from a variety of sources for group, family and individual supports at CASA. Children considered for admission to TAG must be stable enough to benefit from and safely participate in, a group treatment setting. Children who are not suitable for a group setting, or who present a serious danger to themselves or others, may receive individual and/or family therapy in place of TAG participation.

In addition to the diagnostic and safety criteria, in order to be eligible for the program a child must have “placement stability” for at least one year prior to participation in TAG programs (i.e. living with the same family with no intention to move the child), a common suggestion for treatment with this population (Purvis, et al., 2013; Jackson, et al., 2009). Families must also agree to minimize or eliminate factors that could jeopardize placement stability for children participating in the program (i.e. agree to avoid all contact with any family members directly associated with the original developmental trauma). Though consideration can be made where the children are still in court appointed contact with biological families.

According to TAG program documents and communication with CASA staff, caregiver factors also impact whether a dyad can be admitted to the program. It is preferable that caregivers demonstrate their own stability with regard to mental health and have well-established access to supports including respite care and a social support network. Caregivers must also be committed to the intensity of the program (i.e. attending eight months of weekly sessions, taking time off from work, arranging care for other children in the family), in addition to working to minimize potential treatment disruptions such as family vacations.

2.4 Details of TAG I and TAG II

The TAG program is designed to address developmental trauma, and (as mentioned) is based on a trauma-informed three-stage treatment model (Rahim, 2014; Bremness & Polzin, 2014; van der Kolk, 2005). The first stage of this model, Stabilization (establishing safety in the home and community), is the primary intervention goal for the first part of the program (TAG I). The second two stages, addressed during the second phase of the program (TAG II), are Trauma Resolution and Reconnection / Generalization to Community.

2.4.1 TAG I

To achieve stabilization, TAG I focuses on establishing a “safe place” for participants, in terms of clinical and environmental stabilization, as well as developing a practical model for caregivers for both mindfulness (Seigel & Hartzel 2004) and reflective functioning (Slade, 2005; Fonagy, et al., 1991). Clinical stabilization, considered internal to the child, is encouraged through the establishment of physiological and emotional regulation with the help of group dyad activities centered around emotional, cognitive, and behavioural regulation. Examples of techniques used to achieve this include guided visualizations, creation of a “safe place”, trust exercises, and sensory-related activities (e.g. weighted blankets) that are believed to allow for the development of trust and security with their caregiver as well as to promote the development of emotional and self-regulation.

TAG I is a 12-week group with three distinct components. First, there is the caregiver’s group designed to increase awareness of trauma’s effects on behaviour, encourage the development of therapeutic parenting skills that promote attachment, and facilitate the development of environmental conditions that promote and maintain attachment. Secondly, there is a concurrent group therapy experience for the children which includes therapeutic free play with staff support and guidance; physical activity to promote self-regulation; guided visualization; experimentation with sensory strategies; verbal processing of weekly strengths and challenges; activities related to interpersonal boundaries, emotional identification and expression, life history, and current family relationships; therapeutic stories related to trauma and attachment needs, and community snack.

Additionally, there are guided caregiver-child dyadic interactions. These interactions are child-led and focus on building attachment, trust, and self-awareness. During caregiver/child dyad time, group activities for clinical stabilization include role-playing, body (feeling) map drawings, and safe place visualizations. Children are supported to increase their self-regulation skills both through reflection on their feelings and thoughts, and through connection with their caregiver. Caregiver-child attachment is further encouraged outside of group meeting times through dyadic activities such as “kit time”, where caregivers and children set aside time every day to do activities together that mimic early attachment behaviours. For example these may be providing one-to-one attention and connections through games that encourage increased eye contact and/or increases in the amount of physical touching between the caregiver and child. Such activities are believed to develop an individual’s sense of self (Arvidson, et al., 2011) and to build attachment and social competence (Purvis, et al., 2013).

Reflective functioning on behalf of the caregiver is believed to be an integral part in the development of a child’s safety and comfort in the attachment relationship (Slade, et al., 2005). In an attempt to help develop this attunement in caregivers, TAG I begins with caregiver education on the neurological, emotional, and behavioural effects of developmental trauma, through the Neurosequential Model of Therapeutics (NMT) (Snyder, et al., 2012; Perry, 2009). NMT is designed to be a developmentally-driven neurobiological model, where, for example, caregivers discuss the potential impacts of trauma on brain functioning, including controls over regulation, arousal, and attention, before trying to move on to higher-level functions, such as decision-making and problem solving. It is hypothesized that abuse may lead to some, as yet undetermined, changes in regulation from structures located in the brain stem controlling arousal and attention (Shonkoff, et al., 2012; Fisher, et al., 2006; Teicher, et al., 2003; Schore, 2001; van der Kolk & Fisler, 1994). The goal of TAG I, therefore, is to try and educate caregivers and help them acquire techniques that may improve control over potentially deregulated areas. For example, caregivers learn the sequential importance of various developmental tasks like executive function skills (decision making and problem solving) maturing after more instinctual arousal related responses.

After a focus on clinical stabilization, the TAG facilitation team supports the family to increase the security of the child's surrounding relationships (termed "environmental safety" in TAG program description documents). This is achieved, in part, through the development of family connections to school or community supports, and includes the need to help the child begin to generalize feelings of safety gained within the relationship with their caregiver, to others in the child's social world.

2.4.2 TAG II

TAG II is a 15- week group for the children and their parents/caregivers, which focuses on trauma resolution using an attachment model. There are 3 parts to the group: (1) grounding the body orientation using movement exercises and dyad activities, and anxiety reduction using visualization, (2) sand-tray therapy, and (3) storytelling and closure.

The TAG II treatment component seeks to support trauma resolution (stage two of van der Kolk's treatment model) (van der Kolk, 2005; van der Kolk & Fisler, 1994), through encouraging the child's recollection of their early traumatic experiences in a safe environment. The caregiver learns to become a witness to the youth's "trauma story" in a mindful, non-judgmental, and supportive manner (Purvis, et al., 2013). Children are supported to integrate past trauma into a narrative that also includes present experiences and to respond to their present environment without viewing it through the lens of their trauma. Children begin to tell their story through drawing, collages, and sand-tray work. They also participate in regulatory activities, (i.e. learning to "be present" in their own bodies), practice mindfulness-based stress reduction (Kabat-Zinn, 2011), and are guided through relaxation exercises. During this part of the process, children are also encouraged to reframe their early attachment experiences to help them understand that the current caregiver is not the one responsible for their early developmental trauma. Caregivers are supported with regard to increasing their capacity to make sense of their own and their child's mental states (reflective functioning), which is believed to play a critical role in helping children to self-regulate and establish healthy and meaningful relationships (Stacks, et al., 2014; Fonagy, et al., 2007; Slade, 2005; Slade, et al., 2005). This reframing for both children and caregivers aims to re-build models of healthy attachment and reinforce safety and stability.

The final goal of TAG II treatment is to address reconnection and generalization to the community (van der Kolk, 2005; van der Kolk & Fisler, 1994), which involves the successful transfer of treatment gains across environments. This is encouraged through the provision of caregiver collaboration to advocate with community support systems for their child’s needs. Working in groups is important to this component of the program, and the families involved in TAG II practice positive participation in a wider community through group sand-tray and group dyadic movement activities. Stabilization for each child also continues through one-on-one, caregiver/child activities. The goal is that the dyad and their families will learn more about the impact of early relational trauma on the child’s current functioning. If treatment is successful then it is intended that children are increasingly open to positive attachment relationships with their caregiver and other community members, and in this situation children are then provided with tools to begin to honour primary (albeit dysfunctional) attachments. Once this is achieved, support is given to allow the family to work, build, and maintain connections in the child’s social, community, and educational support systems.

2.5 TAG Program Internal Evaluation

Since its development, the Trauma and Attachment Group program has made several revisions to its internal evaluation plan in an attempt to more accurately represent and measure specific changes occurring in caregiver-child relationships. To more specifically assess program outcomes, TAG internal evaluation has shifted away from measurement of overall child mental health towards measurement of child-experienced trauma symptoms, parent-child relationship, and child attachment behaviours. To determine impact on these outcomes there has been an increased use of evaluation tools with population normed, reliability- and validity-rated outcome measures. Previous measurement tools have included: Behaviour Assessment System for Children (BASC-2) (Reynolds & Kamphaus, 2006), Adaptive Behaviour Scale – Residential and Community (ABS-RC: 2) (Nihira, et al., 1993), Self-Reflection and Insight Scale (SRIS) (Grant, et al., 2002), in addition to measures designed by CASA such as the TAG parent checklist, which was designed for caregivers to rate changes in levels of parenting stress.

Despite changes in the program after its inception, since September 2011 the program has consolidated and current assessment aims to determine child and family progress in its three main outcome areas: (1) attachment; (2) trauma-related symptomology; and (3) parental reflective functioning. All three are currently being assessed through caregiver-rated and therapist-rated questionnaires completed at the beginning of TAG I and upon the completion of TAG II (explored in detail in Section 5.2). Caregivers participating in the TAG program also complete the Health of Nations Outcome Scales for Children and Adolescents (HoNOSCA) (Gowers, et al., 1999) and, since 2013, the Adverse Childhood Experiences (ACE) questionnaires (Felitti, et al., 1998), in which they report adverse experiences for both themselves and their child.

Therapist-rated measures used in internal TAG program evaluation present clinical observation of the child, caregiver, and dyad and complement data obtained from the caregivers' viewpoint at the start of the program. These measures include:

- HoNOSCA - The TAG mental health team assesses the severity of a child's mental health-related symptoms in the areas of attention, externalizing and internalizing behaviours, peer and family relationships, and self-care using the HoNOSCA (Gowers, et al., 1999). This assessment document is a short, widely accepted clinician-rated measure developed for general clinical practice, to measure global aspects of mental health and functional impairment in child and family mental health settings (Hanssen-Bauer, et al., 2010).
- A specific CASA-created measure is the Goal Attainment Scaling module where therapists rate client progress towards treatment goals on a continuum of "much less than expected progress" to "much more than expected progress." Typical goals for children range from demonstrating safe boundaries and attachment behaviours, toward the reduction of trauma-related symptoms including dissociation or angry outbursts. This measure is also intended to capture specific goals outlined by caregivers at the start of the program (e.g. improving reflective functioning skills, enhancing parental attunement, or increasing understanding of trauma and its emotional and behavioural effects).

Another CASA-created caregiver-generated measure, completed at program conclusion, asks caregivers to complete satisfaction and feedback questionnaires in which they share their insights about aspects of the program that they liked, as well as those they would like to change.

2.6 Conclusion

CASA Child, Adolescent and Family Mental Health originated its Trauma and Attachment Group program for children (and their caregivers) to address the various shortcomings and impairments caused by early developmental trauma. The goal of treatment was to amend the profound negative impact on the child's ability to function in multiple environments, leading to unstable foster/adoptive placements, poor peer relations and poor school performance. TAG initially aimed to focus on both increasing the attachment relationship and decreasing the behavioural symptoms of trauma through a stage-based trauma treatment model: Stabilization, Trauma Resolution, and Reconnection or Generalization to the Community.

To achieve stabilization, TAG I focuses on establishing a "safe place" for participants, in terms of clinical and environmental stabilization. Clinical stabilization, considered internal to the child, is encouraged through the establishment of physiological and emotional regulation with the help of group dyad activities centered around emotional, cognitive, and behavioural regulation. Beginning with a caregiver-only group, designed, in part, to increase awareness of trauma's effects on behaviour, the child is then supported in child-only group play therapy with activities encouraging the promotion of self-regulation, interpersonal boundaries, and emotional identification and expression. As a final component, there are guided caregiver-child dyadic interactions in a group setting where dyads can practice the skills necessary to build and promote healthy attachments.

The TAG II treatment component seeks to support stage-two of the trauma treatment model, trauma resolution, through encouraging the child's recollection of their early traumatic experiences in a safe environment. Children are supported to integrate past trauma into a narrative that also includes present experiences and to respond to their present environment without viewing it through the lens of their trauma. The final goal of TAG II participation is to address reconnection and generalization to the community, which involves the successful transfer of treatment gains across environments. This is encouraged through caregiver collaboration (group support) to advocate with community care systems for their child’s needs. Working in groups is important to this component of the program, while stabilization for each child also continues through one-on-one, caregiver/child activities. A purported goal is that the dyad and their families will learn more about the impact of early relational trauma on the child’s current functioning.

Since its development, the TAG program has made several revisions to its internal evaluation plan in an attempt to more accurately represent specific changes occurring in caregiver-child relationships, and to measure program outcomes. Since 2011 the program has consolidated assessment aims to determine child and family progress in three main outcome areas: (1) increase in attachment; (2) decrease in trauma-related symptomology; and (3) increase in parental reflective functioning. These are currently being assessed through caregiver-rated and therapist-rated questionnaires completed at the beginning of TAG I and upon the completion of TAG II.

3 Overall Methodological Approach

3.1 TAG Program Evaluation Procedures

It should be noted that in past internal CASA assessments of program effectiveness, challenges have arisen because of discrepancies between pre-TAG I and post-TAG II caregiver outcome measures, outcomes from clinician-rated measures, and end-of-program satisfaction surveys (in personal communication, 2014). Non-matching evaluation results are believed to be attributed to a variety of factors including the use of inadequately sensitive outcome instruments; small cohort sizes impacting statistically significant group change results; and vacillation of individual family needs, stressors, and experience, which create increased variability in group results.

Typically, clinical program treatment efficacy would be measured through development of a simple intervention that is compared to standard practice without this intervention. However, the current research involved determining efficacy of a long-existing, repeatedly changing, complex, high-intensity, long-duration, multimodal intervention in a high-needs population. For this reason, the utilization of a range of research methods was appropriate to help answer the (deceptively simple) question regarding the clinical effectiveness of the TAG program. These approaches, and relevant background, are discussed below.

3.2 Outcome Measures Utilized in the Current Study

Does the TAG program demonstrate effectiveness in achieving its stated treatment goals regarding increased caregiver/child attachment, decreased post-traumatic stress symptoms in children, and increased parental reflective functioning? To assess these targeted areas of treatment, the TAG program utilized three outcome measures, which we evaluated for this investigation. All are described in detail below.

3.2.1 Attachment

Though modification of the attachment relationship has been long recognized as an effective outcome measure (Dozier, et al., 2009; Kagan, 2008; O'Connor & Byrne, 2007; Dozier, et al., 2001), there appears to be no widely accepted single standard measure to determine such changes. Proposals have been such that any "gold standard" measure for assessing attachment should involve intensive parent-child observations and interviews (O'Connor & Byrne, 2007), which require substantial training and resources. Additionally, it has been difficult to effectively assess attachment behaviours in children who are too young to adequately self-report (in personal communication with CASA staff, 2014).

For these reasons, it was accepted that changes in caregiver-child attachment in this study would be measured using a conventional TAG evaluation measure, the Parenting Relationship Questionnaire (PRQ) (Kamphaus & Reynolds, 2006). This 71-item measure is standardized for use with children aged 6-18 years old (Rubinic & Schwickrath, 2010) and consists of 7 sub-scales, 6 of which are focused on the quality of caregiver-child interactions including, attachment, relational frustration, communication, and involvement, as well as discipline practices and parenting confidence. It also provides a score to evaluate school satisfaction. The PRQ employs a Likert type 4-option scale, *never*, *sometimes*, *often*, *always* (N, S, O, A) and rates responses to several relationship-related questions including, "I know when my child wants to be left alone", "It is difficult for me to communicate clearly with my child", and "when upset my child comes to me for comfort". Each item is scored from 1-4, but each sub-scale of the PRQ can be scored independently. Results are interpreted based on the instructions of the PRQ manual, which also provides normative data, and it has been used in a range of different clinical situations to examine changes in parental views (Lewallen & Neece, 2015; Xie, et al., 2013; Lowe, et al., 2012).

According to CASA staff, the PRQ was chosen for TAG evaluation because of its normalized population data and well established clinical thresholds (Jacobson, et al., 1984), created through testing with normative samples of both female and males in the U.S. (Rubinic & Schwickrath, 2010). These normative data permitted comparison with the data for the CASA TAG population. The PRQ's clinical thresholds include scores of 10-40 points indicating meaningful clinical significance, (except with the relational frustration sub-scale, which is reverse-scored with negative change scores indicating a positive outcome), and scores of 41-59 points considered to be in the average range.

In addition, the measure's authors (Kamphaus & Reynolds, 2006) reported comparative reliability coefficients (from 0.72 to 0.81) and validity testing (the correlation of subscales ranged from 0.82 to 0.87) for the PRQ with the *Parent-Child Relationship Inventory* (PCRI) (Gerard, 1994), the *Parenting Stress Index*, Third Edition (PSI) (Abidin, 1995) and the *Stress Index for Parents of Adolescents* (SIPA) (Sheras, et al., 1998). This tool has been suggested as an adequate way to gain insight into a caregiver's relationship with his or her child and learn information about the parent child relationship (Rubinic & Schwickrath, 2010).

Research suggests that strengthening the caregiver/child attachment relationship may allow for change in symptomology related to early relational trauma (Cornett & Bratton, 2014; Purvis, et al., 2013; Sprang, 2009; Marvin, et al., 2002; Rushton & Mayes, 1997). As TAG purports to have the strengthened relationship as a primary treatment outcome, it was determined that the primary outcome measure for this study would be the Attachment sub-scale of the PRQ.

3.2.2 Post-traumatic Stress Symptoms

Few previous studies (Kagan, et al., 2008; Saylor, et al., 2003) have measured trauma symptoms utilizing the Parent Report Of Post-traumatic Stress Symptoms (PROPS) (Greenwald & Rubin, 1999). This 32-item measure was designed to assess caregiver perspective regarding changes in the child's frequency of post-traumatic stress symptoms, including somatic complaints (stomach and head aches), anxiety, mood swings, and behavioural indicators of trauma such as fighting, hyper-vigilance, and sleep issues. Various indicators of the presence of child-experienced trauma symptomology are rated on a range of 3 potential answers from "not true/rarely true" to "very true/often true". Test-retest reliability was found to be 0.80/0.79 with a correlation to history of exposure to trauma of 0.60 and a correlation to children's self-reports of trauma symptoms on the Child Report of Post-traumatic Symptoms (CROPS) of 0.60 (Greenwald & Rubin, 1999). The total score on the PROPS has a range of 0–60, with higher scores indicating greater distress and a recommended cut-off of 16 to determine PTSD level symptoms. At baseline 40 of 51 youth in this study sample had had a score of 16 or above.

3.2.3 Parental Reflective Functioning

Reflective functioning is, in part, thought to be attributable to an individual's ability to understand the mental state of another person (Fonagy, et al., 2007; Slade, et al., 2005; Fonagy, et al., 1991) and has been closely linked previously to successful attachment between primary caregivers and children (Stacks, et al., 2014; Slade et al., 2005; Fonagy, et al., 1991). Reflective functioning is purported to evolve "in the context of the infant-caregiver relationship" (Fonagy, et al., 1991) and may allow an individual to develop the experience of emotion and organize relationships. It has also been suggested that through the process of caregiver self-reflection, children are able to co-construct the meaning of their experience (Slade, 2005; Fonagy, et al., 1991). As parents respond (both verbally and non-verbally) to their child's affective states, they increase their child's ability for engaging in reflective thought, which is a foundation for self-awareness.

There is some evidence that improving reflective function can increase both caregiver sensitivity and attachment security (Stacks, et al., 2014; Slade, et al, 2005; Fonagy, et al., 1991). For this reason, TAG staff began including measurement of parental reflective functioning in their outcome goals about 5 years ago, in an attempt to increase positive group and dyadic outcomes (personal communication with TAG staff, 2014). To measure changes in caregiver reflective functioning TAG has utilized the Parental Reflective Functioning Questionnaire (PRFQ-1) (Luyten, et al., 2009). The PRFQ-1 is a 39-item measure designed to assess caregivers' reflective function specifically in regards to their relationship with their child. Caregivers are asked to rate their agreement with questions like "My child and I can feel differently about the same thing", "How I am feeling can affect how I understand my child's behavior", and "I try to understand the reasons why my child misbehaves". Each item on the PRFQ is rated on a 7-point likert scale, where "1" represents "strongly disagree" and "7" represents "strongly agree". In the development of this questionnaire, the authors, (Luyten et al., 2009), met with experts in the field of reflective function to determine how mothers, skilled or lacking in the skill of mentalizing, would answer a variety of items. An increase in score on this measure is felt to indicate an increase in reflective thinking about their relationship with their child.

Though, to this point not widely used in child intervention literature, it has been used in previous studies examining maternal tolerance of infant stress signals with positive findings suggesting that parental reflective functioning may be related to infant distress tolerance and other "persistence behaviors in parenting contexts"

(Rutherford, et al., 2013). This measure's validity and reliability are currently under investigation by its authors.

3.3 Self as Researcher

In the context of qualitative research data collection, eliciting the views of informants is the primary goal. Though the views of the researcher are a secondary concern, they nonetheless shape the interaction (Morrison & Stomski, 2015; Tong, et al., 2007; Griffee, 2005). Because qualitative research is primarily seen through the eyes of its researcher, it is important, as a contribution to the study's quality components, to maintain transparency with regard to all processes of a study's design (Tracy, 2010; Plummer-D'Amato, 2008b) including researcher's presuppositions regarding the research topic. As a process of that transparency, this section begins with a discussion of the ontology, epistemology, and worldview held by the PhD candidate, and concludes with a discussion of how she came to the research question.

It is the PhD candidate's ontological position that multiple realities exist and that it is possible for individuals to have different views about a given phenomenon. While there can be value in measureable "proof" attempted through quantitative (positivist) research designs, not all stories can be told or answered through this lens. There is an assumption in constructivist epistemology that individuals come to their experience through a social or historical construction, and as such, the core element of the current research approach was to gain understanding of the *meaning* study participants placed on their experience as facilitators and partakers of the TAG program. As such, the PhD candidate looked to understand the meaning that participants placed on their experience to add context to the measurable outcomes; to focus on the discovery rather than the proof. This epistemology supported that members of the TAG program constructed their own realities in relation to one another and therefore, this relationship was the main reference point of analysis.

The candidate is a Canadian Certified Counsellor who specializes in the area of trauma and attachment (described in more detail below). As a therapist, the PhD candidate places value on the individual experience. Where some research aims to illuminate success for the masses, success for one individual is deemed relevant to this researcher. In addition, participating as a student in field study work at CASA, provided insider knowledge of the TAG program, which brought with it some advantages with regard to understanding TAG structure, language, and facilitation. This role also required extensive reflexivity and transparency with regard to data collection, analysis, and findings of this research at various stages.

3.3.1 Researcher's Worldview

In qualitative research, a worldview is a framework of beliefs, values and methods within which research takes place. For this PhD candidate, one framework from which this research can be understood is that of cultural relativism. This view holds that an individual's beliefs and values can be better understood through the lens of his or her own culture (Johnson, 2007; Atkinson & Pugsley, 2005). What is particularly significant about this position for the PhD candidate is that the researcher's own knowledge and perspective within the context of her culture will be affected by the perspectives shared by the study participants (Johnson, 2007).

Another worldview held by the candidate is that knowledge is socially constructed (Rasmussen, 2015; Gergen, 1985). The social constructionist framework lends itself to the idea that meaning is constructed at the point at which a person interacts with his or her environment and that even mental illness, in itself, can be considered a social construction (van Riel, 2016; Gergen, 1985). What appears most relevant with regard to this worldview for the PhD candidate is the way in which meaning was derived from data collected and analyzed in this investigation. While objectivist/quantitative designs require strict adherence to the aim of uncovering “truth”, it is this candidate’s perspective that truth is socially constructed. From this perspective, understanding is an active and cooperative “enterprise of persons in relationship” (Gergen, 1985). As with the focus group facilitation, while care was taken to remain neutral and reduce “intentional or unintentional endorsement” of a particular view (Plummer-D’Amato, 2008a), it was nonetheless true that the PhD candidate was a part of that discussion and would therefore shape its direction in some way. The social constructionist framework created an interesting synergy with this investigation in that it provided the context for collecting and analyzing data. The more *information* that could be collected from the many elements of TAG participation, the more *meaning* that could be derived from the analysis of this information. The findings in this study were one interpretation of the truth, but should not be seen as the only answer.

As mentioned, the PhD candidate is a practicing mental health clinician who has trained and worked in the area of trauma and attachment for the last 15 years, including a field study placement at CASA 11 years ago, where she participated as a student member of the TAG facilitation team (outlined in more detail in the next section, 5.3.2). The research questions grew out of her clinical work, discussion with staff at TAG/CASA, a review of the trauma and attachment literature, and discussions with research partners (Tong, et al., 2007).

3.3.2 Developing the Research Question

One challenge that came about as a result of holding an epistemological stance that relevant meaning can be derived from the subjective understanding of individual experience was that the methodological elements of this study evolved as the research question became more defined. This approach is common in ethnographic research.

The research questions were informed by the PhD candidate's formal training as a counsellor in the area of trauma and attachment, and her employment in group care/residential treatment, where she learned about the multitude of challenges facing children who have experienced early relational trauma and deprivation. As mentioned, the PhD candidate also trained as a student therapist at CASA and was able to participate as a student member of the TAG facilitation team at that time. The skills gained as a clinician have influenced the design, implementation and analysis of this study in various ways, most predominantly in the Chart Review (Section 7) and the Focus Group and Interviews (Section 8).

In line with presuming a cultural relativist worldview, the candidate's background allowed her to have an insider view and understanding of the TAG program in a way that other, more novice researchers may not have achieved. This insider view shaped recommendations for the practical application of research findings but also required deeper reflexivity, and closer monitoring of the interpretation of data to maintain the study's rigor and trustworthiness (Johnson, 2007; Tong, et al., 2007).

3.4 Research Design: Ethnography

A researcher's job is to choose a design that can be used to provide the best answers to research questions (Doody, et al., 2013a). Traditionally ethnographic investigations were based in anthropology, requiring tedious, lengthy data collection in remote locations (Cruz & Higginbottom, 2013; Atkinson & Pugsley, 2005). Emphasis was customarily on face-to-face contact in unstudied cultures, working to bring the information mainstream. In more recent years, ethnographies have been utilized to bring life and meaning to more local social and societal settings and can provide great value in evaluation research (Henry, et al., 2007). It is believed that those who contribute data to ethnographic explorations are the experts in their phenomenon and hold the key to more explicit knowledge that can be gained by an outsider through sharing in that process (Atkinson & Pugsley, 2005).

Generally, an ethnographical approach offers an opportunity to base methodological considerations on the unique needs of a cultural or social phenomenon (Higginbottom, et al., 2013; Reeves, et al., 2008; Tong, et al., 2007). These various methods allow an ethnographer to acquire and develop insights into people's actions and perspectives (Naidu, 2012), as well as the atmosphere of the setting they populate (Reeves, et al., 2008). In ethnography, the literature and design of the study, as well as the philosophies of the researcher and the study team, are all believed to play a part in final "story creation". In ethnography, "reality is constructed through the perceptions of those under study" (Naidu, 2012). Through the process of "immersing oneself" in the study topic, an ethnographic researcher and the study team become players in the experience, and their experience becomes valuable in the context of understanding the research (Higginbottom, et al., 2013; Reeves, et al., 2008; Griffee, 2005). As a result, the PhD candidate's prior knowledge of and participation in the TAG program supported the choice of an ethnographic paradigm.

Initial stages of study design (review of the TAG literature, informal interviews with TAG and CASA staff, and meetings with the study team) revealed that there is a "culture of TAG" in the context of the CASA community. These insights led to the recognition that a standard retrospective data analysis procedure would not be enough to answer the proposed research questions. It was hypothesized that further understanding could be gained from the people who "lived" the experience of the program. It was also relevant to recognize that when programs have a strong emotional or cultural attachment within organizations, they can be difficult for internal individuals to examine appropriately (Johnson, 2007; Fine, 1993). Thus, the need for an independent external examination of the program became a relevant outcome of the collective observations.

As outlined in the following chapters, the first part of this study involved exploring the effects of the TAG intervention via analysis of retrospective questionnaire data available through the CASA archives. A more thorough understanding of the core mechanisms of TAG was undertaken by learning more about TAG "rituals", practices and activities through an examination of charts; moderating a focus group conversation with TAG facilitators to learn more about their facilitation style, beliefs and influences; and interviewing caregivers to gain first-hand knowledge of their recalled day to day experience while enrolled in the TAG program. In effect, the elements of the "TAG culture" were used to tell its story and gain a rich narrative of the mechanisms of change inherent in the program, thereby answering the second proposed research objective.

3.5 Data Collection Strategies

As mentioned, the overall design relied on several data collection strategies to better understand the TAG program and its outcomes, and to answer the research questions. The first method involved quantitative research in which data from the standardized scales used by the research team was retrospectively analyzed by comparing baseline data to that collected following completion of the TAG program (pre- and post-test data). This involved data collected from the period September 2011 – December 2013. The same data were collected prospectively from January 2014 – December 2014, after post-test data were completed at the end of TAG II.

The second method was to carry out a detailed retrospective chart review on selected charts from the quantitative sample, to identify quantifiable changes reflected in client charts that were not captured in the standard measures. The third method utilized in the current study was to carry out a focus group and informal interviews with those facilitating the TAG program, as well as individual interviews with caregivers who participated as a part of a dyad in the program during the years represented in the quantitative component of this study.

Two initial research objectives were proposed:

1) To assess the effectiveness of the TAG intervention in creating changes in attachment, child-experienced trauma symptoms, and caregiver reflective functioning. This was addressed by collection of both retrospective and prospective data consisting of standardized scales, as well as through the analysis of the retrospective data available in the clinical charts.
2) To identify the specific aspects of the program that yielded the most relevant positive change. This was achieved through focus group and interviews with TAG facilitators, and individual in-depth interviews with TAG caregiver participants.

It was initially hypothesized that the TAG program would lead to statistically significant improvements in attachment (the primary outcome measure), as well as decreased caregiver reported child trauma symptoms, and increased parental reflective functioning. This hypothesis was tested through quantitative data collection strategies, and further explored through a retrospective chart review, in the hopes of answering the first research question listed above. The focus of the remaining qualitative data collection strategies was to learn about the mechanisms responsible for this improvement (the second research question) by gaining insight into the lived experience of the facilitators and participants.

3.6 Ethics

Permission for secondary use of retrospective data and chart review, and to conduct a focus group and individual interviews was obtained through the Health Research Ethics Board at the University of Alberta. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board in August 2014, Project Name "Effectiveness of a Trauma and Attachment Group (TAG) intervention in youth", No. Pro000484514.

Primary ethical considerations early in the study design phase were around procuring data for secondary use and analysis. All participants in TAG sign consent forms at CASA that allow their data to be utilized for research purposes. To ensure anonymity of TAG participants a member of the CASA Evaluation and Research team carried out data collection for this study's retrospective analysis. For the prospective collection of data, this CASA team member attended TAG II orientation sessions, in September 2014, to provide information about the study for those participants who would be providing pre-TAG and post-TAG measures for the period of January 2014 – December 2014. All retrospective data prior to and including this cohort were de-identified prior to being provided for research analysis.

With regard to the retrospective chart review and qualitative components of this study, ethical considerations surrounded the accessibility of personal and identifiable data in participant charts and through the provision of details in personal interviews. To help protect confidentiality in data collection, the PhD candidate obtained status as a "student" at CASA, and took a sworn oath of confidentiality with regard to patient charts. All information collected from participants in any way (charts, outcome measures, interview transcripts, etc.) was de-identified on all data collection documents (Morrison & Stomski, 2015). During the analysis stage, member reflections (Tracy, 2010; Reeves, et al., 2008) and peer review was utilized where possible to examine the data and potential findings from multiple perspectives: academic, supervisory, and other partners in the community.

Participation in the qualitative data collection portions of this research was voluntary. Because some interview participants were potential current and future users of CASA supports and services, it was made clear at the beginning of each interview that the PhD candidate was connected with the University of Alberta and not an employee of CASA. No names or identifying information were utilized in any part of data collection, analysis, or dissemination. Though it was not needed at any point in the study, the PhD candidate was prepared to offer referrals to participants of the interview component of this research for outside support if necessary.

3.7 Rigour

It is recognized that, by the very nature of being responsible for data collection, the researcher's presence influences the process (Tracy, 2010; Reeves, et al., 2008; Tong, et al., 2007), and that by ignoring this important aspect of the research, unconscious preconceptions in the research may be created (Johnson, 2007). It is important to adhere to and identify rigorous standards of quality in all research (Tracy, 2010; Morse, et al., 2002). While purely impartial perspectives are not attainable, attempts were made to maintain neutrality (where achievable and appropriate), throughout study design phases, data collection, and analysis. It has been suggested that validity is not easily accomplished or expected in research approaches rooted in the qualitative paradigm (Konradsen, et al., 2013; Plummer-D'Amato, 2008b). In large part because, as it's exploratory, constructivist nature implies, there is an expectation that each respondent will provide a unique story that draws on his or her unique experience. Nonetheless, it is through these uniquely different narratives that an ethnographic researcher gains insight into the phenomenon as a whole (Morrison & Stomski, 2015; Reeves, et al., 2008; Atkinson & Pugsley, 2005).

This study had qualitative and quantitative components and so the steps to ensure rigor in each of these parts will be described separately.

3.7.1 Qualitative Research

With regard to the qualitative components of this investigation, Tracy, (2010) outlined criteria of quality that were exercised throughout. These are, (1) worthy topic, (2) rich rigor, (3) sincerity, (4) credibility, (5) resonance, (6) significant contribution, (7) ethics, and (8) meaningful coherence.

Primarily quality was ensured by the picking of a relevant, timely, significant and interesting phenomenon to investigate (a "worthy topic"). As mentioned, initially the research topic was of interest to the PhD candidate as a clinician in the field of trauma and attachment. A review of the literature revealed a scarcity of research in the area with regard to the examination of effective treatment interventions for this population. Student facilitation in the TAG program alerted the PhD candidate to the availability of a focused intervention that had not been previously formally evaluated. Conversations with experts in the field in addition to the review of the literature further supported potential with regard to the value of this research.

The second criterion, "rich rigour", was achieved by providing a "requisite variety of theoretical constructs, data sources, contexts, and samples" (Tracy, 2010). This included the way this study accounted for validity, which referred to the degree to which findings were a valid reflection of how participants felt and what they thought about the topic. This was achieved through the inclusion of participant quotes drawn directly from transcribed interview data. These quotes represented views held by the majority of the participants, but also included conflicting views so as not to prejudice the interpretation of TAG effectiveness. Validity with regard to this research also looked to ensure that this study measured what it proposed to measure. In addition to continual revisiting of the research questions through the design and data collection processes, another way in which this was examined was through the interview portion of this research. Focus group findings were utilized to inform the interview questions, as a way of learning through participant interviews if

TAG philosophies transferred to practice. Another element of rigour was demonstrated in the care with which the researcher collected and analyzed the data. Detailed attention was paid to question design, breadth of sample through data collection methods, and transcription accuracy. All data collection and analysis steps are clearly outlined in each methodology chapter.

The third element of quality utilized in this investigation, sincerity (Tracy, 2010), was established in the way the researcher has demonstrated transparency regarding her impact on the research in this document. Detailed descriptions of how the candidate's interest in this topic developed and keeping a careful audit trail showing how decisions were made during data collection and analysis (Plummer-D'Amato, 2008b) also aided in the process.

Credibility, by its many names, is a measure of the study's ability to demonstrate reliability or plausibility (Tracy, 2010). This was addressed by providing a detailed account of the TAG program, as described by participants and reflected in their charts. These descriptions provide the reader the opportunity to follow conclusions drawn by the candidate. While convergence of the data on its own does not itself make a study more credible, it is widely accepted as a measure of quality, particularly when combined with other elements of rigour (Konradsen, et al., 2013; Tracy, 2010; Lambert & Loiselle, 2008; Griffee, 2005). One such element is in the inclusion of multiple voices on the research topic (chart review, focus group, and interviews), and in the encouragement of participants to reflect back on research findings. Specifically, the candidate applied shared findings with participants during analysis and asked for their feedback.

Another aspect of rigour is external validity. Tracy (2010) addressed external validity by discussing "resonance" and "significant contribution" elements of a study. Another way to ensure external validity is to support "recognizability" of findings and analysis (Konradsen, et al., 2013). This strategy was employed in the current investigation by discussing findings with members of the study team, by bringing the questions and thematic ideas back to interview participants for reflection, involving neutral peer reviewers, and by comparing back with current literature on the topic (Konradsen, et al., 2013; Tracy, 2010; Lambert & Loiselle, 2008; Griffee, 2005). The resonance and contribution of this study is addressed again in section 9.2.3 of this thesis.

The final elements of rigour surround *procedural, situational and relational ethics*. This includes not only that ethical clearance was obtained from an Institutional Review Board (which this investigation has), but also that data were secure, and that no harm was done to participants during data collection and in relation to the researcher’s connection with participants. For example, in line with observing relational ethics, several sections of the interview with TP2 (whom professed a less than positive experience with the TAG program) would have provided an interesting element to the research story. However, as this text contained information that was potentially identifiable, it was left out of dissemination of findings in order to protect the participant.

3.7.2 Quantitative Research

In order to ensure that the quantitative data collection and analysis methods of the study were carried out in a rigorous manner, a review of the literature revealed several elements of quality in the use of quantitative research methods, which were employed in the current study. There is consensus that quantitative research presents data that is in an aggregated and measurable format, has pre-declared hypotheses, and that study questions are clearly defined (Bryman, et al., 2008). It is also deemed important that variables are defined in a way that numbers can be assigned to them (Liebscher, 1998). In addition, while writing up quantitative findings, rigour includes: a clear description of the study sample demographics, a discussion of power of the analysis, and of the way in which the data were collected and analyzed to address issues of bias, validity, and reliability (Norris, et al., 2015). To account for rigour in quantitative analysis, it is also important to report the level of expected statistical probability (*alpha* level), to present specific descriptions of analytic choices, descriptive statistics (where available), and to accurately report inferential tests (p-values, etc.). All elements of rigour were addressed in this investigation and are outlined in the next chapter.

4 Quantitative Methods

4.1 Introduction: Quantitative Methods

In order to determine the overall effectiveness of the TAG program, it was important to determine if there were statistically significant changes in TAG outcomes. The first step involved quantitative research methodology, in which data from the standardized scales used by the research team were retrospectively analyzed by comparing baseline data to that collected following completion of the TAG program.

4.2 Methodology: Quantitative Methods

4.2.1 Study Procedures

Data collected and analyzed for the retrospective quantitative component of this study included change in mean scores on retrospective measurements collected from CASA’s Trauma and Attachment Group program running from September 2011-June 2014, and from prospective individuals who were in the program from January - December 2014. The outcome scores were coded by a member of the CASA Evaluation staff and provided to the research team for data analysis in an aggregated, de-identified format. The primary objective was to determine if there were improvements in the caregiver-child attachment relationship following involvement in the TAG program, with a secondary objective of revealing a reduction in the child-experienced trauma symptoms, which may be a useful guide to longer-term positive outcomes (van der Kolk, 2006). The caregivers’ ability to engage in reflective thinking about their relationship with their child before and after treatment was also examined.

4.2.2 Inclusion Criteria

All 51 caregiver/child dyads that completed the Trauma and Attachment Group program between September 2011 and December 2014 were considered for inclusion in analysis.

4.2.3 Exclusion Criteria

There were no exclusion criteria for study participants in this portion of the research study. All individuals who started the TAG program during the time period it was being studied, and who completed outcome measures both at intake and program completion, were considered part of the study cohort. However, partial outcome data (i.e. some questionnaires completed, others not completed) were not included in this portion of the study, as detailed below.

4.2.4 Data Collection

The data used for quantitative analysis were collected during standard CASA procedures. As part of this, at the start and end of each child's treatment they and/or their caregivers were asked to complete questionnaires related to a variety of program outcomes. Previously, these questionnaires had been scored and quantitatively analyzed by the CASA Evaluation and Research department, with the results being aggregated and presented in internal annual reports submitted to program staff and contained within mandatory Alberta Health Services reports. More detailed analysis of the data had not previously been carried out. In the present study data were data collected retrospectively using the following three instruments, the Parenting Relationship Questionnaire (PRQ) (Kamphaus & Reynolds, 2006), the Parent Report of Post-Traumatic Stress Symptoms (PROPS) (Greenwald & Rubin, 1999), and the Parental Reflective Functioning Questionnaire (PRFQ-1) (Luyten, et al., 2009). The primary outcome measure was the Attachment sub-scale of the PRQ.

Psychometric information for these three measures was outlined in section 5.2 of this thesis document.

4.2.5 Data Analysis

The primary study objective was to determine if there were changes in the caregiver-child attachment relationship, as well to determine if there were changes in the child's experience of trauma symptomology, and in the caregiver's ability to reflect on their relationship with their child. Statistical analysis of scores on the relevant scales was performed, comparing the individual data at baseline to that at follow-up, (i.e. a pre-post comparison). Paired two tailed Student's *t*-tests and analysis of variance, with a determination of statistical significance at $p<0.05$, were performed on IBM SPSS Statistics Version 22 software. In order to understand more about the association between the independent variables (age, gender, cohort #, and break) and program outcomes, a multiple linear regression was utilized to gain more in-depth multivariate understanding of these changes. Pearson's Coefficients were also completed on each individual cohort and whether or not they took their break in the summer or over the 2-week winter break, to determine any potential correlations between outcomes in relation to these variables.

4.2.6 Sample and Effect Size

In relation to sample size and the statistical significance of observed effect, enrollment in the TAG program from 2011 to 2014 predetermined the sample size in this study. Although a power analysis is typically utilized to determine whether the study sample would be large enough to serve as a representative of the entire population, in this study the participants were the entire population. Therefore, *a priori*, it was not known if the study was appropriately powered, although post-hoc statistical tests were employed to provide insight into significant findings.

4.2.7 Other Study Issues

Results for this quantitative component of the study were derived, in part, from secondary use of data collected for program evaluation at CASA. Before participating in TAG, all caregivers gave written informed consent for the use of their child's and their own information for evaluation and research purposes. It is also important to acknowledge that this is not a mandated treatment population. Those who attend TAG have sought out treatment and may have been more motivated to change and grow as a result of the intervention they received.

4.3 Results: Quantitative Methods

4.3.1 Participants

Exploration of the clinical structure, delivery and measurement of the TAG program revealed that the greatest continuity and availability of numerical data was from those collected since 2011. This defined the study sample as those families attending the TAG program during the study period of September 2011- December 2014.

Each TAG group has the capacity to treat a maximum of 10 dyads consisting of a caregiver and their child or youth, during an 8-month course of treatment. Each group is referred to as a "cohort". Of those in the sample, 64% of the families came from Edmonton, and the remainder from surrounding communities up to 100 km away (although most were much closer). As charted in Table 1 below, children admitted to the TAG program from Sept 2011- December 2014 (51 dyads) were on average 8.4 years of age at admission, with the majority of the children between 8-12 years of age (29/51), with the remainder being 5-7 years of age. One child in the first cohort, whose age was listed incorrectly, was listed as "N/A" without the availability of a date of birth for comparison. There were similar percentages of female (51%) and male (49%) children. The majority of the children treated in TAG during this period were living with foster or adoptive parents or in kinship care arrangements, though exact numbers were not available at this time. As mentioned, the TAG I and II program also runs two times per year. Three cohorts in this study sample took 3 months off in the summer between TAG I and TAG II, while three only received a 2-week winter break (Table 1).

Table 1: TAG Program Cohort Demographics

TAG Program Cohort Demographics				
Cohort	N *	Gender	Age	Break
1	4/10	Female = 5 Male = 5	5-7 = 3 8-12 = 6 N/A = 1	Winter
2	8/9	Female = 6 Male = 3	5-7 = 2 8-12 = 7	Summer
3	7/8	Female = 2 Male = 6	5-7 = 4 8-12 = 4	Winter
4	8/9	Female = 5 Male = 4	5-7 = 3 8-12 = 6	Summer
5	8/9	Female = 4 Male = 5	5-7 = 6 8-12 = 3	Winter
6	5/6	Female = 4 Male = 2	5-7 = 3 8-12 = 3	Summer

*Complete data sets/Total N of the group

As this was primarily retrospective analysis of previously collected data, potential for analysis of variance between independent and outcome variables was limited. Demographic data included age (of the youth participant) and gender (of the youth participant) for all 51 dyads that participated in the program as a part of this study. Demographic documents presented to the research team by CASA, revealed the child's current age and placement status. Age was adjusted by comparing file numbers in these documents with file numbers in the data set based on the year the youth attended the TAG program. Adjusted age was then inserted in the data grouping, as is common in youth intervention literature, into age 5-7 (1) and 8-12 (2). Gender was coded as: Female (1) and Male (2).

Placement status was more challenging to confirm from current demographic information provided. Placement status (i.e. foster care, adoption, kinship, natural family), as well as noting who attended the program with the child was available only for those who were examined in the retrospective chart review component of the study. As it would have required a further chart review on the remaining 33 charts, placement status and caregiver participation at the time of program participation was not entered as a variable for analysis of variance, as originally hoped.

In the end, electronic data consisting of pre- and post-test data for 51 caregiver/child dyads was obtained for analysis. Of these 51 families, 40 had complete data sets with no missing values. Due to the inability to determine change in outcome scores for these 11 families, they were excluded from overall data analysis. Yearly reports generated by the CASA Evaluation and Research team indicated that incomplete data sets primarily arose from dyads that left the program before completion, or otherwise did not provide post-test data. Analysis revealed no statistically significant differences between completers and study dropouts in level of baseline severity or demographic data. Therefore, the study group of 40 is believed to be representative of the wider group who started the TAG program.

4.3.2 Outcomes on PRQ

The findings show that for the total study population there was statistically significant change (*t* = -3.258, p = 0.001) in attachment, as measured by the attachment sub-scale of the PRQ (Table 2). There were also statistically significant improvements in PRQ sub-scale scores for communication (*t* = -2.441, p = 0.045), discipline practices (*t* = 2.498, p = 0.003), involvement (*t* = -3.580, p = 0.001), and relational frustration (*t* = 3.413, p = 0.003).

Table 2: Comparison of Pre- and Post-test Results for Items on the Parenting Relationship Questionnaire (PRQ) Subscales

PRQ	**Pre-Test (SD)**	**Post-Test (SD)**	***t*-test**	**p (sig)**
Attachment (+)	37.23 (9.5)	41.95 (10.8)	-3.258	**0.001****
Communication (+)	38.55 (13.2)	42.25 (12.2)	-2.441	**0.045***
Discipline Practice (-)	43.35 (11.2)	38.50 (10.4)	2.498	**0.003****
Involvement (+)	44.20 (8.2)	48.50 (8.4)	-3.580	**0.001****
Parent Confidence (+)	41.35 (9.6)	42.90 (10.1)	-1.134	0.277
School Satisfaction (+)	46.03 (11.9)	46.18 (9.8)	-0.070	0.935
Relational Frustration (-)	65.73 (11.2)	61.10 (12.2)	3.413	**0.003****

*p<0.05, **p<0.01

(+) or (-) after the sub-scale refers to the expected direction of change in mean scores

Three multiple linear regression analyses were completed with each outcome individually (the attachment subscale of the PRQ, the PROPS, and the PRFQ-1) and determined there were no statistically significant effects of age, gender or break (summer or 2-week winter) on the PROPS or the PRFQ-1. Interestingly, "break" demonstrated an effect on the attachment outcome, even when accounting for age and gender. Thus, there was a statistically significant effect between when a dyad took their break in the program and their change in attachment as measured by the PRQ ($t = 2.40$, $p = 0.022$) (Table 3). A Pearson's correlation confirmed that "break" expressed a positive correlation with the change in attachment variable ($p = 0.036$ – no Table). To understand this effect and correlation further, a table was created to examine the difference between individual cohort change scores in each measured variable. Change scores indicate that those participants who had a 2-week winter break had a greater mean improvement in attachment scores on the PRQ than those who have a longer 3-month break in the summer (Table 4).

Table 3. Effects of Break, Gender, and Age on Attachment subscale of the PRQ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-13.454	8.676		-1.551	.130
	Break	6.841	2.851	0.410	2.400	**0.022***
	Gender	0.240	2.649	0.014	0.091	0.928
	Age	3.279	2.812	0.196	1.166	0.251

a. Dependent Variable: ChangeAtt
b. *p<0.05

Table 4. Cohort Change Score Means

Cohort Change Score Means*							
PRQ	Expected Change Direction	C1 (N=4)	C2 (N=8)	C3 (N=7)	C4 (N=8)	C5 (N=8)	C6 (N=5)
Attachment	+	**6.5**	**2.6**	**5.4**	**0.6**	**10.1**	**3.6**
Communication	+	5.5	1.5	0.3	2.4	13.4	-3.0
Discipline Practices	-	-2.5	-2.2	-0.4	-1.5	-5.9	-12.8
Involvement	+	6.3	3.0	5.3	4.4	5.5	1.4
Relational Frustration	-	-6.5	-8.1	-5.3	-2.0	-6.0	1.4

* C1, C3, C5 - 2-week winter break
C2, C4, C6 – 3-month summer break

Utilizing an ANOVA (Table 5) to examine potential cohort effects, for the 6 cohorts, on the same 3 dependent variables (the attachment subscale of the PRQ, the PROPS, and the PRFQ-1), revealed that between cohorts there was an overall statistically significant effect on the change in caregiver-reported, child-experienced trauma symptoms as measured by the PROPS (F = 3.397; p =0.016).

Table 5. ANOVA for Cohort Effects

		Sum of Squares	Df	Mean Square	F	Sig.
PRQ - Attachment	Between Groups	425.436	5	85.087	1.232	.316
	Within Groups	2348.539	34	69.075		
	Total	2773.975	39			
PROPS	Between Groups	1828.466	5	365.693	3.397	**.016***
	Within Groups	3014.475	28	107.660		
	Total	4842.941	33			
PRFQ-1	Between Groups	.813	4	.203	.832	.516
	Within Groups	7.089	29	.244		
	Total	7.902	33			

* $p < 0.05$

When performing Pearson's coefficients for individual cohorts against the three outcome variables (attachment, trauma symptomology and parental reflective functioning), two cohorts showed positive correlations with dependent variables (Table 6). Cohort 3 demonstrated a positive correlation ($p = 0.028$) with a change in PROPS scores. What may account for this correlation is that *all* dyads in this cohort with complete data sets started out at or above the clinical range for PTSD (a score >16). Following participation in the TAG program, 3 out of 5 children (with complete data sets), in cohort 3, moved into the normal range following participation in the TAG program decreasing their PROPS scores by > than 20 points (Table 7), a finding not demonstrated by any other individual cohort.

Table 6. Pearson's Correlation for Cohort 3 and a Change in Attachment and Cohort 5 and a Change in Trauma Symptoms.

		ChangeAtt	Cohort5	PROPSChange	Cohort3
PRQ-Attachment	Pearson Correlation	1	0.324*	0.111	0.039
	Sig. (2-tailed)		**0.041***	0.531	0.812
	N	40	40	34	40
Cohort5	Pearson Correlation	0.324*	1	.014	-0.204
	Sig. (2-tailed)	0.041		.937	0.154
	N	40	50	34	50
PROPS	Pearson Correlation	0.111	0.014	1	-.0377*
	Sig. (2-tailed)	0.531	0.937		**0.028***
	N	34	34	34	34
Cohort3	Pearson Correlation	0.039	-0.204	-.377*	1
	Sig. (2-tailed)	0.812	0.154	0.028	
	N	40	50	34	50

* Correlation is significant at the 0.05 level (2-tailed).

Table 7. Cohort 3 - PROPS Change Scores

Cohort 3 PROPS change scores			
PROPS	Pre-test	Post-test	Change
Dyad 1	36	13	-23
Dyad 2	30	6	-24
Dyad 3	30	30	0
Dyad 4	38	30	-8
Dyad 5	32	12	-20

Another interesting correlation was that Cohort 5 demonstrated a statistically significant positive relationship (p = 0.041) with a change in attachment (Table 6), despite the ANOVA findings that there were no statistically significant effects from cohort on the attachment outcome (Table 5). Clinical range improvements may account for this change, i.e., it appears that 6 of 9 dyads in this cohort started out hovering around or below baseline attachment scores in the below average range (lower than 41) (Table 8) (see explanation of clinical thresholds below for more information). Then, 3 of the 9 reported a 20 or higher point post-test increase on the attachment subscale (Table 8), a higher number than is represented by other cohorts. This may explain, in part, why this cohort demonstrated the positive correlation with a change in attachment as measured by the PRQ. Another possible explanation is that 6 of 9 members of Cohort 5 were in the 5-7 year-old age range, a higher younger/older age proportion than other cohorts. While age demonstrated no effect on outcomes in this study, it is possible to consider that the younger age of the participants in Cohort 5 could have bearing on the higher change in over all attachment scores.

Table 8. Cohort 5 - Attachment – PRQ Change Scores

Cohort 5 Attachment – PRQ change scores			
Attachment – PRQ	Pre-test	Post-test	Change
Dyad 1	43	63	20
Dyad 2	52	56	4
Dyad 3	22	45	23
Dyad 4	33	36	3
Dyad 5	45	40	-5
Dyad 6	33	38	5
Dyad 7	24	49	25
Dyad 8	43	49	6

The PRQ has well-established clinical thresholds where scores of 10-40 points indicate meaningful clinical significance, (except with the relational frustration sub-scale, which is reverse-scored with negative change scores indicating a positive outcome), and scores of 41-59 points considered to be in the average range. In the present analysis, participants' scores on the relational frustration sub-scale moved from a clinical to average range, indicating positive change. In contrast, changes within the other four sub-scales (attachment, communication, discipline practices, and involvement) while statistically significant, may not have demonstrated clinical meaningful change since scores at baseline and post-test remained within the average range (between 41-59). In spite of this, it is important to note that several individual caregiver-child dyads made clinically significant improvements (moving from a clinical score into the average or normal range) (Table 9). This varied markedly between PRQ sub-scales, with 40% of the dyads changing from clinical range for the attachment sub-scale to the non-clinical (average) range of scores, compared to 77% of the dyads changing in terms of the involvement sub-scale (Table 9).

Table 9. Proportion of Families Showing Clinically Significant Improvements [1] on the Parenting Relationship Questionnaire (PRQ).

PRQ - Sub-scales	% of families starting treatment in the clinical range (number out of 40)	% of families starting in the clinical range of PRQ who moved into the average range[2]
Attachment	63% (25/40)	40%
Communication	48% (19/40)	32%
Discipline Practices	43% (17/40)	18%
Involvement	33% (13/40)	77%
Parental Confidence	40% (16/40)	31%
School Satisfaction	35% (14/40)	50%
Relational Frustration	63% (25/40)	32%

[1] The PRQ clinical cut-point scale is: 10-30 is lower extreme; 31-40 is sig. below average; 41-59 is average; 60-69 is sig. above average; 70+ is upper extreme.

[2] For the purposes of this analysis pre-post scores were analyzed for change from <41 to ≥41.

4.3.3 Outcomes on PRFQ-1 and PROPS

In addition to the PRQ results, there were statistically significant improvements in the ability of caregivers to recognize and understand both their own and their child’s feelings about the parent-child relationship, as seen in the caregiver scores on the PRFQ-1 ($t = -2.464$, $p = 0.019$). As well as a trend indicating a reduction in symptoms typical of post-traumatic stress disorder (PTSD), determined by answers provided through the PROPS measure ($t = 2.010$, $p = 0.053$) (Table 10). Of interest, as mentioned earlier, 40 of 51 youth in this study sample had had a score of 16 or above on the PROPS at baseline, indicating PTSD level symptomology. At completion, 7 of these 40 dropped to a score that falls below this threshold, though 4 of these 40 did not provide post-test scores. Twenty-nine of the 51 youth maintained a score of >16 following their involvement in the TAG program during this study period.

Table 10. Parent Rating of Post-traumatic stress Symptoms (PROPS), and the Parental Reflective Functioning Questionnaire (PRFQ-1)

Measure	Pre-Test (SD)	Post-Test (SD)	*t*-test	p (sig)
PROPS (-)	31.44 (11.17)	27.26 (12.23)	2.010	0.053
PRFQ-1 (+)	4.84 (0.37)	5.05 (0.35)	-2.464	**0.019***

*p<0.05

(+) or (-) after the scale refers to the expected direction of change in mean scores

4.4 Conclusion: Quantitative Study

Data for the quantitative component of this investigation were collected from September 2011 through December 2014 because of the addition of the Parental Reflective Functioning Questionnaire (PRFQ-1) in or around 2011, and because of the ease of electronic data availability and collection also occurring from that date forward. The study sample consisted of 51 dyads, the entire cohort of families attending the TAG program during this study period, 40 of whom had complete data sets for use in analysis.

As this was a retrospective analysis of previously collected data, analysis of variance was limited with regard to potential independent and outcome variables. Placement status was more challenging to confirm from current demographic information provided, and as a result, was not entered as comparison variable for analysis of variance, as hoped. However, both age and gender were compared using a t-test design to determine if they had any effect on the outcomes of change of attachment, change of child-experienced trauma symptoms or change of parental reflective functioning and revealed no statistically significant effect on outcomes.

Paired two-tailed t-tests (pre- and post-test scores) demonstrated that for the total study population there was statistically significant change (t = -3.258, p = 0.001) in attachment, as measured by the attachment sub-scale of the PRQ (Table 3). There were also statistically significant improvements in PRQ sub-scale scores for communication (*t* = -2.441, p = 0.045), discipline practices (*t* = 2.498, p = 0.003), involvement (*t* = -3.580, p = 0.001), and relational frustration (*t* = 3.413, p = 0.003). In addition to the PRQ results, there was statistically significant improvements in the ability of caregivers to recognize and understand both their own and their child's feelings about the parent-child relationship, as seen in the caregiver scores on the PRFQ-1 (t = -2.464, p = 0.019). As well as a trend indicating a reduction in symptoms typical of post-traumatic stress disorder, determined by answers provided through the PROPS measure (t = 2.010, p = 0.053) (Table 10).

A final interesting finding was that those that have a 2-week winter break appear to have a higher mean change in attachment than those who have a longer 3-month break in the summer (Table 4). This finding may indicate that further research examine the cost analysis and value of running two groups a year and instead determine if the most salient treatment effects would be gleaned through both cohorts beginning in September and running until June of the following year.

5 Clinical Record Chart Review

5.1 Introduction: Clinical Record Chart Review

Chart Reviews can provide a rich and interesting addition to any research study (Allison, et al., 2000). As a means of further understanding the change in program outcomes, the PhD candidate (with initial support from a member of the Evaluation and Research team as described below) conducted a retrospective chart review. During this process the candidate examined documents available in CASA clinical charts pertaining to the participants' involvement in the TAG program (i.e. session notes, phone contact, psychiatrist notes, intake notes and reports, etc.). The aim was to learn more about how change scores from caregiver pre- and post-test measures might be reflected in the charts. In addition, a review of clinical charts was predicted to offer further insight to the design and implementation of the TAG program itself.

5.2 Methodology: Clinical Record Chart Review

A review of the literature revealed little in the way of standard methods utilized for retrospective chart reviews for use in ethnographic and qualitative research. However, several research teams have reported on their methods of data extraction and analysis of medical charts (Vassar & Holzmann, 2013; Gearing, et al., 2006; Allison, et al., 2000; Miller, et al., 1998; Smith, 1996; Dworkin, 1987) and this provided guidance for the present collection and analysis as described below.

5.2.1 Chart Review Procedure

Gearing and colleagues (2006) map out a suggested 9-step method for chart review study procedures. Several initial steps are in relation to developing research questions, examining current literature pertinent to the study's focus, developing the proposal, and the necessity of obtaining ethics approval. As all of these steps were already a part of the general study design, the other recommended steps formed the basis for the chart review procedure as outlined below.

A primary step in chart data collection is the creation of an adequate data abstraction tool and protocol for their extraction (Gearing, et al., 2006). Though not typical in larger chart review studies (Gearing, et al., 2006; Wu & Ashton, 1997), the PhD candidate was the primary study team member to extract the data from the charts in an attempt to mitigate bias and increase efficacy (Dworkin, 1987). The PhD candidate's training as a mental health clinician allowed for a more detailed understanding of standard structure, wording, and documentation style of therapeutic charts. Also, having worked as a student at CASA encouraged familiarity with charting protocols as well as general recognition of TAG team members listed in the charts with regard to their roles within the TAG program. It also provided an awareness of the specific therapeutic "language" both common to general counselling, as well as those common to the TAG program itself.

CASA arranged access and secure storage of all relevant clinical charts according to all ethical and legal privacy requirements. The specific charts involved were those requested by the PhD candidate, which were reviewed at a CASA location and never left the secure storage location.

Upon a review of the literature and collaboration with team members, initial stages of design and data collection focused on scouring the information provided in three charts to determine what types of information were available for extraction (Gearing, et al., 2006; Allison, et al., 2000). The candidate wanted to determine not only *what* information was available in the charts, but *how* it was gathered, and *whom* was represented and through who's voice the data were recorded (Gearing, et al., 2006). This review provided critical information regarding how the TAG participant chart was constructed. After consultation with a supervising study team member and with the main research question as a guide, the candidate then examined the availability of information coinciding with a change in attachment, child-experienced trauma symptoms, and parental reflective functioning. Once it was established that the charts obtained adequate information to warrant a more extensive chart review, the candidate and the CASA Evaluation and Research team member discussed a plan for extraction.

Two separate charts were then reviewed and compared to support inter-rater reliability (Gearing, et al., 2006). It was determined at this point that the process of obtaining information from the charts would take a vast amount of time. In spite of the large potential for data extraction opportunities, the decision was made to extract data related to the research questions, rather than to allow for a more inductive exploration of the charts. Triangulation with a third and supervising member of the study team established and shaped the final extraction/collection procedure described below.

5.2.2 Chart Review Sample

Very little was available in the literature with regard to a standard sampling procedure in retrospective chart reviews. A suggested rule for quickly determining sample size in retrospective chart review literature is 10 charts per variable (Gearing, et al., 2006) or at minimum 5-7 per predictor, to obtain results that are likely to be both accurate and clinically useful. In this study, the size of the chart review sample was influenced by the substantial amount of information available in each chart, and the limited time available for the chart review. As a result, a convenience sampling approach was used (Gearing, et al., 2006). The sample of participants for the chart review was drawn from the original quantitative sample and based on 2 of the 6 original cohorts (Table 1). These two cohorts (a) had among the highest number of participants with a complete data set (8/9), and (b) consisted of one cohort with a summer break (Cohort 4) and one who took the 2-week winter break (Cohort 5). It was hypothesized that pulling from each of these two groups could potentially elicit information illustrating potential cohort differences. All charts from these two cohorts were reviewed regardless of availability of complete quantitative data sets (18 charts). Four charts were excluded and the reasons for doing so are outlined in the results section of this chapter (7.3).

5.2.3 Chart Review Data Collection

Due to the fact that the PhD candidate was the only member of the study team to extract information from the charts for use in analysis (as is typical in Ethnographic research), (Higginbottom, et al., 2013; Galman, 2013), no official data extraction tool was created. However, maintaining an organized approach to data collection was critical to this research component (Gearing, et al., 2006; Smith, 1996). Consultation with the study team established the procedure for data extraction to focus on the points at which data were collected for the quantitative component of this study, in order to better facilitate comparison and triangulation of data. As a result, the PhD candidate created a document listing pre-test and post-test scores of the participants represented by the numerical code provided by the CASA Evaluation and Research member of the study team. All information from the charts was anonymized and then entered in the extraction document. The information that corresponded to the points at which the pre-test and post-test scores were extracted were recorded in the chart review extraction document. There were three specific documents in the patient chart chosen for data collection information. Two corresponded with pre-test data (the Initial Assessment and TAG Treatment Goals - Parental Appraisal documents), and one to post-test data (the Treatment Plan- a facilitator- created document citing an individual child’s TAG treatment summary).

The Initial Assessment document created at intake into the TAG program is TAG clinical facilitator-generated and contains information on client demographics (i.e. age, gender, placement status); diagnosis, referral, and treatment history; detailed symptom descriptions; and family constellations.

The TAG Treatment Goals (Parent Appraisal) document is based on caregiver reports, filled out prior to the commencement of the program, and coincides directly with the three stated treatment outcomes for TAG (attachment, child-experienced trauma symptoms, and caregiver reflective functioning). This document is divided into three sections: Attachment Symptoms, PTSD symptoms, and Caregiver Skills (i.e. those related to parental reflective functioning). The document provides a range of options that represent potential indicators of treatment-related concerns. For example, the attachment section outlines the child's severity and frequency of symptoms from Never to Severe with regard to how affected the child is by things like "boundary issues", "seeking comfort & connection appropriately", and "ability to regulate emotions", all things typical of the effects of attachment-related trauma (van der Kolk & Fisler, 1994). The post-traumatic stress disorder (PTSD) symptoms section asks for the same severity and frequency scale listed above for symptoms related to trauma, such as "nightmares", "flashbacks", "startle response", "dissociation", and "range of emotional expression". The caregiver skills section asks caregivers to select various skills they would like to learn while participating in the program. These skills related to attachment, reflective functioning, and trauma-related psychoeducation (i.e. learning about increasing one-to-one time, "attunement parenting", and the effects of empathy, and a better understanding of the ways in which trauma impacts their children).

Finally, the Treatment Plan document is facilitator-generated, and outlines progress in both TAG I and TAG II in relation to the goals outlined in the TAG Treatment Goals (Parent Appraisal) document. In this final report, there is a short description of the TAG program and clinical report of the ways in which these goals were met or continue to need support.

In addition to information from the specific chart documents previously described, the PhD candidate also recorded detailed information provided on both the initial and discharge HoNOSCA documents where available (Table 11). All information collected was de-identified and names were eliminated from quotes obtained, and then recorded in the study data document. What proved particularly time consuming was sorting the information provided in these documents alongside the three research variables in the chart extraction document. Using the TAG Treatment Goals document as a guide, all statements in the summaries that coincided with three stated treatment goals (attachment, child's trauma symptoms, and parental reflective functioning) were listed at the pre- and post-test points. Thus, with the TAG Treatment Goals (Parent Appraisal) document as a guide, all language that coincided with the development or demonstration of attachment, trauma-related symptomology, or parental reflective functioning was listed in the data extraction document at the appropriate point that it occurred (i.e. pre- or post-participation in TAG).

5.2.4 Chart Review Data Analysis

As a reminder, the review of the literature revealed little in the way of methodology for standardized chart review analysis relevant to this research paradigm. Though several research teams reported on their methods of data extraction from medical charts (Vassar & Holzmann, 2013; Gearing, et al., 2006; Allison, et al., 2000; Miller, et al., 1998; Smith, 1997; Dworkin, 1987), very few provided guidance for analysis of this extracted data. As a result, and to coincide with the research questions, a deductive analysis process was utilized to understand the data available, in an effort to understand how the relevant chart information answered the research questions. No data abstraction software was utilized in analysis, and all information was gathered manually. The primary research objective in the chart review focused on determining whether there was available documentation of changes in the caregiver-child attachment relationship, child's developmental trauma symptoms, and in the caregiver's ability to reflect on their relationship with their child (parental reflective functioning), following involvement in the TAG program.

As mentioned, a data extraction document was created to detail the information from the charts that coincided with the quantitative data collection points. Using the symptom lists on the TAG Treatment Goals (Parent Appraisal) document, the PhD candidate extracted information in the chart that reflected change in TAG stated outcome goals through their own template for symptom description. This information recorded on the extraction document was then read through repeatedly to extract themes that coincided with findings gleaned through quantitative data analysis. This was performed specifically to determine if the clinical charts were able to support the positive changes in TAG outcomes in terms of changes in attachment, child-experienced trauma symptoms and parental reflective functioning. The data extraction document was then reviewed following the focus group and interview analysis to determine if there was relevant support in the clinical record information, as a method of triangulating the data to support rigour and trustworthiness of the findings (Higginbottom, et al., 2013).

5.2.5 Missing Information

It is recommended that chart reviewers make a decision regarding how missing data will be managed (Gearing, et al., 2006). As anticipated, not all charts contained all the information being sought (Table 11).

Table 11. Missing Documents – Chart Review

Chart #	HoNOSCA Pre/Post	Initial Assessment	TAG Treatment Goals (Parent Appraisal)	Treatment Plan
Chart 1	Yes/Yes	Yes	Yes	Yes
Chart 2	No/Yes	Yes	Yes	Yes
Chart 3	No/Yes	Yes	Yes	Yes
Chart 4	Yes/Yes	Yes	Yes	Yes
Chart 5	Yes/ Yes	Yes	Yes	Yes
Chart 6	No/Yes	Yes	Yes	Yes
Chart 7	No/ Yes	Yes	Yes	Yes
Chart 8	No/ Yes	Yes	Yes	Yes
Chart 9	No/ Yes	Yes	Yes	Yes
Chart 10	Yes/ Yes	Yes	Yes	Yes
Chart 11	No/Yes	Yes	Yes	Yes
Chart 12	Yes/ Yes	Yes	Yes	Yes
Chart 13	No/ Yes	No	Yes	Yes
Chart 14	No/ Yes	Yes	No	Yes
Chart 15*	No/Yes	Yes	Yes	Yes
Chart 16*	Yes/ Yes	Yes	Yes	No
Chart 17**	Unknown	No	Yes	No
Chart 18**	Unknown	Yes	No	No

* Not used in chart review due to missing data, or to avoid bias
** Not used in chart review as did not complete TAG program

Where there was no document available, or missing values, this information was documented in the data extraction document and attempts were made to locate such information (as in the case of any missing HoNOSCA documents) from other locations where it may have been retained. As HoNOSCA measures were not utilized as a variable in the quantitative component of this study, charts were not excluded if either the pre- or post- score was missing. Similarly, if there were missing TAG Treatment Goals (Parent Appraisal) document (Chart 14), OR a missing Initial Assessment (Chart 13), AND the information was listed in the final TAG Treatment Goals document, the chart was considered in analysis. Unless the Initial Assessment and TAG Treatment Plan documents were not available, as without those two documents, no information was available with regard to pairing with treatment outcome variable data points (see Table 11 for a breakdown of missing information).

5.3 Results: Clinical Record Chart Review

There were 18 clinical records available from the two cohorts (Table 11). Of these, 2 families had withdrawn prior to completing the program so no TAG II data was available. There was 1 clinical record that did not have an Initial Assessment OR a Treatment Plan document available in the chart. Lastly, 1 of the clinical records was from an individual who had agreed to be interviewed in depth, and was therefore excluded to prevent any potential bias. Thus, after determining the availability within these clinical records of the specific information being sought, a total of 14 clinical records were comprehensively reviewed (labeled throughout as Charts 1-14).

Of the children represented by the 14 charts, (See Table 12 as outlined below) 8 were male and 7 were female and were aged either 5-7 years old (n=7) or 8-10 years old (n=8). There were 7 children who were from adoptive families (with 5 of these having been adopted from a country outside of Canada). All children who had been adopted had their adoptive parents in attendance in the TAG program as their child/caregiver dyad partner. There were 3 who were living in foster care and had their foster parent in attendance with them. There were 5 who attended the program with a biological family member (2 attended with a grandparent, 1 with an uncle, 1 with a father, and 1 with the female partner of a biological uncle), and 3 children had two caregivers in attendance throughout the TAG program. There was 1 child who was identified by their caregiver as First Nations and 1 other whose caregiver identified them as "potential treaty status" (and therefore likely also First Nations).

Table 12. Chart Review Demographics and Variable Representation/Support

Chart #	Gender	Age	Placement Status	Attachment*	Trauma Symptoms*	PRF*
Chart 1	F	6	Adoption in process	YES	NO	NO
Chart 2	M	6	Adopted	YES	YES	YES
Chart 3	F	9	Foster care	YES	YES	NO
Chart 4	F	10	Kinship	YES	NO	YES
Chart 5	F	8	Adopted	YES	YES	YES
Chart 6	F	7	Foster care	YES	NO	YES
Chart 7	M	6	Kinship	YES	YES	YES
Chart 8	F	6	Adopted	YES	YES**	YES
Chart 9	M	10	Adopted	YES	YES	YES
Chart 10	M	8	Kinship	YES	NO	YES
Chart 11	M	7	Kinship	YES	YES	YES**
Chart 12	M	9	Adopted	NO	YES	YES
Chart 13	M	7	Foster	NO	YES	YES
Chart 14	F	7	Bio	YES	NO	YES

* Support for outcome change scores reflected in chart?
** Some support but not equal to level of change reported in outcome score

5.3.1 Detailed Results

Client demographic information regarding, age, gender, caregiver who attended the program, as well as history of abuse, neglect, and placement, were detailed in the majority of the clinical records. This provided the PhD candidate with more detailed information regarding client demographics than was available for the entire data set utilized for quantitative analysis. In addition, the clinical records contained a richer detail of TAG program components such as "kit time", sensory stations, details of psychoeducation topics, weekly phone calls, trust games, sand-tray, and the child break-out sessions, which aided in providing a more detailed description for the TAG narrative and final accumulation of the ethnographic description of the program.

It is also important to note the clear organization with regard to the way the TAG team organized the flow of communication/information necessary for the measurement of their treatment outcomes. TAG has three stated outcomes goals: to increase caregiver/child attachment, decrease child-experienced trauma symptomology, and to increase caregiver parental reflective functioning skills. A review of the TAG program section of the clinical charts of these 15 participants, revealed a clear documentation stream that coincided with these measures. As described earlier, at intake, the TAG facilitators create a detailed initial assessment highlighting client diagnoses, biographical, family, and placement histories, and caregiver/therapist-generated treatment concerns. With regard to coordination with the 3 treatment outcome goals, caregivers also complete, at intake, a CASA created "TAG Treatment Goals (Parent Appraisal)" document. In conclusion, their Treatment Plan document addresses these goals in their final report and attempts to highlight which of these issues have been addressed through participation in TAG. This organization supported a more accurate and fluid approach to data extraction.

To reinforce triangulation and accuracy of findings (Konradsen, et al., 2013; Lambert & Loiselle, 2008; Griffee, 2005) the clinical records provided descriptions that reflected the quantitative findings and provided support for qualitative data collection and analysis. The three main areas of TAG outcome measurement, and central to the research questions, were ways in which the chart data characterized a change in attachment, child-experienced trauma symptoms, and parental reflective functioning. All quotes below are drawn solely from the three previously identified documents contained within the clinical records from which data was extracted, namely the Initial Assessment, TAG Treatment Goals (Parent Appraisal), and the Treatment Plan.

5.3.2 Attachment

Similar to others who have utilized facilitator-generated behavioural descriptions to demonstrate changes in attachment (Purvis, et al., 2007), changes in the primary outcome measure were documented through extracting clinician-rated data from the clinical records that coincided with the pre-test Parenting Relationship Questionnaire (PRQ) data and comparing them with data collected at termination with the TAG program. Pre-test scores were compared with caregiver-generated goals collected through the TAG Treatment Goals document, and clinical descriptions of child's attachment-related trauma histories, trauma symptoms, and behaviours available in the Intake Document. The TAG Treatment Plan document was used to coincide with post-test PRQ results. Final TAG report documents (Treatment Plan) provided facilitator perceptions linked to dyad relational progress through the program and highlighted facilitator-reported changes that coincided with caregiver reports. Where comments were taken directly from the charts themselves, quotation marks are used; text without quotations is chart data summarized by the PhD candidate.

In all charts facilitator-generated language demonstrated perceived attachment related behaviours, "plenty of eye contact and animated communication between them during the 'feeling faces' exercise…(also) during visualization and CASA train journey she usually snuggled with her Dad, but occasionally remained sitting up for a short while before settling" (Treatment Plan document – Chart 1). Chart 6 had facilitator notes on observed attachment behaviours, "During caregiver-child dyadic interaction both client and caregiver 'were reciprocal in their interactions...appeared comfortable in each other's company...(and) lots of hugs, kisses, and cuddles were observed'" (Treatment Plan document)

This style of behavioural description was also often supported by specific strategies attempted by caregiver and facilitation team to improve attachment. One chart recorded, "'they went from playing games together to (caregiver) giving (client) manicures'. Caregiver 'also received support regarding the balance of maintaining contact with healthy family members in a manner that would not jeopardize the building of a healthy attachment between (client) and (caregiver).'" (Treatment Plan document – Chart 4). And, in a chart where the attachment subscale of the PRQ advanced 20 points (Chart 9), facilitator comments underscored the attitude of the caregivers (both were in attendance) "appeared to bring a lot of enthusiasm and engagement to the interactions”. Descriptions of the behaviour witnessed in program participation were also recorded: “During safe place visualization client would ‘cuddle up very closely’ with mum and she would stroke his head or rub his back. ‘It was apparent they were very attuned to each other’” (Treatment Plan document- Chart 9). And in Chart 10, a clinician reported, “(client) was able to lead grandma in a trust exercise in TAG II which gave them an opportunity to discuss boundaries and limits in a safe supported environment.” (Treatment Plan document).

This facilitator-generated documentation strategy was employed also in cases when a variation in attachment behaviour was indicated by caregiver. For example, “client is ‘more interested in attachment to a group’ than to mum individually. Reports feeling most comfortable when the family is all together.” (Initial Assessment document – Chart 5). In this chart, change in attachment was recorded in the final TAG Treatment Plan document, “During group ‘worked to incorporate lots of physical touch (hand massage with lotion, cuddling, rocking) mixed with playing cards and doing some crafts.’ (client) and (caregiver) ‘appeared very comfortable, close, and present while engaged in dyadic activities’". In another chart, quantitative results indicate a reduction in attachment as evidenced by a decrease in attachment score on the PRQ. Tag staff recorded:

> “Client did not say goodbye to caregiver when leaving for child only portions of treatment in TAG I. During ‘kit time’ client and caregiver were ‘able to share lovely periods of eye contact and shared-joy but at points (client) would disconnect and observe the other dyads’. In TAG II, client was often distracted during other's sharing and would ‘wander’, struggled to listen to others sharing." (Treatment Plan document – Chart 7).

In Chart 10, the Treatment Plan document shared both strengths and areas of improvement with regard to the attachment related group participation, “Enjoyed the sensory stations, liked the weighted hot dog blanket, and disliked the smelling station. Became more connected during TAG I, but still hesitant to 'discuss more emotional family activities'".

Charts also occasionally reflected child participants' ability to demonstrate attachment related behaviours into other environments, in this case, during the child-only sessions: "During TAG, client appeared to demonstrate empathy toward others and opened up about her own story and placement history with others. She 'particularly enjoyed the 'mirror game'…and frequently engaged in caretaking activities with baby dolls'" (TAG Treatment Plan document –Chart 6).

Overall, it appeared as though language reflecting and coinciding with changes in attachment behaviour was consistent throughout the charts (Table 12). As this is the main treatment target of the program, this was a predictable result.

5.3.3 Child-experienced Trauma Symptoms

Chart reflections of changes in child-experienced trauma symptoms were measured through extracting data from the clinical records that coincided with the pre-test Parental Report Of Post-traumatic Stress (PROPS) data and comparing them with data collected on the Treatment Plan document at termination with the TAG program (to coincide with post-test PROPS results). The documents utilized to extract from were the same as listed above, the Initial Assessment, TAG Treatment Goals (Parental Appraisal), and the Treatment Plan document.

Information available in the charts generally reflected facilitator report of caregiver-cited changes in child-experienced trauma symptoms throughout participation in the program. In Chart 3, a child who's caregiver report at the completion of the TAG program highlighted a 23-point drop in trauma symptoms on the PROPS measure: "Her caregiver reports that child shows 'fewer PTSD symptoms, dissociation'" and that:

> “At those times (of dissociation) she would typically become irritable, often retreating to her room to calm herself. (Client) was beginning to have more good days. At the completion of TAG I, caregiver reports that client's ‘violent rages decreased in frequency and that she has learned some self-calming techniques when she does rage’. She ‘appears more empathic, thinking through her rages and triggers, and using her safe place at home’” (Treatment Plan document – Chart 3).

Chart 5, a child who’s caregiver reported a 10-point decrease in PTSD symptomology as indicated by her post-test PROPS score, clearly reflected changes in trauma symptoms through facilitator-recorded comments in the Treatment Plan document:

> “Caregiver reports that client "uses her 'anxiety kit' quite often while at home". Client’s body map showed ‘fear in the pit of her stomach…that she misses her mom (in birth country), and that she was afraid of her dad (in birth country) because she saw him hitting her mom.’ Overall, caregiver reports that client has fewer flashbacks, nightmares and rages since starting in the TAG program.”

A similar representation in the charts of another child’s progress reflected his own 12-point drop in PROPS at completion of the program:

> “Consistent kit time and the use of ‘safe place’ language ‘are reported to help with this second goal of reducing PTS/Anxiety. (Mum) reports that dissociations have reduced at home’. Client says he is afraid of being ‘sold’ because he believes that it what happened to him in his birth country. Mum reports that dissociations have decreased and that her son is ‘more present and engaged with her and (dad)’” (Treatment Plan document – Chart 9)

In some cases, TAG clinical charts recorded facilitator perspective of progress with regard to the reduction of trauma symptoms in addition to an increase in the caregiver’s ability to manage them: “Mum reports feeling more confident in calming son down during panic attacks and using relaxation techniques to help him feel safe." (Treatment Plan Document – Chart 2). However, what appeared to be inconsistent in the clinical charts was that, unlike with the attachment outcome, many charts with significant changes in scores on the PROPS (10 or more points) reported no clear representation of this in the facilitator-generated reports (Table 12). For example, half of the charts (3 of 6) that demonstrated a 10-point or higher decrease in PTSD symptomology (on the PROPS measure) had limited to no representation of this in the reports utilized in this clinical chart review. One chart had an 11-point *increase* in PROPS score (indicating increased symptomology) at completion of program with limited explanation of the PTSD symptoms address in the clinical chart.

In addition to this discrepancy, what was interesting with regard to the way that PTSD symptomology was recorded in the charts was that it did not always address specific PTSD symptomology that were recorded on the TAG Treatment Goals (Parent Appraisal) document. Some caregivers would record "moderate to severe" experience of trauma symptomology (such as nightmares, flashbacks, dissociation, or limited range of emotions) and there would be limited to no reflection of this in the clinical charts in the documents extracted for this review.

5.3.4 Parental Reflective Functioning

Examples of parental reflective functioning were examined through extracting data from the clinical record charts that coincided with the pre-test Parental Reflective Functioning Questionnaire (PRFQ-1) data and comparing them with data collected at termination of the TAG program (to coincide with post-test PRFQ-1 results). The documents utilized for extraction were the same as listed above, the Initial Assessment, TAG Treatment Goals (Parental Appraisal), and the Treatment Plan document.

As a function of increased awareness of trauma’s impact on behaviour (an element of reflective functioning) CASA charts recorded caregiver progress in managing behavioural symptoms while outside of the group (as learned through the program’s weekly phone calls). Facilitators recorded for one family: “mum has seen some improvements in son's behaviour following changes in her discipline practices, (through) 'firmer, less emotional' parenting techniques. (Caregiver) also enforces strict boundaries such as 'violence is not okay' in the home to establish that safe places have rules." (TAG Treatment Plan Document – Chart 2). In this same chart, changes were reported in regard to the caregiver’s ability to reflect on the impact of her own story in the escalation and calming of her child’s behaviour:

> "(Caregiver) ’works hard’ to learn how client's past affects him and to not take it personally. (She) ‘has shown growth in personal reflection on how her own past may be affecting her present story and sees value in this type of reflection’. (Caregiver also) appears to recognize how her own behaviour affects her son's escalation in behaviour as well…(and is) working on being more ‘present’ with her son.” (TAG Treatment Plan Document – Chart 2).

Interestingly, the caregiver for one child reported a *decrease* (5-points) in attachment on the PRQ, and only a slight decrease (2 points) in PTSD symptoms, and yet a the chart demonstrated a clear representation of how the parental reflective functioning skills had improved following participation in the TAG program, “’(caregiver) reports learning enormously from the TAG I experience and is feeling much more aware of why (client's) behaviours take place. She also feels in control of their relationship and confident that she can help him get through (his) struggles with separation and anxiety" (Treatment Plan document- Chart 7). Facilitator comments also mirrored caregiver’s increased reflective functioning in her enhanced understanding of her son’s “female-directed rages” as linked to his negative and abusive relationships with female caregivers in his past.

With another family, in spite of only a small increase in her PRFQ-1 score (from 5 to 5.19), facilitator reports of caregiver's increased reflective functioning included:

> "Mum 'displayed a commitment to understanding (client's) past and present story as it related to (her) current challenges.' After TAG II: many stressors may make it difficult for expected progress in TAG, though mum can 'recognize that sometimes she can over react to (client) but is able to admit it and make repairs with (client) quickly'. Mum was 'able to talk about how she knows that her own past story affects her parenting as well as how (client's) past and present story influence (client's) behaviours'" (Treatment Plan Document – Chart 8).

Many clear descriptions of changes in caregiver reflective functioning in the charts followed. For a mother who also had only a slight increase in PRFQ-1 score (5.05 to 5.10), her son's chart indicated clear ways in which her own ability to self-reflect on her child's behaviour was evident while participating in the TAG program.

> "Mum was an 'eager and engaged participant' who 'identified where (client) was struggling in (sic) and could also implement attuned parenting to deal with these behaviours.' (Caregiver was) 'able to identify how (client's) past and present story affect (sic) him and his behaviours...(and) also able to recognize how her past story and (husband's) past story influence their parenting and feelings'." (Treatment Plan document – Chart 9).

Facilitator-generated reports also expanded to include the ways in which this increase in reflective function can support the attachment relationship, as reflected by this chart:

> "Grandparents attended and 'openly shared' in parent group. (They) talked about parenting strategies like 'creating a safe place for (client), the need for parental self-care to manage vicarious trauma, and concern about historical

inaccuracy reflected in (client's) life/road map.’ As sessions progressed ‘it became increasingly evident that (client)'s story touched (Grandma) in a way that brought her to revisit her past and current story with emotional depth’. Grandpa plays a role as 'glue' that has helped (grandma) and the rest of the family to 'hold things together'. Reportedly ‘actively applied’ group readings stating that the most relevant info they gleaned was about the importance of attachment to one primary caregiver. “ (Treatment Plan document – Chart 10).

5.4 Conclusion: Clinical Records Chart Review

As a means of further understanding the ways in which changes in TAG outcomes are reflected in the charts, a retrospective clinical chart review was conducted. Clinical charts pertaining to the participants’ involvement in the TAG program were reviewed to learn more about the supports provided to the TAG participants during their participation in the program. The overarching goal was to determine if the charts presented information that could confirm, highlight or compare to the questionnaire data (Higginbottom, et al., 2013). In spite of a dearth of “standard methods” to carry out retrospective chart reviews for use in ethnographic and qualitative research, the use of this method nonetheless provided key additional insights in to answering the research questions.

This review demonstrated that TAG clinical charts held rich detail with regard to program description, client and family demographics, and therapeutic process. Though many other potentially valuable documents were also available (i.e., body maps and sand-tray photos; as well as group progress, weekly phone call and psychiatric/therapeutic notes), only 3 documents in the charts were utilized in this review: the “Initial Assessment” document which provides demographic, family and clinical history as well as a detailed listing of youth client treatment considerations; the “TAG Treatment Goals (Parent Appraisal)” document, which highlights caregiver report of various symptoms linked to, and divided by, each outcome goal; and the Treatment Plan document, which attempted to address each of these stated goals in their final report and highlighted ways in which these outcomes have been addressed through participation in TAG. All documents provided rich detail with regard to facilitator-generated perspectives on elements of behavioural change as a result of participation in the TAG program.

Worth noting is the clear organization with which the TAG team had organized the flow of communication/information necessary for the measurement of their treatment outcomes, supporting ease of extraction of information coinciding with the quantitative data collection points. Most relevant were the "TAG Treatment Goals (Parent Appraisal)" document and the Treatment Plan document. While recorded clinician comments did not always line up with the level of increase or decrease in pre- and post-test scores, or with the stated goals at intake, the noted progress in each area appeared to demonstrate that the program design, from intake, to implementation, to discharge, is client-focused, treatment plan oriented, and measurable on various levels.

6 Focus Group and In-depth Interviews

6.1 Introduction: Focus Group and In-depth Interviews

Focus groups are commonly used as a data collection method in qualitative research paradigms. Because the group interaction quality allows for individual participants to "react and build upon the responses of other group members", focus groups can offer a unique perspective over other interview techniques (Plummer-D'Amato, 2008a). Though focus groups are more commonly used to learn more about the interactional qualities of a group of people (Freeman, 2006; Kitzinger, 1994), it has been suggested that focus groups can also be useful in generating more structured interview questions (Doody, et al. 2013a). In the present study the decision to consciously have the focus group prior to the participant interviews was intended to shape the direction of the in-depth interviews and generate ideas for potential transition questions (Redmond & Curtis, 2009; Griffee, 2005). As TAG was identified early on in the research process as a "culture" it became relevant to utilize a focus group with those who generated this culture and facilitate its dissemination.

In-depth interviews are intended to explore participant experience and the meaning they place on this experience (Tong, et al., 2007) and are supported as a method useful in examining an insider's voice to the phenomenon under study (Morrison & Stomski, 2015; Ryan et al., 2009; Lambert & Loiselle, 2008; Griffee, 2005). In this study, interviews were used to explore what was meaningful to caregivers who participated in the TAG intervention. Interviews were also carried out with TAG facilitators who were unable to attend the focus group in an effort to include their views. All interviews were recorded, transcribed, and analyzed for themes utilizing the methodology detailed in in this section.

With regard to sampling procedures in both interview methods, it is important to note that ethnographers often choose purposive sampling procedures in order to best represent or answer the questions they have identified through the discovery phase (Higginbottom, et al., 2013). However, the degree to which heterogeneity is relevant to sampling is in debate in the focus group methodology world (Freeman, 2006). In general quantitative research methodologies, sample size is related to heterogeneity of the population; the greater the heterogeneity, the larger the sample needed to account for variability/diversity in the population. In focus group research, homogeneity of focus group participants (e.g. shared backgrounds and experiences with the other group members) is recommended to “maximize the extent to which the participants feel comfortable expressing their views” (Plummer-D’Amato, 2008a). In ethnographic philosophies, it is proposed that if the characteristics of the population are largely shared (Schensul, et al., 1999), then even one participant’s story can provide richness, which exemplifies the population and sampling strategy of this qualitative phase of our study.

6.2 Methodology: Focus Group with TAG Facilitators

Focus groups provide an opportunity in research to gain the perspective of key stakeholders in the area of interest, asking them to provide their interpretation of the phenomenon, while learning more about their interactions resulting from group discussion (Freeman, 2006). The primary goal of a focus group is to use this “interaction data” emerging from the discussion amid participants (e.g. non-verbal responses to each other’s comments, commenting on each others’ experiences, referencing one another, etc) to increase the richness of the exploration (Lambert & Loiselle, 2008; Plummer-D’Amato, 2008a; Kitzinger, 1994) and unveil relational aspects of the phenomenon (Freeman, 2006). In this sense, having a focus group with TAG facilitators had an added advantage that they all knew one another and had the opportunity to work closely around the research topic (Plummer-D’Amato, 2008a; Kitzinger, 1994).

In order to prepare for the focus group, a purpose statement document was devised to help define focus group goals. This included consideration about how the information gleaned from the focus group would be used, and when goals would be successfully reached for this focus group. From this purpose statement, a Moderator’s Guide was developed for use in organizing and facilitating the focus group with TAG facilitators (Vaughn, et al., 1996).

As mentioned previously, an experienced multi-disciplinary team delivers CASA’s Trauma and Attachment Group programs. This team includes a psychiatrist, a psychiatric nurse, a clinical support worker, psychologists, social workers, and a part-time occupational therapist. To learn more about the unique and complex nature of TAG facilitator involvement with the participants and in the overall development of the program, TAG facilitators were invited to participate in a focus group, which was recorded, transcribed, and analyzed as outlined below. A focus group was conducted rather than individual interviews, because the PhD candidate was interested in the ways the facilitators interacted with each other, and how the views and opinions of the TAG facilitators influenced each other in a group setting (Doody, et al., 2013a; Lambert & Loiselle, 2008; Freemen, 2006; Kitzinger, 1994). The opportunity to have an “audience” for view expression also had the potential to add richness over one-on-one interviews (Plummer-D’Amato, 2008a; Kitzinger, 1994).

6.2.1 Focus Group Procedure

The focus group was 2 hours in length (Redmond & Curtis, 2009; Freeman, 2006) and was conducted in English at CASA offices at the request of the TAG team facilitators. The focus group was held in an office that was easily accessible to participants, free from interruptions, and in a circle of chairs facing one another with snacks and the audio recorder in the center on a table. All but the recorder, were elements of experience that the group participants encountered while facilitating the TAG program sessions, which was hoped to add to their comfort level (Redmond & Curtis, 2009; Freeman, 2006). To help encourage this comfort further, the PhD candidate facilitated the focus group in a relaxed, but semi-structured, manner and was assisted by member of CASA's Evaluation and Research team, experienced in focus group facilitation and well known to the group.

Focus group discussion was based on the main qualitative research question: "What are the mechanisms of change inherent in the TAG program?" and followed up with potential transitional questions (Plummer-D'Amato, 2008a) to support the flow of conversation on the topic (Redmond, & Curtis, 2009; Vaughn, et al., 1996). In order to promote a safe environment for self-disclosure, and to reduce censoring and conformity, prior establishment of clear ground rules for participation were provided to participants (Redmond & Curtis, 2009; Plummer-D'Amato, 2008a; Freeman, 2006). Concluding the focus group, the moderator summed up the focus group discussion and asked if participants had anything more to add, or if there was anything they felt was relevant that the moderator did not ask (Higginbottom, et al., 2013; Redmond & Curtis, 2009; Plummer-D'Amato, 2008a).

To aid in the ability to report on group dynamics as well as what was discussed (Plummer-D'Amato, 2008), the assistant took general notes about the discussion, noted non-verbal cues between participants, and kept track of who spoke in response to a given question. The focus group was recorded on an audio recording device and transcribed immediately following the group to facilitate more rigorous analysis. To support early stages of analysis, the moderator and assistant continued with a debriefing session following the focus group, which was also recorded and written up in a separate transcript (Creswell, 2009).

6.2.2 Participants

While all facilitators who participated in the TAG program during the study years of 2011-2014 were invited to participate (providing the potential for 8-10 participants), 5 confirmed interest in attending. The focus group included 4 facilitators (as the 5th did not arrive), whom all provided written informed consent. Those who expressed an interest in participating but who could not attend the scheduled focus group (2 facilitators), met with the PhD candidate individually for unstructured, informal interviews in order to provide their perspective. The questions provided in these information-gathering interviews were the same as those provided in the study focus group.

6.2.3 Inclusion criteria

All facilitators of the Trauma and Attachment Group program who were either currently employed by CASA, or who had recently left the TAG program were deemed key informants to the study process, due to their long-term involvement in the TAG program (Higginbottom, et al., 2013; Redmond & Curtis, 2009; Freeman, 2006; Kitzinger, 1994). A primary focus was on those who facilitated the TAG program during the study years of 2011-2014 as part of a multi-disciplinary clinical facilitation team. Utilizing these criteria, there was potential for recruiting between 8-10 participants for the focus group, within the range suggested in the literature (Redmond & Curtis, 2009; Plummer-D’Amato, 2008a; Freeman, 2006). The goal was to have a group small enough to encourage participation, and large enough to expose diverse opinions of the topic.

6.2.4 Exclusion criteria

There were no exclusion criteria for the focus group.

6.2.5 Consent process

As is ethical in qualitative/interpretive design (Morrison & Stomski, 2015), the PhD candidate continually clarified the consent process and revisited it throughout the data collection process. Information about the objective of the focus group and overall study was provided to each participant prior to, and at the commencement of the focus group interview session. Confidentiality and anonymity were explained. Each participant was asked if they consented and agreed for the focus group to be recorded using a digital audio recorder. The participants were informed that no incentive would be provided other than refreshments. The focus group was conducted in English, which was the preferred language of all of the participants.

6.2.6 Recording interviews and field notes

A total of 4 individuals attended and consented to take part in the focus group. The focus group was recorded and each participant was allocated a unique identifying number (identified in this document as FG Participant 1-4), which was written on the focus group form, in session and transcription notes, and was used to name transcript documents. Two interviews were completed with facilitators who were unable to attend the focus group. One was recorded and one was not, however each participant was allocated a unique identifying number (Facilitator interview 1 and 2 in this document) in all notes and transcripts of these interviews. All participants were offered the opportunity for copies of the transcript and publication information.

6.2.7 Transcription

The focus group was transcribed and analysed by the PhD candidate in English in the days immediately following the focus group. In this study, the transcription method reflected the ethnographic approach, and strived to convey as fully as possible the experiences and representations of the participants (Higginbottom, et al., 2013; Mayan, 2009; Plummer-D’Amato, 2008b). This included word-for-word (or “verbatim”) transcription, recording all hesitations, pauses, utterances, cross-talking and incomplete sentences, where possible. A set of notations was applied to indicate these paralinguistic features of speech and communicated to the member of the study team who aided in the analysis process. The transcription was proof-read against the audio file by the transcriber, to check for accuracy, identify any missed or misheard words and to clarify any areas of confusion or unclear terminology (Crang & Cook, 2007). All queries and changes were made using Microsoft Word track changes tool and a clean, anonymized copy of the transcript was provided to the focus group assistant who participated in the data analysis process.

6.2.8 Data analysis

Though a more typical approach to interpretivist/qualitative design is to allow the data to “speak for itself” through an inductive approach to data analysis (Higginbottom, et al., 2013), there is no “universally accepted” method for focus group analysis (Plummer-D’Amato, 2008b). In line with ethnographic methodology (Galman, 2013) the candidate chose to examine the focus group transcript through both an inductive and deductive analysis process (Griffee, 2005; Joffe & Yardley, 2004). This combined process was intended to provide further “interpretive understanding” of the data (Fereday & Muir-Cochrane, 2006). Observing the relationship between focus group participants appeared to help facilitate an understanding of the way in which they facilitate TAG. Their turn taking, adding on to other’s thoughts of the program, and deliberate acknowledgment of one another’s skill sets, supported a view of “standard program delivery”. In order to provide an opportunity for member reflections (Tracy, 2010) and triangulation of findings, both the PhD candidate and the assistant for the focus group participated in this process. Interviews with facilitators also provided an opportunity to allow for member reflections as proposed findings were shared in an attempt to gain overall perspective.

In line with the stated goals of the TAG program, the primary research objective in analyzing the focus group transcript centered around investigating whether there was evidence of the specific *mechanisms* of the group involved in encouraging the changes observed through the quantitative analysis of this program. These changes included increased caregiver-child attachment relationships, decreased child's developmental trauma symptoms, and increased ability for caregiver to reflect on their relationship with their child, following involvement in the TAG program. In addition, the focus group transcript, transcript of the debrief meeting between the moderator and assistant, and notes from the focus group were utilized to devise an overall examination of the relationship between participants (Sandelowski, et al., 2012; Lambert & Loiselle, 2008). And how their interactions, philosophies, and process may themselves be part of the underlying mechanisms of change within the TAG program.

The process of inductive coding was undertaken by the PhD candidate through a three-part process (Doody, et al., 2013c) involving repeated reading of the transcript until certain themes become apparent and then breaking down the writing into words emphasized by the participants (Griffee, 2005). These words were then written on individual pieces of paper, grouped into code-related arrangements (Doody, et al, 2013c; Griffee, 2005), summarized and then used to tell a descriptive story of the TAG program (Galman, 2013; Griffee, 2005).

To uncover ways in which the focus group participants directly answered the research question and to allow for "flow from principles that underpin the research" (Joffe & Yardley, 2004), the candidate and the focus group assistant also individually analyzed the focus group transcript using a deductive coding process (Doody et al., 2013c; Griffee, 2005). Codes were devised from text that addressed questions asked during the focus group (including the mechanisms of change inherent in the TAG program; and facilitator and caregiver characteristics), then grouped into themes that linked to group process, content, and the approach taken by the group facilitators. Peer review of this process and triangulation of emerging findings with other interviews and the literature encouraged adherence to rigour and trustworthiness of the findings (Konradsen, et al., 2013; Lambert & Loiselle, 2008; Plummer-D'Amato, 2008b; Griffee, 2005).

Finally, guided by the research question and the proposed meaning the participants placed on their experience in the TAG program, the study team concurred on the overall themes extracted through coding to shape the final interpretation outlined in the results section of this chapter.

6.3 Methodology: In-depth interviews

These interviews were intended to provide context to other data collected in this study (Lambert & Loiselle, 2008). They explicitly aimed at capturing contextual issues that may have shaped the caregiver's participation in the TAG intervention and to highlight the mechanisms of change inherent in their experience.

6.3.1 Interview Procedure

In this component of the investigation participants were asked to share about their experiences as partakers of the TAG program. Though the interview questions were open-ended and non-directive, participants were asked to reflect on potential characteristics of a facilitator and caregiver that may impact their participation experience of the program.

The PhD candidate conducted all caregiver interviews in a "responsive interview model" (Rubin & Rubin, 1995), chosen because of its conversational nature (Ryan et al, 2009; Reeves, et al., 2008). Interviews were semi-structured (Ryan, et al., 2009) and held in locations chosen by the participants. With an informal "interview plan" as a guide (Jacob & Furgerson, 2012), caregivers were asked to recount their experience as a participant of the TAG program. A few additional open-ended questions that coincided with themes from the focus group (i.e. characteristics of facilitators and caregivers) were also included as potential transition queries when there was an opportunity to ask further questions. Initial interviews lasted from 30 – 120 minutes (with most lasting approximately 60 minutes). One participant provided follow-up information through email correspondence. All participants were provided with contact information and were invited to access publications and other outcome data in addition to their own transcripts.

In order to reduce observer effects, ethnographers go to great lengths to build trust and relationship with the participants/interviewees, including arranging a comfortable setting at a time chosen by the participants, following their lead with regard to pace, length and timing of the interviews, ensuring confidentiality where appropriate, and ensuring participants know their participation is not linked to continued care or employment (Morrison & Stomski, 2015; Jacob & Furgerson, 2012; Ryan, et al., 2009). All of these approaches were utilized in the present study. Additionally, high levels of inter-rater reliability were sought across contexts: coding; accuracy of field notes; and focus group and in-depth interviews. Interview participants and peer reviewers were also consulted to verify observations and explore initial conclusions (Plummer-D’Amato, 2008b; Reeves, et al., 2008).

6.3.2 Participants

TAG participants (caregivers) enrolled in the program between the time period of September 2011 and December 2014, were selected to participate by purposive sampling (Reeves, et al., 2008) and were mailed information letters and consent forms. Because there was a special interest in learning more about a potential cohort difference, and to support triangulation of data points, initial invitation to participate in the interviews was limited to the same 18 TAG participants whose charts were reviewed in the retrospective clinical record chart review component of the study (detailed in Chapter 7).

Based upon the relevant published literature, recruitment aimed at obtaining 4-8 participants for in-depth interviews (Doody, et al., 2013d). However, only 5 caregivers returned consent forms, and of these only 3 individuals returned phone requests and were subsequently interviewed. One participant came from a family where the second caregiver in the home was also in attendance throughout their involvement with the program. This second caregiver also agreed to participate in the current study.

6.3.3 Consent Process

As mentioned, ethical considerations in interpretive design require clear examination of consent procedures (Morrison & Stomski, 2015; Jacob & Furgerson, 2012; Ryan, et al., 2009). In order to preserve anonymity, CASA's Evaluation and Research team recruited participants from the sample selection criterion. Once the participant provided written consent, CASA staff provided the PhD candidate a first name and contact number to schedule the interview. Information about the objective of the interview and overall study was mailed out to each TAG participant in a recruitment package (in Appendix). At all points (in mail outs, phone contact and in person) confidentiality and anonymity were explained and each participant was asked if they consented to being interviewed, and for the interview to be recorded using a digital tape recorder. The participant was informed that no incentive would be provided, unless the participant incurred costs for parking for the interview, in which case this cost would be refunded. The interviews were all conducted in the preferred language of the participant, which in all cases was English.

6.3.4 Recording Interviews and Field Notes

An audio recording was made of all interviews. On completion of the interview, the interviewer prepared a field note summarizing the conversation. Each interview participant was allocated a unique identifying number (TP1- TP4 in the text examples below). This number was written on the interview/focus group form, in notes taken, and was used to name audio files and transcript documents. All participants were offered an opportunity to view and obtain a copy of their transcript and any forthcoming publications. They were also informed that they could withdraw consent at any point following their involvement, except in the case of information already provided for publication.

6.3.5 Transcription

Immediately following the interview, to support rigour, the PhD candidate transcribed all interviews in English. The transcription method utilized for the individual in-depth interviews reflected the ethnographic approach, and strived to convey as fully as possible the experiences and representations of the participants (Witcher, 2010; Mayan, 2009; Ryan, et al., 2009; Rubin & Rubin, 1995). This included word-for-word transcription, recording all hesitations, pauses, utterances, cross-talking and incomplete sentences. A set of notations was applied to indicate these paralinguistic features of speech. All interruptions by other people or telephones were recorded to contextualise any breaks in speech or repetitions. The transcription was proof-read against the audio file by the PhD candidate, to check for accuracy, identify any missed or misheard words and to clarify any areas of confusion or unclear terminology (Crang & Cook, 2007). All queries and changes were made using Microsoft Word track changes tool. A cleaned version of the transcription was then created, ready for analysis. All participants were offered the opportunity to receive a copy of their transcript, though none requested one.

After completing the initial transcription, all audio files were reviewed for final edits and to record stand-out themes or ideas. Copies of the transcript, notes taken during and after the focus group and those made during the final listen-through were all compared to ensure accuracy and clarity of the transcription data, and to assist with analysis.

6.3.6 Data Analysis

As the main purpose of the caregiver interviews was to learn of their experience as participants in the TAG program, thematic analysis and coding for the in-depth interviews followed a slightly different trajectory than was used in the focus group (section 8.2). Reading and re-reading the interview transcripts by the PhD candidate encouraged the inductive identification of potential codes/concepts/themes (Doody, et al., 2013d; Reeves, et al., 2008; Auerbach & Silverstein, 2003). After initial thematic extraction of participant experience, documents were then reviewed with a focus on underlying meaning or statements coinciding with the objectives of the qualitative component of the study (to learn about the underlying mechanisms of change inherent in the TAG program). After potential themes were confirmed, text was extracted and a summary was created to allow comparison between interviews themes (Doody, et al., 2013d). This information was then triangulated back with relevant literature, focus group findings, themes identified across interview transcripts (Sandelowski, et al., 2012), and collaboration with a peer reviewer to reduce selective perception and add to the overall trustworthiness of the analysis (Doody, et al., 2013d; Konradsen, et al., 2013; Lambert & Loiselle, 2008; Plummer-D’Amato, 2008b).

To support reliability and validity, periodically, the codes and groupings developed were discussed and confirmed with members of the research team and other peer reviewers. In addition, alongside this coding process, a reflective analytical diary was kept, to attempt to draw out and justify emerging themes and lines of inquiry through the fieldwork process (Crang & Cook 2007). As the study progressed, emerging ideas were referenced to wider bodies of relevant literature and theory, to support and encourage recognisability and identify potential knowledge transfer opportunities.

6.4 Results: Focus Group and Interviews

In order to better understand and identify mechanisms of change inherent in the TAG program, data were generated from a focus group and interviews with TAG facilitators, and also from in-depth interviews with caregivers who participated in the program during the years represented in the study sample (families participating in TAG from September 2011 to December 2014). The study team consulted regarding major themes revealed in in-depth interview analysis in order to compare them to findings extracted from focus group analysis (Lambert & Loiselle, 2008), and to add to the richness and trustworthiness of the findings (Lincoln, 1995). Because many similarities between focus group and interview data were identified, results will be presented in tandem.

Results presented below were devised from focus group data collected from 4 previous and current facilitators (consisting of two Registered Social Workers, one Occupational Therapist, and one Registered Psychologist) and interviews with two current therapy team members (the lead Psychiatrist and one Registered Social Worker). The diversity of the professional background of each participant, and that the interviews included several founding members of the TAG program and one who had just joined the team, provided an opportunity for variation in opinions and views (Plummer-D'Amato, 2008a). As explained, those facilitators who participated in the focus groups are labeled FG Participant 1-4 in the findings illustrated throughout this manuscript. The two facilitators who provided interviews individually with the PhD Candidate are labeled as Facilitator interview 1 and 2.

With regard to the 4 caregivers who provided interviews for this study (labeled as TP1-4 in results below), 3 participants were adoptive parents and 1 was a foster parent. Three (3) of the caregivers were female and 1 was male (Table 13). Their experience of parenting children not born to them (i.e. foster, adoption, kinship) spanned from 1 - 21 years at the time of their participation. The youth represented by interview participants were all boys between the ages of 9 – 11 years old at the time they attended the TAG program. Similar to others who attend the TAG program, these youth presented with complex mental health diagnoses and a variety of social, behavioural, relational, and school problems (Ashton, et al., 2016).

Table 13. Interview Participants and Reflection of Themes.

Interview Participant	Gender	Age of Child	Theme #1	Theme #2	Theme #3
TP1	F	9	YES	YES	YES
TP2	F	9	YES	YES	NO
TP3	F	9/10.5	YES	YES	YES
TP4	M	9	YES	YES	YES

Analysis converged on three core mechanisms of change (themes) that were reflected by both facilitators and caregiver participants: "Relationship as locus of change", "Group process", and "Psychoeducation-based content". For ease of reading, all pauses, "ums and ahhs", and interviewer comments/communication have been removed from quotations included below. Words in quotations that are italicized are that were emphasized by participants.

6.4.1 Theme 1: Relationship as Locus of Change

What became progressively clear during analysis was that *relationships* were viewed to be the key mechanism of change in the program. This theme was divided up into three key relationships, those between the caregiver and the child, the caregiver and the facilitators, and, lastly, among the facilitators themselves.

6.4.1.1 Caregiver/Child Relationships

A key mechanism of change in the TAG intervention identified by both caregivers and facilitators was the focus on the caregiver-child dyad rather than on each party as an individual, a unique feature of the TAG program. A focus group participant clarified the rationale behind this treatment decision: "the wounding happened in relationship and so the healing happens…in relationship" (FG participant 1).

This relational focus, enhanced through activities like "kit time" (a 30-minute daily session where the caregiver/child dyad spend uninterrupted time participating in activities chosen by the children and then adapted to include things both enjoy doing together) is considered key to TAG program structure. Through the use of sand-tray in session, and homework assignments designed for dyadic participation, TAG encouraged development of a healthy relationship between the caregiver and the child. One facilitator explained, "It's the one to one time, whether it's the "kit time" or other times, that's really going to be the medicine that helps them through the attachment and trauma" (FG participant 2). A caregiver concurred: "(kit time) was largely the attachment part. That work has to be done on both sides, not just the child, the parent as well" (TP1). Another participant agreed:

> …(time spent doing 'kit time') was *really* eye opening as well, because it just makes your bond stronger. It definitely changed the relationship between us. And…(the child in TAG) would *brag* about it to the other kids, right? 'Oh, it's 'kit time', you have to go and leave us alone' (laughs) right? So, they were very territorial about it. (TP3)

TP4 proposed that just the *process* of crafting the "kit" itself built relationship through allowing the dyad to learn about one another. He shared, "it's what works well with time spent together with the two of you…just because your son or daughter *likes* this…doesn't mean you two are going to interact *well* with that." (TP4). In addition, he proposed kit time development empowered his son through learning to eliminate and invite activities into their time together. Another caregiver (TP2) valued the importance of one to one time with her son, she enjoyed "just *simply*, taking him out of school for the morning, I mean, and giving him that kind of priority in his life."

6.4.1.2 Caregiver/Facilitator Relationships

With regard to the caregiver/facilitator relationship, several previous studies have put forward that a strong therapist/client relationship (therapeutic alliance) supported improved clinical outcomes (Schmidt, et al., 2014; Stratford, et al., 2009;

Horvath & Symonds, 1991). These outcomes included both increased caregiver-related parenting skills and improved parenting competence (Schmidt, et al., 2014). It has been suggested that this improved outcome is not related to length of treatment or the specific type of treatment support given (Stratford et al., 2009; Horvath & Symonds, 1991), but rather that the strength of the relationship between therapist and client may even take precedence over therapeutic strategies or techniques (Stratford et al., 2009). Results from caregiver interviews indicated that when a strong therapeutic alliance was not achieved during early caregiver sessions, treatment outcomes might have been affected for these participants. It is possible to presume that a lack of dyad participation may highlight a missed opportunity to effectively align with the participant, limiting their cooperation and follow-through with program requirements.

Lastly, there was acknowledgment by both facilitators and caregivers that the majority of the therapeutic caregiver/child relationship building occurred outside of group time. As a result, caregivers needed support, "almost more than the children because they have all the responsibility, you know, problems- (they) are up at night, etc., etc. So we have to give them a lot" (FG participant 2). A caregiver agreed:

> I'm the one doing the majority of the therapy. You're trying to operate *through* me, so that in each relationship I have with (my son)- or each interaction with him, I'm doing what you want me to do. So, I would have prepared *me* a whole lot more, and built the relationship with *me*, so that I would feel good about the situation. (TP2)

In the families where this facilitator/caregiver relationship was thriving, there appeared to be an amplified opportunity for healing extending beyond the walls of the therapeutic milieu.

6.4.1.3 Facilitator/Facilitator Relationships

A third element echoing the relationship theme existed in the way the TAG facilitators described their relationships with each other. Working together as a team appeared to encourage facilitators to be more transparent, vulnerable, and self-reflective, and in turn, better facilitators. One explained that "being on the same page with your co-facilitators, touching base about how that went" (FG participant 3), was a critical part of effective group facilitation. Several facilitator participants had been providing trauma therapy in TAG for over 10 years. These participants reflected that this inter-team support was a key protective factor against facilitator burn out. It appeared to help them remain optimistic that "healing happens and can happen and should happen" (FG participant 1). This optimism can be translated to caregivers facing ongoing behavioural effects of trauma.

One way facilitators looked to provide support during non-group time was through weekly phone calls. Though a structured process (clearly delineated by the TAG facilitators in the focus group) TAG facilitators checked in with caregivers during the week to offer this individualized support. One facilitator encouraged another to speak more in-depth about the "great" work she does with families as the mid-week support person. As a result FG participant 4 shared about the need to learn to practice therapeutic "containment" while also providing support for an individual family:

> "Just being sensitive to what's happening…in their village, and with their child at school, and…just being aware of things that might have been a trigger for them, or whatever. So, I think…as I've been in the group, and as I'm learning more and more about containment (laughs)…it's just one of those things where you - sort of as you go along you realize ok, this is really important for them to talk about and this is something that can wait, or this is something that isn't necessary to be talking about right now."

In the families where this theme of relationship (child/caregiver and facilitator/caregiver) was thriving, there appeared to be an amplified possibility for healing extending beyond the walls of the therapeutic milieu. Further elements of relationship as locus of change were reflected in the Overall TAG Metaphor (explained later in this chapter).

The "interaction data" from the focus group also supported this relationship theme. Facilitator participants were observed actively drawing one another out and encouraging further reflection. Participants supported each other's responses through non-verbal and verbal acknowledgment, while referring to one another for further insight. Participants leaned in as others spoke, as in active listening techniques, and appeared to take care to not misrepresent the views of others in the room.

6.4.2 Theme 2: Group Process

Offering TAG in a group setting (as opposed to individual/family counselling) appeared to strengthen the opportunity for change, according to both caregivers and facilitators. One facilitator hypothesized that TAG's effectiveness was based in the group process. He stated, "(parents) feel safe, they feel validated, they feel they can come to TAG and 'oh, these people believe me, I'm not crazy. I get support and I get to tell my story'" (FG participant 2). Starting with the intake process, an awareness of group dynamics was mentioned as a pre-requisite for facilitators. One facilitators shared that, "doing intakes, we are really considering who is in the group and creating some reflection around how many- what's the gender, what's the cultural discrepancies." (FG Participant 3). All focus group and interview participants highlighted the group participation as a key component to the success of the program.

Collaboratively, caregivers' reported feeling that they were not alone in their struggles helped them to normalize their experience. Reportedly, feeling that they were not alone in their struggles helped caregivers to normalize their experience and gave them a community of people to share with at a time in their lives where they felt their most vulnerable and ostracized. Participation with other families allowed caregivers to learn from and teach each other, and feel safe to share comparable experiences. One caregiver shared that "things like it being in a big gymnasium with other kids, seeing different ways other parents connected…actually seeing some of the challenges and seeing other parents dealing with challenges," (TP2) was what she found most useful in attending the TAG program. Others agreed:

> "…sometimes the *biggest* benefit that I saw was…finding out that *wow*! You know what? Some of these extreme reactions, and extreme experiences we're having? We aren't the *only* one (sic) having them! And even if you didn't hear *anything* to solve it, you came away knowing you weren't alone, and that knowledge alone gave you so much strength." (TP4)

> "(The TAG facilitators) talk about that. It takes a village. That's what that is. We all work together, and we all talk to each other and work through it. I *often* think about (the other participants). Wonder how they're doing, how the kids are, those kind (sic) of things. But yes, definitely you all get involved. You all support each other." (TP3).

Importantly, it wasn't just the caregivers that benefitted from the opportunity for group connection. Child participants also benefitted from the presence of caring adults in the group. One mother shared:

> "The children built relationships with the other adults because they would comment (on their work) and maybe one would get them more than the other (adults). (The caregivers) would see something that (a child in the group) had done, that someone else didn't pick up on. So (the children) did build that trust with the other parents. It gave them an opportunity to realize that there

> are other people, other parents, that they could trust and they *could* go to. ” (TP3).

For facilitators, this group aspect was helpful as well. Having a multi-disciplinary team reportedly brought the advantage of varied skills sets, as well as the opportunity to rely on others when their own "story" was getting in the way of their ability to be effective in the group setting. One facilitator in our focus group mentioned, "it's really helpful to have two people or more in the group, in the facilitation because one person is focusing on content and your other (facilitator) is focusing on process or recognizing who's nodding their head, who's starting to get sort of triggered. So you need more than one person to facilitate the group."

6.4.3 Theme 3: Psychoeducation-based Content

A third key mechanism of change inherent in the TAG program appeared to be the psychoeducation facilitators provide regarding the effects of trauma on various levels of functioning. Caregivers were encouraged to understand behaviour from a base premise of "connection before correction". Facilitators explained that in regards to brain and biology, there are four elements in any interaction: "the caregivers' past and present, and…the child's past and present" (FG Participant 4). Seen through an attachment theory lens (George, 1996) TAG staff proposed that helping caregivers change their understanding of behaviour from "my child is giving me a hard time" to "my child is having a hard time" helps caregivers to refocus their own reactions to their child's behaviour.

Facilitator interview 1 highlighted the opportunity to pause and reflect "and say, what part of the story is that?" allows a caregiver to respond in a more adaptive manner. Further extrapolating that psychoeducation behind "how certain events disrupt attachment" also provided a tool kit for participants as they learned to understand how relationships can break apart and, in turn, be brought back in to focus. Caregivers confirmed that psychoeducation of trauma gave them a newfound awareness and a “language” to explain their experience:

> These words we have for it helps us keep that perspective. There’s always going to be emotion involved (but) it gives us that tool to step back and say ‘yes, I’m very emotional, ok, maybe this is *why*’. I don’t know, for me, being able to understand the *why*, kind of just helps to normalize it and just, makes it more manageable. (TP1)

> I have incorporated, a *lot*, a lot, a lot. I did come out of (TAG) with a new understanding, and I have been fostering for 21 and a half years! So, I did come out of there with a way better understanding of trauma, and how children *react* to that. So things, that before I would have said “oh, you’re being ridiculous”, now, I look at in a totally different way. And that’s a *huge* thing for me, because I didn’t just apply that to the kid that was in TAG. I can apply that to *all* my children. (TP3)

One participant explained that the awareness she had regarding her ability to advocate for her son was her biggest takeaway from TAG. She shared, “I think (it) is the most important thing that TAG told me. It…gave me that insight that I can challenge the system…to make it work for me. And for (my son).” (TP2). Another caregiver explained that learning about the effects of trauma allowed him to relate to his child’s outbursts and behaviours more effectively: “Different parts of his history come up so you’re going to have to relate those, then learn how to interact with a kid *with* that history. For someone his age.” (TP4). This participant expanded that the opportunity to share this educational experience with other parents also aided in the learning process:

> “…The group scenario, the group discussions, is so critical, because, you have shared experience. You see people going through the same thing, which helps

> you feel not alone. The way *you* deal with that and the way (the other families) deal with that; and the way *their* kid reacts and the way *your* kid reacts; and the way *other* family members react; can create a completely unique situation." (TP4)

One facilitator also credited the trauma-informed content with increasing facilitator effectiveness. She said, "That's kind of the benefit of being that evidence informed practice, right? I mean, practice informs evidence, too, so it's two extremes. I think that's what we are always trying to achieve" (FG Participant 3). The process is there for the families but it's also there for the facilitators, to continue to learn from the psychoeducation of trauma and attachment and staying on focus with what they are treating. This focus group participant continued:

> "You have to be, sort of, informed by evidence. So, you have to like reading the literature and updating yourself with professional development and recognizing what strategies are being used out there. Like, often times, families come in and say "Hey! I heard about this treatment, what do you think?" And it's really helpful to understand what's going on and to sort of being (sic) informed by literature." (FG participant 3)

Another long-time facilitator explained that this awareness is important to the foundational aspects of their program:

> "If we can see their behaviours as 'symptoms of brain development that went askew' instead of the behaviour itself – sexual boundaries, aggression, stealing – all things that people get freaked out about. We have to see these as 'no fault symptoms.' Just like coughing is a symptom of asthma, boundary issues are symptoms of RAD (Reactive Attachment Disorder). We have to calm people down and assign no value around them. Yes, we have to *change* them, but without assigning *blame* or *badness*" (Facilitator interview 2).

6.4.4 Overall TAG Metaphor

As a function of the exploration of TAG facilitator interaction and relationships during the focus group, key pieces of information were uncovered that appeared to positively impact the overall efficacy of the TAG intervention. In addition to the specific responses and discussion generated by the focus group, interactions among focus group participants were key in developing the initial model of the TAG phenomenon (Lambert & Loiselle, 2008). Their interactive manner and description of underlying philosophy allowed the exploration of a broader contextual factor. As focus group participants spontaneously discussed dimensions of the TAG program in relation to the research question, concepts relevant to the ways in which the group interacted and reported feeling about the program allowed a larger picture impact of potential underlying metaphor that may be reflected in the overall mechanism of change.

During peer review of the analysis of the focus group transcript, various "hidden" messages started to arise around the way in which the general design and approach of the TAG program may be enhancing the overall impact on its participants. The facilitators appear to behave toward each other in a nurturing and supportive manner, which provided the presumption that they would also behave that way toward the caregivers during TAG sessions. Focus group dialog supported this presumption in that facilitators discussed providing TAG program content in a way that "nurtures" the caregiver so that they can, in turn, nurture their child, or as a neutral peer reviewer termed the "re-parenting of parents". This metaphor can be explained in various ways: leading by example, helping you feel that you are not alone, providing unconditional support and acceptance. After reflection on the theme and going back to TAG caregiver participants for their perspectives on the emerging findings, it became relevant that the TAG program success may be linked to this "Teach by Example" design.

In line with literature supporting the healing benefits of improved caregiver/child relationships (Purvis, et al, 2013; Arvidson, et al., 2011; Puckering, et al., 2011; Sprang, 2009; MacDonald & Turner, 2005; Pearlman & Curtois, 2005; Hughes, 2004), analysis revealed that TAG facilitators worked to build relationships with caregivers. They appeared to model self-reflection required in acquiring and maintaining relationships, in order to encourage the same in the caregivers toward their children. A facilitator stated that as a group they attempt to "mimic the message, by not making promises and breaking them. Trying to, like, role model what we would want in parenting" (FG Participant 3).

This also means the facilitators appeared to value fluidity in program implementation and purposely adapt program content to "support (caregivers) to BE ready for the group" (FG Participant 3), and to best meet the "case sensitive" needs of each family. One facilitator explained, "Some kids need more medicine, some kids need more support at school. Some parents need more support, more phone calls. It's an individual approach within the context of TAG" (FG Participant 2). Checking with caregivers during interviews clarified this finding, that TAG facilitators "Teach by Example," in their own words:

> "I have to think a big part of it is the total non-judgment and the kindness and understanding, as well. So you could tell (the TAG facilitators) and they weren't going to say, 'Well, you were a bad parent!' They'd kind of say, 'Well, hey, yeah, that's what happens. That's normal. A reaction we would *expect*.' It just sort of, gave you that comfort and they just let us *learn* from them, right?" (TP1)

> "I think, my very *favourite* part of TAG was, very much I guess, was like my kids with kit time, was having one-on-one with the facilitators. You could ask

> them questions (and) they would draw you out in a way that you don't think about". (TP3)

6.5 Conflicting Experience

Some studies that combine methodological elements fail to give voice to contrasting or conflictual experience (Lambert & Loiselle, 2008). One advantage in this current research was finding a participant willing to share a "mixed experience" of TAG. While she did share several of the experiences reflected in the three major themes, it is important to note that her story represents a contradictory experience to the other caregivers whom I interviewed. Of note, due to the anonymous nature of this research, it is unknown if this participant shared a cohort with any of the other interview participants. In addition, several elements of her experience will not be shared here in order to protect her anonymity.

This participant described an experience in initial parent-only groups at the beginning of TAG I where she felt in conflict with TAG facilitators regarding their reaction to another caregiver's choice of discipline. She shared in her interview that she tried to voice her opinion of this other parent's choice, and felt shut down by the facilitators for speaking out. She credited this experience with the point at which she emotionally withdrew from the group. She shared feeling that the facilitators' response "was rude and it set me off on an entire (sic) *bad* experience for the rest of the session, like, for the whole program". This participant explained multiple times throughout her interview that she and other caregivers coming in to TAG were "in an *extremely* vulnerable place. Often we're adoptive parents who have committed to, like, dramatically changing our lives, we're ostracized," and that "(facilitators) seemed to me like they were not being as sensitive, especially to *some* people."

She stated feeling "like I was going in and being labeled as a problem parent" and further stated that because of this early conflict with TAG staff,

> "*my* perspective on them could have been off. That's where I think they should have built more relationship. I have to be open to them and accept and everything? But I think they have to be building a personal relationship to (sic) me, making it more comfortable for me. And that just wasn't there. I think that is where things went off base for me a bit. " (TP2).

This participant also reported that she did not feel that the program offered enough "praxis-oriented" supports and would have liked to see some more guidance with regard to specific strategies to apply in day-to-day experiences with her son:

> "(The TAG facilitators) didn't seem actually very happy to do that because they wanna leave it up to your individual judgment and your individual situations with your kids. But you know, when you kid's threatening to pee on the ground, and they're banging, or they're going after their sibling. There's not a whole lot of TIME to put the theory and apply it to a situation in a great way. Just like ok, 'this is a good principle. Ok, in this moment I have to think of 1-2-3, okay, I'm going to apply it here.' And that's what I was looking for. And it didn't come very much."

Labeled throughout her transcripts as "missed opportunities" on behalf of TAG staff, attachment-based interpretation of these findings was that by missing key elements of relational connection, facilitators missed the opportunity to connect with this participant. Thereby, potentially not allowing the "Teach by Example" metaphor to work in this case. A vulnerable parent felt further ostracized by a program designed to be inclusive, non-judgmental and "in this for the long haul" (FG Participant 1).

6.6 Facilitator and Caregiver Characteristics

In an attempt to understand more about potential variable elements of TAG effectiveness, interview and focus group participants were asked to provide their perspectives on relevant qualities that people would inhabit that may make them more effective facilitators or that may fortify their ability to benefit from TAG program participation. What became apparent while in the process of interviewing was that many of the characteristics appeared to overlap.

During the analysis stage of this project, statements made by facilitators and caregivers that reflected their answers to the question "Are there any characteristics or qualities that you feel a TAG facilitator would need in order to better facilitate of the TAG program?" and "Can you name any characteristics or qualities that you feel that caregivers or families might have that may allow them to experience more success in the TAG program?" were extracted from the transcripts. Both facilitators and caregivers were also asked if there were qualities that might impede abilities for effective facilitation or participation. As all study participants presented ideas that congealed to a core set of characteristics, these results will also be presented in tandem. An important note is that during the focus group many of the characteristics highlighted below were echoed throughout the manner in which the focus group participants interacted with each other during the interview. In a sense corroborating their presuppositions, which were then further substantiated by caregiver interviews.

6.6.1 TAG Facilitator Characteristics

TAG facilitators and caregiver participants were asked to explain their perspectives regarding both follow-up interview questions outlined above regarding facilitator characteristics. Many articulated traits that underscored the importance of working together as a team, understanding group dynamics, and having experience in the area of trauma. One facilitator explained the importance of "being able to work with a team, in an interdisciplinary approach, and learn from each other, and support each other" (FG Participant 2). Another focused on group dynamics: "understanding groups dynamics and an ability to facilitate a group and lead a group, because it's very easy, it can be very easy for things to go off on a tangent, or to go off in a different direction" (FG Participant 1). A caregiver (TP3) echoed this finding, "(The facilitators) work as a team (and) all focus on the same thing".

It was also deemed valuable that consideration be made regarding the "make up" of the facilitation team with regard to philosophical and professional "skills (you) bring to the table" (FG Participant 3). This participant elaborated, "To facilitate, I think it's important to recognize WHY (the facilitators) are there and what role they are going to be (sic)- because everyone is doing similar things in the group, but I think the lens is important." (FG Participant 3). Another facilitator in the focus group raised an example of this awareness of group dynamics: the ability to allow the parents to learn from each other through the group process. He said, "You still have to manage the group and manage the process, but allow parents to support each other. It's almost like the parents have move validity in what they say than the facilitators might have" (FG Participant 2). But with this comes a core theme touched on by various participants: passion. One facilitator interviewed shared, "(Without) passion for the people who come to TAG, (it would be) just a job I go to everyday" (Facilitator interview 1). Also, without this passion, as others in the focus group also emphasized, burn out would be inevitable. It takes a vast amount of energy and focus to work with trauma stories day in and day out.

Along with passion, facilitators in the focus group agreed with the idea that having the ability to self-reflect and "know your own story" was valuable to the facilitation process. Being in a group appeared to allow one participant to find words for what he was articulating and further highlighted the participants' comfort with one another:

> FG participant 1: I think several things come to mind, and (FG participant 2) mentioned one of them earlier, and that's having a *passion* for the work and (also) doing the work *with children* and teachers and caregivers. And in

addition to that, being able to work with a team, in an interdisciplinary approach, and learn from each other, and support each other. There's a sense of, I don't know what that's called. Your own maturity, your own centeredness, your own…

FG participant 2: understand your own story (laughs)

FG participant 1: Exactly! Because I often found myself triggered, like there were little things that happened and they're just normal as a therapist, but I'd notice, "Woah, ok" (FG participant 2: mm hmm; others non-verbal agreement). So, being settled in your own story, and then a passion for the work and working with patients and learning from each other. "

Facilitators also emphasized qualities that make a person more "flexible", specifically with regard to implementation of program content:

FG Participant 3: I think that if you are overly rigid and you lack flexibility it makes the group a little bit challenging to facilitate because things change, things come up in the week and life happens, so you have to be a very flexible person in your own skin. Because if you aren't and that creates a lot of anxiety and tension within yourself, then you start to miss parts of the group…(and then talked about the need for multiple facilitators to manage group dynamics)

FG Participant 1: I think flexibility. You have to be able to respond to what's happening in the group in the moment because you never know when little Johnnie or Susie's going to go, boom! You know, and all of the sudden you have to do something… It could be bizarre, or you know, or anything else, or what's happening in…any dyad, you know disrupts- getting triggered by something.

> FG Participant 4: Yeah, I think flexibility in content as well because…I think it's sort of a constantly moving program so the ability to stay flexible with the content as well (a FG participant: mm hmm), the ability to be able to change it a little bit if you need to…

The fourth participant in the focus group mentioned this characteristic as well: "You have to be able to respond to what's happening in the group in the moment" (FG Participant 2).

A successful facilitator also has to have the ability to "stay centered in the eye of the hurricane" (Facilitator interview 2) and to "be able to self-reflect and to *maintain* it in the face of a problem that no one else can solve." This facilitator further extrapolated:

> "A TAG therapist needs to be in the eye of the hurricane where it is dead calm and understand (the children's) behaviours differently. Not just with your own story – personal, professional, parenting – but also to self-reflect about society. (Society is) going to see these (behaviours) as inherently "bad" until we can change that view, which takes time. To change it to the idea that they are not *giving* you a hard time, they are *having* a hard time, that's the real issue." (Facilitator interview 2).

Along with the skill for self-reflection came the suggestion that a facilitator should be able to recognize his or her own boundaries. From a caregiver's perspective, TAG facilitators would need to have "awareness of the varying reasons a child may not be able to process" so they could reach them where they are at while also having "the ability to separate themselves from their work." (TP4). A focus group participant also shared this perspective (facilitator responses left in text to help demonstrate their agreement with her point):

> "I mean, (FG participant 3) already talked about that. We're working, of course, with boundary issues, (FG participant 2: mm hmm) and so, I think that is the other piece…understanding OUR boundaries (FG participant 4 and 2: mm hmm). You know, that they're not too rigid, but they're not too, like, loose. You have to have very GOOD boundaries" (FG participant 1).

Ultimately, a final theme arose regarding the overall metaphor (section 7.4.4) gleaned from analysis of interview data. This was regarding the significance of the facilitators ability to "be interested in the long-term trajectory of development" (Facilitator interview 2) and the "inherent desire to see the families doing well" (FG Participant 4). A successful facilitator appeared to give that sense of "we won't give up, so you don't have to give up". Many families, it was recognized, have been through various other programs, interventions and therapy and still face daily disruptions to their family and community relationships. During their interviews TAG facilitators emphasized the need for wrapping the family in support so they can feel hope that change is possible.

Caregivers added to this list a variety of personality characteristics that were inherent in their experience of TAG facilitators: "non-judgmental, kind, understanding, comforting, let us learn from them," (TP1), "compassion, empathy, outgoing, thoughtful, sense of humour, insightful" (TP3), "Gentle, persistent, friendly, loving, caring, encouraging, patient, (and to take on the) role of a teacher, therapist and friend (TP4). TP3 also emphasized that success in the TAG program hinged on the ability for participants to trust the facilitators "if you are at your wits end, then you have to trust that they know what they are doing". This caregiver participant followed up that TAG facilitators were "excellent at that trust and they didn't let you down (because they) had the skills to draw you out and help you understand what it is that you are asking".

One caregiver did not share the above experiences of the TAG facilitators she encountered through her participation in TAG, as mentioned previously. This participant (TP2) described a conflicting story of facilitator/caregiver connection than the other participants: "I didn't think that they spent enough time building relationship, either among the participants or between themselves and the participants." When asked about her perspectives regarding how the facilitators could have better facilitated the TAG experience for her, she explained,

> "If it was *me* doing it, I would first of all – I would sit down, I would have a personal meeting with the parents one on one and build relationship with them, in the sense that this is the first counselling session. We're building relationship. Like, we're building the trust; we're building the therapeutic relationship with me. I would have been pulling parents out individually for, like, a 5-10 minute quick talk with like a social worker, or an MA (Master's level) counsellor? 'How you doing, what do you need, what can I direct you to?' To give them a personal experience (and) *actually* connecting them with the resources that they need."

She further stated that she occasionally found their attempts at inclusive language offensive: "'This is our children', well no, actually, it's not your children, it's my children and you're still the Psychiatric expert over there". In follow-up correspondence by email, TP2 explained (all text cut directly from her email and unedited by author):

> "There seemed to be a high variety of family situations. Some had caseworkers, some had extended families. I think a better understanding of personal needs would be helpful, and regardless of what a supposed background is or is not (I got the feeling the facilitators and particularly the senior leaders were quite burned out and pigeon holed people and backgrounds). Fair enough, we all get there at points in our careers but there

> may be a need for new staff, new approaches or increased self-reflection. As I say, we all get there so it is not to take away from a lot of the good work they do."

This participant finalized in her correspondence that, "I could have *definitely* been a more effective partner in a sense that I felt very- I think I went in and it was like they were presenting themselves as experts and I felt very judged."

6.6.2 Caregiver Characteristics

As reflected by TP2's final comments, caregivers are also presumed to possess characteristics that may reinforce their success in TAG participation. Both facilitators and caregiver participants were asked to provide feedback regarding potential caregiver qualities that may support or hinder their ability for therapeutic gain in the program. As with the previous section, their perspectives will be presented in tandem.

Similarly to proposed effective facilitator characteristics, caregivers who had the ability to self-reflect would be more inclined to gain new strategies and support from the TAG program. However one facilitator expressed caution that many families coming into the program may not be initially able to self-reflect, "they're coming for that reflection, they're coming to learn how to be more reflective" (FG Participant 3), further emphasizing:

> "In TAG II, we give the parents the option of telling their story and how that's affecting their life, and how they are parenting their children. And some parents are quite open and, and other parents were less (so), and we have to respect their confidentiality and privacy. But we could tell that some parents were more adept at that – more along in that (self-reflective) process than others."

Through their own self-reflection, facilitators could potentially support this process. One focus group participant explained the facilitators needed to "pinpoint what it was about the parents that would help them, kind of retain, and soak in the information that we were giving them." (FG Participant 2).

Likely the most repeated characteristic for caregivers was that they came into the program "open" and "willing to participate". One facilitator hypothesized, "There has to be an openness to shifting, or an openness to wanting to shift" (FG Participant 1). Another agreed, "There definitely has to be an openness to the process," stating that honesty supports this process. She said, "openness for (caregivers) to just discuss some of that stuff, about what's really happening 'in their kitchens'" (FG Participant 4) was critical to program success. One caregiver stated in her interview that she felt that all participants in her cohort shared a willingness "to do whatever it took to help their child" (TP1). And a third (TP3) agreed that the "willingness to do the work" was a key quality that would allow one to gain from the experience, but that this would often require that an individual be willing to be out of their comfort zone because "all of it is out of (our) comfort zone." She also felt that because you often come to TAG "at your wits end" you have to be able to "have to trust that (the facilitators) know what they are doing."

Several qualities could be gleaned from the content of the interviews, or the characters of those being interviewed, that were not specifically stated by any participants. One such characteristic was related to the individual's ability to "buy-in" to the program and facilitator approach. One caregiver participant (TP4) expressed this more clearly in that the "buy-in" was required on the behalf of "both spouses". This shared belief in the TAG program to provide support and guidance allowed them as caregivers to strengthen their ability to do it at home. He shared that this "buy-in" of the process of self-reflection brought them "closer" as they learned more about their own history and responses to things that came up in group.

What was also relevant through this inductive gleaning of caregiver qualities was that many of the caregivers appeared to be adaptable people. Like the facilitators, it was potentially relevant that they were flexible enough to take the information gained through their experience in TAG and adapt it to fit their own, more personally relevant, experiences. The essence of adaptability became strengthened when one was also the kind of person who "won't accept that there's nothing you can do" (TP4). This persistent adaptability encouraged a caregiver to keep looking for answers in the context of treatment.

Several characteristics were raised that were not shared among all participants.

- One focus group participant (FG Participant 3) expressed an opinion that "readiness" was important. In addition to the year of stability required for every family, several factors appeared to be a part of this readiness, "maturation levels…that are suitable for the group" and "you can't engage in treatment when you are engaging in- (it's) very challenging to splice your life, and start working on yourself, let's say if you come in with an active addiction." (FG Participant 3).
- One participant (TP4) explained he felt that having "phenomenal employers", and "good workers" (i.e. social/case/adoption workers) allowed him to fully appreciate the benefits of TAG because of the support they provided for him to attend with his wife and son. He also believed the ability for them to attend as a sort of "triad" with his son intensified the change that occurred in the home because, he was able to be "on the same page" with his wife when it came to applying strategies outside of group time.
- One participant (TP2) expressed an opinion that TAG was "really well aimed at the first time foster or adoptive parent in the first year or two of fostering and parenting. When they don't know anything about

> trauma and attachment, and maybe they haven't been through this slew of *everything* up to that point?"

As there were various characteristics listed throughout the facilitator and caregiver interviews, a table was created for ease of review. While not all characteristics were listed, Table 14 presents the main core responses to the question as presented in the interviews.

Table 14. Caregiver and Facilitator Characteristics

Caregivers	Facilitators
Open to change/"shifting"	Self-reflection skills
Honesty	Non-judgmental
Want to be here	Supportive
Willingness to do the work	Kind
Willingness to listen	Understanding
Willingness to trust/Buy-in to program	Comforting
Flexible	Sense of Humour
Self-reflection skills – own story and child's story (empathy)	Passion Perseverance
Passion	Experience/Let us learn from them
Available external resources and support	Calmness
New to Fostering/Adoption	Reflective listening
New to Trauma and Attachment	Ability to draw you in
Sincere	Compassionate
Hard working	Empathic
Adaptable	Gentle
Accepting	Friendly
Non-judgmental	Patient
Stable/Readiness	Can separate themselves from the work
Maturational levels in children	Long-term trajectory
Safety in the home	Flexible

6.7 Conclusions: In-depth Interviews and Focus Groups

Central to the interview design, collection, and analysis phase was the triangulation of various methods to "enhance the exploration of a complex phenomenon" (Lambert & Loiselle, 2008) and more collaboratively tell the story of TAG. When all qualitative interview data was taken together, and summarized, a more "complete" pattern of discussion was highlighted. It was these patterns that allowed for richer analysis (Lincoln, 1995). The focus group findings seemingly provided a partial picture of the program that, when enhanced by information obtained from individual interviews, helped to complete the picture. Conclusions from the in-depth interviews and focus groups are that several factors may contribute to the overall mechanisms of change inherent in the TAG program. Three themes that emerged: "Relationship as locus of change", "Group process", and "Psychoeducation-based content" where echoed throughout the qualitative domains in this research.

Several elements came to light through these themes and the overall metaphor. One is that the dyad-based design allowed for the rebuilding of relationships that were affected by early trauma occurring in the context of caregiving relationships. This dyad then found support through relationships with facilitators and among themselves in the group setting. And finally, the psychoeducation-based content of the program encouraged caregivers to understand the "why" behind their child's behaviours. This understanding presumably encouraged caregivers to change their understanding of behaviour from "my child is giving me a hard time" to "my child is having a hard time", which helped caregivers to refocus their own reactions. Ultimately, combining the findings of the focus group and interviews was hoped to allow themes and findings to be corroborated across methods and to increase the trustworthiness and rigour of findings (Lambert & Loiselle, 2008).

7 Discussion and Conclusions

Both neglect, and the trifecta of physical, emotional, and sexual abuse, occurring during early development can have a lasting impact on a person's emotional, physical and relational health. When abuse is experienced within the context of caregiving relationships, those effects can become more complex and long lasting over a wide array of levels of functioning. The ubiquitous impact of early relational and developmental trauma has been addressed in many ways, with the most common, and arguably most impactful methods, being through early intervention programs (Biglan, et al., 2012; Catania, et al., 2011; Olds, et al., 2010; Howard & Brooks-Gunn, 2009; Slade, et al., 2005). This study aimed to better understand the potential therapeutic impact of a unique, complex, longer-term treatment program aimed at youth in middle childhood.

The underlying theoretical motivation for this approach was based upon suggestions that, by strengthening protective relationships, interventions may help mitigate the long-term behavioural and relational effects of stress caused by early attachment-related trauma. Because adults who have experienced early relational trauma have the potential to become parents themselves, it is critical to intervene early in their life cycle. Mediating the effects of their trauma may allow them to grow up to provide the kind of stable, supportive, attuned, relationships necessary to protect their own children from the long-term impacts of toxic stress, which can otherwise create a trans-generational cycle of abuse (Berthelot, et al., 2015; Verhage, et al., 2016; Newman, et al., 2010; Baptist, et al., 2012; Smith et al., 2005).

7.1 Differences from Previous Research

In comparison to other programs that supported children who have experienced early trauma, (Cornett & Bratton, 2014; Kagan, et al., 2013; Arvidson, et al., 2011; Kagan, et al., 2008; Marvin, et al., 2002), the TAG program differs in several ways. The most salient difference is its focus on supporting children in middle childhood through their dyadic caregiver/child relationship. TAG also differs from other evaluated programs in measures used to detect changes in outcome goals. These differences are explored at more length in this section.

The primary difference between this program and other research developments is the age at which it is focused. Because of the emphasis on early intervention, the majority of programs that offer a caregiver/child relationship-based intervention are offered to children of infant or pre-school age with relative effectiveness (Dozier, et al., 2009; Dozier, et al., 2001; Schweinhart & Weikart, 1997). Very few programs were identified that were aimed at children of the age range supported through TAG.

"Take Two" is a program that was utilized with this middle childhood age range (Jackson, et al., 2009), and purported to have elements of caregiver/child support including psychoeducation of the effects of trauma. It also appeared to integrate a stage-based treatment protocol. The results of their study demonstrated a decrease in trauma symptomology following intervention, however, as these authors did not expand on the description of how the "Take Two" program was administered or the ways in which caregivers were included in treatment, there was not an opportunity for appropriate comparison.

The most unique difference from previous research involves the inclusion of caregivers and youth in a dyadic treatment process. Several studies appeared to support the inclusion of caregivers in treatment (Cohen, et al., 2012; Arvidson, et al., 2011; Jackson, et al., 2009; Kagan, et al., 2008; Purvis, et al., 2007) but did not outline specific ways in which the parents/caregivers played a role in their proposed interventions. In some, the intervention was provided to children in residential treatment (Kagan, et al., 2013), or in a setting away from the caregivers. Typically, the "caregivers" mentioned in these studies were staff members assigned to the children while receiving the intervention (Purvis, et al., 2007). One intervention that could provide promise as a potential future comparison group for TAG is through the use of the Attachment, self-Regulation and Competency (ARC) framework (Arvidson, et al, 2011; Cook, et al., 2005). This framework appears to have a similar structure and content to the TAG program, though it is offered to the caregiver/child dyad, in a therapist-led, individual therapy setting, rather than in a group setting.

Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) has also been utilized in therapist-led individual counselling sessions with success in this age group (Cohen, et al., 2012; Cohen et al, 2004), and purports to have a caregiver component, though it is unclear to what extent they are involved in treatment. TF-CBT reportedly can involve individual sessions with a parent and child together and separately to work on alleviating symptoms of PTSD and other manifestations of the effects of early adversity. Several randomized controlled trials demonstrated treatment gains above non-directive play therapy and other support therapies (Weiner, et al., 2009).

Another way in which the TAG program differs from other literature-supported intervention is in the measures used to detect changes in treatment outcomes. Other researchers have mentioned the challenge of finding outcome measures sensitive enough to detect changes in attachment specifically with regard to those who have experienced early developmental trauma (Kagan, et al., 2013, Kagan, et al., 2008). This has also been a reported challenge throughout the development of the TAG program (personal communication with TAG staff, 2014). The current study suggests that the PRQ (most specifically its subscale for attachment) may indeed be sensitive enough to detect changes in caregiver-child related relational outcomes in this population.

One study depicting similar change in relational outcomes to TAG utilized a child-rated measure to detect changes in the caregiver/child attachment relationship (Kagan, et al., 2008). This measure, a 15-item, Security Scale (SS) (Kerns et al., 1996), with a "some kids" and "other kids" format, may be worth considering for future research, particularly because it gives voice to the child's perspective on attachment outcomes. Children in their investigation were read statements describing other children, and were then asked to identify to which children and to what extent they felt similar. According to its authors, this scale has good internal consistency and reliability coefficients exceeding 0.80, although reportedly, at times, lower for children in the 8–10 year-old range (Kerns et al., 1996).

7.2 Findings from the Current Research Program

The major findings from this current research project suggested that the TAG program may be meeting its three major outcome goals of: fostering an increase in attachment; supporting a reduction of children's trauma symptoms; and increasing parental reflective functioning. Discussion regarding these findings is presented below.

7.2.1 Primary Outcome Measure - PRQ

The overall quantitative findings indicated that including caregivers in dyad-based treatment may have enhanced the attachment related outcomes, even in middle childhood, which is consistent with previous research findings and suggestions (Joussemet et al., 2014; Knoverek, et al., 2013; Toth, et al., 2013; Purvis, et al., 2013; Arvidson, et al., 2011; Schore, 2001). Analysis of pre- and post-test caregiver reported measures demonstrated significant improvement over the course of the program in attachment (the primary outcome measure), as well as improvements in communication, discipline practices, involvement, and relational frustration. The improvements in communication and involvement could be considered to represent aspects of increasing attachment between caregivers and children. The scores on the discipline practices sub-scale show a decrease after receiving treatment, which might reflect increased caregiver attunement related to the specialized parenting required to support children with attachment trauma (Purvis, et al., 2013). Additionally, the significant reduction in caregiver relational frustration is a positive finding, given the strong links between parental stress, family function, and child outcomes (Cornett & Bratton, 2014; Bradley & Mandell, 2005).

Addressing the specific areas in which change was evident in the subscales of the PRQ, it was of interest that caregivers' answers indicated a greater change in some areas than others. While the relatively small sample size may contribute to this difference, there were nonetheless many statistically significant changes in the 4 of the 6 subscales outside of the attachment subscale (Table 2 from section 6.3.2. is reproduced below for convenience).

Table 2. Results From the Parenting Relationship Questionnaire (PRQ) Subscales

PRQ	Pre-Test (SD)	Post-Test (SD)	*t*-test	p (sig)
Attachment (+)	37.23 (9.5)	41.95 (10.8)	-3.258	**0.001****
Communication (+)	38.55 (13.2)	42.25 (12.2)	-2.441	**0.045***
Discipline Practice (-)	43.35 (11.2)	38.50 (10.4)	2.498	**0.003****
Involvement (+)	44.20 (8.2)	48.50 (8.4)	-3.580	**0.001****
Parent Confidence (+)	41.35 (9.6)	42.90 (10.1)	-1.134	0.277
School Satisfaction (+)	46.03 (11.9)	46.18 (9.8)	-0.070	0.935
Relational Frustration (-)	65.73 (11.2)	61.10 (12.2)	3.413	**0.003****

*$p<0.05$, **$p<0.01$

(+) or (-) after the sub-scale refers to the expected direction of change in mean scores

A study looking to understand the effects of Mindfulness-Based Stress Reduction (MBSR) on parents of children with a developmental delay (Lewallen & Neece, 2015) divided all sub-scales on the PRQ to determine individual impacts of MBSR training on the various relationship factors assessed by the PRQ. Similar to findings in the current study, they found statistically significant decrease in relational frustration, though they were also able to demonstrate an increase parental confidence, which this study did not. All other areas demonstrated a small (attachment, and discipline practices) and small to medium (involvement) effect size with no statistical significance reported following treatment. They linked this lack in significance to underpowered analysis.

Another study looked to understand the effectiveness of teaching parent-training skills through videoconferencing to parents of children with ADHD (Xie, et al., 2013) and found statistically significant increase in discipline practices in families utilizing the videoconferencing training and hypothesized that this improvement would lead to increased parenting confidence, but did not comment on any other subscale of the PRQ. What may be relevant in both investigations is the way in which intervention at the parental relationship level may increase a caregiver’s ability to effect change on their relationship with their child through various areas of relational functioning and see positive therapeutic results. In both investigations (Lewallen & Neece, 2015; Xie, et al., 2013) though statistically significant improvement was demonstrated in certain relational elements of the PRQ, neither was able to demonstrate an increase in attachment as this study demonstrates was possible in TAG (though neither listed attachment as their primary hypothesis with regard to the use of the PRQ). And the retrospective cohort data involved in this study demonstrated that participation in TAG allowed for statistically improved outcomes in 5 of the 7 subscales of the PRQ, potentially highlighting that the mechanisms of change inherent in the program revealed in the qualitative components of this study (relationship as locus of change, group process, and psychoeducation-based content), may help to support the caregiver in the improvement of various components that may be involved in improved caregiver/child relationship function.

Also worth considering with regard to PRQ related findings, is the correlation between when the program break occurred (3-month summer or 2-week winter) and improved attachment scores, it may be relevant to consider options that can maximize this benefit (i.e. would resources be better applied to run both cohorts from September of one year to June of the following year?).

7.2.2 Other Outcome Measures

7.2.2.1 PROPS

The candidate found a marginally significant reduction in child trauma symptoms, as reported by the caregiver on the PROPS measure ($t = 2.010$, $p = 0.053$). While there is no clear rationale for why these scores were not as statistically significant as those for several of the PRQ subscales, one possibility is that this may partially reflect different timeframes for measurement, since the PROPS symptom checklist only identifies symptoms occurring within the last seven days. Reasons for this could also include the clinical phenomenon in which temporary symptom *increase* is seen as a result of participating in treatment. It is also conceivable that this trend towards statistical significance could reflect the adult's increased recognition of trauma symptoms and/or the child's increased security to share previously hidden traumas following past physical or sexual abuse. Both of these responses could increase the perceived severity of some symptoms in safer, more understanding environments, a finding suggested by others who have utilized this measure in previous research studies (Kagan, et al., 2008; Saylor, et al., 2003). As well, movement through the three-stage model of treatment has the tendency to proceed in a fluid, rather than linear manner. There is potential for the possibility that a caregiver-reported score at termination could be impacted by a child who's behaviour is reflecting that they are still actively in the second stage (Trauma Resolution and Recovery). The severity of behaviours expressed by the children participating in the TAG program may also play a role in this marginal increase. As mentioned, scores higher than 16 on the PROPS determine PTSD level symptoms, and at baseline 40 of 51 youth in this study sample had had a score of 16 or above. This observation may have impacted the ability to measure change that reached statistical significance. The addition of future cohort results, as well as more in-depth analysis of the correlation between cohorts and other demographic data, may help clarify this issue.

7.2.2.2 PRFQ-1

In addition to the PRQ results listed in the previous section, there were statistically significant improvements in the caregivers' reflective functioning at the end of their participation in the TAG program. This ability of caregivers to recognize and understand both their own and their child's feelings about the parent-child relationship, as seen in the caregiver scores on the PRFQ-1 ($t = -2.464$, $p = 0.019$), may have come from the program’s focus on psychoeducation of trauma. Both facilitators and participants credited the increased awareness of the effects of trauma on their children with allowing them to “not take it personally” and to learn to take time to understand both what’s behind the behaviour and their reaction to it before responding, a key component of reflective functioning (Katznelson, 2013). One parent mentioned that participating in TAG allowed him to learn to “pause” before responding (words in italics were emphasized by participant):

> “And that’s what TAG taught you to do. Try and- when something is starting to escalate- try and just take that 5-second break, if you can. To think, ‘where is this coming from?’ and not only…’where is this coming from’ from them, but there might be nothing wrong with what *they’re* doing it might be coming from *you*. And it might be the ability to stop and think that, ‘where is this coming from, which story, which piece and *why*?’ And now (that) I understand why, it makes it *that* much easier to deal with. Because if you understand why and where, you can respond to it more appropriately.” (TP4)

And though a review of the literature located limited use of the PRFQ-1 in other investigations, one study utilized the PRFQ-1 and demonstrated that parental reflective functioning may be related to infant distress tolerance and other “persistence behaviors in parenting contexts” (Rutherford, et al., 2013). What this may support in regard to the current study is that an increase in reflective functioning could be helpful in allowing a parent to more easily support and tolerate maladaptive behaviours in their youth, particularly those that appear resistant to immediate change.

7.2.3 Qualitative Measures

A key function of this study was the inclusion of qualitative methodology to draw out further conclusions regarding the mechanisms of TAG that may be responsible for its efficacy. Addressing the primary research question, the potential efficacy of the program was determined utilizing the retrospective analysis of caregiver report measures given at pre-TAG and post-TAG participation. These results were further supported by facilitator-generated information in the charts. The next step sought to understand more about the way in which the individuals participating in the program extrapolated its value.

The charts provided an opportunity to examine the flow of information, register facilitator perspectives on therapeutic change in TAG participant's behaviour, and assert more detailed information on the tools and techniques utilized in the TAG program. The opportunity to view the progress as charted by facilitators added richness to the pre- and post-test scores in the qualitative data collection component of this research. One element of "significant contribution" of a study is the potential for creating an opportunity for "methodological significance" (Tracy, 2010), which is taken to mean that by introducing an element of methodology that is not traditionally utilized to study this phenomenon, rigour can be enhanced. In a way, this may be relevant in the chart review component of this study. A search in the literature revealed little in the way of qualitative, retrospective chart review in ethnographies (as outlined in Chapter 7 of this paper), however the qualitative review and analysis of this clinical chart data appeared to offer an intriguing picture of the TAG program. The other elements of significance will ultimately be undecided until the research has an ability to be utilized by those who read it. Nonetheless, this evaluative investigation was intended to contribute to the literature with regard to offering a credible option for best practices with regard to relevant treatment options for youth who have experienced early developmental and relational trauma.

Focus group participants demonstrated richness to their discussion not inherently found in the same depth in the interviews with TAG facilitators. This may be attributed to the participants' strengths in building on the thoughts and opinions of other participants (Plummer-D'Amato, 2008a). The de-brief interview between the candidate and assistant, following the focus group, provided and opportunity to explore the interactional qualities of the facilitators. Though the content of their answers mirrored the opinions of the other two facilitators who provided interviews, the context in which they were shared allowed for a further engaged and enigmatic response to the research questions. Participants were observed actively drawing one another out and encouraging further reflection. The facilitator participants supported each other's responses through non-verbal and verbal acknowledgment, referred to one another for further insight, leaned in to each participant as in active listening techniques, and appeared to take care to not misrepresent the views of others. This engagement and clear picture of group dynamics verified the use of a focus group as a data collection tool in this study.

Thematic analysis of the focus group and interviews with TAG facilitators and interviews with caregiver participants of the program provided insight into 3 major themes that may substantiate changes reflected in TAG treatment outcomes. The three themes that arose were: "Relationship as locus of change"; "Group process"; and "Psychoeducation-based content". These elements are reflected in previous research which suggests that caregivers be included in treatment (Knoverek, et al., 2013; Purvis et al., 2013; Arvidson, et al., 2011; Dozier, et al., 2009; Jackson, et al., 2009; Purvis, et al., 2007; Erikson, et al., 1992), that outcomes are improved through group participation (Deblinger, et al., 2016; Puckering, et al., 2011; Sprang, 2009; Dandforth, et al., 2006), and that facilitation of psychoeducation can enhance program effectiveness (Knoverek, et al., 2013; Arvidson, et al., 2011; Sprang, 2009; Kagan, et al., 2008; Fonagy, et al., 2007; Danforth, et al., 2006; Erikson et al., 1992).

Through healthy caregiver/child relationships (Theme #1), behavioural effects of early relational trauma appeared to be re-worked as children began to feel safe in the context of caregiving relationships (Jackson, et al., 2009; Sprang, 2009; Perry & Szalavitz, 2006; Hughes, 2004; George, 1996; van der Kolk & Fisler, 1994; James, 1989). This strengthened relationship was also proposed to support the caregiver in managing these behavioural effects of trauma in a more adaptive and less destructive way (Sprang, 2009; Hughes, 2004; Rushton & Mayes, 1997). This increased skill may eventually account for lowered rates of placement disruption (Rushton & Mayes, 1997) and behavioural symptomology (Kagan, et al., 2013; Kagan, et al., 2008; Timmer, et al., 2005).

Child-centered play during "kit time" may facilitate the ability for the child to learn how to create and be imaginative, a common deficit in the lives of children who have experienced early developmental trauma (Arvidson, et al., 2011). Play may be the primary way in which children learn to "communicate their internal experience, master developmental tasks, and self-regulate". Giving a child the opportunity to direct play may aid in the creation of this competence through giving them the opportunity to practice problems solving, discover and explore aspects of themselves, and address and identify feelings in a neutral place. It is plausible that "kit time" may aid in the development of self through uninterrupted time with caregiver attuned engagement, mirroring, reflective statements, tracking of play, and in allowing the child to direct the play. Having this occur within the context of the caregiving relationship is believed to increase the efficacy of the development of positive self-concepts for children (Cornett & Bratton, 2014; Purvis, et al., 2013; Arvidson, et al., 2011). This may also help children see that they can have an impact on their environment and are not simply passive participants (Fonagy, et al., 2007; Hughes, 2004). Programs such as Child Parent Relationship Therapy (CPRT) (Cornett & Bratton, 2014) also demonstrate improved parent/child relationship through teaching parents how to conduct at-home play sessions with their children in a filialtherapy, child-centered play therapy approach. However, unlike with the TAG program, the child does not attend the group parent sessions.

Also important to consider with regard to this primary relationship theme, the caregiver/child dyad-focused design differentiates TAG from the Positive Parenting Program (Triple-P) (Scmidt, et al., 2014; Sanders, et al., 2003), and other parent training programs (Danforth, et al. 2006), which were provided to caregivers, only. In addition to programs, which provided stage-based trauma-focused cognitive behavioural therapy (TF-CBT) intervention only to youth (Cohen et al., 2012) with a caregiver education component. This relationship-focused design allowed for in-group practice of skills potentially enabling the TAG facilitators to support improved parenting skills related to attunement in an environment geared toward positive reinforcement of behaviour (Lewallen & Neece, 2015). Also presumably supporting facilitator recognition of lacking attachment skills, in addition to a more immediate ability for reinforcement, correction and role-playing, found to improve parent/child relationships in other research settings (Parent-Child Interaction Therapy- PCIT) (Timmer, et al., 2005). The dyad-based design of TAG may also have encouraged the transfer of skills to other environments, (Levine, 2010), and fostered the development of safety and security with the caregiver in place of the therapist or facilitators (Purvis, et al., 2013; Levine, 2010; Pearlman & Curtois, 2005; Timmer, et al., 2005; James, 1989). Both of these potential benefits may confer clinical advantages of dyad-based intervention as compared to other program designs.

With regard to caregiver/facilitator relationships, also an element of this primary relational-based theme, several previous studies have suggested a positive connection between a strong therapist/client relationship (therapeutic alliance) and improved clinical outcomes (Schmidt, et al., 2014; Stratford, et al., 2009; Horvath & Symonds, 1991), particularly when the client rather than the therapist acknowledged this alliance. With this idea in mind, one study (Kagan, et al., 2008) looked to the alliance procured between the child client and the therapist as a key element of program efficacy with the Working Alliance Inventory (Horvath & Greenberg, 1989) with promising results. A more conscious focus on facilitator/caregiver alliance as a positive predictor of outcomes could potentially change perspectives with regard to "non-compliance". Those who appear unwilling to comply with treatment could indicate, instead, an increased need for facilitator connection and individualized supports. Future studies could look to understand outcomes more clearly through the inclusion of an awareness of the impact of this working alliance.

Group settings (Theme #2) are recognized as a way to enhance treatment outcomes in mental health treatment (Deblinger, et al., 2016; Puckering, et al., 2011; Sprang, 2009; Danforth, et al., 2006). Whether this is due to increased social support, or from the opportunity provided to caregivers and youth to self-reflect (Puckering, et al., 2011), it appears to create a haven for individuals who are typically feeling ostracized and alone. In relation to this TAG program, while all participants mentioned the group aspect as a key mechanism of change, several participants reflected that the building of community was something they valued not just while participating in the program, but following completion. A participant who had a "mixed" response to the TAG program shared in her follow-up correspondence that though she was unable to find this community support through TAG participation itself, watching others do so encouraged her to actively pursue building her own community.

Many studies assert the importance of including psychoeducation in treatment programs (Knoverek, et al., 2013; Arvidson, et al., 2011; Sprang, 2009; Kagan, et al., 2008; Fonagy, et al., 2007; Danforth, et al., 2006; Erikson et al., 1992). Unique to this study, trauma-related psychoeducation (Theme #3) is provided to the caregiver/child dyad in a group setting. While no similar approach has been published for children of a similar age, one study looked to provide a relationship-focused, group intervention with caregivers of 0-6 year olds with attachment-related problems (Sprang, 2009). This study cited significantly lower scores in parenting stress, potential for abusive behaviour in caregivers, and child behavioural symptoms than controls following involvement in their intervention. In a similar manner to the TAG program, these authors credited clinical improvement with their group psychoeducation, i.e. teaching caregivers to better manage emotions and increase their parental attunement to their child in a group setting. An opinion reflected in other research recommendations (Rahim, 2014; Knoverek, et al., 2013; Danforth, et al., 2006).

What did not come, as easily, in the analysis process was the overall metaphor: "Teach by Example" (in Section 7.4.4). In line with other research conclusions (Stratford et al., 2009), it is conceivable that TAG's effectiveness may be linked to the *manner* in which the group is facilitated, rather than to the design, structure, and techniques of service delivery alone. In an attempt to understand more about this potential, qualitative research methods were utilized to learn more about the elements of the program that support these outcomes. Analysis of the focus group transcripts highlighted the way in which the relational approach embodied by the facilitators impacted the way they delivered the material (psychoeducation) to the dyads in the group. As mentioned, the members of the focus group demonstrated various interpersonal skills that encouraged the belief that this was a traditional style of service delivery. The supposition that the facilitators of TAG lead and "Teach by Example" emerged from the data, though it is recognized that these elements of *relationship* cannot be easily studied or verified. However, the effort facilitators appeared to place into creating "felt safety", a sense of belonging, and a purposeful coming together under a shared experience may, in fact, have provided the impetus for concluding that the way in which relationships are modeled in an environment may itself be underlying that positive change.

7.2.3.1 Reflexivity

Reflexivity, or how the study influences the researcher, is an important element of quality in qualitative research (Tracy, 2010). Through extensive reflexive journaling and conversations with study and professional colleagues, the PhD candidate explored the various ways in which this research validated and challenged her assumptions of what is involved in quality intervention and care. The reflexivity journey also included an examination of ways in which the PhD candidate herself influenced the participants or study phenomenon itself.

During the literature review portion of this research the PhD candidate was introduced to the term "relative insider" (Witcher, 2010) referring to the dichotomy that exists from having both an "insider" and "outsider" role in one's research. What resonated was possessing an "insider" perspective with regard to training and experience in trauma and attachment, working with children in care and the families who support them, and having facilitated in the TAG program itself. Not belonging to either group of participants, (facilitators or caregivers participating in TAG in the study years) establishes the "outsider" perspective. The role of "relative insider" supported study design, data collection and analysis in various ways. An extensive knowledge of the study topic supported a more relevant exploration of research question design. Experience with the TAG program provided sustenance to the TAG program description, sample demographic, and background knowledge. During interviews and chart review data collection, the PhD candidate's role as a mental health therapist allowed for a more in-depth understanding of chart structure, therapeutic language, and interview skills. Following the interviews, insider knowledge of TAG and clinician "language" supported accuracy of transcription enhancing "quality of transcripts and integrity of interpretation" (Witcher, 2010). What was not as developed by Witcher (2010), was the *downside* to being a "relative insider": the deeper need for self-reflection and "checking in" to ensure shared meaning is not gleaned where clarity of meaning should be sought. And finally, the awareness that the candidate was not a “cheerleader” of the TAG program, but instead, a “researcher/evaluator”, lead to the need for increased reflexivity and attention to neutrality where necessary and appropriate (as in the next example provided in this section).

The most predominant impact on the researcher, during data collection, was that of the conflicting opinions expressed by one TAG caregiver participant. As a proponent of the TAG program in its efforts to support families who are often ostracized and alone, it was disappointing to hear that a participant had such mixed feelings about the program. It was through participation in this interview, transcription, and analysis that clarity arose for the candidate around the distinct role of the facilitator in engaging the participant to participate in treatment. This caregiver participant underscored the importance of removing blame from the client for limited treatment compliance or “bad attitude.” What became relevant, instead, was to look to the many missed opportunities facilitators had to connect with and build relationship with this client; and the ways in which this connection could have potentially secured different outcomes for her. As such, coding the interview transcript, these conflicting experiences were coded as a missed opportunity (“missed opp”) by TAG staff to meet the emotional needs of this participant. This experience provided an example of the variety of ways in which relationship forms the *foundation* of treatment in any setting or capacity.

Lastly, it is through the attachment theory-based lens (explored in the Introduction, Section 3.1 of this manuscript) that the data was collected, analyzed and disseminated. The inferences made were uncovered through the researcher’s understanding and analysis of the mechanisms behind the building of relationships. This lens provoked the main meta idea behind TAG’s effectiveness, the “Teach by Example” metaphor (see Section 8.4.4 in Focus Group and In-depth Interviews).

That the PhD candidate sees value in nurturing the caregiver in order for him or her to do so in their own relationships with their children was, in whole, influenced by the way attachment relationships were recognized and presented in the data. The concept that TAG facilitators "parent the caregivers so they can parent their children", was not something that came out of the mouths of participants until it was voiced by the PhD candidate (while summarizing dialog presented in the focus group discussion). However, through member reflections with caregiver participants, discussion with study team members, and exploration with peer reviewers, this idea was confirmed and brought to light in a way that was not initially extrapolated by the participants.

Great effort was made to account for rigour through continuous collaboration with the study team and participants, reflexivity work (journaling, etc.), peer review, and checking back with the literature itself, prior to solidifying findings. Further reflexive impacts will come to light in the knowledge translation stage of this research as the PhD candidate shares her findings with the TAG team.

7.3 Answering the Research Questions

Two initial research objectives were proposed: To assess the effectiveness of the TAG Intervention in creating changes in attachment, trauma symptoms and caregiver reflective functioning; and to identify the specific elements of the program that yielded the most relevant positive change. The first objective was addressed by collection and analysis of both retrospective and prospective data consisting of standardized scales, as well as the retrospective examination of clinical charts. The second was accomplished through a focus group and interviews with TAG facilitators, and individual in-depth interviews with TAG caregiver participants.

The major findings from this research suggested that the TAG program has met its three major outcome goals of: fostering an increase in attachment;

supporting a reduction of child-experienced trauma symptoms; and increasing parental reflective functioning. The clinical charts demonstrated these changes through facilitator-generated documentation of change in all three areas, with a less clear delineation of changes in child trauma symptoms.

Consistent with other research, the use of ethnographic methods proved illuminating to the "hidden benefits" (Henry, et al., 2007) of the TAG program for participants. Thematic analysis of a focus group and interviews with TAG facilitators and interviews with caregiver participants of the program provided insight into 3 major themes/elements that may substantiate the changes reflected in the above outcomes. The three themes that arose were: "Relationship as locus of change"; "Group process"; and "Psychoeducation-based content". These are reflected in previous research, which suggests that caregivers be included in treatment, that outcomes are improved through group participation, and that facilitation of psychoeducation can improve treatment outcomes.

Analysis of the focus group transcripts also highlighted the way in which the relational approach embodied by the facilitators impacted the way they deliver the material (psychoeducation) to the dyads in the group. The effort facilitators appeared to place into creating "felt safety", a sense of belonging, and a purposeful coming together under a shared experience may, in fact, have in itself facilitated an environment that promotes change.

7.4 Limitations

The present study is an evaluation of a naturalistic program. As such, it was not designed as a clinical study, and this therefore limits the conclusions. Some of these limitations include the absence of a control/comparison group, which may prevent more robust or generalizable conclusions. There is also no clear understanding at this time as to whether all components of the present program are required to achieve clinical outcome goals. Also, given the intensity of the program, the resources required to support it for a relatively small number of children may be appreciated when consideration is given to competing funding demands. Another limitation in the quantitative data collection component of this study was the lack of participant cultural/ethnicity data available for analysis. It is conceivable that the child client’s specific cultural needs may be relevant in exploring behavioral and relational effects of trauma on a caregiver/child relationship. It warrants future research endeavours to explore cultural and ethnicity-based impacts on TAG program involvement.

Some may view the ethnographic approach to this investigation as problematic (Cruz & Higginbottom, 2013). It may be contested due to its “lack of precision and consensus of definition” due to the fluid boundaries with which it explored this phenomenon. Of particular scrutiny may be the challenge with replication of results, or that another researcher may uncover the same findings. In order to help assuage these concerns, strict procedures for quality were adhered to throughout and have been clearly identified in this dissertation.

In terms of future research, it should be noted that although randomized controlled studies with no treatment are clearly inappropriate and unethical (due to the withholding of treatment), it might be possible to consider comparisons to a randomized wait-list control. Such future prospective research may help elucidate the potential benefits of this program in comparison to other interventions. Comparisons could also be made to the successes experienced in other such intervention programs should they become available. Nonetheless, it is also possible that the individuals who seek out interventions, such as the TAG program, arrived after attending (and often failing at) various other interventions (Purvis, et al., 2007) and may be exhibiting higher than normal disruptions. As a result, the improvements they report may be a “reversal of that downward trend” or those of a “treatment-resistant” group, and therefore any improvements have some value regardless of the lack of a control group.

In terms of future research, there may be opportunities to compare TAG participant outcomes with those who attend other CASA programs (most particularly the Trauma Program). There could also be interest in the performance of a “true” ethnography in future research. As this study was, in essence, purely retrospective, what may be of value is following one or two cohorts through their prospective involvement in the TAG program utilizing similar data collection and analysis methods as the current study. This may also be a way of enhancing the validity of the findings presented here.

Another significant limitation of the information available for analysis was the lack of long-term follow-up. As with others who provided interventions with youth who have early attachment related trauma (Purvis, et al., 2007), CASA’s Evaluation and Research team reached out to parents with phone surveys, though they were not included in analysis for the current research project due to time constraints and lack of applicability to the current study sample. Such longer-term follow-up with youth emerging from adolescence could substantiate the ability of the TAG intervention to ameliorate long-term impairments caused by early attachment related trauma.

There are several other limitations in the current study, many of which involved the chart review. Firstly, there were rich sources of data excluded from the chart review due to time and relevance for this study’s focus. Some examples of this exclusion were: TAG I midsession interview with caregivers, case notes, phone call logs, session notes, pictures, and drawings. In making the decision to extract chart data reflecting the quantitative data collection points, other relevant documentation regarding the outcome measures may have been missed.

Several limitations with regard to content and context of chart data were also relevant: The positive, subjective focus with which information is typically recorded in behavioural and clinical reports, the original intention of chart data (i.e. not for research purposes), and discrepancies in clinician or patient recall, may all add to incomplete or inaccurate data collection (Dworkin, 1987). Also, as the person extracting the data from the charts was not the person who entered the information, there was an increased risk of interpreter bias. It is for these reasons that the charts were used to supplement other methods of data collection for this study, rather than as the primary study outcome.

A limitation with regard to the quantitative and qualitative data collection strategies was the lack of inclusion of youth participant perspectives. Limitations on available retrospective data from child-generated measures did not provide the youth perspective on changes that occurred in the three major outcome areas. In the qualitative portion of the study, limitations on time and access did not allow for the inclusion of youth participants, which would likely have provided a rich addition to the TAG story. Of particular caution, their perspectives were provided through the caregiver, which is not always the most reliable interpretation of youth perspective. As well, not all facilitators or caregivers were able to be interviewed, so while the sample size met the original data collection goal, it is important to clarify that interpretation is based only on the individuals who were interviewed and is therefore, not the only potential explanation of a TAG participant’s experience.

Finally, the TAG intervention is provided free of charge to the participants as part of general health service coverage in Canada. Outcomes may be different if a similar program required caregivers to pay for the therapy.

Thus, while the current research may have highlighted potential benefits of participating in the TAG program, it does not fully delineate effects that might be demonstrated in other intervention research. Nor does it clarify if all aspects of the program were required to produce these outcomes, or if improvement was due to only some aspects of program delivery. For all these reasons, further research is recommended.

7.5 Future Directions

Several important recommendations for future research can be made. Due to time constraints and the structure of the overall study design, no emphasis was placed on the youth portion of the program and its influence on outcomes. Interventions that modify youth behaviour, reflective functioning, and affect regulation states, have played a role in changing long term outcomes of early developmental trauma (Knoverek, et al., 2013; Arvidson, et al., 2011; Purvis, et al., 2007) and should be further examined. The TAG program has child break-out sessions which appeared to address these suggestions, but limitations on time and resources did not allow the inclusion of these data in the current analysis.

Reviewing clinical charts of TAG participants helped clarify the very wide variation with which clinical information is recorded in patient charts. For the purposes of evidence-based intervention, developing a standardized, consistent manner of recording information and processes inherent in an intervention program is warranted. It is recommended that those recording participant progress have specific training regarding outcome expectations to help ensure that all individuals documenting information in the client record do so with comparable rates of accuracy (Pan, et al, 2005). Ideally, whenever possible, the same team member should fill out measures at both intake and completion of the program to support continuity and accuracy of what is being measured. This recommendation has been made in personal communication with TAG staff.

Another area of consideration includes the dependence on community resources and a cost-benefit analysis of involvement in such programs (Cook, et al., 2005; Biglan, 2012). TAG is a highly intensive multimodal, multidisciplinary approach that is not always a possibility for those providing day-to-day supports for this population. Examination of measurable economic impacts of TAG or other similar programs would help further understand any potential applicability to other settings. This could be through exploration of a change in both direct costs (staff time particularly) and indirect costs (i.e. tutors, behavioural supports, special education, criminal justice, legal, medical supports, etc.), as well as through an understanding of placement stability and other indicators of improved clinical outcomes. It would also be relevant to explore ways in which these findings could be adapted to settings where not all three recommendations are available (dyad-based, group setting, psychoeducation) and still benefit the mediation of the effects of early trauma on long-term functioning.

7.6 Conclusion

This largely retrospective, investigative, and evaluative ethnographic exploration of CASA’s TAG program utilized various methods of data collection and analysis. The iterative process and integration of data sets appears to have led to an enhanced understanding of the structure and essential characteristics of the program. This process identified some of the ways in which this intensive, multimodal, multidisciplinary intervention has effectively supported families and their youth who have experienced early developmental and relational trauma.

In addition to providing support for the proposed effectiveness of relational intervention for healing attachment-related trauma with children aged 5-11, the results of this study contribute to current therapeutic recommendations that caregivers be included in treatment, that outcomes are improved through group participation, and that facilitation of psychoeducation can improve outcomes.

Overall, the study supports the effectiveness of implementing trauma and relationship-focused treatment and may be relevant in a wide range of child welfare programs and interventions (Stewart, et al., 2013). Though generalizability is not typically a cornerstone of qualitative research (Leung, 2015; Cruz & Higginbottom, 2013), it is important to consider the implications of these findings in the broader community (Biglan, et al., 2012; Tracy, 2010).

Certainly the findings may help others developing relationship-based programs to consider key treatment considerations. What may be particularly relevant is the role clinicians play in the dissemination of these findings with regard to supporting community, social, educational, faith-based, and other potential outlets for change (Biglan, et al., 2012; Catania, et al., 2011; Raphael, 2000). Even if all suggestions for improved outcomes (dyad-based, psychoeducation in a group setting) are not realizable, clinician awareness of the grievous lack of trust emanating from a history of interpersonal trauma can result in more worthwhile attempts to build rapport, provide education, and engage in emphatic follow-up, which may improve adherence to clinical recommendations (Knoverek, et al., 2013). Collaborative care formats that focus on social and mental health services in partnership with primary medical care may also be a way to achieve a more efficacious attempt of support (Brent & Silverstein, 2013; Johnson, et al., 2013; Catania, et al., 2011). Mental health care providers must also be advocates for social policies that can help families secure a safe and nurturing environment for their children to develop into capable and healthy adults (Biglan, et al., 2012). Facilitators should be cognizant that families often start treatment programs when at their most exhausted and exposed condition. Findings from this research indicate that emphasis on relationship building begins with the facilitators, and appears to extend through all phases of treatment.

In conclusion, the TAG study suggests that an attachment/trauma-focused, dyad-based, treatment in a group setting may serve as an effective support for families who experience the maladaptive behavioural impacts of early trauma, in line with recommendations from relational intervention literature (Stewart, et al., 2013; Hughes, 2004). Multimodal, multi-level interventions, combined with the introduction of a healthy and focused relationship, may be the key to promoting change in relationships challenged by the adverse effects of early developmental trauma. Child abuse and neglect perpetuate a costly burden to the public health sector (Gelles & Pearlman, 2012) with a total lifetime burden demonstrating a potential $124 billion impact on society (Fang, et al. 2012). Further evaluation may help more clearly define potential demographic and program components that contribute to the success of the program, as well as to explore the costs associated with the feasible provision of such care in the general population.

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FOCUS GROUP PARTICIPANT INFORMATION LETTER

Title of Study: Effectiveness of a Trauma and Attachment Group (TAG) Intervention for Youth.
Principal Investigator: Peter Silverstone, 780-407-6576.
Research/Study Coordinator: Chandra Ashton, 780-400-4541.

Why am I being asked to take part in this research study?

As a facilitator of the Trauma and Attachment Group (TAG) Program at CASA, you are being asked to participate in a focus group with other TAG facilitators. Before you make a decision one of the researchers will go over this form with you. You are encouraged to ask questions if you feel anything needs to be made clearer. You will be given a copy of this form for your records

What is the reason for doing the study?

This study is being conducted in an effort to better understand the effectiveness of the TAG Program at CASA in the lives of youth who have experienced attachment/developmental trauma. As a participant of the TAG program, caregivers and youth are asked to fill out questionnaires. We have collected and analyzed the answers provided on these questionnaires by past TAG participants (2011-2015) and it appears as though TAG has a positive impact on attachment relationships, reduces trauma symptoms in youth, and increases a caregiver's reflective functioning within their relationship with their youth. We are interested in learning what it is about TAG that makes these changes happen.

What will I be asked to do?

Should you choose to participate, the focus group will be held at a CASA location and will be moderated by one study investigator (Chandra Ashton) and a note taker (Anna O-Brien-Langer), and will be approximately 2 hours in length. The interview will be recorded and what is said during the interview will be kept confidential to the extent permissible by law, with no facilitator names being used in analysis or reporting of the results. All identifiable information will be in the hands of CASA at all times and will not be disclosed to the study team, or in the final results and the audio recordings will be destroyed after the study has been completed.

What are the risks and discomforts?

There are no known risks to participating in this type of study. However, it is not possible to know all of the risks that may happen. As a result, the researchers have taken all reasonable safeguards to minimize any known risks to a study participant.

What are the benefits to me?

You are not expected to get any benefit from being in this research study, though your input and perspective may help to find ways to improve the TAG program for those who participate in the future.

Do I have to take part in the study?
We believe your story will provide a valuable contribution to the results of this study. You are in no way obligated to participate, or to answer any questions that make you uncomfortable. You can withdraw at any time should you chose to do so and it will not impact your employment or future involvement with TAG, though we may need to keep the data that we have collected to that point. To participate, please sign the consent form provided with this letter and return it to Anna O'Brien-Langer in the envelope provided.

Will my information be kept private?
The focus group will be recorded and what is said will be kept confidential to the extent permissible by law, with no facilitator names being used in analysis or reporting of the results. Some of your comments may be used in reports and presentations in order to support the conclusions drawn at the end of the study, but these comments will be carefully chosen so that they do not identify you. All identifiable information will be in the hands of CASA at all times and will not be disclosed to the study team, or in the final results and the audio recordings will be destroyed after the study has been completed. The study information stored at the University of Alberta will be kept for five years after the study is complete.

Sometimes, by law, we may have to release your information with your name so we cannot guarantee absolute privacy. However, we will make every legal effort to make sure that your information is kept private. Also, due to the nature of disclosure of information in a group setting, while we will strive to protect the confidentiality of the data you provide, we cannot guarantee that others from the group will do the same.

What if I have questions?
If you have any questions about the research now or later, please call Anna O'Brien-Langer or Chandra Ashton at 780-400-4541.

If you have any questions regarding your rights as a research participant, you may contact the Health Research Ethics Board at 780-492-2615. This office has no affiliation with the study investigators.

Research Team contact information:
Chandra Ashton, M.Sc., Research Coordinator, 780-400-4541. Email: cashton@ualberta.ca
Anna O'Brien-Langer, CASA Research Officer, 780-400-4541. Email: ao-brien-langer@casaservices.org
Dr. Peter Silverstone, Principal Investigator, 780-407-6576

CASA Child, Adolescent and Family Mental Health
UNIVERSITY OF ALBERTA

PARTICIPANT INFORMATION LETTER

Title of Study: Effectiveness of a Trauma and Attachment Group (TAG) Intervention for Youth.
Principal Investigator: Peter Silverstone, 780-407-6576.
Research/Study Coordinator: Chandra Ashton, 780-400-4541.

Why am I being asked to take part in this research study?
You are attending the Trauma and Attachment Group (TAG) Program at CASA. We would like to invite you, to participate in a research project being conducted by the University of Alberta. We would like to learn about your experience in this program. Before you make a decision one of the researchers will go over this form with you. You are encouraged to ask questions if you feel anything needs to be made clearer. You will be given a copy of this form for your records.

What is the reason for doing the study?
The study team wants to learn how the CASA Trauma and Attachment Group (TAG) program impacts attachment relationships between youth and their caregivers. Trauma can affect an individual's ability to experience healthy relationships in many ways. We want to learn how participating in the CASA TAG program changes this dynamic.

As a participant of the TAG program, caregivers and youth are asked to fill out questionnaires. We have collected the answers provided on these questionnaires by past TAG participants and it looks like TAG has a positive impact on attachment relationships, reduces trauma symptoms in youth, and increases a caregiver's ability to think about their relationship with their youth. We are interested in what it is about TAG that makes these changes happen.

What will I be asked to do?
Should you choose to participate, we would also like permission to view the answers you give on the questionnaires you fill out at the beginning and the end of the program. During the interview, you will be asked to describe your experience as a participant in the program.
Your individual interview will be held at a location of your choosing, and will be approximately 2 hours in length. The interview will be recorded and what is said during the interview will be kept confidential to the extent permissible by law, with no names or identifying information being used in analysis or reporting of the results. All identifiable information will be in the hands of CASA at all times and will not be disclosed to the study team, or in the final results and the audio recordings will be destroyed after the study has been completed. It is possible that your interviewer will request a follow-up interview to ensure accuracy and clarity of information you provide.

What are the risks and discomforts?
There are no known risks to participating in this type of study, but it is possible that by describing your experience you may recall some upsetting things that happened

in the past. If that happens, you may take a short break or end this part of the study by telling the researcher what you would like to do.

It is not possible to know all of the risks that may happen in a study, but the researchers have taken all reasonable safeguards to minimize any known risks to a study participant.

What are the benefits to me? You are not expected to get any benefit from being in this research study. This study may help us find ways to improve the TAG program for those who participate in the future.

Do I have to take part in the study?
We believe your story will provide a valuable contribution to the results of this study. You are in no way obligated to participate, or to answer any questions that make you uncomfortable. You can withdraw at any time should you chose to do so and it will not impact your current or future involvement with TAG or CASA, though we may need to keep the data that we have collected to that point. To participate, please sign the consent form provided with this letter and return it to Anna O'Brien-Langer in the envelope provided. Anna will provide your first name and contact info to the study coordinator who will contact you to schedule an interview.

If at any point you would like to leave the study, you can telephone or email a member of the research team (below). You do not need to say why you want to withdraw from the study.

Will my information be kept private?
During the study we will be collecting information from and about you. This information will be stored on a password protected and encrypted computer system at the University of Alberta in the Department of Psychiatry. Your questionnaire data will be available to both CASA and the research team but only the research team will have access to your interview data. Your name will never be used in any presentations or publications about the study results. All the information from the questionnaires will be grouped so no one will be able to identify you or your youth in the final report. Some of your comments may be used in reports and presentations in order to support the conclusions drawn at the end of the study, but these comments will be carefully chosen so that they do not identify you or your youth. The information stored at the University of Alberta will be kept for five years after the study is complete.

Sometimes, by law, we may have to release your information with your name so we cannot guarantee absolute privacy. However, we will make every legal effort to make sure that your information is kept private.

By signing the consent form you give the study team permission to use the answers you have provided on the questionnaires, information about your relationship to your youth (i.e. mother, father, caregiver), and the description you provided about your experience in the TAG program. Demographic data, (such as age, gender and marital status) may also be used as long as it does not identify you or your youth. If you leave the study, we will not collect new health information about you, but we may need to keep the data that we have already collected.

What if I have questions?
If you have any questions about the research now or later, please call Anna O'Brien-Langer or Chandra Ashton at 780-400-4541.

If you have any questions regarding your rights as a research participant, you may contact the Health Research Ethics Board at 780-492-2615. This office has no affiliation with the study investigators.

Research Team contact information:
Chandra Ashton, M.Sc., Research Coordinator, 780-400-4541. Email: cashton@ualberta.ca

Anna O'Brien-Langer, CASA Research Officer, 780-400-4541. Email: ao-brien-langer@casaservices.org

Dr. Peter Silverstone, Principal Investigator, 780-407-6576.

CASA Child, Adolescent and Family Mental Health

UNIVERSITY OF ALBERTA

CONSENT FORM

Title of Study: Effectiveness of a Trauma and Attachment Group (TAG) Intervention for Youth

Principal Investigator: Peter Silverstone, 780-407-6576.

Research/Study Coordinator: Chandra Ashton, 780-400-4541.

	Yes	No
Do you understand that you have been asked to be in a research study?	☐	☐
Have you read and received a copy of the attached Information Sheet?	☐	☐
Do you understand the benefits and risks involved in taking part in this research study?	☐	☐
Have you had an opportunity to ask questions and discuss this study?	☐	☐
Do you understand that you are free to leave the study at any time, without having to give a reason and without affecting your affiliation with CASA/TAG?	☐	☐
Has the issue of confidentiality been explained to you?	☐	☐
Do you understand who will have access to your study records, (including personally identifiable health information?)	☐	☐

Who explained this study to you?

____

I agree to take part in this study:

Signature of Research Participant

____

(Printed Name)

____

Date: _________________________

Signature of Investigator or Designee: ___________________________

Date ________