Conduct Disorder:
New Directions in Promoting Effective Parenting and Strengthening Parent-Adolescent Relationships

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Abstract

Introduction: Although it is always preferable to prevent childhood mental health and behavioural problems, it is not always possible to do so early in their developmental trajectory. Adolescence offers another window of opportunity to intervene and reduce risk or prevent the development of late onset conditions. In this paper, we focus on adolescent Conduct Disorder, noting the special challenges of this developmental period and implications for interventions. We briefly discuss the growing evidence of the importance of parent and family targeted interventions. **Method:** Forty-eight adolescents with severe Conduct Disorder and their caregivers completed questionnaires at the beginning and end of a parent group program (Connect Parent Group). The program is guided by attachment principles and focuses on skill development in the domains of parental attunement, empathy and effective dyadic affect regulation. These skills are the building blocks of secure attachment and important components of effective parenting. **Results:** Caregivers' reports revealed significant improvements in their perceived parenting competence and satisfaction; reduced adolescent aggressive behaviour, internalizing and externalizing problems; and reduced levels of avoidance in the caregiver-adolescent relationship. **Conclusion:** These findings provide further support for the importance of parent and family focused interventions in the treatment of Conduct Disorder in both children and adolescents.

Key words: conduct disorder, treatment, parenting, parent-adolescent relationship, attachment

Résumé

Introduction: Bien qu'il soit préférable de prévenir les problèmes de santé mentale et les troubles du comportement, ce n'est pas toujours possible de le faire aussitôt qu'on le voudrait. La période de l'adolescence donne ouverture à certaines interventions susceptibles de réduire le risque, voire de prévenir certaines pathologies d'apparition plus tardives. Nous présentons ici les difficultés particulières rencontrées dans le traitement du trouble des conduites à l'adolescence en mettant en relief les difficultés particulières de cette période du développement et les conséquences au niveau de l'intervention. Nous discutons brièvement de l'importance grandissante des interventions qui visent à aider le parent et la famille. **Méthodologie:** Quarante-huit adolescents présentant un trouble sévère des conduites et les intervenants remplirent un questionnaire au début et à la fin d'un programme conçu pour les parents (*Connect Parent Group*). Les théories de l'attachement et le développement d'habiletés telles l'harmonie parentale, l'empathie et la régulation dyadique des émotions sont les principes directeurs du programme. De telles habiletés sont à la base même d'un attachement solide et d'interventions efficaces par les parents. **Résultats:** Les résultats ont montré une nette amélioration du sentiment de compétence chez les intervenants, une satisfaction accrue chez les parents, une diminution des comportements agressifs chez les adolescents et un niveau moindre d'évitement entre adolescents et intervenants. **Conclusion:** Ces résultats ajoutent encore à nos connaissances, à savoir que, dans le traitement du trouble des conduites chez les enfants et les adolescents, les interventions auprès des parents et de la famille sont de toute première importance.

Mots-clé: trouble des conduites, traitement, habiletés parentales, relation parent-adolescent, attachement

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Submitted November 25, 2005; Accepted January 8, 2006

Conduct Disorder (CD) is the most common psychiatric condition to precipitate contact with mental health professionals (Muntz, Hutchings, Edwards, Hounsome, & O'Ceilleachair, 2004). The magnitude of aggressive and antisocial behaviour problems that commonly occur in CD – particularly during adolescence – is challenging and often poorly addressed by mental health services. Consequently many youth become involved in the juvenile justice system and some become incarcerated for periods of time. Incarceration is expensive not to mention ineffective: in 1994, the estimated costs of detaining a young offender in Canada was $100,000 per year (Ontario, Standing Committee on Social Development, Children at Risk, July 1994). These costs have unquestionably risen since then. The burden of CD extends beyond childhood and adolescence: youth diagnosed with CD are at substantially higher risk for mental health problems and involvement in criminality in adulthood (Moffitt, Caspi, Harrington, & Milne, 2002). Cost estimates must also take into consideration 'indirect costs' such as the impact on victims and loss of economic contributions by both perpetrators and victims. In short, the costs of CD are high and the need for effective intervention to reduce risk and increase mental

health and social outcomes for youth with CD is great.

In the current paper, we discuss interventions for adolescent CD. First, we review the unique developmental challenges that occur during the adolescent period for youth and their parents. A thorough understanding of these challenges is essential to tailoring interventions so that they best address common problems and developmental issues that arise at this time. Second, consistent with other perspectives in the field (Chamberlain & Smith, 2005; Craig & Digout, 2003), we argue that it is critical to target the parent-adolescent relationship as a fundamental component in an integrated systemic approach to treating adolescent CD. Finally, we present empirical findings from a parent-group program developed to target key factors in parenting and parent-adolescent interaction patterns that have been empirically linked with problem behaviour and other forms of developmental psychopathology. This intervention draws from research on attachment, parenting and healthy adolescent development.

Pathways to Conduct Disorder

The causes and pathways to CD are diverse. Research has commonly identified child characteristics including difficult temperament, language deficits and impulse control problems as risk factors for CD in boys; when combined with family adversity including low socio-economic status, family violence and harsh and/or inconsistent parenting practices, risk for CD increases (Greenberg, Speltz, & DeKlyen, 2001). Although studies are limited, research suggests that similar risk factors play a role in the development of conduct problems in girls (Moretti & Odgers, 2002). Two major trajectories to CD have been identified: an early onset pathway, which carries considerable risk for life-course continuity, and a late onset pathway that typically emerges around adolescence.

When CD develops early, and is left untreated, it sets in motion a variety of direct and indirect processes that can 'lock in' development and make change difficult. These processes operate both at the level of the individual child and the parent-child dyad. Children fail to learn to inhibit aggressive behaviour and to use socially appropriate means to resolve conflict (Tremblay et al., 2005); dyadic interaction between parents and children becomes patterned into coercive sequences characterized by escalated negative affect and limited problem resolution (Patterson, 2002). An insecure pattern of attachment often develops, which limits opportunities for normative development of representational capacity, empathy and adaptive self-regulation (Hill, Fonagy, & Safier, 2003).

CD can also arise as children move into adolescence. Although the adolescent onset pathway was once thought to be less concerning, research shows that girls who develop CD in adolescence are at similar risk to early onset boys for a host of adult mental health problems and poor social adjustment (Odgers & Moretti, 2002). The developmental trajectory to adolescent onset CD is less well understood. However, factors such as harsh and punitive parenting, limited parental monitoring, parent-child relationship problems and deviant peer affiliation have been implicated in predicting the continuity of problems into early adulthood (Broidy et al., 2003).

The Challenge of Adolescence

Adolescence presents challenges for all children because of the rapid neurological, cognitive and social changes that it entails, and the associated changes in the child-parent relationships. Changes in the production and functional levels of hormones and neurotransmitters occur throughout this developmental period (Luna, Garver, Urban, Lazar, & Sweeney, 2004; Susman, 1997) and significant transformations take place in the prefrontal cortex. These changes support the gradual emergence of higher order cognitive functions, such as enhanced behavioural inhibition, decision making, and cognitive control but have also been implicated in increased irritability, anhedonia, and risk taking behaviour, particularly early in adolescence (Spear, 2000). Early adolescence is also characterized by heightened levels of emotional reactivity and poor affect regulation, which predicts poor social relations, as well as behavioural and emotional problems (Eisenberg et al., 2005). As children move into adolescence they view themselves as invincible, capable of making their own rules and decisions, and without need of parental guidance. These characteristics often provoke conflict with parents (Steinberg, 2001).

In the midst of these rapid changes, a key challenge of adolescence is achieving autonomy, in other words, maintaining connection with parents while exploring their independence in

new social roles away from the family and developing attachment relationships with peers and romantic partners (Moretti & Holland, 2003). Healthy transition to autonomy and adulthood is facilitated by secure attachment and emotional connectedness with parents (Ryan & Lynch, 1989), but this is not always easily maintained in the face of conflict as parents struggle to maintain empathy and emotional availability, and to reduce control and enhance autonomy promotion. Parents who perceive their child's move toward autonomy as a threat to the relationship and to their authority have limited capacity to support their children through this period of change or to employ parenting strategies that promote autonomy. For those children with pre-existing behavioural problems, the challenge of adolescence is far greater. Deficits in self-regulation and their reliance on coercive behaviour place them at an increased risk of responding to frustration with aggressive behaviour intended to intimidate and control others. These problems compound existing challenges associated with difficult temperament and poor impulse control. Their relationships with caregivers are now under immense strain as they push for greater independence and extend their circle of relationships to include peers who may share their premature disengagement from caregivers and involvement in aggressive and delinquent activities. Increasingly coercive and aggressive interactions between parents and their adolescents are likely to ensue and further damage the parent-child relationship as well as intensify the social-emotional and behavioural delays already present in the adolescent.

What do adolescents need from their parents during this period to navigate this challenging developmental transition? Although adolescents do not need the same degree of proximity that young children require, they continue to depend upon parental *sensitivity* and *attunement*, especially in the domain of autonomy needs (Allen et al., 2003; Moretti, DaSilva & Holland, 2003; Moretti & Peled, 2004). The ability of parents to sustain a '*goal directed partnership*' with their child also remains critical, and is particularly challenging because conflict increases during adolescence (Paikoff & Brooks-Gunn, 1991). While the presence of conflict in the parent-adolescent relationship is normative, how the parent-adolescent dyad negotiates conflict and sustains their relationship is diagnostic. Adolescents who feel the relationship with their parents is secure, even in the face of conflict, confidently move forward toward early adulthood. These securely attached adolescents do not avoid conflict, exploration or individuation nor do they prematurely push to independence without the support of their parents.

Supporting Parents of Adolescents Struggling with Conduct Disorder

As previously noted, CD is often associated with a range of parent and child problems including harsh and controlling parenting, lack of child compliance, increased aggression toward parents, and coercive parent-child interaction patterns. Parenting training interventions are the most widely researched and effective intervention strategies available for the treatment and prevention of CD in young children (for a recent review see Hutchings & Lane, 2005). However, studies indicate that between 70-90% of young children who need treatment for CD do not receive it (Brestan & Eyberg, 1998).

While early prevention of serious childhood conduct disorder is the most effective strategy in reducing the scope of the disorder in the population (i.e., "nipping it in the bud"), interventions during the pre-adolescent and adolescent period present a unique opportunity to: 1) intervene with youth and families with a longstanding history of CD with the goal of risk reduction and minimization of risk escalation during adolescent development; and 2) prevent adolescent onset CD. Unfortunately the majority of family and parent focused interventions have been designed to serve parents of younger children and research with older children and adolescents is limited (Farmer, Compton, Robertson, & Burns, 2002). Over the past decade, however, new evidence has emerged pointing to the substantial benefits of parent and family focused interventions for youth with severe conduct problems (e.g., Oregon Model of Parent Management Training, PMTO, e.g., Forgatch, Bullock, & Patterson, 2005; Adolescent Transitions Program, ATP, e.g., Dishion, & Kavanaugh, 2002). ATP, for example, works with families of young adolescents, 11 to 14 years of age, and utilizes a step-wise approach to teaching parents basic skills in limit setting, supervision and effective family communication. Parents meet in groups and use role-plays, group exercises and discussion to

pinpoint problems in behaviour management and trouble shoot behaviour management plans. Individual family sessions are provided as a supplement to group work. Parents who complete the ATP program report significant reductions in family conflict and teachers report significant reductions in aggressive behaviour of their children (Dishion & Kavanaugh, 2002). Similar elements are integrated in parent management training programs, such as the Multidimensional Treatment Foster Care (Chamberlain & Smith, 2005). These approaches have been shown to be an effective and cost efficient means to reducing adolescent behaviour problems and reducing juvenile recidivism.

The Connect Parent Group Program

In light of the growing evidence of the significant role of parent and family intervention in the treatment of conduct disorder, the Connect Parent Group (CPG) was developed integrating research on parenting effectiveness, adolescent development and attachment. Unlike other parent group formats that adopt a primary behavioural management program, CPG focuses on the enhancement of the building blocks of secure attachment: parental reflective capacity, sensitivity (Fonagy & Target, 1996), and effective dyadic affect regulation (Bowlby, 1973). These components of parenting have been shown to indirectly affect parenting behaviour and child outcomes. The enhancement of competence in these domains facilitates parents, skills in: 'reframing' their adolescent's behaviour and needs; modulating their own emotional response to problem behaviour; and mindfully utilizing parenting strategies to support their relationship with their adolescent while clearly setting limits and expectations.

The Connect program adopts a 10-week psycho-educational format and focuses on principles of attachment, particularly as they relate to adolescent development, and their implications for parenting. The program is manualized (Moretti, Holland, Braber, Cross & Obsuth, 2006) and includes experiential activities in the form of role-plays and exercises to help parents develop skills necessary to better identify, understand and respond to the needs of their adolescents.

Each session begins with the presentation of an attachment principle that helps parents understand attachment issues associated with challenging interactions with their adolescent (see Table 1 for the list of principles and illustrative goals)[1].

Parents learn, for example, that conflict is part of attachment and is particularly acute during times of transition in the relationship, such as the transition through adolescence. Parents also learn to 'step back' in emotionally charged situations, recognize and *modulate their own affect*, and consider the possible meanings behind their adolescents' behaviour. They are encouraged to think about the perspective of their child, and through utilizing *attunement* and *empathy,* to *respond* to their child's behaviour *sensitively*, rather than reactively. Parents are encouraged to consider new ways of responding to their child's behaviour in light of the attachment needs of their child. Throughout the sessions parents are also encouraged to reflect upon their own experiences both when they were adolescents but also in their current lives.

Increasing parental capacity to identify and reflect on their experiences in their relationships with their adolescents assists them in reframing conflict and increases their ability to communicate and set appropriate limits. These strategies enhance parent-adolescent interactions and the parent-adolescent relationship by providing necessary skills for navigating conflict without defaulting to coercion and aggression. Furthermore, these strategies open new opportunities for constructive communication between parents and their adolescents wherein frustration can be expressed without risk of derailing the parent-child partnership in negotiating expectations, limits and privileges. This supports the continued availability of the care giving relationship to provide support, limit setting and guidance as adolescents move toward adulthood.

Method

In a preliminary report based on treatment outcomes of 16 adolescents and their caregivers, we presented results showing significant reductions in caregivers' reports of youths' externalizing and total problems at the end of treatment compared to admission (Moretti, Holland, Moore, & McKay, 2004). Here we summarize findings based on a larger sample including an additional 32 adolescents and their caregivers. In total 48 adolescents (28 boys and 20 girls; mean age 14.51, SD=1.33) and their 48

[1] *Principles and goals have been expanded and updated from those reported in our earlier paper - Moretti, Holland, Moore, and McKay, 2004.*

Table 1. Connect Parent Group Principles and Illustrative Goals

Session	Title	Principle	Illustrative Goals & Skill Development Focus
	Information Session	Attachment and Your Child	▪ Provide information on the role of attachment in development and adolescence. ▪ Provide overview of program and enhance motivation.
1	Understanding Behaviour Through Attachment	All behaviour has meaning.	▪ Enhance recognition of behaviour as a form of communication about attachment. ▪ Develop skills in stepping back and considering alternate meanings of behaviour.
2	Attachment over the Lifespan	Attachment is for life.	▪ Enhance recognition that attachment needs continue throughout life but are expressed differently as children develop. ▪ Develop skills in reframing children's behaviour in terms of their developmental level and attachment needs.
3	Conflict- An Opportunity for Understanding and Connection	Conflict is part of attachment.	▪ Enhance recognition and acceptance of conflict as a normative part of relationships, particularly during adolescence, that often communicates attachment needs. ▪ Develop skills in regulating affect, maintaining connection and negotiating in the face of conflict.
4	Autonomy Includes Connection	Secure attachment: A balance between connection and independence.	▪ Enhance recognition and acceptance of adolescent strivings for autonomy but continued need for parental availability in support. ▪ Develop skills in providing continued emotional support coupled with clear structure and expectations in response to adolescent behaviour.
5	Change - Understanding It and What It Takes	Growth involves moving forward while understanding the past.	▪ Enhance understanding of the impact of personal narratives on experiences in attachment relationships and the capacity to be open to new experiences. ▪ Develop skills in identifying the expectations and barriers parents carry regarding change in relationships with their children and enhance motivation to overcome these obstacles.
6	Empathy – The Heartbeat of Attachment	Understanding, growth & change begins with empathy.	▪ Enhance understanding of the role of empathy for children's and parents' experiences as essential to secure attachment. ▪ Develop skills in empathic listening with others in conflict situations.
7	Balancing Connection and Independence	Relationships include being connected and independent: Maintaining balance is key.	▪ Enhance understanding that adolescence is a unique developmental period that involves expanding one's own sense of self, developing new relationships, and balancing these with existing attachments. ▪ Develop skills in maintaining a partnership between parents and adolescents that nurtures their relationship and supports the expansion of attachment relationships in adolescents' lives.
8	Celebrating Attachment	Attachment brings joy and pain.	▪ Enhance understanding that attachment brings joy through celebration of connection with adolescents and pain through negotiation of conflict and change in the relationship. A focus on conflict and change can obscure opportunities for continued celebration of connection. ▪ Develop skills in continuing to embrace opportunities for celebration of connection despite conflict and the importance of clarity and consistency in expectations for adolescent behaviour.
9	Two Steps Forward, One Step Back: Staying the Course	Attachment allows trusting the relationship even during turbulent times. Adversity is an opportunity for learning.	▪ Enhance understanding that change is not a straightforward process; setbacks occur and can undermine motivation (i.e., relapse recognition and prevention). ▪ Develop skills in reframing 'setbacks' as opportunities for learning and growth rather than failures.
10	Feedback Session	The parent group is a tool-kit for continued work in relationships.	▪ Embrace parents as partners in development; encourage honest feedback. ▪ Gather parent feedback to improve delivery of service.

caregivers (female caregivers: 31 biological mothers, 3 adoptive mothers, 1 stepmother, 2 female relatives, 3 foster mothers; male caregivers: 3 biological fathers, 2 stepfathers, and 3 foster fathers) participated in a Connect Parent Group (CPG) session offered at the Maples Adolescent Treatment Centre, Burnaby, BC between September 2003 and August 2005.

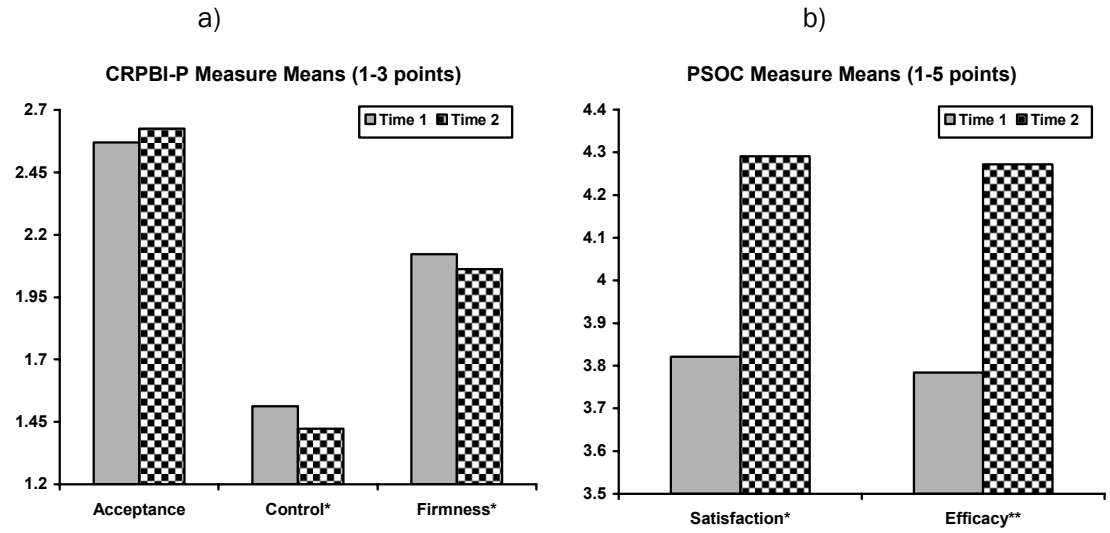
The CPG program is tailored specifically for caregivers of youth with severe behavioural difficulties as evidenced by their behavioural profile prior to admission: within six months prior to admission, 21% of youth had dropped out of school; 59% had been placed outside their biological parents' home for some period of time; 49% had threatened to kill or seriously harm themselves; and 61% had threatened to kill or seriously harm someone else. The majority of families were classified as lower (11%) or lower-middle (62%) social economic status (Hollingshead, 1975). Twenty-one percent of caregivers had not completed high school; 54% completed high school and 26% had a college diploma or university degree.

Caregivers and youth completed questionnaire packages at the beginning and end of the CPG program to assess change.

Results

Consistent with the goals of the program, caregivers' reports of their parenting practices on the Childhood Report of Parenting Behavior (CRPBI; Schludermann & Schludermann, 1988) revealed significant pre- to post-treatment reductions in controlling parenting practices; both behavioural (firmness, p=.03) and psychological (control, p=.01), thus increasing autonomy support. A trend toward greater child acceptance also emerged (*p*=.06; see Figure 1a). Similarly, caregiver reports on the Parenting Sense of Competence Scale (PSOC; Johnson & Mash, 1989), revealed *greater parenting satisfaction (p*=.01) *and perceived efficacy (p*<.001, see Figure 1b). Caregivers also completed a parent-report attachment measure (Moretti, McKay, & Holland, 2000), which taps attachment anxiety and avoidance; results confirmed a shift to lower levels of youths' avoidance of their caregivers over the course of treatment (see Figure 1c). On a measure assessing perceived family functioning (FACES-III; Olson et al., 1985), caregivers reported significant increases in family adaptability suggesting *more flexibility in family relationships* (*p*<.05). Furthermore, a trend toward greater family cohesion and closeness

Figures 1a-1d. Parents' pre (Time 1) and post (Time 2) treatment reports of a) parenting practices, b) parental satisfaction, c) their youths' attachment to them, and d) family functioning.



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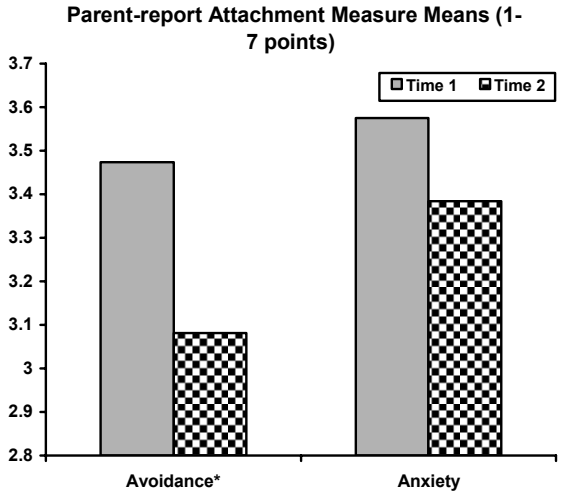

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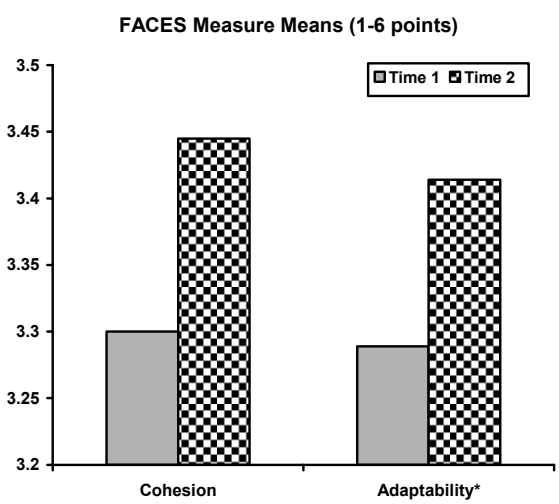


Note: **p=.001; *p<.05

between family members, also emerged (p=.07, see Figure 1d). Positive changes in caregivers' reports of parenting and their relationship with their child were mirrored in significant reductions in parents' reports of adolescent behaviour problems on the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1981); significant decreases were noted in pre- to post- treatment levels of youths' externalizing (p<.001), internalizing (p=.001) and total problems (p<.001; see Figure 2).

Youth also completed the Youth Self-Report (YSR; Achenbach, 1995), a parallel version to the CBCL, assessing their emotional and behavioural problems. Consistent with their caregivers, youth reported significant decreases in internalizing behaviours (p<.05). However, unlike their caregivers, youth did not report significant decreases in externalizing behaviours (see Figure 2). This may be due to a restricted range of this scale as a result of youth reporting low levels of initial externalizing behaviour problems. This interpretation seems likely given the fact that on an alternate measure of aggression (Little, Jones, Henrich, & Hawley, 2003) completed by youth in our program we found significant reductions in overt aggression (p=.04).

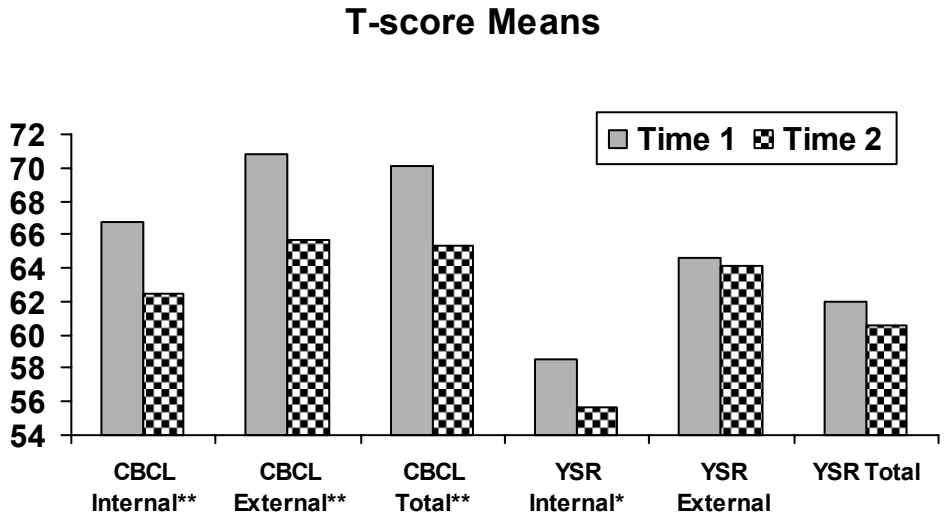
Programs for caregivers of teens with severe conduct problems frequently suffer from poor participant motivation and low attendance. Our survey revealed extremely high levels of client satisfaction: caregivers felt that the program fit well with their needs; provided relevant and useable skills; and that program delivery was engaging and respectful. Attendance and engagement with program components was high. On average, parents missed only one session (M= 0.97; SD = 1.23) and only 1 participant missed more than 50% of the sessions. The data from this individual were excluded from the analyses.

Encouraged by the results of the program evaluation thus far, we are currently completing an evaluation of this program using a wait-list control design, which includes long term follow-up. Results from this study will be available in approximately six months.

Discussion

Our current findings add to our prior evidence (Moretti et al., 2004) for the effectiveness of the Connect Parent Group in improving parental and family functioning, and reducing the severity of

Figure 2. Parents' and youths' pre (Time 1) and post (Time 2) treatment reports of problem behaviours.



Note: **p=.001; *p<.05

adolescent behaviour problems. These findings are compelling given the severity of behavioural and social functioning difficulties of the adolescents and families included in this research and the fact that spontaneous remission is rarely found in youth with severe CD. Thus this study provides a good approximation of the effectiveness of the intervention in high-risk clients where clinical needs are challenging. Nonetheless, it is important that we keep in mind limitations of this study. This research was conducted in the context of clinical service delivery and consequently it was not possible to randomly assign parents and youth to treatment versus control conditions. In addition, the results do not include follow-up assessment to determine long-term effects of the treatment program. Findings from our wait-list control trial, including assessment of long-term effects, will address these issues.

Despite the limitations of this study, our findings provide additional support for the efficacy of an attachment based group program for parents of youths with CD. The long-term negative impact of unresolved CD on psychological well-being of individuals, their families, as well as the economic impact on society is well documented (e.g., Muntz et al., 2004). As previously noted, there is growing evidence that involvement of parents and interventions directed at enhancing their knowledge and use of effective parenting strategies is a critical component in the treatment of CD. Although these programs differ in their focus on teaching behavioural management techniques versus skills such as parental reflective capacity and sensitivity, which foster secure attachment (Fonagy, 2003), it is possible that enhancement of the quality of parent-child relationships remains a key factor that determines treatment impact. Furthermore, teaching parents behavioural management techniques in the absence of addressing issues in the parent-adolescent relationship may result in parents attempting to enforce greater control over their adolescents, that inadvertently exacerbates rather than solves problems. Further research examining the components and processes that account for change will provide important answers to the question of which factors are most important in moving troubled adolescents and families toward greater psychological health and effective behavioural regulation. Given the mounting evidence for the importance of parent-child attachment in mental health and social well being throughout adolescence, special attention should be paid to the possible mediating role of attachment as a primary factor that determines the impact of parent and family intervention (Doyle & Moretti, 2000; Moretti & Peled, 2004; Marsh, McFarland, Allen, McElhaney, & Land, 2003).

Acknowledgements

Support for this project and associated research was provided by a New Emerging Team grant to Dr. Marlene M. Moretti from the Canadian Institutes of Health Research (#54020).

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