Competing with the gang; an exploration of MST therapists' experiences working with gang-involved young people and their families.

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University College London

Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

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Date: Tuesday 14th October 2014

Overview

Volume 1 of this D.Clin.Psy. thesis is the research component of the thesis and is divided into three parts.

Part one is a systematic literature review evaluating twenty two studies that examine the relationship between conduct disorder in childhood and adolescence and later antisocial personality disorder in adulthood. A narrative synthesis of their results is offered, with consideration of how these fit with the wider literature examining the persistence of childhood and adolescent antisocial behaviour.

Part two is an empirical paper using a qualitative design to explore the experiences of multisystemic therapy (MST) therapists working with gang-involved young people.

Part three is a critical appraisal of the research process. I initially offer a more informal discursive account of my own interest in youth antisocial behaviour. This is followed by discussion of the definitional issues associated with gang research, a wider consideration of whether youth antisocial behaviour is best thought of as encompassing a broad spectrum of behaviours, and, how gang-involvement might fit as a more nuanced part of this. Finally, I talk about the choice of therapists as participants in my study, examining the challenges and benefits that I felt accompanied this.

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Part One: Literature Review

To what degree do serious conduct problems in childhood and adolescence predict later antisocial personality disorder?

Abstract

Aims: This review explores the degree to which conduct disorder (CD) in childhood and adolescence might predict later antisocial personality disorder (ASPD) in adulthood, with consideration of other potential influencing factors.

Method: A systematic search using the database, Ovid PsychINFO resulted in 122 citations. After initial inclusion and exclusion criteria were applied and studies were quality assessed twenty two studies remained.

Results: The studies reviewed widely recognise CD as a significant predictor of more enduring and persistent antisocial behaviour, whether diagnosed as ASPD or evidenced in later social maladaptation as a result of persistent antisocial behaviour in adulthood. It is less clear what distinguishes those young people with CD who progress to later adult ASPD from those who do not. Associated risk factors are identified and reviewed in relation to their impact on the development of ASPD. These include biological background, social- environmental factors, psychiatric disorder, temperament, personality, comorbid pathology, severity of CD (in terms of early onset and increased number of symptoms endorsed), number of covert CD symptoms and endorsement of callous and unemotional traits.

Conclusions: There was evidence to suggest that early onset CD symptomatology may not be an unequivocal or consistent predictor of later ASPD. Personality traits such as callous unemotional traits linked to child psychopathy are considered as potential means to refine prediction of those at greatest risk of persistent antisocial behaviour. Implications for future research and clinical practice are considered and limitations of the review discussed.

Introduction

This review examines the persistence of antisocial behaviour from childhood into later adulthood based upon the Diagnostic and Statistical Manual (DSM) diagnoses of conduct disorder (CD) and antisocial personality disorder (ASPD). CD is characterised by a persistent pattern of behaviour in which the rights of others, or major age-appropriate societal norms and rules are violated. Behaviours are broadly divided into four categories: aggression to people and animals, destruction of property, deceitfulness or theft and serious violation of rules. ASPD is characterised by a lack of empathy or remorse and a pervasive pattern of disregard for, or violation of, the rights of others. To receive a diagnosis of ASPD, an individual must be over eighteen years old and the impairments in their personal and social functioning should be relatively stable across time (i.e. there is evidence of earlier CD, with an onset before fifteen years old). Whilst other diagnostic systems operationalise similar diagnostic categories (i.e. dissocial personality disorder describes the equivalent disorder to ASPD in the International Statistical Classification of Diseases and Related Problems, ICD-10), this review focuses on those as defined by DSM criteria as these are widely adopted in research studies of the development of antisocial behaviour.

Youth antisocial behaviour has been a topic of widespread concern and investigation for many years, with Werry (1997) positing conduct disorder as potentially the most important social and public health problem faced in childhood and adolescence. Longitudinal research has demonstrated that persistent antisocial behaviour in youth significantly increases the risk of criminality, unstable relationships and mental health problems in proceeding adulthood (Hill & Maughan, 2001). In addition to these individual costs, the cost to society is considerable. Individuals showing persistent antisocial behaviour at 10 years of age are estimated

to cost society ten times as much as their non-delinquent peers by the time they are 28 years old (Scott, Knapp, Henderson & Maughan, 2001).

Moffitt (1993) proposed that there might be two categories of individuals manifesting antisocial behaviour: those where antisocial behaviour is temporary and limited to adolescence ('adolescence-limited), and those where antisocial behaviour persists from preadolescent onset, through adulthood ('life-course-persistent). Whilst Robins' (1966) seminal work following up children referred to a clinic for conduct problems demonstrated that not all children with antisocial behaviour persist into adulthood, for some, a continuity of disturbance into their adult lives underlies further problem behaviour and associated negative sequelae.

Expanding our understanding around why some children persist in antisocial activities whereas others are able to desist from delinquent behaviour and offending could help to inform more effective interventions (Farrington & Hawkins, 1991) with obvious widespread benefits to individuals, families, communities and the wider state.

A pessimistic trajectory from conduct disorder (CD) in childhood and adolescence to antisocial personality disorder (ASPD) in adulthood has been outlined in research exploring the persistence of antisocial behaviours (Fontaine et al., 2008; Nock, Kazdin, Hiripi & Kessler, 2007; Perdikouri, Rathbone, Huband & Duggan, 2007). Characterised by a pattern of aggressive, impulsive, irresponsible and remorseless behaviours, ASPD proves one of the most impairing and socially detrimental disorders in adulthood (Goldstein, Grant, Ruan, Smith & Saha, 2006). With a reported prevalence rate of approximately 1%, it is as common as other major psychiatric conditions such as schizophrenia and bipolar disorder, and yet, as outlined in the development of the recent NICE guidelines for ASPD (Duggan & Kane, 2010), those with ASPD are often treatment rejecting and similarly rejected by those in place to support them, making them some of the most excluded individuals in our society.

Whilst being refractive to treatment, ASPD has been associated with a wide range of problematic behaviours and subsequent poor outcomes, including criminal and violent behaviour, substance misuse, unemployment, homelessness, divorce and early mortality (Black, Baumgard, Bell, & Kao, 1996; Jainchill, Hawke, & Yagelka, 2000; Robins, Tipp, & Przybeck, 1991; Westermeyer & Thuras, 2005), making identifying those at risk for the disorder essential for early prevention (Offord, 2000).

Linking CD and ASPD

In DSM-V (DSM-V, 2013) disturbances of conduct in childhood are outlined in regard to three broad diagnoses: (i) Oppositional Defiant Disorder (ODD); (ii) Conduct Disorder (CD); and (iii) Antisocial Personality Disorder (ASPD). These diagnoses are structured in a way that suggests a developmental nature to the relationships, i.e. ODD cannot be diagnosed if the criteria for CD are met (as their presence is included within CD criteria), and a diagnosis of ASPD is contingent on evidence of CD before age 15. Whether the association between CD and ASPD is best described this way and whether it is such a straight forward relationship has provided a source of significant debate.

Longitudinal studies have reported that between 40-50% of children with severe conduct disorder progress to become recidivist criminals and/or antisocial personality-disordered adults (Earls, 1994; Offord & Bennet, 1994). It is less clear what underlies this disparity between those whose antisocial behaviour continues into adulthood and those where it does not; the difference between 'persisters' and 'desisters' as coined by Hill (2003).

Aims of the review

This review intends to explore the degree to which conduct disorder in childhood and adolescence might predict later antisocial personality disorder in adulthood. This will be done by systematically reviewing the literature which

explicitly explores this link between earlier CD and later ASPD as an outcome, with consideration of other potential influencing factors. This review is timely and necessary, given the data from studies following Robins' (1966) seminal work following up conduct disordered children, highlighting a complicated picture of comorbid psychiatric disorders, risk factors and specific symptoms relating to the persistence of antisocial behaviour into adulthood (Elkins, Iacono, Doyle & McGue, 1997; Hill, 2003; Holmes, Slaughter & Kashani, 2001; Loeber & Burke, 2011; Werry, 1997).

Method

Inclusion of studies

Inclusion criteria

Studies were identified through a database search using Ovid PsychINFO. Only quantitative studies were included. These included prospective longitudinal and cross-sectional designs. Scoping studies revealed that limiting to prospective studies only, which would be the ideal standard to answer the research question posed, would not yield a high enough number of studies. Including both longitudinal and cross-sectional studies therefore enabled review and comparison of a greater number of studies, with increased ability to detect concurrent findings and information regarding generalisability. Limitations associated with cross-sectional designs are discussed in the results.

Studies were required to incorporate diagnostic criteria from DSM-III, DSM-III-R or DSM-IV in their measurement of CD in childhood or adolescence, and ASPD as an outcome in adulthood. DSM criteria informs the majority of clinical research and this captured a large enough range of studies using well-established interview and self-report measures based on the DSM criteria and providing results in a comparable framework.

Exclusion Criteria

Exclusion criteria included studies that:

- Did not include a clear measure of CD and ASPD as defined by DSM-III DSM-III-R or DSM-IV criteria.
- Were not written and published in peer-reviewed English-speaking Journals.
- Were not investigating ASPD as a potential outcome of CD.

Participants

Studies included both clinical and community samples. Whilst population-based community samples might enable study of prevalence within the wider population and hold more validity in terms of generalising findings, the natural-occurrence of ASPD is likely to be greater in forensic and clinical populations than in the general population and therefore lends itself to the study of CD and ASPD. Many of the community-based studies, particularly those of longitudinal design, sample from larger epidemiological studies, allowing a prospective study of the general population. Limitations and benefits of samples are discussed in further detail in the results.

Outcome measures

As noted above, studies were included where CD was used as an independent variable defined according to DSM criteria. The measures used to assess CD included self-report measures from the young person, parent or both, semi-structured diagnostic interview, and review of history and clinical notes. ASPD was measured and diagnosed according to DSM criteria via interview or self-report measures or a combination of both.

Summary of review protocol

Participants: Epidemiological community samples where children in sample are followed up into adulthood.

	Cross-sectional study of clinical or forensic samples where individuals meet diagnostic criteria for ASPD, (including being over the age of 18).
	Cross-sectional population-based samples.
Outcome:	Clear measure of ASPD according to DSM-III, DSM-III-R or DSM-IV criteria.
Study Design:	Observational studies of either prospective longitudinal or retrospective cross-sectional design.

Search Strategy

A search for previous literature reviews with the same objective using the Cochrane Library yielded no relevant results. The search terms used and number of results are outlined below. All studies were discarded as irrelevant, describing studies of interventions or inappropriate citations:

(conduct disorder) AND (antisocial personality disorder) = 3

Antecedents AND (antisocial personality disorder) = 2

Progression AND (conduct disorder) = 9

(conduct disorder) AND (antisocial personality disorder) OR (adult antisocial behaviour) = 5

During October 2013 the database PsychINFO was systematically searched for relevant studies. The research question was broken into its core concepts and refining criteria, the database thesaurus used to check for and include synonyms for the keywords, conduct disorder and antisocial personality disorder. These exploded terms were then used in combination to organise the key terms.

Search terms combining these exploded terms, ‘exp antisocial personality disorder AND exp conduct disorder AND predictor OR risk factor’ yielded only 12 results and did not include some of the key studies identified in earlier scoping

searches, whereas a simple search combining these terms gave a very large number of studies, including many irrelevant to this review.

Combining searches for exploded disorder terms and exploded methodological design key terms, ‘exp antisocial personality disorder AND exp conduct disorder AND (prospective or longitudinal or cohort or progression or predictor)’ delivered 122 results. These were then refined by excluding those that were not from peer-reviewed English written journals and duplicate studies. The abstracts of the studies were reviewed and exclusion criteria applied.

Assessment of methodological quality of studies

Quality criteria for critical appraisal of observational studies were applied (NHS CRD, 2001), (Appendix I). Criteria include assessing whether study participants are adequately described, whether independent and dependent variables are adequately measured, looking at dropouts in longitudinal studies and whether this introduced bias, if the study is long enough to allow changes in outcome to be identified, whether all groups were treated similarly, and whether the outcome measure was blind to bias.

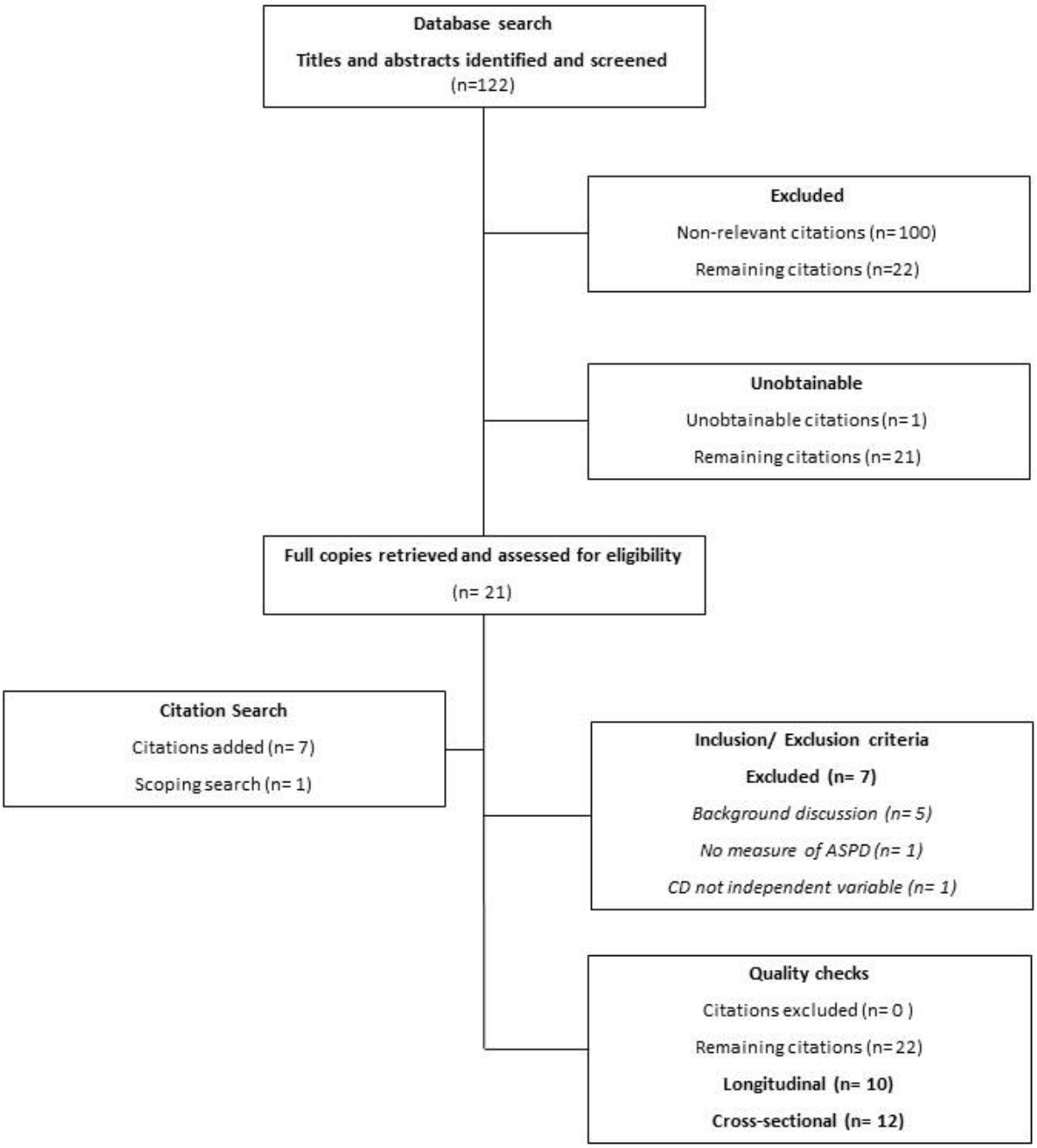

Figure 1

Flowchart of search results

Results

In order to look at continuity of behavioural disturbance from childhood into adult disorder, longitudinal, population-based samples provide the ideal methodology, with a clear measure of CD as an independent variable and a measure of ASPD as the outcome, or, dependent variable. Consequently, the longitudinal studies addressing this research question will provide the primary focus of the review. At the same time, longitudinal studies clearly require more resource, likely explaining the relatively low number of prospective studies identified. This review identified ten longitudinal studies and twelve cross-sectional studies. Table 1 summarises the characteristics of the longitudinal studies, whilst Table 2 summarises the characteristics of the twelve cross-sectional studies. The longitudinal studies will be examined in the first part of the review, followed by the studies utilising a cross-sectional design.

Table 1

Characteristics of the longitudinal studies included

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
1	**Zoccolillo, Pickles, Quinton & Rutter (1992)**	The outcome of childhood conduct disorder: implications for defining adult personality disorder and conduct disorder.	London.	Community-based sample (children who had been in care). **n=254** participants: 171 who had been in care (90 men, 81 women) and 83 in the comparison group (42 men, 41 women).	Data were examined to answer various questions. Of interest to this review: 'What proportions of subjects with conduct disorder who are not entirely well functioning as adults have DSM-III ASPD?	• CD: contemporaneous teacher questionnaires (Rutter, 1967) and juvenile court records. Parent questionnaires for the 'in care' group only (Rutter et al., 1970). Participant interview at follow-up in their mid-twenties. • ASPD: Standardised investigator-based interview-life experiences and histories, behaviour in childhood and adolescence, adult social functioning, psychiatric symptoms.	A descriptive account of the relationship between CD and clinically defined PD. 35 males with CD in childhood, 14 (40%) were rated with ASPD in adulthood compared to 4 % (4/92) of those without CD. 26 females with CD, 9 (35%) showed ASPD compared to none of those without CD.
2	**Copeland, Shanahan, Costello & Angold (2009)**	Childhood and adolescent psychiatric disorders as predictors of young adult disorders	USA. (North Carolina). (Great Smoky Mountains Study).	Representative community-based sample. 3 cohorts aged 9, 11, 13 at intake. **(n=1420)**.	To establish which childhood and adolescent psychiatric disorders predict young adult disorder.	• CD: Child Adolescent Psychiatric Assessment (CAPA; Angold & Costello, 2000). (Parent and YP informants) • ASPD: (19 and 21 years) with the Young Adult Psychiatric Assessment (YAPA; Angold, Cox & Prendergast, 1999). (YP informant)	Homotypic prediction from CD to ASPD was supported.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
3	**Taylor, Elkins, Legrand, Peuschold & Iacono (2007)**	Construct validity of adolescent antisocial personality disorder	USA. (Minnesota Family Twin Study).	Community-based sample. **n=501**.	Examining the construct validity of adolescent antisocial personality disorder.	• CD (at intake): Diagnostic Interview for Children and Adolescents- Revised (DICA-R-P; Herjanic & Reich, 1982; Reich & Welner, 1988). • ASPD: Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II; Spitzer et al., 1987).	Adolescent ASPD group had significantly more depression and substance use disorders, greater performance>verbal IQ discrepancy, more deviant peers, poorer academic functioning than CD only and control groups. Adolescent ASPD and ASPD groups did not differ on most variables, supporting the construct validity of Adolescent ASPD.
4	**Loeber, Burke & Lahey (2002)**	What are adolescent antecedents to antisocial personality disorder?	USA. (Pittsburgh, Pennsylvania and Georgia). (The Developmental Trends Study).	Clinic-referred male sample. **n=177.**	1. How well do CD and callous/emotional behaviour predict ASPD? 2. Do other forms of psychopathology predict ASPD as well? 3. Which factors distinguish between those who will progress to ASPD from CD and those who do not? 4. What is the outcome of those with CD in adolescence who do not progress to ASPD? 5. Is there something unique about the proportion of those with ASPD who did not demonstrate prior CD?	• CD: the NIMH Diagnostic Interview Schedule for Children (DISC-C; Costello et al., 1982) and Parents and Teacher versions were used. • ASPD: Computerised Diagnostic Interview Schedule (Revised) (Robins & Helzer, 1988).	38% of sample met modified criteria for ASPD at 18 or 19. CD strongly predicted modified ASPD.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
5	**Lahey, Loeber, Burke, & Applegate (2005)**	Predicting future antisocial personality disorder in males from a clinical assessment in childhood	USA. (The Developmental Trends Study).	Clinic-based male sample. **n=177**.	Testing the competing hypotheses that ASPD is predicted by childhood CD, ADHD or both disorders. Using data from a single childhood diagnostic assessment to predict future ASPD during early adulthood.	• CD: participants, parents and teachers interviewed using the National Institute of Mental Health Diagnostic Interview Schedule for Children (DISC; Costello, Edelbrock, & Costello, 1985). • APSD: Diagnostic Interview Schedule (DIS; Robins & Helzer, 1988) with diagnostic scoring algorithm for DSM-IV criteria for ASPD.	CD, but not ADHD significantly predicted subsequent ASPD. An interaction between SES and CD indicated that CD predicted ASPD only in lower SES families. The number of covert but not overt CD symptoms improved prediction of future ASPD, controlling for SES.
6	**Burke, Waldman & Lahey (2010)**	Predictive validity of childhood oppositional defiant disorder and conduct disorder: Implications for DSM-V	USA. (The Developmental Trends Study).	Clinic-based male sample. **n=177**.	To evaluate the predictive validity of childhood ODD and CD as defined by DSM-IV and ICD-10.	• CD: A modified version of the NIMH Diagnostic Interview Schedule for Children, Parents and Teacher (DISC; Costello, Edelbrock, Dulcan, Kalas & Klaric, 1987). • ASPD: Computerised Diagnostic Interview Schedule (Revised) (DIS; Robins & Helzer, 1988).	Forty-eight participants (30.2%) met criteria for ASPD two or more times over FU period. 39.5% of those with CD went on to meet criteria for ASPD more than once. 10% of young men who met criteria for ASPD never met criteria for CD.
7	**Washburn, Romero, Welty, Abram, Teplin, McClelland & Paskar (2007)**	Development of antisocial personality disorder in detained youths: The predictive value of mental disorders	USA. (Chicago). (Northwestern Juvenile Project)	Forensic, incarcerated-sample of Juvenile detainees. **n=1112**.	How well does CD and other mental disorders predict the development of APSD among male youths involved in the juvenile justice system.	• CD: Version 2.3 Diagnostic Interview Schedule for Children (DISC-2.3; Schwab-Stone et al., 1996). • ASPD: Diagnostic Interview Schedule IV (DIS-IV; Robins, Cottler, Bucholz & Compton, 1995).	Prevalence of ASPD: 17.3% developed ASPD, 27.6% M-APD (excluding the requirement for CD in diagnosis). Having 5 or more symptoms of CD, dysthymia, alcohol use disorder or generalised anxiety disorder significantly associated with developing M-APD.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
8	**Myers, Stewart & Brown (1998)**	Progression from conduct disorder to antisocial personality disorder following treatment for adolescent substance abuse	USA. (San Diego).	Inpatient substance-abusing adolescents. **n=137**.	To investigate the progression from CD to ASPD among individuals treated for adolescent substance abuse.	• CD and ASPD: The Conduct Disorder/ Antisocial Personality Questionnaire (Brown, Gleghorn, Schuckit, Myers, Mott, 1996).	At follow-up 61% of the sample met DSM-III-R criteria for ASPD. Logisitic analysis indicated that onset of deviant behaviour at or before 10, greater diversity of deviant behaviour, and more extensive pre-treatment drug use best predicted progression to ASPD.
9	**Taylor & Iacono (2007)**	Personality trait differences in boys and girls with clinical or sub-clinical diagnoses of conduct disorder versus antisocial personality disorder	(USA). (Minnesota Twin Family Study).	Community-based sample. **n=910.**	Examining whether antisocial behaviour disorders that differ in course were associated with differences in personality traits.	• CD and ASPD: the Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II; Spitzer, Williams, Gibbons, & First, 1987). • Parent informed lifetime symptoms of CD: the Diagnostic Interview for Children and Adolescents-Revised, parent version (DICA-R-P; Herjanic & Reich, 1982).	Boys and girls with ASPD were significantly different from controls on constraint, and those with ASPD were significantly lower on constraint than those with only CD.
10	**Rueter, Chao & Conger (2000)**	The Effect of Systematic Variation in Retrospective Conduct Disorder Reports on Antisocial Personality Disorder Diagnoses	USA (Iowa). (The Iowa Youth and Families Project and The Single Parent Project).	Community-based school sample. **n=500**.	Examining the influence of current behaviour on retrospective reports of CD.	• Retrospective CD and adult component of ASPD: Modified Composite International Diagnostic Interview (CIDI; WHO, 1990). • Contemporaneous CD: Delinquency Checklist (Elliott, Huizinga & Ageton, 1985).	Participants whose current behaviour agreed with past behaviour provided reliable retrospective CD reports.

Table 2

Characteristics of cross-sectional studies included

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
11	**Black & Braun (1998)**	Antisocial patients: A comparison of those with and those without childhood conduct disorder	USA.	Psychiatric-inpatient sample. **n=55**.	Comparing those diagnosed with ASPD against those who meet the adult criteria for ASPD but fail to meet the criteria for childhood CD.	CD and ASPD: Clinician chart review including diagnosis, physician, nursing and social service notes.	Few significant differences found between those who met full criteria for ASPD and those who met the adult criteria for ASPD but without evidence of childhood CD.
12	**Perdikouri, Rathbone, Huband & Duggan (2007)**	A comparison of adults with antisocial personality traits with and without childhood conduct disorder	UK. (East Midlands).	Clinic-based sample. **n=255**.	Examining the validity of the requirement of meeting childhood criteria in addition to the relevant traits exhibited in adulthood to be diagnosed with ASPD. (Replicating Black & Braun study).	•CD and ASPD: Interview version of the WHO International Personality Disorder Examination (IPDE; WHO, 1995). Historical data obtained by reviewing case notes and medical records.	Failure to find clinically important differences between the two groups, though ASPD group scored higher on the State-Trait Anger Expression Inventory-2.
13	**Marmorstein (2006)**	Adult antisocial behaviour without conduct disorder: demographic characteristics and risk for co-occurring psychopathology	Canada. (The National Comorbidity Survey).	Population-based sample Overall **n= 7612**.	To examine the demographic features and patterns of co-occurring psychopathology of those exhibiting late-onset antisocial behaviour (AAB without CD); those with ASPD (CD and AAB); those suffering from CD but not AAB and a non-antisocial control group.	• CD and ASPD: Structured interview, a modification of the CIDI, the Baseline NCS Interview Schedule (Kessler et al., 1998).	2.3% of participants exhibited late onset antisocial behaviour (AAB but not CD). These individuals were similar to those with full ASPD on measures of demographic characteristics and co-occurring psychiatric disorders.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
14	**Langbehn & Cadoret (2001)**	The adult antisocial syndrome with and without antecedent conduct disorder: comparisons from an adoption study	USA.	Adoption studies sample. **n=197**.	Using adoption study data to compare risk factors for adult antisocial behaviour with and without a history of CD. Hypothesised that participants meeting adult criteria for ASPD would share the same risk factors, regardless of retrospectively diagnosed CD.	• CD and ASPD: Diagnostic Interview Schedule Version III, revised (DSI-III-R; Robins, Cottler & Goldring, 1989). (Parent and Participant interview). • CD: the Adverse Adoptive Environment Scale (AAES; Cadoret, Yates, Troughton, Woodworth & Stewart, 1995).	Having an antisocial biological parent was a specific risk factor for ASPD. Fetal alcohol exposure, male gender and adverse environment were associated with ASS, regardless of CD history. The two groups were similar on sociopathy scales, co-occurring diagnoses and incidence of most individual symptoms. Several adult and CD symptoms had significant specific associations with biological or environmental background or their interaction.
15	**Cottler, Price, Compton & Mager (1995)**	Subtypes of adult antisocial behaviour among drug abusers	USA. (St. Louis, Misssouri).	Inpatient substance-abusing sample. **n=545.**	Evaluating the clinical homogeneity of the 405 participants meeting criteria for adult antisocial behaviour with CD (ASPD group) and without CD (AABO group).	• CD and ASPD: NIMH Diagnostic Interview Schedule Version III-R (Robins et al., 1989).	The ASPD group was distinguishable from the AABO group on all childhood behaviours, adult impulsive and aggressive behaviours and measures of severe drug abuse.
16	**Walters & Knight (2010)**	Antisocial personality disorder with and without antecedent childhood conduct disorder: does it make a difference?	USA.	Forensic, incarcerated male sample. **n=327**.	To test whether prior CD increased deviance in persons diagnosed with ASPD.	• CD and ASPD: The Antisocial Personality Disorder module of the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II: First, Gibbon, Spitzer, Williams, & Benjamin, 1997).	ASPD group scored higher on self-report measures of criminal thinking and antisocial attitudes. ASPD group also more likely to receive disciplinary infractions for misconduct than the other groups.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
17	**Goldstein, Grant, Ruan, Smith & Saha (2006)**	Antisocial personality disorder with childhood- vs adolescence-onset conduct disorder	USA. (The National Epidemiologic Survey on Alcohol and Related Conditions.)	Population-based sample. **n=1422**.	Looking at whether ASPD differs in symptomatic presentation or comorbidity with Axis I or other Axis II disorders over the life-course by CD onset in childhood vs. adolescence.	• CD and ASPD: DSM-IV criteria using the NIAAA Alcohol Use Disorder and Associated Disabilities Interview Schedule-DSM-IV Version (AUDADIS-IV; Grant, Dawson & Hasin., 2001).	Those in the childhood-onset CD group were more likely to endorse CD criteria involving aggression and increased odds for psychiatric disorder. Concludes that childhood-onset CD identifies a more polysymptomatic and violent form of ASPD, associated with greater lifetime comorbidity for psychiatric disorder.
18	**Burnette & Newman (2005)**	The natural history of conduct disorder symptoms in female inmates: On predictive utility of the syndrome in severely antisocial women	USA. (Virginia).	Forensic, incarcerated female sample. **n=261**.	To examine the construct validity of the criterion of adolescent-onset CD in the differential prediction of adult ASPD in women.	• CD and ASPD: Brief Symptom Inventory (BSI; Derogatis, 1993) and the Structured Clinical Interview for DSM-IV Personality Screening questionnaire (SCID-II; First et al., 1997).	Cluster analysis revealed 4 typologies of CD symptoms which were more predictive of ASPD than CD diagnosis.
19	**Gelhorn, Sakai, Kato Price & Crowley (2007)**	DSM-IV conduct disorder criteria as predictors of antisocial personality disorder	USA. (District of Columbia, Alaska, and Hawaii). (National Epidemiologic Survey on Alcohol and Related Conditions).	Population-based nationally representative sample. **n= 41,571**.	To identify antisocial behaviours displayed during adolescence which may indicate severity and persistence into adulthood; To examine the use of individual DSM-IV CD symptom criteria in predicting persistence and diagnosis of ASPD in adulthood.	• CD and ASPD: DSM-IV criteria using the NIAAA Alcohol Use Disorder and Associated Disabilities Interview Schedule-DSM-IV Version (AUDADIS-IV; Grant et al., 2003).	1186 (6.7%) males qualified for a diagnosis of CD, 79% of those with CD (n=932) also qualified for a diagnosis of ASPD. In females, 627 (2.6%) met criteria for CD, or which 75% (n=471) also qualified for a diagnosis of ASPD. Progression from CD to ASPD was higher than previous estimates at 75%. Relationships between individual DSM-IV CD symptom criteria and ASPD were variable.

	Authors (Year)	Study Title	Location	Sample	Aims of the study	Measures of CD and ASPD used	Results
20	**Doğan, Önder, Doğan & Akyüz (2004)**	Distribution of symptoms of conduct disorder and antisocial personality disorder in Turkey	Turkey. (Sivas province).	Representative, population-based sample. **n=998**.	Examining the relationship between CD and ASPD and the distribution of their symptoms.	• CD and ASPD: the Diagnostic Interview Schedule-III-R (DIS-III-R-APD; Janca, 1989) subscale.	Lifetime prevalence for CD and ASPD was found to be 21.03% and 3.02% respectively. Comorbidity for both disorders was 14.35%. In those with ASPD 'truant from school several times' was most frequently endorsed.
21	**Dowson, Sussams, Grounds & Taylor (2001)**	Associations of past conduct disorder with personality disorders in 'non-psychotic' psychiatric inpatients.	UK.	Psychiatric inpatient sample. **n=56**.	To investigate associations of a history of features of DSM-III-R CD with features of DSM-III-R personality disorders and psychopathy.	• CD and ASPD: Auto SCID-II computer-assisted structured clinical interview for DSM-III-R personality disorders (SCID; First et al., 1991) and the Psychopathy Checklist Revised (PCL-R; Hare, 1991).	Significant associations between a history of CD criteria and the adult features of ASPD were relatively specific compared with other PDs, but weaker in women. Significant correlations between the number of positive CD criteria and PCL-R scores were similar in both genders.
22	**Howard, Huband & Duggan (2012)**	Adult antisocial syndrome with comorbid pathology: Association with severe childhood conduct disorder.	UK. (East Midlands).	Clinic-based sample. **n=255**.	Tested the hypothesis that adult antisocial syndrome co-concurrent with borderline personality disorder would be associated with greater conduct disorder severity than adult antisocial syndrome alone.	• CD and ASPD: Interview version of the WHO International Personality Disorder Examination (IPDE: WHO, 1995).	The mean number of CD criteria met and the total number of individual CD symptoms were significantly greater in the AAS+BPD group than the AAS alone. The AAS+BPD group were also more likely to be female, to have self-harmed, to show greater personality disorder comorbidity, and to self-report anger.

Predicting future antisocial personality disorder: Longitudinal Studies

Zoccolillo, Pickles, Quinton and Rutter (1992) used a longitudinal study design to examine the hypothesis that ASPD is the expected adult outcome for childhood-onset CD, when there is any kind of social maladaptation in adult life. The authors hypothesised that only some of the maladaptive behaviours in adulthood following childhood CD are captured by current diagnostic criteria for ASPD and subsequently aimed to examine social maladaptation in greater detail as part of their exploration of the impact of CD into early adulthood.

The study looked at detailed information gathered on young adults who had spent much of their childhood in care; alongside a comparison group who had not lived in care. The mean age at follow-up was 26, at which time standardised investigator-based interviews were used to gather data on life experiences and histories, behaviour in childhood and adolescence, adult social functioning and psychiatric symptoms. On the basis of these, individuals were assigned to *probably* or *definite* CD groups (evidenced by 2 symptoms or 3 or more symptoms of CD according to DSM-III respectively). Similarly, ratings of ASPD were made using DSM-III criteria but excluding the requirement that CD should be present in childhood in order to compare the prevalence for those with and those without a rating of CD.

Zoccolillo and colleagues (1992) reported that 40% of males with CD in childhood were rated with ASPD in adulthood, compared to only 4% of those without CD. 35% of women with CD were diagnosed with ASPD in comparison to none of those without CD. The study examined the continuity of CD into adaptive and maladaptive states in adulthood by measuring social maladaptation in three domains: work, social relationships and intimate relationships. 86% of the men with three or more symptoms of CD showed social maladaptation in two or more areas, whereas only 40% were given a diagnosis of ASPD. Similarly, 73% of women with

this level of CD showed social maladaptation, whereas only 35% were diagnosed with ASPD. The authors challenge whether a diagnosis of ASPD can adequately account for all the cases of pervasive persistent social dysfunction in adult life or whether measures of social maladaptation show more continuity between CD and later adult dysfunction.

Social dysfunction only rarely occurred in the absence of childhood conduct disturbance and suggests that pervasive social dysfunction may follow CD but not always reach threshold for the diagnosis of ASPD. Generalisability of these results is limited by the small sample size and the fact that the authors sampled from a population potentially at higher risk of social maladaptation due to both their social and environmental background. This population may not be representative of the larger population of adults who have experienced conduct problems during childhood. Regardless, the findings do raise questions about whether the diagnosis of ASPD provides adequate coverage for the range and severity of difficulties that may represent the sequelae of CD in childhood.

Studies that employ larger sample sizes, standardised measurement using more widely validated diagnostic interviews, and more robust analysis of the size and significance of results provide a better study design, both improving the quality of results and making it easier to compare results across studies. Studies 2-4, as listed in Table 1, employ larger sample sizes and standardised assessment of CD and ASPD diagnoses, addressing some of the limitations in this research.

Copeland, Shanahan, Costello and Angold (2009) differentiate between homotypic prediction, a disorder predicting itself over time, and heterotypic prediction, referring to different disorders predicting one another over time. They used a longitudinal prospective design with three cohorts and a large sample size (see Table 1) to establish which childhood and adolescent psychiatric disorders predict particular young adult disorders. Their sample was selected from a large population with a cohort design, subjects weighted in order to present results as

representative of the population. Diagnostic status was assessed by semi-structured psychiatric interviews where scoring programmes combined information about date of onset, duration and intensity of different symptoms in order to identify diagnoses according to DSM-IV. Interviews up until 16 were completed with both parent and child, multiple informants providing increased accuracy in reports. Across waves an average of 82% of possible interviews were completed.

Homotypic prediction for ASPD from adolescent CD was found to be significant. To test whether this was an artefact of the required presence of CD in childhood in order to meet diagnostic criterion for ASPD, an adjusted model was rerun using an ASPD diagnosis where there was no requirement of prior evidence of CD before 15 years. Again, CD alone predicted ASPD. Similarly, the link between CD and ASPD was found between childhood diagnoses and diagnoses during early adulthood, remaining after the adjustment for comorbidity and when the adjusted form of ASPD diagnosis (without the requirement for the presence of CD) was used.

These analyses were based on 1149 and 838 cases respectively and provided thorough tests of these predictive patterns by separately examining childhood and adolescent diagnostic predictors and adjusting for comorbid conditions. The fact that the relationship remained after adjusting the analyses to take account of the criteria requiring the presence of CD for an ASPD diagnosis supports the case that CD predicts later ASPD. Despite the large sample size, limitations remain with the population which was based in a rural area and, as acknowledged by the authors, not representative of the wider US population and similarly a UK population.

Taylor, Elkins, Legrand, Peuschold and Iacono (2007) question whether ASPD is a useful diagnosis for informing timely and appropriate intervention. On the one hand, not applying the diagnosis of ASPD may prevent some young people from being labelled with a potentially inaccurate and unhelpful label, an important consideration when research has shown that most antisocial young people do not

continue to be antisocial into adulthood (Robins, 1966). On the other hand, the age restriction within ASPD criteria (i.e. the necessity to be over 18 years) might mean a clinically important group are overlooked. Consequently, their study examines the construct validity of ASPD as diagnosed in adolescence. They question whether a poor prognosis could be associated with an earlier onset of ASPD in a way similar to the worsening outcomes associated with an earlier onset of CD in terms of poor academic functioning and a trajectory of antisocial behaviour (Moffitt & Caspi, 2001).

Participants were drawn from a sample of 1252 twins taking part in the Minnesota Twin Family Study (MTFS) which identified twin pairs through Minnesota state birth records between 1972- 1977. Intake data were sampled when the twins were 17 years old, with follow-up at 20 years. 88% of the twins completed diagnostic measures and were then grouped on the basis of diagnoses of DSM-III-R CD and ASPD. Three groups were formed: (i) a control group (n=340) where neither CD nor ASPD were diagnosed through age 20; (ii) a CD only group (n=77) where CD was diagnosed by 17 but no ASPD through 20; and (iii) an adolescent ASPD group (n=64) where ASPD was diagnosed by age 17. These three groups were compared on rates of comorbid DSM-III-R diagnoses at age 17, Verbal IQ score and Performance IQ>Verbal IQ score discrepancy, Bad Peers scale scores, and academic achievement.

Results showed that the Adolescent ASPD group had significantly more depression and substance use disorders, greater PIQ>VIQ discrepancy, more deviant peers and poorer academic functioning than the CD only group and the Control group. In a second analysis, the Adolescent ASPD and Adult ASPD groups were then compared on rates of endorsement of each CD and adult antisocial behaviour (AAB) symptom and the measures outlined above. The Adolescent ASPD group was not significantly different from the Adult ASPD group in most analyses; they did not differ significantly on their rates of endorsement of CD and AAB symptoms, suggesting that both adolescents and adults diagnosed with ASPD

endorse similar symptoms. Similarly, they did not differ significantly on any cognitive, peer, academic achievement or paternal history variables.

The authors conclude that Adolescent ASPD is a valid construct. They add that identification of Adolescent ASPD might offer parents and professionals a means to recognise those individuals at higher risk of persistent antisocial behaviour earlier in their development and to address their significant treatment needs.

The study provided inclusion of a mixed-gender, large community sample, with clear measures of CD and ASPD using structured clinical interviews and a mixed-informant design with information from parents, teachers and participants which may provide less biased information than relying purely on self-report measures. However, the study sample was predominantly white and, although consistent with the prevalence rates reported in the wider population, the CD and ASPD groups were relatively small, all limiting generalisabiliy of their findings to the wider population. Confidence in these results could be enhanced via replication with a larger and more diverse sample and also perhaps within clinic-based samples where higher rates of CD and ASPD are likely.

Taylor and Iacono (2007) used longitudinal data from the same epidemiological sample (MFTS) to examine whether personality traits as measured by the Multidimensional Personality Questionnaire (MPQ; Tellegen, 2000) were associated with antisocial behaviour disorders in adolescents that differed in their progression into adulthood. They compared results between three groups: (i) those with CD who did not progress to ASPD in early adulthood; (ii) those with ASPD and (iii) a control group with neither a CD nor ASPD diagnosis, predicting a significant difference between groups on constraint and negative emotionality.

Those in the ASPD group were significantly different from controls on constraint and each of its subscales and on negative emotionality and two of its subscales (alienation and aggression). Those in the CD-only group did not significantly differ to controls on most scales; aggression proved the only scale

score to demonstrate a significant difference. The ASPD group were significantly lower in constraint and all of its subscales than those with a CD-only diagnosis; however, the groups only differed on the aggression subscale of negative affectivity. The authors found no statistical difference in findings across gender other than on two scales; social closeness (where boys scored lower than girls) and aggression (where girls scored lower than boys).

Taylor and Iacono (2007) argue that their results provide some support for the idea that personality might play a role in organising behaviour that leads to a more persistent form of antisocial behaviour for some (i.e. those continuing to develop ASPD in adulthood) but not others (i.e. those whose antisocial behaviour apparently desists in adolescence; the CD-only group). They suggest that a greater deviance on the constraint personality dimension, a broad measure of behavioural control, sensation-seeking and attitudes towards authority, underlies this, those scoring lower on constraint at greater risk of a more persistent form of antisocial behaviour.

The authors argue that this difference between those in the apparently desistent-antisocial group (CD-only) and the more continuous-antisocial ASPD group indicates that those adolescents with CD-only may be aetiologically distinct from those with ASPD. The control and CD-only group showed no significant difference on most personality traits, the authors arguing that this suggests personality traits are unlikely to contribute significantly to the aetiology of CD when it is confined to adolescence, whereas the aetiology of ASPD may in part be defined by extreme personality traits such as high aggression and low constraint.

The longitudinal design of the study and clear assignment of participants into diagnostic groups allowed the authors to examine associations between personality and antisocial behaviour in terms of aetiology; the authors report this study as the first published report exploring associations between personality traits and DSM-defined antisocial behaviour disorders. They consider whether personality

assessment might offer an inexpensive and accessible means to help better improve prediction of which children with CD might progress to ASPD.

Clinic-based samples

Loeber, Burke and Lahey (2002) used a clinic-based sample of 177 boys in the Developmental Trends Study to prospectively predict ASPD from psychopathology earlier in life. Participants were 7-12 years of age at the beginning of the study and were followed-up annually with parent and child assessments until the age of 17. Young adult follow-up interviews were conducted solely with the participant at 18, 19 and 24 years. The recent study by Burke, Lahey and Waldman (2010) includes analyses to age 24, whilst a third paper (Lahey, Loeber, Burke, & Applegate, 2005) uses data from the same study to test the competing hypotheses that ASPD is predicted by childhood CD, ADHD, or both.

The study demonstrated good retention rates for childhood through adolescent data collection, 93.4% on average across the years. 143 successfully completed data collection at age 24. The sample was purposively selected to be composed of approximately 75% boys with CD and/or ADHD and 25% boys with other disorders. Multi-informant 'best-estimate' DSM-III-R diagnoses were made by two clinical psychologists independently reviewing computer-generated symptom summaries reported by each informant. Agreement between these two diagnosticians was high, kappa coefficients ranging from .92- .98.

Forty-eight participants (30.2%) met criteria for ASPD two or more times among the 159 participants who were assessed at least twice over ages 18, 19 and 24. Of the 159, 109 had met criteria for CD at least once during childhood assessments between 7-17 and 39.5% of those with CD went on to meet criteria for ASPD more than once. These rates of continuity between CD and ASPD are concordant with that found by Zoccolillo et al., (1992), outlined previously.

10% of the young men who met criteria for ASPD never met criteria for CD. Of these five participants all had shown two symptoms of CD during at least one

previous assessment however. These findings are consistent with those outlined by Copeland et al (2009), citing CD as the strongest predictor for ASPD. Whilst again highlighting CD as a necessary precursor in the majority of cases with ASPD, logistic regression analyses were used to evaluate those cases with CD at highest risk for developing ASPD and found that those who scored highly on callous/unemotional behaviour, depression and use of marijuana were at the highest risk to advance to modified ASPD (ASPD without the prerequisite of a CD diagnosis before 15).

In addition to this, Lahey and colleagues (2005) used joint regression models to assess the independent contribution of sociodemographic variables in predicting future ASPD. They found that global SES index significantly predicted future ASPD. Similarly, in a logistic regression analysis using SES, maternal ASPD, childhood CD and childhood ADHD, SES and childhood CD predicted later ASPD.

54% (33/61) of the adults who met criteria for ASPD also met criteria for CD in wave 1 of the study (7-12 years). 73% (74/102) of the adults who did not meet criteria for ASPD also did not meet criteria for CD in Wave 1. The authors translated this to a positive predictive power for childhood CD in predicting ASPD to therefore be .54, whilst the negative predictive power for CD was .73. Noting this, the authors attempted to further examine the prediction of which boys would develop ASPD, controlling for SES and looking separately at the number of covert and overt symptoms of CD.

Overt symptoms of CD included physical cruelty to animals, forced sexual activity, use of a weapon in a fight, initiation of physical fights, stealing with confrontation and physical cruelty to people. Covert symptoms included stealing without confrontation, running away overnight, lying, fire-setting, truancy, breaking and entering, and destruction of property. The number of overt CD symptoms was not significantly related to future ASPD; whereas, the odds of later ASPD were 89% greater at each greater number of wave 1 DSM-III-R covert symptoms.

Multiple statistical tests were performed on this data, with acknowledgement from the authors that at this stage in the research they regarded Type 2 errors as more detrimental than Type 1 errors. This leaves the results to be assessed alongside data from other studies. One difficulty in doing this is the fact that ASPD was assessed at different time points, thus increasing the incidence of diagnosis and making it difficult to compare to population-based estimates of ASPD. The results indicate that it may be helpful to take into account family SES and the specific types of CD symptoms present (i.e. covert or overt symptoms) in order to more accurately predict ASPD. Similarly, the small group where ASPD emerged in young adulthood in the absence of a CD diagnosis but with some history of CD symptoms perhaps raises questions regarding the number of symptoms required for a diagnosis of ASPD.

Washburn et al., (2007) used data from 1112 (431 females and 681 males) detained youth in the Northwestern Juvenile Project to explore how well CD and other mental health disorders and substance misuse disorders might predict ASPD for those young people in the juvenile justice system. Structured interviews were used at baseline and three years later at follow-up when participants had reached young adulthood. 17.3% of detained youths developed ASPD at follow-up, 27.6% modified ASPD (M-ASPD), where the criteria for a diagnosis of CD prior to age 15 is removed, (M-ASPD). 77.5% of those with M-ASPD met criteria for CD at least once in their lifetime, of those with CD at baseline, 25.2% of males and 18.5% of females developed ASPD and 34.9% of males and 26.2% of females developed M-ASPD. Having CD at baseline interview significantly increased the odds of developing M-ASPD at follow-up.

Significantly more males than females developed ASPD, but the authors found no significant differences by race or ethnicity. Those adolescents with five or more symptoms of CD were significantly more likely to develop M-ASPD than those with fewer than five symptoms. Similarly to Lahey et al., (2005), the study found that

the number of covert symptoms but not overt symptoms increased the odds of developing M-ASPD. The number of covert symptoms was not significantly associated with M-ASPD when having five or more symptoms for CD was included in the model. Having ADHD but not ODD significantly increased the odds of developing ASPD, but, again this association was mediated by having five or more symptoms of CD. Dysthymia and alcohol use disorder significantly increased odds of developing ASPD, whereas generalised anxiety disorder (GAD) significantly lowered the odds of developing ASPD.

The authors conclude that whilst CD proved the most sensitive predictor of ASPD, reliance on this as a marker alone would fail to identify approximately half of those participants who developed M-ASPD. The accumulation of covert symptoms also increased the odds of developing ASPD, consistent with social interaction and coercive theories of delinquency, where a growth in covert antisocial behaviour may mediate the progression from overt antisocial behaviour into more chronic adult antisocial behaviour (Patterson & Yoerger, 1999). Perhaps taking this along with results suggesting those with five or more symptoms of CD are at increased risk of ASPD suggests that a growth in specific, covert, symptoms of CD maybe associated with increased risk of ASPD.

These results are relevant for a detained adolescent sample and may not be generalisable to those young people with CD in the general population. The authors argue the importance of prospective studies with this population, suggesting that they may not be comparable to clinic-samples, as most detained youths do not receive mental health services (Teplin et al., 2005). The prevalence of ASPD in this population emphasises the necessity of an increased understanding of those who may be at risk and how they may be identified in order to appropriately utilise limited resources.

In their longitudinal study of 137 substance-abusing adolescents, Myers, Stewart and Brown (1998) reported that 84 participants (61%) met DSM-III-R criteria

for ASPD four years later. This included more male participants than female, 71% (60) and 29% (24) respectively. These two groups were found to be comparable in race/ethnicity, age and socioeconomic status at baseline. Logistic regression was used to help establish the influence of different covariates. In the final model, early onset of CD at age 10 or earlier, a greater diversity of conduct disordered behaviour, and heavier drug use prior to admission emerged as the best predictors of ASPD.

These findings are supportive of models predicting persistence of antisocial behaviour, particularly when associated with early onset, diversity and number of problem behaviours and substance misuse. A diagnosis of ASPD was associated with poorer alcohol and drug use outcomes, potentially indicating their substance use as a coping mechanism within this group, and indicating that from a clinical perspective, more intensive support targeting other areas of difficulty rather than sole-focus on the substance-misuse behaviour might be more appropriate.

Whilst demonstrating the clinical implications an increased understanding of the persistence of antisocial behaviour might have upon service design and delivery for young people, the study sample represents a clinically distinct population where the prevalence of CD and ASPD might be expected to be greater and is unlikely to be representative of the general population. The questionnaire adopted for use has not been validated for use diagnosing ASPD in comparison with other, standardised measures and consequently may not provide a validated and reliable means to compare data with other studies.

The longitudinal studies offer a prospective exploration of the persistence of CD into ASPD, examining the function of CD as a potential predictor of later emerging ASPD. The studies show some consistency in terms of the rate of persistence of CD into ASPD in both population-based and clinic-based samples (Loeber, Burkey & Lahey, 2002; Zoccolillo et al., 1992). They indicate a strong association between CD and the prediction of ASPD, even when the criterion requiring CD for a diagnosis of ASPD is removed (Copeland et al., 2009). They also

indicate that there may be additional risk factors present during earlier childhood and adolescence that are relevant to the prediction of ASPD in adulthood, and question whether current diagnostic criteria for ASPD capture the range and severity of difficulties of CD as it evolves into adulthood.

Antisocial personality disorder with and without conduct disorder: Cross-sectional studies

A number of studies have examined the existence of a group of individuals who meet criteria for adult antisocial behaviour (AAB), but without meeting criteria for earlier CD (studies 8-13, Table 2), and therefore not meeting the full criteria for ASPD. This raises the question of whether this group represents a clinically distinct category from that of ASPD and, if so, whether this denote a difference in what would represent helpful intervention and areas for further research to expand our understanding of this group.

Black and Braun (1998) outline a dilemma whereupon some clients do not meet the childhood CD criteria for ASPD, but where a diagnosis of 'adult antisocial behaviour' does not capture the full nature of their chronic and enduring maladaptive personality traits. These individuals might be left in "diagnostic limbo", as coined by the authors, where clinical intervention is not forthcoming and exploratory research investigating this subgroup of antisocial individuals is lacking as a result. They reviewed the case notes of 55 inpatients receiving a discharge diagnosis of ASPD or antisocial personality traits, dividing the charts into two groups depending on whether or not they showed evidence of childhood behavioural problems consistent with a diagnosis of CD.

They found no significant differences in demographic or historical data between the two groups, though those with childhood CD were more likely to have been admitted due to a recent suicide attempt, and in a comparison of nine adult

behaviour problems, these were shown to be more frequent in the subjects where childhood CD was evidenced. The authors conclude that whilst those who met full criteria for ASPD might be more symptomatic, perhaps reflecting that they may have suffered from a more severe and enduring personality disorder, the fact that those antisocial individuals without a documented history of CD did not differ more significantly from this group may suggest that they are widely similar.

Black and Braun (1998) acknowledge the limitations of their study due to its small sample size, comprised of patients who had required psychiatric hospitalisation, and reliance on chart information rather than purpose designed face-to-face assessments. They add that whilst it may not be representative of the general population of antisocial persons, their findings provide a preliminary basis for further investigation.

Perdikouri, Rathbone, Huband and Duggan (2007) sought to replicate the findings from Black and Braun's earlier study, whilst addressing some of its limitations, recruiting a sample of individuals who were seeking treatment within the community. They split participants who met adult criteria for ASPD into those who met full criteria (n=30) and those who failed to qualify for a diagnosis of ASPD through not meeting criteria for childhood CD, identifying this group as those with the adult antisocial syndrome (AAS) (n= 39). They examined the validity of this ASPD/ AAS distinction by looking at interview and historical data. The two groups were not significantly different when looking at gender, age, marital status or occupation. Using psychometric data available for a subsample who participated in the full trial, the authors found that the ASPD and AAS groups were not significantly different in self-assessed social functioning, social problem-solving ability, impulsiveness, shame or dissociative experience. Trait anger and outward anger expression were significantly greater for the ASPD group and control of this outward anger significantly less when compared to the AAS group. No significant differences were recorded in terms of offending history, although 70% of the ASPD group had at

least one conviction recorded on the Offenders Index, compared to 54% of the AAS group.

In conclusion, and similar to the results reported by Black and Braun (1998), Perdikouri and colleagues (2007) reference few differences between AAS and ASPD groups although those with full ASPD again appear to be more severely affected and seemingly more antisocial, as evidenced by more meeting criteria for three or more personality disorders and increased expressed anger. Additionally, the four childhood criteria most commonly endorsed were the same for both groups, suggesting that AAS is not qualitatively different from ASPD. The results indicate that whilst there might be a group of antisocial adults without evidence of prior CD, the relatively few differences between the two groups suggest that AAS and ASPD are not distinct disorders. Rather, it appears that AAS represents a less severe form of ASPD. The overall sample also contained a higher number in the AAS group (n=39) than the ASPD group (n=30), perhaps suggesting that AAS may be more common than previously considered.

Whilst this study builds upon its predecessor by recruiting a population-based sample and utilising both standardised interview, and self-report psychometric measures, it continues to have limitations in terms of generalising to the wider population of antisocial individuals, given that the small sample was drawn from a group seeking treatment and considered by referrers as likely to have a personality disorder.

Using a population-based sample, Marmorstein (2006) examined the demographic features and co-occurring psychopathology of participants organised into four groups: (i) those exhibiting late-onset antisocial behaviour (i.e. AAB but not CD); (ii) those with ASPD (i.e. CD and AAB); (iii) those with CD but not AAB; (iv) and a non-antisocial control group. They failed to uncover any significant group differences between the adult participants who met full criteria for ASPD and those in the late-onset, AAB, group: the AAB-only and ASPD groups did not have

statistically different rates of substance use disorders, the rates of depressive disorders were comparable between the two groups and higher than that of the CD-only and control groups, the AAB-only and ASPD groups had similar and relatively low levels of personal income and a higher rate of living in poverty than the control-group.

There were more females in the CD-only and AAB groups (29.9% and 30.1%) than the ASPD group (18.4%). This seems to suggest that females are more likely to show more transient and/or less severe antisocial behaviour than males, experiencing early or late-onset antisocial behaviour but perhaps less likely to engage in lifelong, persistent antisocial behaviour as their male counterparts. This is consistent with other major cohort studies, such as the Dunedin Longitudinal Study (Moffitt, Caspi, Rutter & Silva, 2001) which found that the majority of females who engage in antisocial behaviour fit the adolescence-limited pattern.

In further analysis, Marmorstein split the sample into four more distinct groups according to symptom count in order to take into account the possibility that her analyses were based on insufficiently distinct groups, (i.e. requiring CD-only participants to have zero symptoms of AAB). The results were much the same, suggesting that the results are not owed to individuals falling just above or below diagnostic cut-offs. Marmorstein concludes that, as 2.3% of this population-based, representative sample demonstrated AAB, this is a significant subgroup of antisocial adults that are at risk of being overlooked by exclusion from ASPD criteria.

These conclusions that AAB represents an important group of antisocial adults are strengthened by findings reported by Langbehn and Cadoret (2001), who also failed to find clinically important differences between patients with ASPD and those with AAB. Langbehn and Cadoret attempted to identify specific associations between biological or environmental background and specific adult or CD criteria. They used data from adoption studies to compare risk factors for adult antisocial behaviour with and without a history of CD. They hypothesised that participants

meeting the adult criteria for ASPD would share the same risk factors, regardless of whether there was retrospectively diagnosed CD.

The ASPD group had slightly more symptoms, increased incidence of lying, unstable work behaviour and drug problems, but these differences were not significant to a clinical level. Using models to examine antisocial biological background (at least one parent with ASPD), gender, adverse adoptive environment (as measured by the Adverse Adoptive Environment Scale (AAES; Cadoret, Yates, Troughton, Woodworth & Stewart, 1995)) and foetal alcohol exposure as predictors, the authors reported having an antisocial biological background as a specific risk factor for ASPD, whereas foetal alcohol exposure, male gender and adverse environment were associated with adult behaviour regardless of whether or not there was a history of CD. In an exploratory analysis of individual symptoms, 'lying' was most strongly associated with antisocial biological background whilst 'arrests' had a strong environmental association among adult symptoms. Among CD symptoms, 'expelled', 'lies', 'low grades' were associated more closely with antisocial background, whilst 'early sex', 'thefts' and 'violates rules' were strongly associated with adverse environment.

The authors cite the strong biological association with this pattern of conduct disordered behaviours as potential support for a biological parent influence on ASPD versus AAB. This is consistent with other research that cites genetic factors as one of the key determinants of antisocial behaviour, though this is in addition to other, family socialisation factors such as family criminality, family discord and ineffective parenting (Pulkkinen, 2001). Lying was the adult symptom with the strongest association with antisocial biological background. Lying is often considered the first covert antisocial behaviour to manifest in childhood and can be seen as a building block for continued covert antisocial behaviours (Patterson, 1982). This is also consistent with the studies showing covert symptoms as a strong predictor of ASPD (Lahey et al., 2005; Washburn et al., 2007).

The small sample size in the study limits statistical power and biological background did not predict who might progress from CD to ASPD. The authors conclude that any biological or genetic influence may manifest itself prior to adulthood, leaving other factors to influence which of these individuals may then develop ASPD. They suggest that utilising CD as a criterion for a diagnosis of ASPD increases the probability that what is being identified is a biologically influenced syndrome; this does not necessarily indicate heritability however.

Cottler, Price, Compton and Mager (1995) looked at subtypes of adult antisocial behaviour among drug users, their findings supporting clinical heterogeneity between these groups in contrast to the studies outlined above. They found that subtypes with and without CD were distinguishable on all measures of childhood behaviours, adult impulsive and aggressive behaviours, and measures of severe drug abuse. They suggest that the increased occurrence of adult symptoms of antisocial behaviour in the ASPD group is perhaps indicative of a more severe subtype. Yet, they recognise that a significant proportion of their sample (37%) did not meet full criteria for ASPD, despite meeting many of the adult behaviours and being indistinguishable from the ASPD group according to adult antisocial behaviour reported: physical, psychological, occupation and social substance-related problems, lifetime comorbid psychiatric disorders, and the number of psychiatric diagnoses and symptoms.

Cottler et al. (1995) used logistic regression models to look at the effect of reducing the number of criterion items required from 3 to 1 and found that it would lead to increased rates of ASPD diagnosis from 44% to 68% in men and from 27% to 51% in women. Similarly, increasing the age of onset requirement for CD to include 15 and 16 years, led to increased rates of ASPD from 44%-47% in men and 27%-31% in women.

Walters and Knight (2010) conducted a series of analyses on measures completed with recent admissions to a medium security federal prison in the North-

Eastern United States to examine whether prior CD increased deviance in those diagnosed with ASPD. Their sample of 327 male inmates was divided into three groups: (i) those meeting both adult antisocial criteria and childhood CD (ASPD); (ii) those meeting only adult criteria (AAB); (iii) and a non-antisocial group (NA). They hypothesised that those in the ASPD group would score higher on measures of criminal history, criminal/ antisocial attitudes and institutional misconduct than those in an AAB group and that this group would, in turn, score significantly higher than the NA group.

In contrast to the results outlined above (Black & Braun, 1998; Langbehn & Cadoret, 2001; Marmorstein, 2006; Perdikouri et al., 2007) Walters and Knight (2010) found a significant difference between the ASPD and AAB groups; the ASPD group demonstrated greater levels of criminal thinking, antisocial attitudes, and behavioural adjustment difficulties than those in the AAB and NA groups. Despite scoring significantly higher than the NA group on most of the measures of criminal thinking and antisocial attitudes, the AAB group failed to differ significantly from the NA group on rates of delinquency according to the behavioural measure of adjudications and convictions, whilst those in the ASPD group were more likely to receive disciplinary infractions for misconduct than participants in either of the other two groups.

Walters and Knight (2010) recognise one of the potential limitations with their research as the fact that many of the variables rely on self-report measures, questioning whether, consequently, the relationships between ASPD, criminal thinking and attitudes might in part be attributed to shared method variance. One of the variables in the study not dependent on offender self-report is that of age of onset.

Walters and Knight (2010) found that offender age recorded at first delinquent adjudication or criminal conviction distinguished between those in the ASPD and AAB groups but not those in the AAB and NA groups. This finding is in

accordance with previous research highlighting the age of onset's role in predicting future problem behaviour (Lahey et al., 1999). The authors argue that the key components of ASPD, antisocial attitudes, emotional impulsivity and behavioural deviance are demonstrated to have their roots in childhood CD.

Goldstein, Grant, Ruan, Smith and Saha (2006) suggest that those with childhood-onset CD represent a group that have a greater diversity of antisocial behaviours and a more violent form of ASPD, associated with greater lifetime comorbidity with other psychiatric disorders. They used data from a nationally representative, epidemiologic sample to investigate whether ASPD symptom patterns, psychiatric comorbidity and sociodemographic and family history correlates differed according to CD onset in childhood versus onset in adolescence. An earlier, childhood-onset of conduct problems was associated with elevated odds for Axis I comorbid disorders (social phobia, generalised anxiety disorder and drug dependence), paranoid, schizoid, and avoidant personality disorders, significantly more total CD criteria before age 15, and significantly more violent symptoms over their lifespan than those with onset in adolescence.

Burnette and Newman (2005) examined the utility of a CD diagnosis to predict ASPD in a sample of incarcerated females. They found that most of the women in their sample did not meet full criteria for ASPD due to a low occurrence of CD symptoms reported before age 15. This is consistent with the findings of Cottler et al., (1995) who found that among adult drug abusers, the adult-only subtype (AAB) was more common among women (49%) than among men (33%). The authors examined the degree to which the number of CD symptoms might be related to diagnosis and found that the mean number of CD symptoms endorsed for women with a full diagnosis of ASPD was 3.7, whereas the mean number of symptoms among women with adult-onset AAB was 0.9.

A cluster analysis of CD symptom criteria was used to identify patterns of adolescent CD behaviours. Initially CD symptoms were organised into four

composites according to DSM-IV classification: (a) aggression to people or animals, (b) destruction of property, (c) deceitfulness or theft, and (d) serious violation of rules. After examination of the numbers of symptoms endorsed within each composite and their loading patterns, the authors identified a four symptom cluster solution. Using this women were assigned to four groups: (i) *no CD,* participants did not endorse a significant number of CD symptoms; (ii) *moderate child or adolescent CD*, women with higher than average scores on the dimensions of deceitfulness or theft and serious violations of rules as well as mild elevations on dimensions involving aggression; (iii) *destructive*, women who only reported elevated levels of symptoms on the destruction of property but on no other dimension; and (iv) *severe CD*, women with highly elevated scores on all four dimensions of the CD criteria.

Although modest, each of the three clusters with symptoms of CD improved diagnostic specificity and accuracy for ASPD over that of just CD diagnosis alone. The authors question whether these findings suggest that the taxonomic link between CD and ASPD may not be as appropriate for women as previous studies have reported it may be for men. They suggest that within their cluster system, the *severe CD* type corresponds most closely to the life-course persistent (Moffitt, 1993) group identified with males that might be considered synonymous with full ASPD, but this only accounts for about 9% of their sample. Whilst enabling review of why women might show lower prevalence rates of ASPD than men, this study does suggest limited generalisability of the findings in terms of the CD typologies identified in this review for females, and whether these might apply to women outside of an incarcerated population.

Gelhorn, Sakai, Kato Price and Crowley (2007) use data from a nationally representative sample of non-institutionalised adults to examine the persistence of CD into ASPD and the utility of individual DSM-IV CD symptom criteria in predicting this progress. Contrary to previous estimates (i.e. Robins, 1966) the study reports

that 75% of those with CD also met criteria for ASPD, arguing that the persistence of ASPD from CD may frequently be underestimated.

Examining the relationship between individual CD symptoms and progression to ASPD, Gelhorn and colleagues (2007) found that individual CD criteria varied in their ability to predict persistence of antisocial behaviour, with some symptoms better able to predict clinical status, and other symptoms better predictors of persistence. Across gender, several criteria better predicted persistent adult antisocial behaviour (ASPD), most particularly, 'Steal with confrontation', which was not endorsed by anyone in the transient antisocial behaviour group, i.e. those with CD who did not persist to ASPD diagnosis. Similarly, a study using a population-based sample in Turkey (Doğan, Önder, Doğan & Akyüz, 2004) looked at the distribution of CD symptoms, and specifically at what symptoms were most commonly endorsed among the non-antisocial population, those with CD and those with ASPD. There was some overlap in terms of which symptoms were more frequently observed across groups, but those related to aggression, violence and destructiveness, and lying appeared to act as positive indicators for CD and the emergence of ASPD.

Dowson, Sussams, Grounds and Taylor (2001) cite research that has demonstrated a relationship between earlier histories of behavioural problems in childhood with PD psychopathology other than ASPD in later adult life (Bernstein, Cohen, Skodol, Bezirganian & Brook, 1996). Dowson and colleagues examined associations between features of CD with features of personality disorders and psychopathy with a psychiatric inpatient sample of 56 patients. 12 patients were diagnosed with ASPD, 10 male, 2 female. Of these, 10 were diagnosed with co-occurring borderline personality disorder (BPD). The mean number of PD diagnoses per patient was 2.1, and 26 of the patients had a history of meeting two or more CD criteria.

Looking at the relationship between individual CD criteria and PDs, they found a relative specificity of association between CD criteria and adult features of ASPD, seven CD criteria showing a significant item-total correlation with scores for the adult features of ASPD. Two of these were the same as those most frequently reported by Cottler et al.'s (1995) sample, 'stole without confrontation' and 'was often truant' but only three were significant for women, 'ran away overnight'; 'stole without confrontation' and 'destroyed property'.

This study includes a small sample of participants from an inpatient setting where greater levels of self-harm and substance misuse, behaviours associated with PD, are likely to be present (Nace et al., 1991; Russ, 1992). As a result, the findings need to be considered carefully in terms of how they might generalise to adults in non-psychiatric settings. However, some similarity has been reported in other studies (Cottler et al., 1995). Gender differences have also been highlighted in other studies and within this review. The authors argue that CD can also be associated with the development of persistent and pervasive dysfunction in adulthood, as defined by Zoccolillo et al. (1992) and that if PD were defined in terms of 'pervasive social malfunction' it would show similar prevalence across gender (Paris, 1997). The correlation between CD criteria and psychopathy scores in the study did not show weaker associations for women, perhaps suggesting that antisocial behaviour in adulthood was better identified by psychopathy criteria than ASPD adult criteria for women in the sample.

A recent study by Howard, Huband and Duggan (2012) tested the hypothesis that AAB co-concurrent with BPD would be associated with greater CD severity than AAB alone. They divided a sample of 69 personality disordered individuals who met the adult criteria for ASPD into those who also met a diagnosis of BPD (AAB+BPD) and those who did not (AAB only). These two groups were then compared on CD symptoms.

The authors found that despite no significant differences in demographic variables, the AAB+BPD group contained a significantly higher proportion of the women in the sample than the men (89.6% and 47.5% respectively). There was greater evidence of PD comorbidity in the AAB+BPD group and 52% of the AAB+BPD group met full criteria for ASPD, compared with 31% of those with AAB alone. Self-reported psychometric measures also showed a significantly higher score on trait anger and outwardly directed anger expression for the AAB+BPD group. Whilst the mean number of adult antisocial symptoms did not differ significantly between groups, the mean number of CD criteria met was significantly higher in the AAB+BPD group.

The authors use this to argue that CD maybe more closely linked to AAB when co-occurring with BPD, implying that the relationship between CD in childhood and ASPD in adulthood may in fact be moderated by the presence of co-occurring BPD. These results are limited in terms of generalisability due to their relatively small sample size (n= 255), and, similarly with the other cross-sectional studies, that their results are dependent on retrospective measures. The AAB+BPD group showed greater PD comorbidity generally and this, arguably, could be linked with the severity of CD symptoms rather than the AAS+BPD link specifically, but Dowson and colleagues (2001) also outline the relative specificity of the association between CD symptoms and ASPD as opposed to other PDs in a sample in which 59% have BPD. The role of gender also needs to be carefully considered, both Dowson and colleagues (2001) and Howard and colleagues (2012) reporting a higher proportion of women with antisocial behaviour and BPD, questions arising as to whether results would therefore be applicable across gender.

Despite not being able to offer a prospective measure of the persistence of CD into ASPD, the cross-sectional studies reviewed were able to explore the potential heterogeneity or homogeneity of those groups of individuals with AAB distinguished by either history or absence of prior CD. They report some disparity

between whether these groups represent similar or clinically distinct groups (Black & Braun, 1998; Cottler et al., 1995; Marmorstein, 2006; Perdikouri et al., 2007; Walters & Knight, 2010), whilst other studies explore the potential role of symptomology (Burnette & Newman, 2005; Dawson et al., 2001; Doğan et al., 2004; Gelhorn et al., 2001) and comorbid personality disorder (Dawson et al., 2001; Howard et al., 2002) in the diagnosis of ASPD.

One major criticism of the cross-sectional studies is the fact that they rely upon retrospective measures of CD, subject to bias in terms of accurate and true recall. Rueter, Chao and Conger (2000) looked at the influence of current behaviour on the recall and report of retrospective CD behaviours. They found that where current behaviour was inconsistent with past behaviour, inaccurate diagnoses were more likely to occur. This highlights one of the dangers in reliance upon self-report retrospective measures and suggests that those studies which utilise multiple-informant design might be less likely to suffer from this bias in measurement. Seven of the ten cross-sectional studies (studies 1-6 and 9 in Table 2) use other informants, including parents and teachers.

Discussion

This review provides a narrative synthesis of literature examining the association between childhood and adolescent CD and the persistence of antisocial behaviour into adulthood, specifically antisocial behaviour consistent with a diagnosis of ASPD. CD does not signal an inevitable progression into life-course persistent antisocial behaviour, and, whilst a number of longitudinal studies reviewed here report persistence rates consistent with Robins' (1966) earlier findings, wherein around 40% of those children and adolescents diagnosed with CD persist to a later diagnosis of ASPD in adulthood (Loeber, Burke & Lahey, 2002; Zoccollilo et al., 1992), two studies report significantly higher rates. Myers and colleagues (1998) reported that 61% of their substance-abusing adolescent sample

progressed to ASPD at follow-up, whilst Gelhorn and colleagues (2007) report that 75% of those with CD in a nationally representative sample of non-institutionalised adults also met criteria for ASPD. Gelhorn et al. (2007) argue that this reflects the fact that rates of ASPD progressing from CD are commonly underestimated, whilst others may cite potential methodological flaws as responsible (i.e. using post-hoc measures of CD; Rueter, Chao & Conger, 2000).

Regardless, the research studies reviewed here widely recognise CD as a significant predictor of more enduring and persistent antisocial behaviour, whether diagnosed as ASPD (Copeland et al., 2009), or evident in later social maladaptation (Zoccolillo et al., 1992). What seems less clear and the focus of increased attention is the nature of this relationship; what distinguishes those who progress from CD in childhood and adolescence to later ASPD in adulthood from those who apparently show a more time-limited form of antisocial behaviour in their youth?

The studies reviewed outline a number of risk factors which significantly increase the odds of being diagnosed with later ASPD in addition to CD in childhood and adolescence: (i) *social environmental factors*- high family SES inversely predicted ASPD (Lahey et al., 2005); (ii) *related psychiatric disorder*- progression to M-ASPD was predicted by depression and substance misuse in adolescence (Loeber, Burke & Lahey, 2002; Myers et al., 1998); (iii) *temperamental traits*- higher trait anger and outward expression of anger distinguishing those with ASPD from those with later onset AAB without previous CD (Perdikouri et al., 2007); (iv) *personality*- scoring highly on traits relating to constraint and aggression distinguished between those who progressed to ASPD from an earlier diagnosis of CD and those who did not; (v) *comorbid personality disorder*- significantly more CD criteria were met in an AAB+BPD group as compared to a AAB-only group; potentially indicating that the relationship between CD and ASPD is moderated by the presence of BPD (Howard, Huband & Duggan, 2012) (this effect showed greater significance for females).

Similarly, the severity of conduct problems appears a significant factor in identifying those young people at greatest risk of persisting to a diagnosis of ASPD in adulthood. An earlier, childhood-onset as opposed to adolescent-onset of CD (Goldstein et al., 2006; Myers et al., 1998) and a greater number of CD symptoms, specifically covert symptoms of CD (Lahey et al., 2005; Langbehn & Cadoret, 2002; Washburn et al., 2007) were associated with increased odds of a later diagnosis of ASPD. This increased risk associated with the accumulation of covert symptoms is consistent with social interaction theories of delinquency. New forms of antisocial behaviour emerge as they are learned in middle childhood via association with other aggressive peers. In response to changing peer and adult relationships and expectations, children learn to avoid detection and the negative or punitive consequences associated with their antisocial behaviour. This might involve a shift to more covert forms of behaviour (Dishion & Patterson, 2006). Proactive and relational aggression for example can be seen as covert antisocial behaviour, emerging in middle childhood (age 6 years), increasing during late childhood, and accelerating at early adolescence; this growth in covert behaviour reflects the diametrically opposed decline of overt forms of antisocial behaviour into adulthood (Dishion & Patterson, 2006).

Langbehn and Cadoret (2001) suggest that covert symptoms appear more strongly associated with an antisocial background (i.e. an antisocial biological parent) whereas overt symptoms are associated with an adverse environment. Could it be that covert symptoms are more indicative of underlying personality traits or differences which might distinguish those at greater risk of a more persistent and pervasive antisocial trajectory? Walters and Knight (2010) found that those meeting criteria for full ASPD showed greater levels of criminal thinking and antisocial attitudes, whilst those who scored highly on callous and unemotional behaviour were also at higher risk of developing adult features of ASPD (Loeber, Burke & Lahey, 2002).

A growing body of research has been endorsing the use of callous and unemotional traits to identify a subgroup of antisocial youth demonstrating a more severe, aggressive, and stable pattern of antisocial behaviour (Frick & White, 2008). Callous and unemotional (CU) traits have been demonstrated as stable across childhood and adolescence (Frick, Cornell, Barry, Bodin & Dane, 2003) and CU traits in boys aged as young as 7-12 years have been found to predict adult measures of psychopathy after controlling for conduct disordered behaviours (Burke, Loeber & Lahey, 2007). Together with the findings outlined in this review identifying earlier onset CD (Goldstein et al., 2006), covert CD symptoms (Lahey et al., 2005; Langbehn & Cadoret, 2002; Washburn et al., 2007) and personality traits relating to aggression and constraint (Taylor & Iacono, 2007) as associated with increased risk of more enduring antisocial behaviour, one might suggest that the early formation of personality involving CU traits may serve as part of an underlying psychological structure for the organisation or progression of antisocial behaviour.

Consistent with this hypothesis, Taylor and colleagues (2007) identified ASPD in adolescence as a valid construct, implying that more enduring behaviour and maladaptive personality traits are already present prior to emerging adulthood. DSM-V (APA, 2013) outlines an alternative model for personality disorders in which ASPD with psychopathic features is outlined, linking maladaptive personality features with more antisocial and disinhibited behaviour. CU traits and impulsive and irresponsible behavioural style are both dimensions used to define adult psychopathy and show strongest correlation with measures of conduct problems (Frick, Bodin & Barry, 2000). Child psychopathy is an area of increasing interest and might perhaps provide a means of identifying a subgroup of antisocial youth at most risk for enduring and pervasive patterns of further antisocial behaviour into emerging adulthood and beyond (Frick & White, 2008).

Burnette and Newman (2005) found that among a population of female detainee's traditional ASPD criteria including evidence of earlier CD did not appear

to best capture those with the most antisocial behaviour in adulthood, whereas measures of psychopathy appeared a better indicator. As well, several well-conducted studies, (with both male and female participants) have found no significant difference between ASPD with earlier CD in childhood and adolescence, and later-onset AAB without apparent CD in earlier life (Black & Braun, 1998; Langbehn & Cadoret, 2007; Marmorstein, 2006; Perdikouri et al., 2007). Consequently, these studies suggest that early onset CD symptomatology may not be an unequivocal or consistent predictor of later ASPD. Could psychopathic traits therefore act as a means of refining the prediction of who might progress from CD to later ASPD?

Implications for future research

Further research needs to consider how to incorporate this array of risk factors into any proposed model or understanding of causal mechanisms that may underlie the relationship between CD and ASPD. Previous research appears to have focused upon more overt, behavioural aspects of youth antisocial behaviour (i.e. the focus around CD in childhood and adolescence), but the significance of covert factors and personality in predicting later ASPD (Lahey et al., 2005; Langbehn & Cadoret, 2002; Taylor & Iacono, 2007; Washburn et al., 2007) suggest that an increased understanding of how more enduring personality factors may influence the development of serious and persistent antisocial behaviour from childhood to adulthood might further inform our understanding of which young people might be at greatest risk of persistent antisocial behaviour and social maladaptation. Understanding this consolidation of both behavioural patterns and personality might then allow room to consider how environmental factors such as criminogenic lifestyle, peer association and family environment might interact with and have effect on the developmental trajectory of these young people.

This review highlights the complexity of attempts to understand and categorise human behaviour and how it might both manifest and develop. Whilst diagnostic categories such as those operationalised here, defining antisocial behaviour with DSM CD and ASPD, represent an attempt to organise behaviours or symptoms in a way that can be used to try to explore and identify etiological mechanisms, the array of differing factors highlighted as complicit in the development of antisocial behaviour by the studies examined here, show that perhaps it is only part of the puzzle. Whilst psychiatric diagnoses may enable researchers to explore disorders in terms of their etiology and treatment, perhaps acting as the building blocks in the development, assessment and refining of evidence-based treatments, the complexity of the clinical picture demonstrated here underlines the importance of a more multifaceted understanding of the human condition. This review suggests that a more thorough understanding of the range of factors surrounding an individual, and their interplay, might inform a more complete understanding of their behaviour, its development and manifestation. This highlights the importance of clinical formulation and the ability to use psychiatric diagnosis in a nuanced way, perhaps guiding investigation rather than creating rigid structures which block a developing understanding of what might lie behind and influence behaviour.

This review has a number of limitations. Firstly, due to practical limitations, there was only one reviewer; this increases the possibility that there may be some studies that have not been identified or included in the review. Due to reasons of practicality it was not feasible to have more than one reviewer. Similarly, due to practical constraints, only one database was used to complete searches and the results and interpretations made are based upon only studies published in peer-reviewed, English-speaking journals. Results may therefore be subject to more publication bias, whereupon only studies with significant findings tend to be published, and may discount potentially relevant and informative results from other

countries, possibly limiting the generalisability of interpretations and suggested areas for further research.

This review sought to remain focused in scope, but the results indicate that a multitude of factors may offer a significant contribution to both picking apart the complicated trajectory of persistent antisocial behaviour and understanding how it might prove best to offer intervention. It may be helpful for future reviews to widen their scope subsequently and to consider how the construct of child psychopathy might inform further thinking and research regarding those young people most at risk of continued antisocial behaviour throughout adolescence and into their adult lives.

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Part Two: Empirical Paper

Competing with the gang: an exploration of MST therapists' experiences working with gang-involved young people and their families

Abstract

Aims: This study offers a qualitative exploration of the experiences of MST therapists when working with gang-involved young people and their families, examining whether gang-involvement has any impact upon the implementation of the model.

Method: Semi-structured interviews were completed with 12 therapists and supervisors, sampled from two inner-city London boroughs. Data were transcribed and analysed thematically.

Results: Three main themes were identified: *The unique clinical challenge of working with gang-involved young people, it's not perfect but MST offers a good option* and *MST is limited in the support it provides therapists when working with gang-involved youth*.

Conclusions: Results are discussed in the wider context of the existing gang-literature, highlighting clinical implications for the MST model in order to address the additional challenges implicit in working with gang-involved young people, and ways in which the current MST supervisory structure may be shaped to better support its therapists.

Introduction

Serious youth antisocial behaviour and gang-involvement is both costly and poorly understood. Potential consequences of gang-involvement have been well-documented, highlighting the negative impact for the young person themselves, their family and the wider community (Shute, 2008). Gang-involvement acts as an amplificatory factor for delinquent behaviour beyond that of association with delinquent peers alone (Battin, Hill, Abbott, Catalano & Hawkins, 1998), and is highly predictive of problem behaviour (Walker-Barnes & Mason, 2004), increased delinquency and substance use (Dukes, Martinez & Stein, 1997), dealing drugs and carrying weapons (Marshall, Webb & Tilley, 2005). Finally, gang-involvement has been associated with a longer-term trajectory of worsening behaviour (Howell & Egley, 2005; Loeber et al., 1993). US criminologist, Terence Thornbury (1998) describes the gang as an escalator, taking young people to new and more serious levels of criminal involvement. Similarly, other researchers have noted that whilst a high proportion of gang-involved youth are known to criminal justice services (Pitts, 2007), traditional means of reprimanding and deterring further criminal behaviour, i.e. imprisonment, can in fact produce defiance amongst gang-involved youth, incarceration consolidating gang loyalties (Sherman, 1993). The widespread detrimental impacts associated with gang-involvement, for young people and for those around them, necessitate ongoing attempts to understand the processes driving gang-involvement and how to disrupt the gang (Schute, 2008).

Whilst research into gang-involved youth is predominantly from the US, there has been a growing interest in the plight of gang-involved youth in the UK (e.g Pitts, 2007), perhaps in part associated with the extensive public disorder in August 2011. The riots in August 2011 saw some of the most extensive public disorder in decades, with widespread looting, arson, criminal damage, violence and the mass deployment of police across several London boroughs and in other cities and towns across England. The riots drew attention to the wider social cost of serious youth

antisocial behaviour, costing the retail sector up to £300 million in damage and lost avenue (Retail Economics, 2011), whilst 5,112 individual disorder-related offences were recorded (68% of these reported by the Metropolitan Police Service) (Home Office, 2011).

Following the disorder, a cross-governmental report recognised the need for a co-ordinated approach to tackling gang and youth violence (Home Department, 2011). Whilst assumptions that gangs may have played a major role in co-ordinating the disorder proved to be inaccurate, (13%, or 417, arrestees nationally were reported to have been affiliated to a gang) (Home Office, 2011), the report did suggest that a minority of gang-involved youth can have a significant and disproportionate impact on antisocial behaviour committed by young people. One in five of those arrested in London (337) were gang-affiliated, whilst half of all shootings in the capital and 22% of all serious violence are also committed by gang members (Home Office, 2011).

The government report promotes intensive family intervention work with the most troubled families, including those of gang-involved young people, with a specific commitment to the roll-out of multisystemic therapy (MST; Henggeler & Borduin, 1990) to 25 clinical teams in localities across the country by 2014 (Home Department, 2011). MST is a family-oriented, evidence-based treatment for youth antisocial behaviour that was developed in the U.S. and is now being implemented and evaluated in several European countries. Family support has previously been recommended as a potential gang reduction measure; family-level factors shown to contribute to the risk of behavioural problems associated with gang-involvement (Schute, 2008). Compared to non-gang-involved youth, gang members are significantly more likely to live in families characterised by lower levels of parental monitoring and supervision, low parental warmth, higher levels of family conflict, and inconsistent discipline (Belitz & Valdez, 1994; Dukes, Martinez & Stein, 1997; Klein & Maxson, 2006; Lahey, Gordon, Loeber, Stouthamer-Loeber & Farrington, 1999).

Interventions which have proven effectiveness with behavioural problems in antisocial youth, and which increase parental monitoring and warmth, may therefore provide the best means of intervention with gang-involved young people (Schute, 2008).

Developed in the 1970s to address the limitations of existing mental health services for juvenile offenders, multisystemic therapy (MST; Henggeler & Borduin, 1990) is an intensive family-based intervention for young people with serious antisocial behaviour. MST adopts a social-ecological approach (Bronfenbrenner, 1979), positing youth antisocial behaviour as multi-determined; a reciprocal interplay between characteristics across the individual, family, peer group, school and community contexts. Guided by nine treatment principles (Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998), MST therapists aim to induce positive behavioural change in the young person by working across the multiple systems in which they are embedded.

Whilst research has shown that MST is effective in reducing youth antisocial behaviour (e.g. Borduin et al., 1995; Henggeler, Cunningham, Pickrel, Schoenwald & Brondino, 1996; Ogden & Halliday-Boykins, 2004), it may be less clear what drives this change (Tighe, Pistrang, Casdagli, Baruch & Butler, 2012). Initial efforts to identify the mechanisms of change in MST identified two key mediating factors: therapist adherence to the model was associated with improved family functioning and decreased affiliation with delinquent peers, this in turn was associated with a decrease in delinquent behaviour. A later study, with juvenile sex offenders, similarly found that improved caregiver discipline practices and a decrease in youth association with antisocial or deviant peers was significantly associated with decreased antisocial behaviour (Henggeler et al., 2009). In a further exploration of the potential variables mediating change, Tighe and colleagues (2012) examined families' experiences of therapeutic processes of change and their outcomes, discovering that tackling association with deviant peers was one of the most difficult

and often least successful aspects of the model (as experienced by families). These findings have strong implications for MST when applied to working with gang-involved young people, where additional complexities may make decoupling from the gang, or delinquent peers, more challenging. A UK based report into gangs in Waltham Forest, London, described the additional factors that might contribute to joining a gang (Pitts, 2007), including status, 'respect', financial reward, protection, and a lack of access to legitimate opportunity. Continued affiliation was, in part due to the dangers inherent in leaving the gang.

Whilst MST typically includes some effort to intervene directly in the peer ecology, (e.g. enrolling youth in prosocial activity and rewarding them for their sustained participation) (Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 2009), assessments of the effectiveness of MST for youth entrenched in or affiliated with negative peer groups, or gangs, has not been explored (Boxer, 2011). Interestingly, a meta-analysis of MST outcomes studies found that MST demonstrated larger effects on measures of family relations than on measures of individual adjustment or peer relations (Curtis, Ronan & Borduin, 2004). In light of the evidence from meta-analyses which identify deviant peers as the most powerful predictor of delinquency in adolescence (Lipsey & Derzon, 1998), and the additional challenges accompanying efforts to decouple youth from gangs as outlined above, this suggests that it might prove helpful to consider the influence of gang-involvement with respect to factors that might inhibit treatment success.

In his study Boxer (2011) examined the effect of negative peer involvement on case closure status for a large sample (n=1341) of adolescents engaged in MST. He looked at whether serious negative peer involvement would reduce the likelihood of successful treatment, and, whether negative peer involvement might lead to the utilisation of different treatment strategies by the MST therapist. The study found that negative peer involvement was significantly related to treatment failure, particularly when young people were involved in gangs. Despite these findings,

Boxer (2011) reported that the study was unable to assess how the treatment strategies of therapists might vary depending upon the involvement of negative peers, specifically to address the peer ecologies of gang-involved youth. He recommended that further research examining the role of negative peer influence during treatment for youth problem behaviour should explore whether negative peer influence poses a challenge to therapists seeking to maintain treatment fidelity. Therapist adherence is a fundamental aspect of treatment success in the MST model and has been identified as a critical factor in the transportability of MST (Schoenwald, Letourneau & Halliday-Boykins, 2005).

The present study aims to build upon the work of both Tighe et al. (2012) and Boxer (2011) by exploring MST therapists' experiences of implementing MST with gang-involved youth. The study adopts a qualitative methodology to explore the experiences of MST therapists and supervisors who worked as part of the START trial (Fonagy et al., 2013); a multi-site randomised controlled trial examining the effectiveness of MST in a UK context. Whilst RCTs are the 'gold standard' in the evaluation of therapeutic interventions, guidelines from the UK Medical Research Council (2008) and a comprehensive systematic review (Greenhalgh, Robert, Macfarlane, Bate & Kyriakidou, 2004) highlight the fact that combining outcome evaluations with an understanding of therapy process 'can provide useful insights into why an intervention achieves or fails to achieve the expected outcomes'. They recommend including the perspective of clinicians, patients and other stakeholders in the design and further development of treatments. Exploring the process of working with gang-involved young people from a therapists' perspective has particular significance in relation to MST, where therapist adherence to the model has been identified as significantly related to treatment success (Huey et al., 2000) and is routinely measured throughout the intervention. It is therefore useful to consider whether working with young people who are gang-involved may challenge this adherence to the MST model.

Despite three decades of research investigating the effectiveness of MST, there have been few qualitative studies of this intervention (TIghe et al. 2013; Kaur, Pote, Fox & Paradisopoulos, submitted for publication; Paradispoulos, Pote, Fox & Kaur, submitted for publication), and none that elicit therapists views regarding treatment implementation. Adopting a qualitative methodology allows an inductive approach where flexible exploration and refinement of therapists' meanings enables themes to be identified in the data rather than using predefined categories (Smith, 1995). This is particularly useful when exploring an area where there has been little prior research (Pistrang & Barker, 2012); allowing therapists and supervisors the freedom to describe experiences in their own language, providing rich, in-depth data.

The present qualitative study focused on the experience of MST therapists and supervisors working with gang-involved young people. It investigated whether gang-involvement had an impact on the delivery of the MST model in terms of the MST therapists' and supervisors' implementation of the model, looking at what the strengths and limitations of the model might be with this sub-sample of young people, and how this might affect positive change.

Methods

Setting

This study was a part of the START trial, a larger-scale randomised controlled trial evaluating the effectiveness of MST across nine sites in the UK (Fonagy et al., 2013). This study specifically sampled those therapists and supervisors who had worked with two of four London sites, based on the hypothesis that therapists working in deprived, urban boroughs of London would have more experience of working with gang-involved young people than the sites located outside of London, which included Peterborough and several localities in the Leeds

area. This assumption was based upon official criminal justice statistics: a larger proportion of those young people involved in the riots in London were gang-affiliated in comparison to elsewhere in the country (Home Department, 2011), and a previous study by the Metropolitan Police (2006) identified 169 youth gangs in London, estimated to have been responsible for around 40 murders and 20% of the youth crime in the capital.

Participants

Using an opportunity, snowball-sampling strategy, MST therapists and supervisors that had worked for the two London sites during the recruitment period for the trial were contacted and invited to participate in the study. At this point participants were advised about the nature of the study using the study information sheet (see Appendix), and via email or telephone conversation with the main researcher. Therapists were encouraged to take part if they had had direct clinical experience working with what they had considered gang-involved young people and supervisors if they felt they had supervised therapists who had been working with families where the young person was gang-involved. All participants felt that they had had experience working with gang-involved young people in this context. Twelve out of a possible seventeen clinicians opted to take part; these included six participants from either site, eleven female and one male. The remaining five clinicians could not be contacted or chose not to participate due to time constraints; no therapist or supervisor advised that they had had no experience of working with gang-involved young people and their families. Two participants had worked solely as supervisors, another four had worked as therapists and later moved into supervisory roles. Six participants continued to work within MST, (though across different teams), six participants no longer worked as part of an MST team. The group represented a diverse array of professional training and background, including clinical psychology, family work, youth work, social work and forensic psychology.

Therapists had spent an average of 2 years 11 months working as MST therapists, supervisors on average had spent 1 year 4 months in the role. Of the remaining five clinicians that did not take part, one declined and the other four could not be contacted.

MST Quality Assurance and Therapeutic Practice

MST has developed a complex quality assurance system that includes the following: an intensive 5-day orientation to MST theory and practice for clinical staff, quarterly boosters for clinical staff, a treatment manual that specifies MST clinical practices (Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998), at least weekly supervision of therapists by a clinical supervisor trained in MST supervisory protocol (Henggeler & Schoenwald, 1998), and weekly phone consultation with the MST team (i.e. supervisor and therapists) by an MST expert who follows a specified consultation protocol (Schoenwald, 1998). Questionnaire measures are used to regularly monitor both therapist and supervisor adherence to the model (Supervisor Adherence Measure, SAM; Schoenwald, Henggeler & Edwards, 1998; Therapist Adherence Measure, TAM; Henggeler & Borduin, 1992).

MST Supervisory Practice

Supervision within the MST model represents a key part of the models attempt to promote therapist fidelity to MST interventions, and thus manuals documenting and guiding MST clinical supervision (Henggeler & Schoenwald, 1998) have been developed. The purpose of clinical supervision in MST is to enable clinicians to adhere to the nine principles of MST in all aspects of their clinical work with families and to promote outcomes for the family. Supervision aims to serve three interrelated purposes: (i) to develop case –specific recommendations to speed the progress towards outcomes for each family; (ii) to monitor therapist adherence to the MST treatment principles in all cases; (iii) to advance a clinicians development in

the ongoing use of the MST model (Schoenwald, Brown & Henggeler, 2000). Supervision takes place in a group format, including the MST treatment team of three to four therapists, with the supervisor responsible for the conduct and outcomes of all supervision sessions. The team format aims to provide the opportunity for team members to learn from one another's successes, mistakes and dilemmas, to provide an opportunity for practice through role play, to promote collaboration among team members, and to ensure that the MST treatment team are able to attend to the needs of any family in crisis (i.e. if a family encounters a crisis out-of-hours then the on duty therapist should be sufficiently familiar with their case to be able to respond appropriately). Whilst group supervision is the norm, supervisors may meet with therapists individually who are encountering problems which are interfering with their adherence to the model or outcomes. Supervision is typically once or twice weekly, depending on the nature of the clinical population, lasting between one to two hours.

Weekly consultation with an MST expert is designed to support therapist and supervisory fidelity to the model on an ongoing basis. Expert MST consultation aims to facilitate clinician learning and application of the MST principles, to monitor and support clinical and supervisor adherence to the MST treatment principles, to coach supervisors in the effective use of MST supervision and to identify organisational and service system barriers to the implementation of MST (Schoenwald, Brown & Henggeler, 2000). As with supervisory sessions, consultation takes place on a weekly basis and is attended by all members of the MST treatment team.

Procedure

Ethical approval was granted by the local National Health Service ethics committee as an amendment to the START trial protocol (see Appendix II). All participants were given information sheets (see Appendix III) and gave written consent (see Appendix IV) prior to the interview. Interviews were conducted within

the community at the convenience of the therapist and lasted approximately one hour. All interviews were audio-recorded and transcribed verbatim. Pseudonyms have been used to replace participants' real names throughout this report, and any identifiable information has been omitted.

Background of the researcher

The primary researcher was a clinical psychology trainee, completing the study as part of her doctoral thesis. Whilst the trainee psychologist had had no clinical experience of MST, she had previously worked as a researcher on the START trial. This had fostered an interest in social-ecological models of antisocial behaviour and encouraged an awareness of the multitude of factors contributing to a young person's experience in their environment. Whilst working as a researcher had encouraged her to recognise the various challenges to young people in their social context, and also for those therapists working with them, she was cautious about maintaining an open and curious stance. The research supervisor was experienced in conducting phenomenological qualitative research and the Trial Manager for the START trial.

Interviews

A semi-structured interview design provided participants the freedom to explore and express their views and meanings in their own terms, gaining a detailed account of their beliefs and perceptions around the topic (Smith, 1995). The areas covered were how they identified young people as gang-involved, engaging gang-involved young people and their families, therapist expectations for working with these families, aspects of the MST model that were both helpful and limited working with these particular families, additional challenges posed by gang-involvement and how they might be addressed, and outcomes for these families. (see Appendix V for the full interview schedule).

Method of Analysis

This study represents an inductive analysis, adopting a realist/essentialist epistemology whereby language is seen to reflect and enable articulation of meaning and experience (Potter & Wetherell, 1987; Widdicombe & Wooffitt, 1995). All interviews were transcribed verbatim and analysed using the thematic analysis procedure outlined by Braun and Clarke (2006). This offers clear guidelines in order to complete a rigorous and systematic analysis of the data set. This form of analysis enabled a thorough and rich description of the data, identifying themes in the data and consideration of how these related to one another.

The procedure consists of 6 phases (see Appendix VI for a full outline): (i) *familiarisation with the data*- reading and re-reading of the data, noting initial ideas; (ii) *generating initial codes*- interesting features of the data are coded across the entire data set and collated together in each code; (iii) s*earching for themes*- collating codes into potential themes and reorganising the data extracts together accordingly; (iv) r*eviewing themes*- checking themes in relation to the data at two levels, the individual extracts and the larger dataset as a whole, (these themes may then be organised into a thematic 'map' of the analysis); (v) d*efining and naming themes*- refining the definitions of each theme so that they offer a coherent story of the data; (vi) *producing the report*- using extracts as a means to offer vivid examples of the themes described.

To optimise the validity of the analysis Braun and Clarke's (2006) 15-point checklist of criteria for conducting a good thematic analysis was applied (see Appendix VII), ensuring methodological rigour throughout transcription, coding, analysis, and write up. Similarly, following methodological guidelines for good practice in qualitative research (Barker & Pistrang, 2005) a consensus approach was used to develop and check the thematic map. The first author, in consultation with the research supervisor, reviewed the data collaboratively after generating initial codes, and again when searching for and reviewing themes. This enabled

discussion of how best to organise codes into themes and then again in terms of clearly defining themes, ensuring that they were representative of the data. Extracts are used throughout the results as a means illustrating the themes with data, making our interpretations explicit to the reader.

Results

The therapists expressed how interesting it was to have the opportunity to think and talk about their own experiences as therapists, offering rich accounts of working with the families of gang-involved young people. Three main themes were identified: *The unique clinical challenge of working with gang-involved young people*, *it's not perfect but MST offers a good option* and *MST is limited in the support it provides therapists*. The following section aims to provide a clear and concise account of the story that the data tell, within and across these themes. Each theme will be presented with its constituent sub-themes. These are illustrated in a thematic map (Appendix VIII) and listed in the table below. The table below also lists how many participants referred to each theme, demonstrating their salience across the data. The quotes that most powerfully capture each theme have been used to illustrate these in the data.

Theme	Sub-theme	How many participants referred to each theme?
1. The unique clinical challenge of working with gang-involved young people	1.1. Balancing reality versus 'hype' around gangs	12
	1.2. Competing against the gang	11
	1.3. Increased risk	9
	1.4. Change is fragile	12

	1.5. Hopelessness	12
2. It's not perfect but MST offers a good option	2.1. Understanding 'the fit'	11
	2.2. Empowering therapists to empower others	12
3. MST is limited in the support it provides therapists	3.1. MST expects too much of therapists	11
	3.2. No room to learn	9

1. The unique clinical challenge of working with gang-involved young people

Therapists' descriptions of working with young people who were gang-involved set them apart as different to working with their non-gang-involved peers. Gang-involved young people were associated with increased risk factors and more fragile outcomes. The gang appeared to act almost as a rival to the intervention, attractive to the young person and well-resourced.

1.1. Balancing reality versus 'hype' around gangs

Therapists appeared to face an initial dilemma when talking about working with gang-involved young people. Whilst there was acknowledgement of the threat and danger that gangs could represent for some young people, difficulties surrounding the definition and negative connotations of 'gang' as a label caused a predicament for some therapists. Whilst a number of therapists described gang-involved youth as a distinct group, at increased risk of violence and criminal behaviour, others talked about how 'gang' had become a 'fashionable' term, perpetuating service anxiety and unhelpful demarcation of this group from their non-gang-involved peers. Therapists explained that from an MST perspective,

information about a young person's gang-involvement might be considered the 'shiny thing in the room', distracting from what might be more relevant and not contributing towards a helpful understanding of a young person's behaviour and best ways to influence change. Yet therapists described conflicting with the MST viewpoint, seen in descriptions of gang-involvement as something different and distinct from other antisocial peer relationships, particularly in terms of the increased risk that this poses for young people.

> 'I think the thing that actually makes gangs very real and really does make it hard to work with is the level of threat. And it is the fact that people really genuinely can get hurt trying to get out of gangs and that is real.' Victoria

1.2. Competing against the gang

Therapists described gangs as attractive to young people, drawing them in, by being well-resourced and rewarding in what they offered young people, making it difficult for young people to decouple from them. Thus, the therapists identified that, in attempting to work therapeutically with gang-involved youth, they were competing with the incentives that gangs offered to young people. The financial incentive and reward of gang-involvement proved particularly difficult to compete with, having practical implications for the implementation and success of behavioural interventions therapists would typically utilise. Therapists struggled to help families find 'more meaningful rewards or consequences than what they were already receiving outside with the gang'. As one therapist explained, 'why would you want to be rewarded by your parent for £2 a night when you can probably earn £200 a day?' Several therapists described the resource and organisation of gangs, likening them to a criminal business. In addition to competing with the financial reward of gangs, therapists found that the gang themselves could take an active role in keeping the young person engaged.

> ‘if you tried to stop their employee going to work by supporting the family to make the home a nicer place, to make you know, you were addressing the family drivers to try and pull them back into the home a bit more, you would kind of get this counter pull-from the gang so you would find the young person would disappear off to Ipswich for a week, or a car would be pulling up to pick up the young person. It felt like, I don’t know if this is what other people have said, it felt like you were getting a counter-pull if you were pulling them back from the other end, and the resources that the gang had at the other end often significantly outweighed the resources the parent would have’ Niamh

It was not only financial incentives that kept young people gang-involved and acted as competition to the intervention. Therapists referred to the gang as the young person’s ‘other family’, accompanied by a sense of belonging and community they had not found elsewhere. This presented a challenge to the primary mechanism of change in MST, namely working with the primary caregiver and family to facilitate changes in the young person’s life.

> ‘so they were tight friends and essentially because the whole of the MST model is predicated on you have got the individual, and the family and community and whatever, but essentially these kids had another family. So all the leverage that you normally use in MST, like rewards and consequences, building on relationships and whatever, I mean with adolescents in general you have got this problem where the peer group is more powerful than the family, but with the gang involved it’s not just another peer group it’s another family’ Freya

A very real practical implication of this meant that the gang-involved young people were often more difficult to access, in fact, one therapist stated bluntly that

'you hardly ever saw them'. Being unable to access and engage the young person meant that it was difficult to work collaboratively to identify prosocial activities that might provide an attractive alternative to gang-involvement. Therapists described practical challenges of engaging the young person with prosocial activity that were specific to gang-involved youth, and challenging gang-involved young people's aspirations in the face of the money and status they could receive from the gang. Setting up pro-social activities or placements (e.g. educational placements and recreational youth or sports groups) was often limited by where the young person felt safe to travel due to gang rivalries, and therapists were frustrated by provision that would 'put naughty children away in places with other naughty children'. There was a sense that this expectation of MST to find prosocial peers was somewhat simplistic and did not account for the real challenge of locating such opportunities in the community.

> 'even when you try and get them into a college course or some sort of training, a lot of the places are with the same type of young people. I have never been a supporter of that anyway, but there is not a lot else on offer, so their aspirations, it is really difficult to change their aspirations and to see that they have a future' Matt

As a consequence of the attraction of the gang and difficulty counteracting or challenging this, therapists were left feeling as though the gang represented a whole other context or system that they had limited access to and inadequate tools with which to contend.

1.3. Increased risk

Young people involved in gangs were held distinct from non-gang involved youth in terms of risk. Risk focused on concerns for the safety of gang-involved young people, their families, and the therapists themselves. Therapists felt they were left holding this elevated level of risk. Increased violence was associated with

gang-involved young people, with risk of reprisal to the young person in response to removing themselves from a gang; the very aim of the intervention. Therapists needed to think more carefully and in detail about what they could safely encourage parents and young people to do. As one therapist explained, 'there was a definite difference of working with young people who are involved in gangs, [than those] who weren't involved in gangs, working with the family because the family were much more reluctant to do certain things, and justifiably because of their fear'.

Additional time was subsequently dedicated to risk assessment, particularly as MST aims to address barriers to engagement by working with families in their home environment. Gang-involved young people were more likely to have access to weapons and therapists could find themselves limited by practical considerations of whether home visits were safe, considering the times at which they might visit or whether lone-visiting was appropriate. This could impact the work in terms of how to proceed, and also with engagement of the young person and their family.

> 'He [the young person] hated me and I was a real threat in the house so he was, for a while I couldn't home visit because he threatened to shoot me and put me in the back of his boot. The view was that he probably did have access to guns and he, you know, he wanted me out of his house, so it massively affected our engagement' Anne

1.4. Change is fragile

Change was described as hard to create and difficult to sustain with gang-involved young people. MST aims to generalise change by empowering parents to continue to address family needs across systemic contexts. Therapists felt that sustaining change for the families of gang-involved young people could feel more precarious as they were often unable to directly address the gang-involvement itself, leaving parents to contend with this while attempting to move forward and build on changes made in other areas. Several therapists felt that removing the family from

the area entirely held the best solution, whilst there was general consensus that interrupting the peer relationships within a gang was the most difficult aspect of the work, and the most limiting on change.

> 'I suspect that a lot of the work we did became unsustainable because of these things that we didn't fix, I would guess. So the kids I can think of where it all unravelled after we finished. I mean I am not saying that the kids were innocent but that peer association would have been a key factor in all of the ones I can think of off the top of my head.' Anne

1.5. Hopelessness

The view of gang-involved youth as part of a separate, more powerful system was associated with a sense of hopelessness in the many professionals and agencies that were typically involved with these families. In one of their nine treatment principles, MST guides therapists to remain positive and strength-focused, identifying strengths that can be used as levers for change, and building feelings of hope. Yet therapists described feeling powerless and overwhelmed in the face of the gang. Referring agencies and services around the young person could feel as though all of their available resources had been exhausted, whilst families could share a diminishing hope for change, often believing that they could no longer play an active role in effecting change. Therapists could feel isolated in their attempts to remain positive and hopeful for change.

> 'I think a lot of professionals feel more hopeless, they say what's the point because we have seen it so many times, we know what his path will be' Jan

Parents could also be discouraged by a belief that their adolescent's involvement in a gang was something they were powerless to influence. It was not uncommon for parents to struggle to acknowledge the problem, to be fearful and

anxious about the gang, and, at times, to refuse treatment. Some parents were described as ‘done’, having lost both their desire and ability to try any further, feeling as though they had lost control over their child’s life and were left at the point of giving up.

> ‘these parents [of gang-involved youth] as compared to parents of other young people who might be aggressive or violent or anti-social in other ways, these parents are extremely hopeless and really have lost control of their child, who is coming and going as he pleases and disappearing for days, and stopped attending school and smoking weed, and parents feel like they have got zero authority and they are quite broken and they have lost any sense of authority and control’ Sandy

Therapists described having ‘different levels of hope’ when working with gang-involved families, where the gang could ‘feel bigger than you sometimes’. This struggle could leave therapists with a more lasting sense of despondency, struggling to maintain a positive and strength-focused approach in the face of an otherwise hopeless and struggling system. Some therapists described their efforts feeling ‘futile’ at times, whilst the thought of working with gang-involved youth could leave them with a ‘sense of dread’. Gang-involvement seemed to feel associated with a sense of impotency for therapists at times. The problem felt larger than them, embedded within the community and out of the range of their influence; something perpetuating and ongoing.

> ‘I might be able to effect change for this one young person and their family working really closely with them, so we might be able to get some shift with this young person but actually the gang is going to just go and find someone else and am I going to be working with someone else who has been pulled into this next week’ Niamh

2. It's not perfect but MST offers a good option

Despite the unique challenges described by therapists in working with gang-involved youth, they also described MST as a helpful means to work with this population. Both the conceptual principles behind MST and how this determined its implementation was felt as appropriate and helpful by therapists. The assumption that behaviour is multidetermined from the reciprocal interplay of factors across individual, family, peer, school and community contexts enabled a means of thoroughly examining and understanding what might drive gang-involvement and associated risky behaviours. The model was 'common-sense' for many therapists, who expressed frustration at previous ways of working that had neglected to consider the context in which young people live.

2.1. Understanding the 'fit'

Therapists described the benefits of 'putting the pieces together'; looking at a young person's gang-involvement in the context of their social ecology. They described how this could both help them to think about the different factors that might drive their behaviour, and also enable them to identify potential areas of intervention.

> 'I think the general MST model and framework is very helpful because just the structure of identifying a behaviour you want to work on, understanding the fit, thinking across all of the systems what is impacting and looking at what the parent has under their control and what can we do something about and change and what is going to work best' Niamh

Using this holistic framework to promote a shared understanding of what may lay behind a young person's behaviour appeared to be a valuable means of helping services and families see 'the young person behind the problem'. This

seemed especially pertinent when challenging the stigma or 'hype' associated with gang-involvement and therapists described the importance of using this to challenge traditional problem- or individual-focused ways of understanding behaviour. This provided a means of challenging the hopelessness of families who could feel powerless to influence change in the context of the gang. Working with families to help them understand what might drive behaviour and why each intervention or strategy may or may not have worked helped them to retain responsibility for action.

> 'I think getting the family to understand all the systemic drivers and that it is not just about the young person is really important, and I really like looking at planning interventions with families and then if it doesn't work getting them to understand why it hasn't worked and starting the process again, I think that is really really important' Matt

2.2. Empowering therapists to empower others

The model was valued as a means of supporting therapists and families, maintaining a hope for change which could be transformed into positive action. A commitment to continuous effort was promoted in supervision, meaning that therapists were not able to 'shy away' from considering those aspects of behaviour that were more entrenched and difficult to influence, such as gang-involvement. One therapist explained that, 'MST just doesn't let you do it, everyone pulls you up on it'. Supervision was a structured means of ensuring therapists could utilise a holistic understanding to review the effect of their interventions and what else might promote change.

Therapists felt able to offer other services surrounding the family a similar experience, continually evaluating the impact of interventions, careful to recognise and celebrate change. 'MST cheerleading' referred to constantly using every opportunity to recognise a success or shift that a young person had made and making this explicit with families and other services. Therapists spoke of 'supporting

the parent to support the child'. Working closely with the parent was seen as a way to 'mobilise them' again, helping them to take back control and responsibility that may have been lost or diminished. Parents appeared to welcome this practical approach that gave them a way to actively work towards change in partnership with the therapist, something that might be a very different experience to what they had been used to previously.

> 'I feel that people are glad to have a service that is going to work so closely in partnership with them and that is going to focus on active interventions because they've talked about it a lot and they have had people, or gotten a lot of calls of concern, or calls from the police or people knocking their door down, raiding the house, but they haven't, what we hear a lot I think, is they haven't actually gotten an offer of real support that is going to be robust enough to try to address the issues.' Victoria

3. MST is limited in the way it supports its therapists

Despite its strengths, therapists described the MST model as having clear limitations when working with gang-involved young people and their families. There was a sense that MST might be 'billed a panacea', promoting high expectations and a sense that the model could tackle any difficulty. This added additional pressure onto therapists and could negate the complexities and challenges associated with gang-involvement. Therapists identified that creating a space to acknowledge and work with these difficulties, and their impact on therapists, for example in supervision, would be useful improvements to implementing MST.

3.1. *MST expects too much of therapists*

Therapists felt that the MST model, or specifically the quality assurance processes of supervision and consultation, could promote the idea that the therapists who work from this approach should be able to meet and tackle any

behaviour or challenge. Consequently, expectations of therapists themselves could be high and somewhat 'all-encompassing'. The assertive approach of MST, the sense that 'MST are here now, we are going to take over'; could both elevate expectations of what the therapists could accomplish with this intervention, and at times alienated other services who might feel that their work was judged as less important.

> 'I think the expectations were quite unrealistic, really unrealistic but then again we sold ourselves in a particular way and I think we set ourselves up. I don't think it is peculiar to [redacted] MST in particular but I think sometimes MST sets itself up to do an impossible task and for some families it is not going to touch the surface' Denise

Therapists described feeling added stress and pressure caused by having to be accountable for change, a cardinal principle of the MST approach. One therapist described feeling 'in the spotlight', that is, having to create the positive changes that might justify asking other services to step back and allow MST to lead. At other times, therapists felt they were asked to 'deliver whatever is needed', even when this might be outside of their range of expertise or something which another service maybe better suited to provide. The accountability that MST gave therapists could leave them feeling blamed when there was not significant change, increasing the levels of stress and anxiety and hopeless and powerlessness mentioned earlier, that therapists could experience when working with gang-involved youth. This appeared to be compounded by additional emotional impact and worry caused by risks associated with the gang. As one therapist explained, 'they were the ones that gave us sleepless nights that they would end up dead'. In the same way that the model focuses on recognising and building on the strengths of the family and the system, therapists considered whether MST could do this more for therapists themselves.

> ‘I feel it could be more strength-focused with the therapist, recognising the skills they have and I feel sometimes we feel blamed, I know I certainly feel blamed as the therapist when the family isn’t making the changes that MST expect, and I feel that it is a bit of a blaming culture, whereas it goes against their 9 principles about being strength-focused with families, I would like to feel that it is being strength-focused down to the therapist because sometimes it can feel quite a de-skilling job’ Matt

3.2. No room to learn

The sense that the MST therapist was capable of tackling anything was associated with a tendency to sometimes over-simplify or negate how complex changing the behaviour of gang-involved youth could be. This meant there was limited space to think about or to acknowledge the additional challenges or competition presented by gang-involvement. Some therapists described feeling frustrated when they had attempted to acknowledge gang-involvement as something different and more complex than the usual peer risk factors that they addressed in their cases during supervision and consultation. It could feel that in protecting the integrity of the model, MST supervisory and case management structures were not always responsive to therapists needs.

> ‘I can understand they want people to be doing it the way they developed it because that is the point they have found that to work, [but] they are not very responsive to things people pick up and notice’ Eve

Therapists felt that the supervision and case management structure provided by MST services did not allow a lot of room to acknowledge their own experiences, and specifically the emotional impact that working with gang-involved youth could have on them. As one therapist explained, ‘I don’t think they recognise how difficult the work is, it feels like a business to me, I struggle with that.’ Therapists could

sometimes be left feeling uncontained and powerless themselves, with an absence of space to think about their experiences with gang-involved youth in supervision, limiting their ability to acknowledge their efforts and reflect upon what else may have been helpful despite the enormous challenges. This 'closed-circuit' meant that it could feel difficult to learn from experience.

> 'When we are closing cases it feels, 'the case is now closed', there is no acknowledgement of the work you have done and how good it has been or let's have a look at why this hasn't worked, let's have a look what worked or let's have a look why this hasn't worked once you have closed a case. It is like they have gone, fill them up out on MST services and then they are never talked about again, instead of learning as a team what you might have done differently or what has gone well, that doesn't happen and I feel that could be really useful.' Matt

Therapists formed 'informal structures' of support amongst their peers as a means of receiving emotional support and encouragement largely absent from the supervision provided by MST. Therapists felt that a reflective space was incompatible with 'the language of MST' and felt that the model prioritised keeping therapists clinically focused and active in a bid to be containing. While this problem-focused supervision had advantages, the process could mean that therapists were left with their anxiety or uncertainty. This unease continued to the completion of therapy where therapists described their difficulty closing cases when there had only been limited change.

> 'I think the ones where you really hadn't shifted it at all were always a mixture of huge relief and kind of feeling like you had failed. So part of you were really relieved that you didn't have to think about how on earth to do anything about it anymore, I think the elephant in the room ones were a bit

like that as well, you were bit relieved you didn't have to think about it and work it out anymore, but you also felt a bit uncomfortable about the fact that you had left this and you knew it probably wasn't going to be ok.' Anne

Therapists discussed how a means to share and learn from experiences working with this specific group of young people would be helpful, enabling them to think about and respond to the different challenges that this group presented in comparison to their non-gang-involved peers.

Discussion

This study offered a qualitative exploration of MST therapist and supervisors' experiences working with gang-involved youth. Interviewing clinicians provided an insight into the 'real-world' implementation of the MST model, illuminating a range of factors that might influence putting these therapeutic principles into practice when working specifically with gang-involved youth and their families. On the positive side, therapists recognised strengths in the theoretical underpinnings of the model, noting how helpful it was to think about a young person and their behaviour in relation to their wider social ecology. This allowed a more thorough understanding of what might drive young people's gang-involved behaviour and enabled families to take an active part in identifying areas in which they might be able to influence change. At the same time, MST therapists described the struggle to compete against the rewards and resources of the gang when working with the family. This could leave parents, other services around the family and MST therapists themselves with a sense of hopelessness and powerlessness to influence change in the face of the gang. Further, the therapists identified MST supervisory practices as problematic when working with gang-involved youth. Specifically, they reported that adherence to MST practices around formulation, which typically identified evidence-based drivers to young people's antisocial behaviour often meant downplaying factors that

they perceived were uniquely contributing to gang-involved youth's antisocial behaviour. In the same vein, therapists perceived that they were not encouraged to identify specific skills and strategies related to working with gang-involved youth, or to consider how they might be able to learn from their successes and failures working with this population. Therapists felt that supervision lacked adequate space to reflect upon their experiences and to acknowledge the emotional impact of their work. To combat this focus on problem-oriented supervision, many therapists described informal means of peer support that they had developed in the absence of more formal structures. Therapists felt that ways to share their experiences and to use this shared learning to address the challenges and complexities associated when working with gang-involved youth would help them to feel better equipped to work with these young people in the future.

While cognizant of the potentially stigmatising effects of the label 'gang-involved', therapists' nonetheless identified this group of gang-involved youth as different from their antisocial but non-gang-involved peers. For example, showing greater level of risk and being part of an ecology of elevated peer status and access to monetary resources that had an adverse impact on treatment implementation. The unique aspects of the gang ecology were believed to be associated with poorer treatment outcomes; gang-involved young people proved more difficult to disassociate from antisocial peers in the gang and attempts to increase their association with more prosocial peers and to engage them in education or prosocial activity were less successful. These qualitative findings obtained from interviews with the therapists are consistent with previous research by Boxer (2011) who reported that treatment success following MST was poorer for those young people that were gang-involved as opposed to their non-gang-involved antisocial peers. Therapists also identified that gang-involved youth were associated with a greater level of risk: to the young person themselves, the family and the therapist. Practically this meant that therapists had to dedicate more time to risk-assessment

and thinking about what they could safely ask families to do in order to challenge their child's behaviour. Therapists talked about this in relation to the emotional impact of the work; working with gang-involved young people was associated with greater levels of stress and anxiety for the therapist. Kearney (2010) describes the additional ethical concerns and considerations that therapists working with gang-involved youth are forced to navigate; implications regarding confidentiality, the therapists' duty to warn or protect, and managing their own personal values contributing additional challenges to their work. Additionally, in developing a measure assessing therapist comfort in the home treatment context, Glebova and colleagues (2012) found that MST therapists' feelings of safety and comfort were associated with the therapeutic alliance. This suggests that managing increased risk and anxiety concerning their own safety might increase the risk of erosion in the therapeutic relationship, something that has been identified as a key part of promoting positive change in MST (Tighe et al., 2012).

The attraction of the gang was described in relation to the incentives gang-involvement offered to young people and related to implementation of specific MST treatment practices. The sense of belonging and safety that young people felt in gangs and the financial rewards and status offered by the gang were difficult to compete with when therapists were implementing typical MST treatment practices, such as parents' use of rewards and consequences and attempts to involve young people in prosocial activities. The net result was that the financial and intrapersonal rewards associated with the gang meant that the aspirations of gang-involved youth were more difficult to shift away from antisocial behaviour than their non-gang-involved peers. Tighe et al., (2012) identified the development of positive goals and aspirations for the future as one of the processes of change in MST, something which appears more limited and difficult to promote in gang-involved young people. A recent review of the research focused on gangs found that the extant literature concentrates on risk factors pertaining to gang-membership, but there has been

limited attention to factors motivating the joining, and desistence from the gang (O'Brien, Daffern, Chu & Thomas, 2013). Decker and Van Winkle (1996) offer a framework for understanding the processes involved in the decision to join a gang. Supporting therapists' accounts, the framework outlines the external forces that 'push' a young person towards the gang (i.e. protection, following friends), and internal forces that 'pull' a young person towards membership (i.e. the desire for money, status or excitement). Therapists and parents struggled to find meaningful rewards or consequences to compete against these 'push' and 'pull' factors, challenging the behavioural methods more successfully implemented with non-gang-involved youth. Whilst MST encourages exploration of the reciprocal relationship between a young person and the contexts within which they are embedded, it appears that therapists felt that the gang represents a separate context, one that removes young people from the areas they feel more equipped to work with, and one which they have a limited power to influence due to its associated rewards.

The attraction or 'pull' of the gang meant that it was more difficult to engage gang-involved young people in the intervention. Whilst MST does work primarily through the caregiver, having limited or no collaboration with the young person made it more challenging to highlight prosocial opportunities that might be attractive enough to appeal to a young person above their gang-involvement. This increased difficulty promoting prosocial relationships with gang-involved youth appears to have a perpetuating effect; research has shown that involvement with gangs limits the gang-involved youth's association with more prosocial peers, in turn, limiting opportunities for prosocial modelling or the construction of networks that might support and promote desistence (Pyrooz, Sweden & Piquero, 2012). The factors that put adolescents at risk of gang-involvement are, at the same time, attenuated by gang-involvement itself (Melde et al., 2012). Namely, increased association with delinquent peers and decreased association with proactive peers are both predictive

risk factors for gang involvement and similarly amplified through gang membership. This increased and perpetuating difficulty disassociating gang-involved young people from gang-related relationships, and promoting more prosocial peer relationships presents a challenge to the fundamental process of change underlying the MST approach. MST mediator studies (Henggeler et al., 2009; Huey et al., 2000) have indicated that reducing deviant peer association is critical to the success of the intervention, in line with meta-analyses that have shown deviant peers to be the most powerful predictor of delinquency in adolescence (Lipsey & Derzon, 1998). Similarly, in their qualitative exploration of the processes of change in MST, Tighe et al. (2012) found that where the young person's antisocial behaviour was still of serious concern, parents mostly attributed this to continued contact with delinquent peers; something they felt powerless to change. Gang-involved young people appear to present increased challenges for MST, specifically in regard to the added difficulty this presents to promoting prosocial peer relationships. This is pertinent considering research investigating the effectiveness of MST with serious juvenile offenders reported that emotional bonding with peers contributed a large and highly significant portion of additional variance to arrests at follow-up; offenders who had positive emotional relationships with their friends were less likely to be rearrested (Henggeler, Melton & Smith, 1992).

The increased challenges inherent in working with gang-involved youth left parents, other services surrounding the youth and their family, and MST therapists themselves feeling hopeless. Parents and other services could feel powerless in the face of the gang, unable to rival their financial and material resources and left doubting their own self-efficacy to influence any change. Services were often left feeling that they had exhausted their treatment options and parents similarly felt they had tried everything and were left ready to give up on their child. The therapists experiences of parents of gang-involved youth as ready to just give up on their children is consistent with previous longitudinal fieldwork completed by Vigil (2007),

who found that the parents of gang-involved young people tended to be less involved with their child and similarly were described as often having ‘given-up’ on them. Therapists were often left feeling that they were accountable for hope in this otherwise hopeless system. This added responsibility was associated with increased levels of stress and anxiety, often making it increasingly likely that they themselves would become hopeless.

Whilst hopelessness has received surprisingly little direct discussion in family therapy literature (Flaskas, 2007), the ‘placebo’ effect, which effectively represents a client’s ‘hope for change’, has been identified as one of four main groups of factors influencing positive therapy outcome (e.g. Hubble et al., 1999; Sprenkle & Blow, 2004). This would indicate that the families’ level of hopelessness might limit the success of the intervention. Though not specific to therapeutic work with families, an established body of literature also suggests that how a therapist responds to the client’s hopelessness can have a significant impact, for better or for worse, on the client’s motivation and ability to overcome problems (e.g. Bloom, 1967; Frank, 1968; Ornstein, 1988). This literature underscores the complicated task therapists are left to negotiate when working with gang-involved young people. The therapists’ capacity to contain their client’s hopelessness whilst regulating the impact upon themselves may impact upon the success of treatment in a number of ways. For example, the hopelessness of caregivers and other services might contribute to the therapists’ own sense of hopelessness and negatively impact upon their ability to promote change. How the therapist supports the parent and other services when they feel hopeless themselves may, in turn, influence the motivation of families and services to overcome their own respective feelings of hopelessness and persist with interventions.

The hopelessness and powerlessness associated with working with gang-involved youth were stressful and anxiety-provoking for therapists, and they did not believe that the MST supervisory structure provided adequate space to consider and

manage these consequences inherent in working with this population. Whilst therapists praised the action-oriented treatment principles of MST, implicit in supervision when evidencing the success of their interventions and using this to review progress and identify ways forwards, they expressed some frustration at the way in which supervision might limit their ability to be reflexive and process the emotional impact of the work. Therapists' accountability for change in MST is made explicit in supervision, and this responsibility, in the context of an MST supervisory posture that largely negated the severity and complexity of gang-involved cases, including how this might be experienced by therapists, was reported to be associated with increased levels of therapist anxiety and stress. The absence of support in supervision to address the therapeutic challenges and adverse emotional impact of working with gang-involved youth seemed to contribute to the levels of therapists' hopelessness. This seemed particularly salient at the point of discharge when therapists reported feeling discomfort at the limited change these families may have experienced, leaving some therapists with a sense of impotency. These negative feeling states were perpetuated by frustrations that they were not able to fully access and challenge the gang-context and were not supported in supervision to do so. Yet they would soon be seeing another young person drawn to a gang in a similar predicament. A number of therapists described the sense of dread they could experience when taking on another case that was gang-involved, or even when thinking back to how difficult the work was. Therapists described informal peer support networks that helped them to manage their anxiety and the increased emotional impact of working with these young people.

MST promotes a rigorous quality assurance system; treatment fidelity associated with the improved family relations and decreased delinquent peer affiliation that, in turn, is associated with decreased delinquent behaviour (Huey et al., 2000). MST supervision sessions serve as a forum in which the MST supervisor can assess a therapist's development and implementation of the conceptual and

behavioural skills required to achieve adherence to the MST model and, as such, to implement MST effectively (Schoenwald, Brown & Henggeler, 2000). Supervisors are primarily responsible for helping MST therapists adhere to the model, the aim of supervision to improve a therapist's clinical effectiveness by improving their adherence to the model. With the additional and distinct challenges associated with gang-involved young people, as described by therapists, does this mean that efforts focused on keeping therapists 'on model' negates the added complexity of working with this group, limiting space and reflexivity to respond to this?

Attempts at definition have looked to elaborate the functions of supervision, examining the different types of tasks that they facilitate: *normative* tasks include case managing, monitoring and quality control; *restorative* tasks include providing emotional support and processing; and *formative* tasks develop supervisee's skills and knowledge (O'Donovan, Halford & Walters, 2011). From therapists' accounts, MST supervision currently focuses primarily on normative and formative tasks, maintaining a focused and action-orientated approach. There appears to be less space dedicated to restorative tasks wherein the emotional impact and more intrapersonal effects of working with gang-involved youth might be processed. Following their qualitative survey with peer-nominated 'master-therapists', Jennings and Skovholt (1999) recommend that particular attention should be paid to the emotional characteristics of therapists. They found that being emotionally receptive and able to have an awareness of how their own emotional health impacted upon their work was key for these therapists. Similarly, the ability and willingness to reflect upon the challenges and hardships faced in professional experience, and having a supportive work environment, both among peers and in supervision, was found to impact upon therapists reflective capacity and ability to manage challenges encountered (Rønnestad & Skovholt, 2003).

Limitations of the study

The results of this study are based on a reasonably large sample of therapists recruited from two inner-city London sites. The assumption that guided recruitment was that the MST therapists at these sites would have had greater exposure to working with gang-involved youth. Nonetheless, caution should be exercised in generalising results beyond this context of UK MST therapists working in inner-city London. In order to address potential bias and avoid accessing only the opinions of those therapists particularly interested in or affected by working with gang-involved young people, the study attempted to invite all therapists and supervisors that had worked for both sites during the recruitment period of the larger START randomised controlled trial to participate. The interview schedule was also designed to ask about both the strengths and limitations of the model when working with these young people. A further consideration concerns the quality and validity of participant accounts. Therapists appeared to speak openly during the interviews, facilitated by interviews being independent of the MST team and based upon a good working relationship with the researcher established during earlier collaborative work on the START trial. The interviews are however based upon retrospective self-report data, which are subject to a number of shortcomings (Giorgi & Giorgi, 2013): they depend on participants accurately remembering experiences and being able to identify and describe complex internal and relational process, which at times may be beyond awareness.

The position of the main researcher and research supervisor in relation to the larger START Trial may also warrant further consideration. Whilst earlier work as a Research Assistant did enable the researcher to build working relationships with the therapists interviewed, this association with the larger trial may have created a dynamic in which therapists may have felt the need to monitor their responses in relation to whether this might affect the larger evaluation of their teams at a national level. The interview data do appear to reflect a balanced critique of the model, eliciting both potential strengths and limitations, whilst therapists reported

appreciating the opportunity to explore an interesting aspect of their clinical work. It is important to acknowledge however that these therapists were aware that the effectiveness of MST and, as such, the teams that they worked for was being evaluated by the START trial and those in its management, and that they may have therefore felt a pressure to reflect the work of their teams in a certain way, or that they may have found it challenging to be open with their own personal opinions and ideas in the face of how these might be evaluated and reported.

The study did not operationalise an agreed definition of what it meant to be 'gang-involved'. Whilst this enabled therapists to explore their understandings using their own language, it may limit comparability with other research in the area. Similarly, if further quantitative investigation, (i.e. as part of an exploratory sequential design; Cresswell & Plano Clark, 2011) were to follow this study, 'gang-involvement' would have to be more concretely operationalised. This study is based on the assumption that this group represent a sub-sample of antisocial young people, given the empirical literature that gang-affiliated youth commit more crimes and are more delinquent than youth who have never been involved with gangs (Klein & Maxson, 2006). Some commentators however warn of the dangers of demarcating groups and individuals as 'gangs' or 'gang-involved', noting the negative connotations caught up in the term which can fuel sensationalism in the media and knee jerk reactions in terms of law and legislation that might not always be helpful (Hallsworth & Young, 2004).

Clinical Implications

The findings from this report suggest a number of clinical implications that highlight potential improvement or modification of the MST model when working specifically with gang-involved young people, and which may warrant further research. The additional challenges faced by therapists working with gang-involved young people and difficulties they had competing with the gang, suggests that further attention should be given to the influence of the peer context and how best to

intervene. Results indicate that challenges and risk associated with gang-involved young people are in addition to those of their non-gang-involved peers and that specific skills, strategies and training focused upon gangs might enable them to feel better equipped to work with these families. MST has developed a number of adaptations from the model to better work with specific behaviours and groups (i.e. problem sexual behaviour (Borduin, Henggeler, Blaske & Stein, 1990), substance use (Sheidow & Houston, 2013) and serious emotional disturbances (Sondheimer, Schoenwald & Rowland, 1994). It may be worth considering whether a gang-adaptation would be a helpful means of devising specific strategies for working with this group.

Therapists felt that the supervisory structure of the model allowed little room to reflect upon the emotional impact of working with these families, the restorative function of supervision as theorised by O'Donovan and colleagues (2011), leaving therapists drawing upon informal peer support. Similarly, therapists felt that supervision did not provide space to reflect upon their work, learning from their experiences and those of others. It was felt this would be particularly helpful when working with gang-involved families, where therapists could feel poorly equipped to intervene. These results suggest that the supervisory structure should be reviewed in light of the perceived lack of support that therapists feel it offers them, with adverse impact on their emotional well-being and ability to deal with specific characteristics that they identify as crucial when working with gang-involved youth, such as therapeutic hopelessness that is also seen as occurring in families and in staff from other services. It also questions whether a more reflexive space might enable therapists to share ideas and resources for working with gang-involved youth, empowering them to feel an active part of the larger MST model and how it might be improved.

Future Research

Randomised controlled trials have not yet differentiated between the outcomes of gang-involved young people from those of their non-gang-involved peers. Quantitative evaluation of the impact of gang-involvement on therapeutic outcomes may help to indicate whether this group of young people represent a different challenge from that of non-gang-involved youth. Further exploration of the increased anxiety, stress and hopelessness that therapists described when working with gang-involved youth would help to better understand the impact of the work upon therapists, how this might influence treatment outcomes, and how therapist well-being might be better supported.

In conclusion, this study offers an initial exploration into whether gang-involved youth provide different or additional challenges to the implementation of MST in comparison to their non-gang-involved peers. Gang-involvement appeared associated with additional therapeutic challenges and impact upon the therapist that warrant further examination. These results contribute to the growing UK literature around gangs and the wider MST literature examining intervention with antisocial young people. The study demonstrates that an inductive approach, eliciting the views of therapists can contribute to a fuller exploration of the implementation of a therapeutic model and the clinical challenges that therapists might face.

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Critical Appraisal

Introduction

In this critical appraisal I will reflect upon several aspects of the research process. To begin with I offer a more informal discursive account of my own interest in youth antisocial behaviour and how this extended to gang-involved youth. This contextualises the research project in terms of the personal interest that it holds for me and the rationale that I applied to some of the methodological choices I had to make. I will then discuss difficulties associated with the definition of what it means to be 'gang-involved' and how this was considered within the study. This is extended into further discussion regarding the current literature base around youth antisocial behaviour and whether it is appropriate to distinguish and bracket different types and manifestations of antisocial behaviour. Finally, the choice of therapists as participants is examined.

The ongoing value in understanding youth antisocial behaviour

Both prior to my clinical training, and in my placements since, I have enjoyed a number of voluntary and research posts, through which I have been privileged to meet a range of different professionals and clients. This experience has given me the opportunity to witness a number of the different challenges that some young people are left to negotiate, and the consequences they can face when this does not go well, i.e. school exclusion, out-of-home placement and custody. I have been struck by the resilience shown by these young people, the differing ways in which their difficulties manifest themselves and the variety of methods adopted by young people in an attempt to cope. Despite the challenges that this might pose for treatment, I have found that this group are tremendously rewarding to work with. I often worry how the negative publicity afforded adolescent youth in our media may increasingly impede attempts to understand youth antisocial behaviour and efforts towards prevention or rehabilitation as a result. Youth antisocial behaviour has

become a high-profile concern in political and policy debate in the UK and is often sensationalised in the media with such attention-grabbing, anxiety-provoking headlines as ‘The gang war being waged on Britain’s streets’ (BBC News, 2012). These contribute to perpetuating unhelpful stereotypes of today’s young, and increasing the chance for over-identification or misidentifying problematic youth (Mille, 2007). As Zatz (1987) highlighted, the problem and perceptions of youth gangs and antisocial youth do not arise in a social vacuum; it is important to think about how the social imagery and narrative surrounding youth and youth culture might contribute to our understanding and labelling of serious antisocial behaviour. This study encouraged me to look at my own perceptions and understandings of youth antisocial behaviour, particularly in the light of therapists concerns regarding whether talking about ‘gang-involved’ youth was perpetuating unhelpful stereotypes and labelling. I value the idea that an increased understanding of the problem of youth antisocial behaviour will inform clearer ways to support young people, whether this is earlier identification and preventative work, or ways in which to better engage and support them. I endorse the importance of being able to see the vulnerability of a young person behind their behaviour or psychiatric label.

I value a more socio-ecological view of an individual young person, thinking about them as embedded in the wider social contexts around them, rather than limiting our scope of understanding to the individual client in the therapy room at one particular snapshot in time. I think that this is particularly important when thinking about young people, for whom there is a multitude of different factors affecting their life in the context of the ecology in which they live (families, peer groups, communities, and schools) (Dishion & Stormshat, 2007). Whilst working on the START trial as a researcher, I found that one of the frustrations that MST therapists and referring agencies often expressed was that some of these more nuanced aspects of a young person’s experience were not captured. Youth Offending Teams, with whom many of the young people referred for MST are engaged, utilise ‘Asset’

(Youth Justice Board, 2011), a structured assessment tool that looks at the young person's offence or offences and identifies a multitude of factors or circumstances which may have contributed to such behaviour. This information can then be used to highlight particular needs or difficulties that may need to be addressed, informing most appropriate ways to intervene and support the young person. This assessment process is based on the risk-need-responsivity model of offender rehabilitation (Andrews & Bonta, 2003), in which three principles promote successful intervention: (i) the *need principle* targets the criminogenic needs of the adolescent, promotes family affection and communication and family monitoring and supervision of the adolescent; (ii) the *responsivity principle* tailors the intervention to the individual; (iii) and the *risk principle* recognises that higher effects are found in higher risk offenders and locates the need for treatment and more room for improvement. In addition to this, the Asset can be used to measure changes in needs and risk of reoffending over time, constantly evaluating these and adjusting intervention accordingly. The Asset measures both neighbourhood and lifestyle characteristics, including association with predominantly pro-criminal peers and a lack of non-criminal friends. Therapists involved in the trial often described how they felt the severity associated with these contextual factors might be overlooked, both by outcomes evaluation in the wider research trial and in determining how successful treatment had been when closing the case with MST Inc. A number of therapists talked about how they felt that treatment outcomes might be over-simplified in the evaluation of their work, often not appreciating the other contextual factors that they as therapists might have to contend with. I wondered how acknowledgement and exploration of these other factors might inform a fuller understanding of these young people and how therapy might best suit their differing needs. The therapists' concerns are consistent with the growing research into contextual risks factors such as those occurring in high crime neighbourhoods (Farrington & Loeber, 2000; Murray & Farrington, 2010).

This view contextualises the following sections which describe decisions that I made in this study regarding differentiating gang-involvement as a type of youth antisocial behaviour, rather than looking at 'antisocial behaviour' as a discrete category in and of itself.

Problems in definition

Since the early 1900s social scientists have been investigating the role that youth gangs play in antisocial behaviour (Park, 1929; Thrasher, 1963). But gangs are not a new phenomenon, nor are they limited to criminological or social research. Gangs feature famously in literary commentaries on youth criminal culture in the UK, from as early as 1838 in Charles Dickens' 'Oliver Twist', to Graham Greene's 'Brighton Rock' (1938) and more recent dramatization on television (e.g. 'Top Boy'; Channel 4, 2011) and in film (e.g. 'Harry Brown'; Marv Films and UK Film Council, 2009). Hallsworth and Young (2004) outline the unhelpful and potentially damaging effects that a 'gang' label can have when sensationalised by the media, fuelling public fears and 'knee-jerk' governmental response. One does not have to spend too long reviewing online news coverage in the UK to find something related to gang-culture or gang-crime, indicating its salience in today's social narrative. Defining what a 'gang' is however or what it means to be 'gang-involved' presents a very real challenge, particularly in light of the fact that much of the literature surrounding gangs is currently US derived (Shute, 2008).

There have been numerous attempts at definition (Klein, 1971, 1996; Miller, 1980; Short, 1996), including a more recent collaboration between American and European researchers as part of the Eurogang project (Weerman, Maxson, Esbensen, Aldridge, Medina & Van Gemert, 2009). Many of these definitions have been criticised however for the central place accorded to crime, which has been seen to project too narrow and simplistic a picture of the gang and what might

motivate gang members (Short, 1997). Despite this lack of consensus regarding the definition and measurement of gang-involvement (Short & Hughes, 2006) there is far greater agreement in terms of the serious deleterious effects that gang membership has on both individuals and the multiply deprived and marginalised communities in which they tend to exist (Klein & Maxson, 2006).

Whilst agreement of more precise terminology might allow more reliable comparisons of data across the literature, I chose not to apply a predetermined definition of what it meant to be 'gang-involved' in my interviews with MST therapists for a number of reasons. Firstly, the UK literature around gangs is in its relative infancy. Many researchers have noted the difference between UK and traditional US street-gangs (i.e. Hallsworth & Young, 2004) and the dangers implicit in assuming or conferring similarity. Secondly, and building upon this, my study adopted an inductive approach, looking at how therapists might make sense of and utilise their own definitions of 'gang-involved' and how these were put into practice in a 'real-world' setting. In my previous work as a researcher for the START trial (Fonagy et al., 2013), I had recognised that this group of young people were referred to across services as being in gangs; 'gangs' a part of the professional narrative around them. At this point in the research, I felt that it was of greater interest and contribution to both the wider UK gang's literature, and MST research, to explore ways in which these working definitions impacted upon the work of therapists and implementation of an intervention. This appeared particularly relevant in terms of the increased attention given to gangs in governmental policy and strategy, where gangs are now considered a public health issue (The Home Department, 2011). I was cautious not to pre-empt opinions and thoughts therapists might have regarding gang-involvement and how this was determined.

Whilst my interview schedule was designed to ask therapists about how gang-involved young people might be identified by themselves and wider services, an implicit assumption of my study was that gang-involvement was a tangible

concept that captured a group of antisocial youth. Interestingly, a number of the therapists interviewed deferred from making this definition themselves, whilst others had a very clear idea what gang-involved construed. A reluctance to adopt the term gang-involved or give a clear definition often appeared associated with concern regarding the negative connotations that might be implicit for these and the consequences that this might have for the young person. Although my sample size was small, it appeared that there was a marked difference between the two sites in terms of the definition and use of gang-involvement. It was beyond the scope of this study, but it might be of further interest and value to look at how working definitions of 'gang' and 'gang-involved' are socially constructed and adopted across services based in different localities, particularly as this language now makes up part of larger social policy (Home Department, 2011).

Distinguishing gang-involvement as a separate part of youth antisocial behaviour

Another consideration posed by how to define 'gang-involvement' and identify those young people that are captured by this term, is whether they represent a separate sub-group to other antisocial young people, and whether this, in of itself, is a helpful distinction to make. In legislative terms antisocial behaviour is that which causes, or is likely to cause, 'harassment, alarm or distress to one or more persons not of the same household' (1998 Criminal Justice Act). As described in my literature review, examining the persistence of conduct disorder to later antisocial personality disorder, much of the literature examines the prevalence and persistence of antisocial behaviour (e.g. Gelhorn, Sakai, Kato Price & Crowley, 2007), looking at differing trajectories from childhood to later adolescence and adulthood (Copeland, Shanahan, Costello & Angold, 2009; Loeber & Burke, 2011). In an attempt to refine this prediction and better understand who might be at most

risk, distinct groups or categories have been isolated. For example, early versus late onset of difficulties (Goldstein, Grant, Ruan, Smith & Saha, 2006; Lahey et al., 1999), type of antisocial behaviour exhibited (i.e. covert or overt symptoms: Lahey, Loeber, Burke & Applegate, 2005; Langbehn & Cadoret, 2001), and the endorsement of callous and unemotional traits (Burke, Loeber & Lahey, 2007; Frick, Cornell, Barry, Bodin & Dane, 2003). Similarly, larger randomised controlled trials of MST have now started to differentially examine the impact of some of these differences. For example, the UK based randomised controlled trial, START (Fonagy et al., 2013) has included information regarding the age of onset of conduct difficulties and will be able to examine outcomes between the two groups. Another recent study examining psychopathy as a predictor or moderator of MST therapy outcomes, recommends that it would be important to tailor MST specifically to meet the needs of juveniles with high levels of callous/ unemotional traits in order to obtain the same level of effectiveness as with adolescents scoring lower on these traits (Manders, Deković, Asscher, van der Laan & Prins, 2013).

Similarly, the rationale behind this study was to enable exploration of whether gang-involved young people too might represent another nuanced form of antisocial behaviour. This assumption was based upon research which has shown that gang-involved young people are at increased risk of antisocial behaviour, beyond that of association with delinquent peers alone (Battin, Hill, Abbott, Catalano & Hawkins, 1998). Similarly, those attracted to gangs might be predisposed to more aggressive and acting-out behaviours (Cairns & Cairns, 1991), a recent UK based study reporting those with an antisocial personality were more likely to be attracted to gang membership (Egan & Beadman, 2011). Social learning or 'facilitation' effects (Thornberry, Krohn, Lizotte & Chard-Wierschem, 1993), by which the norms and group processes within the gang encourage involvement in violence and other delinquency indicates that in addition to individual differences between gang and non-gang youth, the gang itself might serve a facilitative function, increasing deviant

behaviour. Assuming that there can be differing sub-groups or more nuanced aspects of antisocial behaviour is in keeping with ways of thinking about antisocial behaviour as part of a continuum, upon which some youth are able to desist in adolescence with limited impact whilst others progress to more pervasive and severe disorder (Moffitt, 1993).

I felt that undertaking a study designed to explore this potential variability and how it might impact upon the implementation of a therapeutic intervention could contribute to the understanding of antisocial behaviour and development of more targeted approaches if necessary. If these gang-involved young people were to represent a more severe manifestation of behaviour in antisocial youth and impact upon therapy as such, then larger scale randomised controlled trials of MST would need to take this into consideration.

Welcoming therapists to the other side of the table

The decision to interview therapists has been uniquely interesting in terms of the perspective this enabled me access to, encouraging me to think in greater depth about how therapists can play a more active role in the development and implementation of further research into treatment implementation.

In my initial research proposal I planned to interview parents and young people in addition to therapists, looking to combine an understanding of how gang-involvement might impact upon the implementation and experience of intervention. Whilst large scale RCTs, like the START trial are viewed as the 'gold standard' in evaluating the effectiveness of an intervention, guidelines from the UK Medical Research Council (2008) and a comprehensive systematic review (Greenhalgh, Robert, Macfarlane, Bate & Kyriakidou, 2004) suggest that combining outcome evaluations with an understanding of therapy process can 'provide useful insights into why an intervention achieves or fails to achieve the expected outcomes'. They

recommend including the perspectives of clinicians, clients and other stakeholders as early as possible in the design of an intervention and with further development and dissemination. Thus, it felt appropriate to explore the experiences of therapists, gang-involved young people, and their parents as part of a consideration as to how gang-involvement might affect the implementation of MST.

Whilst previous qualitative research in MST had included both parents and young people as participants (Kaur, Pote, Fox, & Paradisopoulos, submitted for publication; Paradispoulos, Pote, Fox, Kaur, submitted for publication; Tighe et al., 2012), I was not aware of any research that had examined the experiences of therapists implementing MST and felt that this provided a unique insight into the implementation of MST in practice. Other research has described the benefits of elaborating the views of therapists regarding the implementation of therapy, observing that this enables identification of practice patterns that may serve as independent variables when examining the effectiveness of an intervention (Olson & Moulton, 2004). I had hoped that eliciting these different perspectives would enable a fuller understanding of both what might influence the process of change and also the different barriers and complicating factors that influence the implementation of treatment for gang-involved youth.

Plans to interview across these different groups however presented some difficulties which led to the adaptation of my original methodology. The definitional issues discussed above meant that in order to identify 'gang-involved' young people to interview across both sites, I would have to operationalise an agreed definition of what was meant by 'gang-involved'. This created pragmatic difficulties; teams would have to review data retrospectively to consider which young people met these criteria. Similarly, consultation with MAC-UK, a youth-led approach making treatment accessible to excluded young people within their own community, emphasised the point that young people may differentially identify with or make sense of themselves as 'gang-involved'. I felt that imposing a definition onto young-

people might mean that I could label some young people in a way which they felt did not accurately describe them, and that the data might become more closely linked with how a young person makes sense of gangs and gang-involvement, rather than how this might affect the implementation of MST. In answer to methodological concerns and practical considerations in terms of the feasibility of the study, I refined the aims and scope of my study and focused upon the experiences of therapists working with gang-involved young people and their families.

Upon reflection I think that I underestimated the level of detail and quality that interviews with therapists would yield. Understandably, as mental health services, we are encouraged to empower the service user by prioritising their voice in service provision and delivery (WHO; 2010). As clinical psychologists in training, consultation with service users now features as part of our training, whilst we aspire to contribute to developing an evidence-based practice through research and the dissemination of our findings. What perhaps is less clear is how our own therapeutic experiences, as clinicians, might contribute to this continued process of learning and refinement.

Bridging the gap between evidence-based practice and practice-based evidence

Green (2008) discusses the difficulties inherent in bridging the gap between evidence-based guidelines informed by research, through to clinical practice on the ground. He describes the importance of context and external validity for interventions that face greater diversity in cultural context, psychological processes and socioeconomic conditions that may mediate or moderate the relationship between the intervention and the outcomes. MST has now been implemented in fifteen countries worldwide (MST Services; 2014). Implementation studies however have not all shown the predicted positive outcomes (Leschied & Cunningham, 2002;

Sundell, Hansson, Löfholm, Olsson & Kadesjö, 2008) potentially indicating that there is something different across contexts for which the model does not always fit as well as expected. Within the UK, MST has been introduced in over 35 localities, each with differing geographical and demographic composition. I wondered whether inner city London boroughs working with potentially gang-involved youth were able to implement MST in similar ways to those therapists working in more rural locations, such as Peterborough. This appeared particularly relevant in the context of gang-involvement, where government recommendations have recognised the need for localised approaches (Home Department, 2011).

In addition to the complexities regarding the site of intervention, when implementing evidence-based research into practice, there is an expectation that the practitioner is an empty vessel into which information can be poured that will then spill over into action (Polgar, 1963). In reality, the practitioner is full of prior knowledge, attitudes and beliefs, and affected by the contextual constraints around them. Green (2008) proposes that the best remedy for this is to bring the research closer to the actual circumstances of practice. He argues that this meets a need for more evidence from practices or populations that are the same as those a clinician works with on a day-to-day basis, meaning that the research results are more tailored and particular to their clients, more actionable as a result. Assuming that gang-involvement does represent a more nuanced aspect of youth antisocial behaviour, as outlined above, research actively undertaken with therapists, examining their 'real-life' experiences might then prove a helpful means of feeding back into ways to improve practices and support therapists to meet the specific demands of their clients.

Interestingly, and anecdotally as my small sample size and methodology are not designed to examine this, the interviews appeared to reveal site differences. These differences seemed to be consistent across the two sets of therapists interviewed and I would hypothesise, represent the different challenges that the two

sites faced in terms of the nature of the local gang-culture. The therapists associated with one site spoke of how organised the gangs in the area were, describing gangs as part of serious organised crime. The purpose of the gang was predominantly to make money via the distribution of drugs and each gang had an organised hierarchy that meant it was often difficult to access those with most control. Another site talked about the history of 'turf-war' in their borough. Whilst these gangs could also be involved in drug-dealing, there was a larger emphasis on territory, safety and status. Other research in the UK has looked specifically at the nature of local gang-culture (Pitts, 2007). Again, for me, this raises the important question of how much local context and culture might be relevant and whether service implementation for interventions that address youth antisocial behaviour need to consider this.

Replicating this study

There were some methodological weaknesses in my design, particularly around my sample of participants. I chose to work with MST therapists involved in the START trial initially because I was going to be interviewing young people and parents recruited into the trial. Whilst I endeavoured to include all of the therapists that had worked at both sites throughout the trial, this also meant that there was variation in terms of how long each had worked as a therapist, and also, how long it had been since some of them had left their position with MST. This does raise the question around validity of retrospective accounts, as discussed earlier. The therapists that I interviewed I had worked with previously, however as an RA for the START trial, and I feel that the good working relationship that we had had, improved the rapport in our interviewee, interviewer relationship. I hypothesise that this enabled therapists to talk more freely about their experiences, enabling me to gather a wealth of information as part of an exploratory approach to assessing

whether gang-involvement did impact upon the implementation of MST and whether this warranted further examination.

Final Considerations

This study represented an exploratory foray into the potential impact of gang-involvement for clinical intervention. As such, the relatively small sample size and methodological weaknesses in the design mean that further studies would be important to look at whether these results might be upheld. In terms of generalisability however, greater exploration of the literature has made me question whether that should be the aim of research like this or, whether instead, research should welcome the variation inherent in different settings and with different populations, and instead offer a means to then build upon and adapt evidence-based approaches to fit local need. I wonder if perhaps a model similar to that of AMBIT (Adolescent Mentalization-Based Integrative Therapy; Bevington, Fuggle, Fonagy, Target & Asen, 2013), encouraging the adaptation of a manualised treatment to fit local needs, might represent a helpful way forwards.

This research project has represented a tremendous undertaking for me, and it is with some disbelief that I find I am completing it. It has given me the opportunity to develop my critical thinking and skills as a researcher; part of a continual learning process which I aim to take with me into my professional practice. Whilst I have learned from both the limitations and challenges inherent in my study, I also feel that this study has raised some interesting and important theoretical considerations for me in terms of the purpose and implementation of research. I am proud to have completed a project which I feel has ‘real-life’ clinical value and hope to be able to build upon this in my future practice.

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Appendices

Appendix I

Quality criteria for critical appraisal of observational studies

Quality criteria for critical appraisal of observational studies

Cohort studies

1. Are the study participants adequately described (with adequate descriptive data on age, sex, baseline health status and other variables as appropriate to the research question)?

2. If the study is an assessment of an intervention, is the intervention clearly described, with details of who exactly received it?

3. If the study is an aetiological study (e.g. does stress cause cancer?) were the independent and dependent variables adequately measured (that is, was the measurement likely to be valid and reliable)?

4. Are the health measures used in the study the most relevant ones for answering the research question?

5. If the study involves following participants up over time, what proportion of people who were enrolled in the study at the beginning, dropped out? Have these 'dropouts' introduced bias?

6. Is the study long enough, and large enough to allow changes in the health outcome of interest to be identified?

7. If two groups are being compared, are the two groups similar, and were they treated similarly within the study? If not, was any attempt made to control for these differences, either statistically, or by matching? Was it successful?

8. Was outcome assessment blind to exposure status? (That is, is it possible that those measuring the outcome introduced bias?)

Case-control studies

1. Are the study participants adequately described (with adequate descriptive data on age, sex, baseline health status and other variables as appropriate to the research question)?

2. If the study is an assessment of an intervention, is the intervention clearly described, with details of who exactly received it?

3. If the study is an aetiological study (i.e. does stress cause cancer?) were the independent and dependent variables adequately measured (that is, was the measurement likely to be valid and reliable)? Were they measured in the same way in both cases and controls?

4. Are the health measures used in the study the most relevant ones for answering the research question?

5. Are the two groups being compared similar, from the same population and were they treated similarly within the study? If not, was any attempt made to control for these differences, either statistically, or by matching? Was it successful?

(From NHS CRD Report 4, http://www1.york.ac.uk/inst/crd/report4.htm)

Appendix II

Ethical Approval Letter

NHS
Health Research Authority

NRES Committee London - South East
Bristol Research Ethics Committee Centre
Level 3, Block B
Whitefriars,
Lewins Mead,
Bristol
BS1 2NT

Tel: (0117) 3421382
Fax: (0117) 3420445

29 April 2013 – Re-issued 11.102013

Dear Professor Fonagy

Study title:	**START (Systemic Therapy for At Risk Teens): A National Randomized Controlled Trial to Evaluate Multisystemic Therapy in the UK Context**
REC reference:	**09/H1102/55**
Protocol number:	**09/0137**
Amendment number:	**Amendment No. 10, dated 24 April 2013**
Amendment date:	**24 April 2013**
IRAS project ID:	***16120***

The above amendment was reviewed by the Sub-Committee in correspondence.

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Qualitative Consent Form Parent-Carer	V1	24 April 2013
Qualitative Assent Form Young Person (15+)	V1	24 April 2013
Interview schedule for Young Person	V1	24 April 2013
Interview schedule for Parents	V1	24 April 2013
Interview schedule for MST Therapist	V1	24 April 2013
Notice of Substantial Amendment (non-CTIMPs)	Amendment No. 10, dated 24 April 2013	24 April 2013
Covering Letter		24 April 2013
START research protocol	*v2.3 (draft)*	24 April 2013
Qualitative Information Sheet Young Person 11-14	V1	24 April 2013
Qualitative Information Form therapists	V1	24 April 2013
Qualitative Information Form parent-carer	V1	24 April 2012
Qualitative Information Form Young Person	V1	24 April 2013

START research protocol	v2.3 (final)	24 April 2013
Assent form for young person (11-14 yrs)	1	24 April 2013
Consent form for therapists	*1*	*24 April 2013*

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at http://www.hra.nhs.uk/hra-training/

09/H1102/55:	**Please quote this number on all correspondence**

Yours sincerely

[redacted]

Wai Yeung
Assistant Coordinator – London – South East

PP David Caplin
Chair

E-mail: nrescommittee.london-southeast@nhs.net

Copy to: *Mr Philip Diamond, Senior Research Administrator*

A Research Ethics Committee established by the Health Research Authority

Appendix III

Participant information form

Systemic Therapy
for At Risk Teens

University College London (UCL) in partnership with

Hackney MST team and East London NHS Trust

OPTIONAL ADDITIONAL QUALITATIVE STUDY

Information for Therapists

Multisystemic Therapy for Families in Difficulty: A Qualitative Study talking to young people, families and therapists who have experienced gang involvement.

Introduction

We know that there are many external factors that affect children and young people and may have an influence on their behaviour. Association with deviant peers has been identified as a risk factor for antisocial behaviour and gang-involvement has proven an additional amplificatory factor. Despite this there are few interventions which target gang involvement directly or measure their effect on gang-involvement. Multisystemic Therapy (MST) has been identified as one of the treatments of choice for young people struggling with antisocial behaviour and their families.

The Study

This study is interested in exploring how MST works with gang-involved young people and their families; what are the similarities or additional challenges faced with these families as opposed to those of non-gang-involved young people, is gang-involvement targeted and in what ways does MST do this. We aim to investigate therapists' experiences of working with gang-involved young people and their families as well as the experiences of the young people and their parents/carers.

What will I have to do if I take part?

If you agree to participate we would like to talk to you about your personal experiences of working with gang-involved young people and their families within MST. This will involve a semi-structured interview which should last about an hour and will be tape recorded.

Do I have to take part?

No. Participating in this part of the MST project is completely voluntary and you are under no obligation to do so.

If I agree to take part what happens to what I say?

All the information you give us is confidential. The audio-taped recording of our discussion will be stored in a secure area and will only be listened to by the researchers involved in this study. These tapes will be securely disposed of once the study has been written up. Any specific thoughts or views you have will not be disclosed to any members of the Hackney MST Team. However, if in the course of our discussions, we learn that someone is seriously planning to harm another or themselves then we would need to inform the Clinical Supervisor of the Hackney MST Team or other relevant professionals.

Reporting the findings of the study

A report will be written about the findings of this study. In that report the results will be presented in such a way that no one can identify you. In other words, we can guarantee that information about you will be anonymous because we will talk about groups not individuals and not use your name or any identifiable information.

Conclusions

We hope that what we learn in this study may be used to help young people and their families by informing clinical practice and thinking moving forwards.

It is not anticipated that you will experience any psychological distress as a result of our discussions. If however, you become uncomfortable when we talk we will of course stop discussion and think about any possible support you may need.

Stephen Butler PhD, CPsych, Trial Manager and Senior Lecturer at UCL, will be available if you have any questions or concerns. You can contact him at:

Research Department of Clinical, Educational and Health Psychology

1-19 Torrington Place, WC1E 7HB

Tel: 020 7679 5982

E-mail: stephen.butler@ucl.ac.uk

Appendix IV

Participant consent form

Systemic Therapy
for At Risk Teens

University College London (UCL) in partnership with…

Hackney MST team and East London NHS Trust

OPTIONAL ADDITIONAL QUALITATIVE STUDY

Multisystemic Therapy for Families in Difficulty: A Qualitative Study talking to young people, families and therapists who have experienced gang involvement.

CONSENT FORM – THERAPIST

Trial Manager: Stephen Butler (PhD, CPsych, and Senior Lecturer at UCL,)

Please complete the following:

		Delete as necessary
1.	I have read the information that describes this study.	Yes/No
2.	I have had an opportunity to ask questions and discuss this study.	Yes/No
3.	I have received satisfactory answers to all my questions.	Yes/No
4.	I have received sufficient information about this study.	Yes/No
5.	I have spoken to a member of the Research Team about this study.	Yes/No
6.	I understand that I do not have to take part in this study.	Yes/No
7.	I understand that I am free to withdraw from the study at any time without giving any reason.	Yes/No
8.	I understand that my interview will be audio-taped and typed up as described in the information sheet.	Yes/No

9. I understand that some documents from the study may be looked at by responsible people appointed by UCL, who must make sure (as Research Governance sponsor) that the study is being run properly. I give permission for this group to have access to the necessary information. Yes/No

10. Do you agree to take part in this study? Yes/No

By completing and returning this form, you are giving us your consent that the personal information you provide will only be used for the purposes of this project and not transferred to an organisation outside of UCL. The information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.

Signed: …… Date: ……

Name in Block Letters: ……

Name of Researcher: ……

Signed: …… Date: ……

Appendix V

Interview schedule

Therapist interview schedule

General/ overall experience of MST

- I wonder if you can tell me a little about your professional background and what led you to become an MST therapist?
- What did you know about MST prior to taking the role?
    - Understandings about the model
    - What you were looking forward to
    - Anything you were unsure about
- Had you had any previous experience working with antisocial behaviour previously? How about young people who were gang-involved?
    - What did you think it might be like going to work with these young people? Did you think that gang-involvement might be a factor?

Identifying gang-involved YP

- What were gang-involved people like?
    - Same presenting problems/ severity?
    - What were the families like?
        - (compared to young people who were not gang-involved)
- How did you know that young people were gang-involved?
    - Defining this
    - Referrals- was this stated/ the reason for referral?
    - What kind of agencies were involved- how did they flag gang-involvement
    - Did this then make a difference in the way these cases were thought about?
- Was beginning work with these young people any different to work with other families?
- Were expectations for treatment and outcomes for these families any different?
    - Goal setting
    - A measure of success- referral agencies, therapist, young person, families?

Engagement of the YP and their family

- Do you notice any differences engaging/ starting work with gang-involved young people and their families?

    - What are they like to approach?
    - Are they happy to work with you/ do they have any reservations?
    - Is gang-involvement something that is directly addressed?
        - How do parents seem to find discussing this?
            - How do you overcome barriers to discussing this?
        - How do young people find discussing this? Are they happy to talk about their experiences?
            - How do you overcome barriers to discussing this?
- MST aims to work with hard-to-reach families who may have had a lot of previous contact with other services. Do you think that this impacts on your work with them?

<u>Expectations around working with YP</u>

- Have you noticed any notable differences between gang-involved or non-gang-involved youth?
    - In terms of their behaviour?
        - Attitude towards treatment?
        - Attitude towards the future?
        - Attitude towards crime and criminal behaviour?
- Are young people happy to talk about their gang involvement or does this present difficulty?
- Have you had to change your practice in any way to try to work with or directly engage gang-involved young people? In what ways?

<u>Knowledge and skills in practice</u>

- What skills or strategies do you think are important when working with gang-involved young people and their families?
- What have you found most appropriate/ successful in your work with these families?
- What makes no difference to your work as an MST therapist and what might make some difference?
    - How do you tackle this?
    - What components of MST seem most important and relevant to these families?

<u>Evaluation of the MST model in working with gang-involved young people and their families</u>

- What do you think are both the strengths and the weaknesses of the MST approach when working with this population?
- If you could shape MST or were a consultant would you do anything differently with these families?
    - Is there anything you feel that is missing or needs to be considered within the MST model or another form of treatment working with these families?
    - What other services/ interventions might be helpful

<u>Outcomes for gang-involved YP</u>

- How do you feel things turned out for these young people and their families after treatment?
    - Why do you feel that was?
    - What kind of things might have changed/ stayed the same?
- What seemed to influence any change in the young person's gang involvement?
    - Did this come from the young person/ the parent?
    - In what ways could MST support/ promote this change?
- Do families and young people look at desistence from gangs as a successful outcome?
    - How does this affect their perception of treatment/ the end of treatment/ the future?
    - Do families feel that this is a long-term and maintainable change?
    - Do you/ families feel that there are additional factors which effect their involvement in gang culture which are outside of their control?
        - What are these?
        - What impact does this then have on their attitudes towards gang-involvement and change?

Appendix VI

Phases of thematic analysis

Braun & Clarke (2006) Phases of Thematic Analysis:

Phase	Description of the process
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Appendix VII

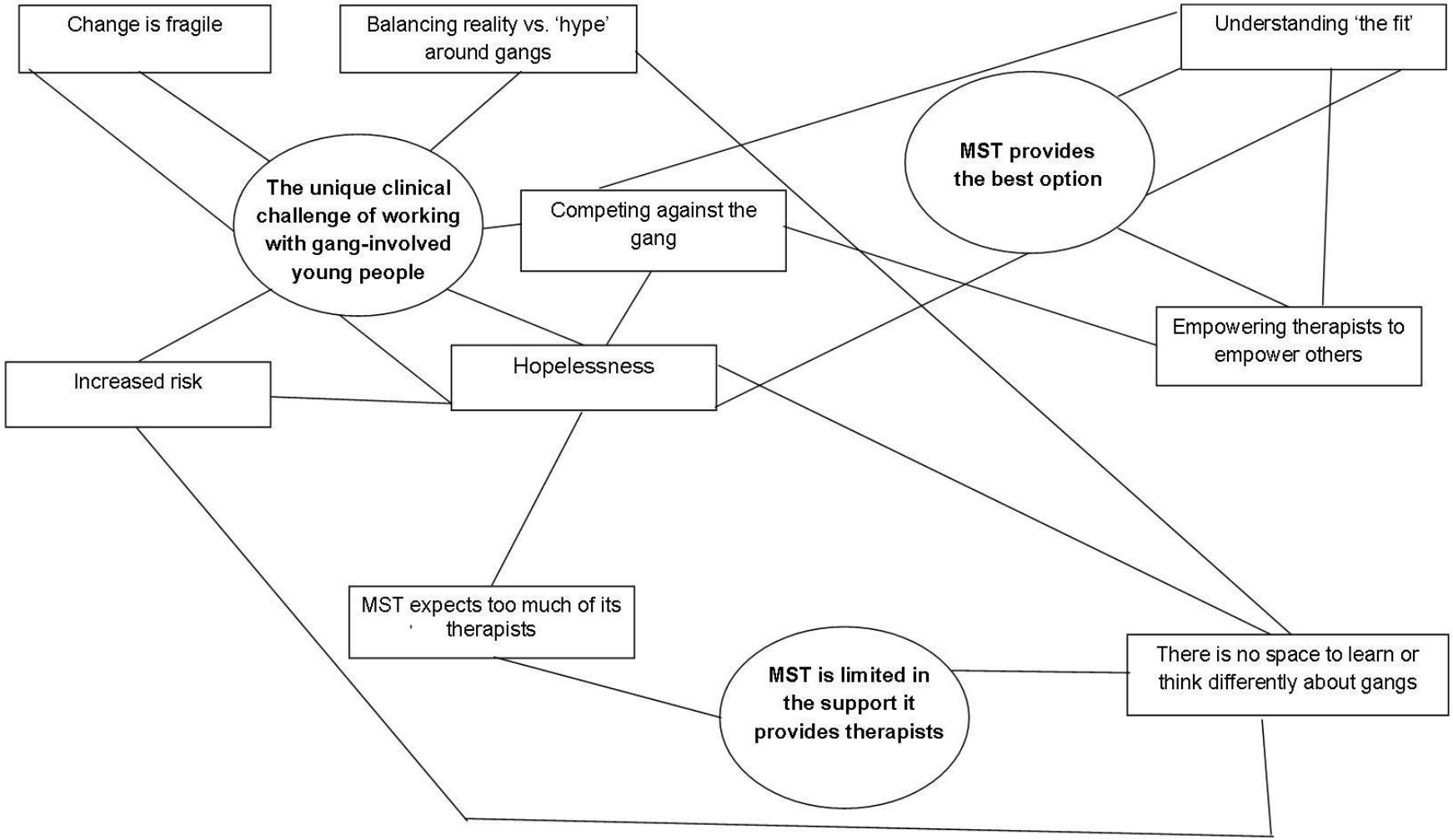
Checklist of criteria for good thematic analysis

A 15-point checklist of criteria for good thematic analysis (Braun & Clarke, 2006).

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analysed- interpreted, made sense of- rather than just paraphrased or described.
	8	Analysis and data match each other- the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organised story about the data and topic.
	10	A good balance between analytic, narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done, i.e. described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as *active* in the research process; themes do not just 'emerge'.

Appendix VIII

Thematic map of results


Change is fragile
Balancing reality vs. 'hype' around gangs
Understanding 'the fit'
MST provides the best option
The unique clinical challenge of working with gang-involved young people
Competing against the gang
Empowering therapists to empower others
Increased risk
Hopelessness
MST expects too much of its therapists
MST is limited in the support it provides therapists
There is no space to learn or think differently about gangs

Appendix IX

An example of the qualitative coding process

An example of the thematic coding process.

Theme	Code	Extract	Transcript
Competing against the gang			
	Gangs as a sub-system?	I think so, I know MST looks at the peer system and the strengths and needs in the peer system but whether the gang system is a sub-system within that, that is just a big question mark because the more entrenched the young person is in a gang and the higher up, and the more structured the gang is and the more higher up the hierarchy they are, I think it is a lot more difficult for them to leave the gang because of safety risks but also accessing them	Sandy p14.
		I think you have to be mindful when you are working with the family about the particular system that young person is in, especially with the gang system	Matt p4.
		Well I think that it was just so inaccessible, if you think about, we would often have a young person and they would be attached to all this whole system that we had no, and then we had the parent, we had all these agencies on the parent, and then there was just no link between these two systems at all. It was immensely, immensely frustrating. In some ways what you want to be doing is going and doing MST with the gang leaders and saying look can you at least give us back the 14year olds, let them finish school.	Freya p9.
		Well I think it is this problem about having a whole other system that is pulling this kid away from the system as we, that MST is designed to intervene with	Freya p9.
		their other family, and it is a strong connection. Whether that connection is around loyalty and need and fear and protection is another thing.	Matt p8.
		It wasn't with all the families, some of them fell more into the more individual and family drivers and they were associating or hanging out with other peers that also had difficulties, and that felt a bit more malleable, still hard work but more malleable, and more amenable to change, I think the ones where it felt harder, were the ones where they would have a high level of family need, high level of individual need but then you wouldn't, you just couldn't, it felt that sometimes you just couldn't access the child because they were so out of the family system they were in, they had another network that was impacting on them and we couldn't access, it was very difficult to access that network.	Niamh p2.

Theme	Code	Extract	Transcript
	Attractive and well resourced	I don't remember having explicit discussions about it, and I definitely, I think, I don't know if the rest of the team would agree with this, but I felt personally as a therapist a little bit less prepared when we got some young people who were really quite seriously involved in gangs and it was like OK they were quite powerful, they were involved with people who had money and therefore access to all sorts of material things and there was a lot of status and power and things coming into it, it definitely felt like a little bit of a different ballgame than maybe some of the other young people referred	Victoria p3.
		They felt more powerful than you were	Freya p9.
		, I think it distorts that whole systemic model	Freya p5.
		I guess I have always assumed there is such a strong peer element and influence, there is stuff they are getting, and I don't just mean material stuff, although that can be the case, there is stuff that is rewarding and getting from this peer involvement, and I think in some cases by the time we have gotten involved in MST, this young person has been kind of been groomed in a way for quite a while, I know that was the case with quite a few I have been involved in in one capacity or another, I don't know if that is always the case but you know, these rewards, whatever they are getting from the peer group have become really powerful and really entrenched	Victoria p4.
		as far as the young person is concerned, I think they are very … it is very hard for them, I remember one young person, I think he was genuinely interested in changing his life but I think the peer group and I am not saying this is just gangs, but the negative peer group, maybe this is what we should call it, but this negative peer group was just so strong and his mum was a single parent as well, she was working loads so she didn't have the supervision and monitoring, she didn't have the social supports and then you had this quite attractive group of guys and a lot of the time they were not up to no good so they were smoking, doing this and it is tough for everyone involved, for the young person, for the parents, even the schools I would guess.	Jan p7.

Theme	Code	Extract	Transcript
		As you said, in MST we don't really focus a lot on the young person co-operating or trying to get them to directly which surprises a lot of other services, but they usually do become interested because their parents and carers and all other people are working together and talking about them and manipulating their privileges and putting consequences in and it gets their attention, but I think there has been a sense where some of the kids who are gang affiliated that the stuff we usually work with there is less powerful and less meaningful to them or we have less to leverage, so it can impact on the moral I guess and people's activity level	Victoria p4.
		Well some of the practical things are if the young person is going missing a lot, you can't work on a lot of things, there is not a huge amount of intervention implementation you can do because they are not around so you are losing that little time where they have done so much. You know they are able to say 'I was able to report them missing' but now what? I guess that can could be a feature of other young people who go missing, but then I think gang involved young who are going missing, they have got a place to go, someone is putting them up and they have got money so I think that is probably a little bit different.	Becky p8.
		Yes and you know these kids would go missing but they would turn up and they would be clean and fed so whoever these people were, they had the resources to look after these kids. It is not like the parent had any leverage to say 'if you don't follow my rules you are out of the house or whatever', there was an alternative so I'm not sure that MST, well we weren't able to find a way to counteract that	Freya p9.
		I think there is lots of money around, a sense of belonging, I guess there is a kind of fun if you chase each other in, this kind of thrill a little bit and I find it very sad, when this young person said 'oh then we snatched this other boys baby brother and took him around the estate while his mum was screaming her head off.' In some ways this is dreadful when you hear it, just to give this boy a warning, he told me that, so I think it is this kind of thrill seeking, some sort of stimulation they get from it and I think it is safety. Why do they carry a knife, to protect themselves, most of them get stabbed with the knife they carry rather than using it to stab someone else, these kind of , part of this is because they are scared	Jan p8.

Theme	Code	Extract	Transcript
		Yes, young people more since the trial, but there has been a couple where very good therapists, really adherent to the model, making, getting all the network really engaged and working very hard to disrupt and get this young person away, and they go, we get the mother and the young person to Belfast where they have got some family, they have worked on the relationship, the parents have worked on how they are going to be with him and the Woolwich boys send the guy a passport and the money to come back	Becky p3.
		so what I found was more difficult was not necessarily gang versus not gang but where there were additional benefits of being involved with those peers that often come through having gang involvement. So a lot of the kids that I think of in my head as being harder to get out of the gangs were kids that were dealing drugs and getting significant financial incentives or were being groomed and were therefore getting trainers and hats. It was the kids that were getting more, so if you're just in a normal friendship where you're not running some sort of illicit business, then you get a lot of good stuff out of hanging out with those people, it's fun, it's somewhere to go, it's definitely better than being at school, they might make you feel good about yourself or whatever but what you don't have is all the additional drivers of financial gain, material gain, status, so it's not in of itself that it is different but the drivers can become different and a lot harder to replace, so if all you are getting is it is more fun, or more kind of rewarding in an intrinsic way, rather than in a material way then there is something you can do about that, though no doubt is hard enough, but if it is also giving you an income that you have no way of replacing	Anne p9.
	Financial incentive	the gang cool gangs and we're on top of the world, kind of taking over the neighbourhood	Jan p9.
		they are used to making money. Why would you want to be rewarded by your parent for £2 a night when you can earn probably £200 a day, when you have been asked to do certain jobs by other people in their group where you can earn a lot of money, offering a reward of £2 a day, even £5 a day is	Matt p8.
		And not being able to compete, so the reward based systems, the poor parents, they couldn't pay the same rates as what they might have been earning, that just seemed quite ineffectual	Eve p9.

Theme	Code	Extract	Transcript
		It feels like they are totally exploited and they have to do really horrible things, like internally hide drugs and remove those drugs, a lot of it seems to be about the money thing, they can make, and they can't see a way, potentially because they have had quite troubled schooling histories, of making that kind of money or soon enough	Becky p6.
		but what also is very hard to compete with for parents is if they are making huge amounts of money. It is hard to compete in terms of if you have rewards, consequence for that, it still works to think about it, but sometimes it feels a bit hopeless, that you just can't replace what they are making.	Becky p3.
		I was why are they linking with these anti-social peers, because we never called them gangs, is it because they get financial benefits from it and I think so it is not that you approach it any differently, you would still do your fit assessment, but if they are really entrenched in this where the family or the young person brings an income to the family of over £1000 a month it is going to be probably very difficult to stop that, especially if you have a poor family who get lots out of it	Jan p5.
		'but I was doing it because my family don't have any money', his family had the most horrendous life, his dad had cancer and lost his job and couldn't work and had loads of health complications and then they had a house fire and they lost all of their belongings and he had said at everyone of his trials, 'the reason I did it is to steal for my parents'	Anne p8.
		And in some respects parents who can give them more tangible rewards, so what's his face was probably earning about £1000 a day or at least £1000 a week, so tangible rewards, what are these parents on benefits going to give them, the relationship is strained anyway at that age and usually for other reasons as well .	Freya p5.
		you just couldn't do that normal 'well if we give him pocket money or more praise', it just wasn't working for a lot of the time. It did work with some of the less involved kids, but we really found there was very little leverage that we had other than parental love against these gang affiliated kids	Freya p9.