

# Evidence *in* Context

Issue: Youth Residential Treatment  
Released: October 2010

Health research — synthesized and contextualized for use in Newfoundland and Labrador

Companion Document

## Youth Residential Treatment Options in Newfoundland & Labrador

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Newfoundland & Labrador Centre for

**APPLIED  
HEALTH  
RESEARCH**

[www.nlcahr.mun.ca](http://www.nlcahr.mun.ca)



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This companion report for a contextualized health research synthesis was prepared by the Newfoundland and Labrador Centre for Applied Health Research (NLCAHR), Memorial University. It was developed through the analysis, interpretation and synthesis of scientific research and/or health technology assessments conducted by other parties. It also incorporates selected information provided by experts in the subject areas and synthesis methodologies. This document may not fully reflect all the scientific evidence available at the time this report was prepared. Other relevant scientific findings may have been reported since completion of this synthesis report.

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## About This Document

This document is a companion to the full report "Youth Residential Treatment Options in Newfoundland & Labrador." It contains technical and supporting information about the synthesis process that was used to create the full report and should be read in conjunction with it.

The support documents are intended to provide a clear view of the process used to produce the contextualized synthesis, and allow for others to replicate and validate it.

To read the full report as well as summary documents: [www.nlcahr.mun.ca/CHRSP/residential.php](http://www.nlcahr.mun.ca/CHRSP/residential.php)

## About the Contextualized Health Research Synthesis Program

In 2007, NLCAHR launched the Contextualized Health Research Synthesis Program (CHRSP) to provide research evidence to help guide decision makers in the provincial health system on issues of pressing interest to Newfoundland and Labrador.

CHRSP does not conduct original research, but rather analyzes the findings of high-level research (systematic reviews, meta-analyses and health technology assessments) that have already been done on the issue in question. The findings of these studies are synthesized and are subjected to a systematic process of 'contextualization': they are analyzed in terms of their applicability to the conditions and capacities of the unique context of Newfoundland and Labrador.

Our contextual analysis includes assessment of the specific forms that the issue takes in this province as well as the applicability of proposed solutions and methods to locally available physical and human resources, cultural conditions and financial capacities. CHRSP uses a combination of external experts and local networks to carry out and contextualize the research synthesis and to facilitate the uptake of the results by research users.

CHRSP focuses on three types of projects: health services/health policy projects; health technology assessment (HTA) projects; and projects that combine the two to examine processes for the organization or delivery of care involving a health technology.

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# 1. Search Strings Used

The following search strings were used to produce the CHRSP report "Youth Residential Treatment Options in Newfoundland & Labrador."

## Search 1: YRT as a Generic Treatment Program

Search 1.a Academic Search Premier		
Search	String	Result
1	DE "TEENAGERS" or DE "YOUTH" or TI "TEENAGER" or TI "YOUTH" or TI "YOUNG" or TI "JUVENILE" or TI "ADOLESCENT" or TI "ADOLESCENCE" or TI "TEENAGE"	123,420
2	DE "MENTAL illness" or DE "ADOLESCENT psychopathology" or DE "AFFECTIVE disorders" or DE "ATTACHMENT disorder" or DE "BEHAVIOR disorders in children" or DE "CONDUCT disorders in adolescence" or DE "DEPRESSION, Mental" or DE "IMPULSE control disorders" or DE "PERSONALITY disorders" or DE "SELF-destructive behavior" or DE "SELF-injurious behavior" or DE "SUBSTANCE abuse" or DE "ATTENTION-deficit hyperactivity disorder" or DE "ATTENTION-deficit disorder in adolescence" or DE "JUVENILE delinquency" or DE "SCHOOL violence" or DE "CRIME" or DE "ANXIETY disorders" or DE "VIOLENCE" or DE "FIGHTING (Psychology)" or DE "TEENAGERS & violence" or DE "VIOLENCE in adolescence" or DE "YOUTH & violence" or DE "AGGRESSIVENESS" or DE "SEX crimes" or TI "OFFENDER" or TI "CRIMINAL" or TI "DELINQUENT"	80,907
3	DE "ADOLESCENT psychiatry" or DE "ADOLESCENT psychotherapy" or DE "CHILD psychiatry" or DE "CHILD psychotherapy" or DE "INSTITUTIONAL care" or DE "RESIDENTIAL care" or DE "ADOLESCENT psychotherapy -- Residential treatment" or DE "CHILD psychotherapy -- Residential treatment" or DE "FAMILY psychotherapy" or DE "BEHAVIOR therapy" or DE "BEHAVIOR therapy for children" or DE "BEHAVIOR therapy for teenagers" or DE "COGNITIVE therapy" or DE "COGNITIVE therapy for children" or DE "COGNITIVE therapy for teenagers" or DE "OUTCOME assessment (Medical care)" or DE "ADOLESCENT psychotherapy -- Outcome assessment" or DE "CHILD psychotherapy -- Outcome assessment" or DE "PSYCHOTHERAPY -- Outcome assessment" or DE "REINFORCEMENT (Psychology)" or TI "INSTITUTION" or TI "INSTITUTIONAL" or TI "RESIDENTIAL" or TI "CORRECTION" or TI "REHABILITATION" OR TI "TREATMENT" OR TI "THERAPY" OR TI "Intervention"	237,201
4	PT "REVIEW" or PT "SYSTEMATIC REVIEW" or TI "REVIEW" or AB "REVIEW" or TX "META ANALYSIS" or TX "META-ANALYSIS"	903,980
5	#1 AND #2 AND #3 AND #4	136
Search 1.b Canadian Research Index		
Search	String	Result
1	("Adolescent" OR "Minors" ) AND ("Residential Treatment " OR "Substance Abuse Treatment Centers" ) AND PDN(>1/1/1994)	3
2	(adolescen* OR minor OR teenag* OR youth OR juvenile) AND ("Residential Treatment " OR "Substance Abuse Treatment Centers" OR institu* OR residen*) AND PDN(>1/1/1994)	211
3	(newfoundland or labrador) AND (adolescen* OR minor OR youth OR teenage* OR juvenile) AND PDN(>1/1/1994)	67
4	#1 OR #2 OR #3	281

Search 1.c Cochrane Library & Database of Abstracts of Reviews of Effects (DARE)		
Search	String	Result
1	"Adolescent" OR "Minors" OR "Adolescent Behavior" OR "young " OR "youth" OR "juvenile" OR "adolescent" OR "adolescence" OR "teenage" OR "teenager":ti,ab,kw in Cochrane Reviews, Other Reviews, Technology Assessments and Economic Evaluations	3759
2	"Juvenile Delinquency" OR "Violence" OR "offender" OR "criminal" OR "Attention Deficit and Disruptive Behavior Disorders" OR "Child Behavior Disorders" OR "Reactive Attachment Disorder" OR "Social Behavior Disorders" OR "Substance-Related Disorders" OR "Child Abuse" OR "Affective Symptoms" OR "Aggression" OR "Child Reactive Disorders" OR "Self-Injurious Behavior":ti,ab,kw, from 1994 to 2009 in Cochrane Reviews, Other Reviews, Technology Assessments and Economic Evaluations	594
3	"Residential Treatment " OR "Substance Abuse Treatment Centers" OR "institution" OR "institutional" OR "institutionalized" OR "institutionalised" residence" OR "residential" OR "correction" OR "rehabilitation":ti,ab,kw, from 1994 to 2009 in Cochrane Reviews, Other Reviews, Technology Assessments and Economic Evaluations	1777
4	#1 AND #2 AND #3 Cochrane Reviews [4]   Other Reviews [10]   Clinical Trials [194]   Methods Studies [0]   Technology Assessments [0]   Economic Evaluations [23]   Cochrane Groups [0]	231

Search 1.d Cumulative Index to Nursing and Allied Health Literature (CINAHL)		
Search	String	Result
1	(MH "Adolescence") OR (MH "Juvenile offenders") OR (TI "adolescents") OR (TI "adolescent") OR (TI "teenagers") OR (TI "teenage") OR "young" OR "youth" OR "juvenile" OR "adolescent" OR "adolescence" OR "teenage" OR "teenager"	146574
2	(MH "Mental Disorders") OR (MH "Attention Deficit Hyperactivity Disorder") OR (MH "Child Behavior Disorders") OR (MH "Reactive Attachment Disorder") OR (MH "Juvenile Delinquency") OR (MH "Anxiety Disorders+") OR (MH "Substance Use Disorders+") OR (MH "Antisocial Personality Disorder") OR (MH "Affective Disorders") OR (MH "Depression") OR (MH "Violence+") OR (MH "Aggression+") OR (MH "Social Behavior Disorders") OR (MH "Sexual Abuse+") OR (MH "Crime") OR (MH "Recidivism") OR "offender" OR "criminal" OR "delinquent"	94926
3	(MH "Psychotherapy") OR (MH "Psychotherapy, Brief") OR (MH "Psychotherapy, Group") OR (MH "Adolescent Psychiatry") OR (MH "Child Psychiatry") OR (MH "Residential Facilities") OR (MH "Residential Care") OR (MH "Family Therapy") OR (MH "Behavior Therapy+") OR (MH "Outcome Assessment") OR (MH "Treatment Outcomes+") OR (MH "Parents/ED") OR (TI "treatment") OR (TI "therapy") OR (TI "iintervention") OR "institution" OR "institutional" OR "institutionalized" OR "residence" OR "residential" OR "correction" OR "rehabilitation"	244906
4	(PT "Review") OR (PT "Systematic Review") OR (TI "Review") OR (AB "Review") OR (TX "Meta Analysis")	134265
5	#1 AND #2 AND #3 AND #4	588

Search 1.e Educational Resources Information Center (ERIC)		
Search	String	Result
1	DE "Early Adolescents" or DE "Late Adolescents" or DE "Adolescents" and DE "Youth" OR DE "Canada Natives"	3776
2	DE "Delinquency" or DE "Antisocial Behavior" OR DE "Aggression" OR DE "Violence" OR DE "Hazing" OR DE "Crime" or DE "Drug Addiction" OR DE "Behavior Disorders" OR DE "Addictive Behavior" or DE "Emotional Disturbances" or DE "Behavior Problems" OR DE "Vandalism" OR DE "Elder Abuse" OR DE "Aggression" OR DE "Violence" OR DE "Hazing" OR DE "Bullying" OR DE "Sexual Harassment" or DE "Self Destructive Behavior" or DE "Substance Abuse" OR DE "Alcohol Abuse" OR DE "Drug Abuse"	43459
3	DE "Correctional Institutions" OR DE "Correctional Rehabilitation" OR DE "Delinquent Rehabilitation" OR DE "Drug Rehabilitation" OR DE "Rehabilitation Centers" OR DE "Rehabilitation Programs" OR DE "Rehabilitation" OR DE "Residential Care" OR DE "Residential Institutions" OR DE "Residential Programs"	10289
4	#1 AND #2 AND #3	33
5	DE "Literature Reviews" or DE "Meta Analysis"	19442
6	#4 AND #5	0

Search 1.f Health-evidence.ca		
Search	String	Result
1	Check box search: " adolescents (13-19) OR First Nations and Inuit OR General Public/All age groups OR grade school aged (5-12) in Population Characteristics AND Addiction/Substance Use OR Adolescent Health OR Mental Health in Focus of Review AND Correctional institution OR Residential centre in lntervention Location AND meta-analysis OR systematic in Review Type "	9
2	("Adolescent" OR "Minors" OR "Adolescent Behavior" OR "young " OR "youth" OR "juvenile" OR "adolescent" OR "adolescence" OR "teenage" OR "teenager") AND (Problem search: "Juvenile Delinquency" OR "Violence" OR "offender" OR "criminal" OR "Attention Deficit and Disruptive Behavior Disorders" OR "Child Behavior Disorders" OR "Reactive Attachment Disorder" OR "Social Behavior Disorders" OR "Substance-Related Disorders" OR "Child Abuse" OR "Affective Symptoms" OR "Aggression" OR "Child Reactive Disorders" OR "Self-Injurious Behavior") AND (Treatment search: "Residential Treatment " OR "Substance Abuse Treatment Centers" OR "institution" OR "institutional" OR "institutionalized" OR "institutionalised" residence" OR "residential" OR "correction" OR "rehabilitation") AND Correctional institution in lntervention Location AND meta-analysis OR systematic in Review Type	0

Search 1.g PsycINFO		
Search	String	Result
1	AG "Adolescence"	228,272
2	DE "Mental Disorders" OR DE "Attention Deficit Disorder with Hyperactivity" OR DE "Behavior Disorders" OR DE "Addiction" OR DE "Attempted Suicide" OR DE "Drug Abuse" OR DE "Homicide" OR DE "Juvenile Delinquency" OR DE "Self Mutilation" OR DE "Attachment Disorders" OR DE "Anxiety Disorders" OR DE "Antisocial Personality Disorder" OR DE "Affective Disorders" OR DE "Major Depression" and DE "Violence" or DE "School Violence" OR DE "Violent Crime" OR DE "Aggressive Behavior" OR DE "Aggressiveness" OR DE "Conduct Disorder" OR DE "Sex Offenses" OR DE "Crime" OR DE "Arson" OR DE "Theft" OR DE "Vandalism" OR DE "Recidivism" OR KW "offender" OR KW "criminal" OR KW "delinquent"	160,370
3	DE "Psychotherapy" OR DE "Adolescent Psychotherapy" OR DE "Behavior Therapy" OR DE "Brief Psychotherapy" OR DE "Child Psychotherapy" OR DE "Cognitive Behavior Therapy" OR DE "Group Psychotherapy" OR DE "Adolescent Psychiatry" OR DE "Child Psychiatry" OR DE "Residential Care Institutions" OR DE "Family Therapy" OR DE "Treatment Outcomes" OR DE "Psychotherapeutic Outcomes" OR KW "institution" OR KW "institutional" OR KW "institutionalized" OR KW "residence" OR KW "residential" OR KW "correction" OR KW "rehabilitation" OR TI "treatment" OR TI "therapy" OR TI "iintervention"	242,978
4	PT "REVIEW" or PT "SYSTEMATIC REVIEW" or TI "REVIEW" or AB "REVIEW" or TX "META ANALYSIS" or TX "META-ANALYSIS"	180,999
5	#1 AND #2 AND #3 AND #4	333

1.h Psychological & Behavioral Sciences Collection		
Search	String	Result
1	DE "Adolescence" OR DE "Teenagers" OR DE "Juvenile Delinquents" OR MH "Adolescence" OR TI "Adolescence" OR TI "Adolescents" OR MH "Teenagers" OR TI "Teenagers" OR TI "Teenage" OR MH "Juvenile" OR MH "young" OR MH "youth" OR MH "adolescent" OR MH "teenage"	16,716
2	DE "Mental Illness" OR DE "Attention-Deficit Hyperactivity Disorder" OR DE "Attention-Deficit Disorder in Adolescence" OR DE "Behavior Disorders in Children" OR DE "Behavior Disorders in Teenagers" OR DE "Attachment Disorder" OR DE "Attachment Disorder in Adolescence" OR DE "Attachment Disorder in Children" OR DE "Juvenile Delinquency" OR DE "Anxiety Disorders" OR DE "Substance Abuse" OR DE "Self-Destructive Behavior" OR DE "Antisocial Personality Disorders" OR DE "Aggressiveness" OR DE "Affective Disorders" OR DE "Depression, Mental" OR DE "Violence" OR DE "School Violence" OR DE "Violence in Adolescence" OR DE "Violence in Children" OR DE "Sex Crimes" OR DE "Crime" OR DE "Arson" OR DE "Criminal Behavior" OR DE "Recidivism" OR DE "Conduct Disorders in Adolescence" OR MH "offender" OR MH "criminal" OR MH "delinquent"	30,786
3	DE "Psychotherapy" OR DE "Adolescent Psychotherapy" OR DE "Behavior Therapy" OR DE "Brief Psychotherapy" OR DE "Child Psychotherapy" OR DE "Cognitive Therapy" OR DE "Group Psychotherapy" OR DE "Problem-Solving Therapy" OR DE "Adolescent Psychotherapy – Residential Treatment" OR DE "Child Psychotherapy – Residential Treatment" OR DE "Institutional Care" OR DE "Family Psychotherapy" OR DE "Psychotherapy – Outcome Assessment" OR MH "institution" OR MH "institutional care" OR MH "institutionalized" OR MH "residence" OR MH "residential" OR MH "correction" OR MH "rehabilitation" OR TI "treatment" OR TI "treatments" OR TI "therapy" OR TI "therapies" OR TI "iintervention" OR TI "iinterventions"	29,931
4	PT "Review" OR PT "Systematic Review" OR PT "Meta-Analysis" OR PT "Meta Analysis" OR TI "Review" OR AB "Review" OR TI "Meta-Analysis" OR TI "Meta Analysis" OR AB "Meta-Analysis" OR AB "Meta Analysis"	148,693
5	#1 AND #2 AND #3 AND #4	56

Search 1.i PubMed		
Search	String	Result
1	Search "Adolescent"[Mesh] OR "Minors"[Mesh] OR "Adolescent Behavior"[Mesh] OR young[TIAB] OR youth[TIAB] OR juvenile[TIAB] OR adolescent[TIAB] OR adolescence[TIAB] OR teenage[TIAB] OR teenager[TIAB]	1487358
2	Search "Juvenile Delinquency"[Mesh] OR "Violence"[Mesh] OR offender[TIAB] OR criminal[TIAB] OR "Attention Deficit and Disruptive Behavior Disorders"[Mesh] OR "Child Behavior Disorders"[Mesh] OR "Reactive Attachment Disorder"[Mesh] OR "Social Behavior Disorders"[Mesh] OR "Substance-Related Disorders"[Mesh] OR "Child Abuse"[Mesh] OR "Affective Symptoms"[Mesh] OR "Aggression"[Mesh] OR "Child Reactive Disorders"[Mesh] OR "Self-Injurious Behavior"[Mesh]	323793
3	Search "Residential Treatment"[Mesh] OR "Substance Abuse Treatment Centers"[Mesh] OR institution[TIAB] OR institutional[TIAB] OR institutionalized[TIAB] OR institutionalised[TIAB] OR residence[TIAB] OR residential[TIAB] OR correction[TIAB] OR rehabilitation[TIAB]	258874
4	#1 AND #2 AND #3	3525
5	#4 AND Limits: Publication Date from 1994/01/01 to 2009/03/27, English, French	2071
7	Search search*[Title/Abstract] OR meta analysis[Publication Type] OR meta-analysis[Title/Abstract] OR meta analysis[MeSH Terms] OR review[Publication Type] OR diagnosis[MeSH Subheading] OR associated[Title/Abstract]	5492178
10	#5 AND #7 (Most sensitive)	911

### 1.j Social Work Abstracts

Search 1.j Social Work Abstracts		
Search	String	Result
1	AB ( adolescen* OR minor OR teenag* OR youth OR juvenile ) and AB ( "Residential Treatment " OR "Substance Abuse Treatment Centers" OR institu* OR residen* ) and AB ( "systematic review" OR "meta analysis" OR "meta-analysis" OR review ) Limiters - Publication Date from: 199401-200912 <i>Search modes - Boolean/Phrase</i>	29



## Search 2: Treatment of Youth with Addictions

Search 2.a PubMed		
Search	String	Result
1	Search “Adolescent”[Mesh] OR “Minors”[Mesh] OR “Adolescent Behavior”[Mesh] OR young[TIAB] OR youth[TIAB] OR juvenile[TIAB] OR adolescent[TIAB] OR adolescence[TIAB] OR teenage[TIAB] OR teenager[TIAB]	1487358 1498093
2	Search “Residential Treatment”[Mesh] OR institution[TIAB] OR institutional[TIAB] OR institutionalized[TIAB] OR nstitutionalized[TIAB] OR residence[TIAB] OR residential[TIAB] OR correction[TIAB] OR rehabilitation[TIAB]	258602
3	“Substance Abuse Treatment Centers”[Mesh] or “Substance-Related Disorders”	178307
4	#1 AND #2 AND #3	1266
5	Search search*[Title/Abstract] OR meta analysis[Publication Type] OR meta-analysis[Title/Abstract] OR meta analysis[MeSH Terms] OR review[Publication Type] OR diagnosis[MeSH Subheading] OR associated[Title/Abstract]	5492178 5538912
6	#4 AND #5	499
7	Limits: English & French, 01/01/1995 to 15/05/2009,	347
x	Combined and filtered search results from Search 1	429

## Search 3: Treatment of Youth with Disruptive Behaviours

Search 3a PubMed		
Search	String	Result
1	Search “Adolescent”[Mesh] OR “Minors”[Mesh] OR “Adolescent Behavior”[Mesh] OR young[TIAB] OR youth[TIAB] OR juvenile[TIAB] OR adolescent[TIAB] OR adolescence[TIAB] OR teenage[TIAB] OR teenager[TIAB]	1487358 1498093
2	Search “Residential Treatment”[Mesh] OR institution[TIAB] OR institutional[TIAB] OR institutionalized[TIAB] OR nstitutionalized[TIAB] OR residence[TIAB] OR residential[TIAB] OR correction[TIAB] OR rehabilitation[TIAB]	258602 258602
3	“Conduct Disorders”[Mesh]	178307
4	#1 AND #2 AND #3	178
5	Search search*[Title/Abstract] OR meta analysis[Publication Type] OR meta-analysis[Title/Abstract] OR meta analysis[MeSH Terms] OR review[Publication Type] OR diagnosis[MeSH Subheading] OR associated[Title/Abstract]	5492178 5538912
6	#4 AND #5	92
7	Limits: English & French, 01/01/1995 to 15/05/2009	72
x	Combined and filtered search results from Search 1	429

## Search 4: Treatment of Sexually Aggressive Youth

Search 4.a Canadian Research Index	
•	Search terms: (juvenile sexual offender) AND PDN(>1/1/1994)
•	Database: Canadian Research Index
•	Look for terms in: Citation and abstract
•	Publication type: All publication types
•	8 results, 0 selected

Search 4.b Ccochrane Library & Database Abstracts of Reviews of Effects (DARE)		
Search	String	Result
1	(interven* sex* offen*) or (interven* OR adolesce* OR child* OR teen* OR youth* OR young*) AND sex* offen* AND (treat* OR therap* OR intervene*) in Ccochrane Reviews, Other Reviews, Technology Assessments and Economic Evaluations	42

Search 4.c Criminal Justice Abstracts	
•	Search Query #4 ((DE="juvenile offenders") or (DE=("juvenile delinquency" or "delinquent behavior" or "juvenile crime" or "juvenile delinquents"))) and (DE=("sex offenders" or "sex offenses"))
•	51 Published Works results found in Multiple Databases +
•	2 Web Sites results found in Web Resources Related to the Social Sciences/Humanities
•	Date Range: 1994 to 2010
•	53 results, 0 selected

Search 4.d Cumulative Index to Nursing and Allied Health Literature (CINAHL)		
Search	String	Result
1	juvenile* sex* offen*	39
2	MM Juvenile Delinquency	535
3	MM Sex Offenders	464
4	(MM "Meta Analysis") or PT systematic review or PT review	86018
5	( S2 AND S3 ) or S1	40
6	S4 and S5	10

Search 4.e Embase		
Search	String	Result
1	juven* AND sex* AND offen* AND [1994-2010]/py	1064
2	ccochrane* OR adolesc* OR child* OR youth* OR young* AND sex* AND offen* AND (treat* OR therap* OR cochrane*) AND [1994-2010]/py	3879
4	treat* AND program* AND ccochrane* AND sex* AND offen* AND [1994-2010]/py	123
5	ccochrane* OR adoles* OR teen* OR young* OR youth* OR child* AND (assault* OR aduse* OR offen* OR cochrane* OR attack*) AND ('sex'/exp OR sex) AND (treat* OR therap* OR programmeme* OR inteven*) AND [1994-2010]/py	250135
6	#1 OR #2 OR #4 OR #5	250470
8	'sex'/exp AND (assault* OR aduse* OR offen* OR ccochrane* OR attack*) AND (ccochrane* OR adolesc* OR child* OR youth* OR young*) AND (treat* OR therap* OR cochrane* OR program*) AND ([cochrane review]/lim OR [meta analysis]/lim OR [systematic review]/lim) AND [1994-2010]/py	146
9	#2 AND #7	28

Search 4.f PsychINFO		
Search	String	Result
1	interven* sex* offen* or ( (interven* OR adolesce* OR child* OR teen* OR youth* OR young*) AND sex* offen* AND (treat* OR therap* OR intervene*) ) or ( juvenile AND (exp Sex Offenses OR exp Acquaintance Rape OR exp Rape) )	2467
2	DE "Literature Review" or DE "Meta Analysis"	24520
3	S1 and S2	25

Search 4.g ProQuest Dissertation & Theses	
•	(juvenile sexual offender) AND (treatment OR therapy OR iintervention OR program OR effect) AND (meta-analysis OR systematic review) AND PDN(>1/1/1994)
•	Database: Dissertations & Theses
•	Look for terms in: Citation and abstract
•	Publication type: All publication types
•	results, 3 included, 1 background

Search 4.h PubMed		
Search	String	Result
10	Search "Sex Offenses"[Majr]	10702
13	Search "Aggression"[Mesh] AND "Sexual Behavior"[Mesh]	853
14	Search #10 or #13	11475
15	Search "Adolescent"[Mesh] OR "Minors"[Mesh] OR "Adolescent Behavior"[Mesh] OR young[TIAB] OR youth[TIAB] OR juvenile[TIAB] OR adolescent[TIAB] OR adolescence[TIAB] OR teenage[TIAB] OR teenager[TIAB]	1521631
16	Search #15 and #14	4404
17	Search Meta-analysis[Publication Type] OR meta-analysis[Title/Abstract] OR meta-analysis[MeSH Terms] OR review[Publication Type] OR search*[Title/Abstract]	1584803
18	Search #16 and #17	386
19	Search #15 and #14 Limits: Meta-Analysis, Review	362
20	Search #16 and #17 Limits: Publication Date from 1995/01/01, Meta-Analysis, Review, English, French	227
21	Search "Residential Treatment"[Mesh] OR "Substance Abuse Treatment Centers"[Mesh] OR institution[TIAB] OR institutional[TIAB] OR institutionalized[TIAB] OR nstitutionalized[TIAB] OR residence[TIAB] OR residential[TIAB] OR correction[TIAB] OR rehabilitation[TIAB] Limits: Publication Date from 1995/01/01, Meta-Analysis, Review, English, French	15953
22	Search #21 and #20 Limits: Publication Date from 1995/01/01, Meta-Analysis, Review, English, French	1

Search 4.i Theses Canada Portal		
•	Term(s) Searched: Select One "juvenile" AND Select One "sex" AND Select One "offender"5 Hits	
x	Combined and filtered search results from Search 1	429

## Search 5: Innu & Inuit

5.a Re-filtered all results from the previous searches:	
• Academic Search Premier	• Health-evidence.ca
• Canadian Research Index	• ProQuest Dissertation & Theses
• Ccochrane Library & Database Abstracts of Reviews of Effects (DARE)	• PsycINFO
• Criminal Justice Abstracts	• Psychological & Behavioral Sciences Collection
• Cumulative Index to Nursing and Allied Health Literature (CINAHL)	• PubMed
• Educational Resources Information Center (ERIC)	• Social Work Abstracts
• Embase	• Theses Canada Portal

5.b Additional search: Grey literature contacts
<b>Health Canada</b>
<b>First Nations &amp; Inuit Health Branch</b>
<ul style="list-style-type: none"> <li>• Community Programs Directorate           <ul style="list-style-type: none"> <li>• Children &amp; Youth Carolyn Harrison, Director Alisar Ibrahim, A/Senior Program Officer, FASD Unit</li> <li>• Mental Health/Addictions Eric Costen, Director Mike Schindel, Senior Policy Analyst</li> </ul> </li> <li>• Strategic Policy, Planning &amp; Analysis           <ul style="list-style-type: none"> <li>• Health Information, Analysis &amp; Research Division Monique Stewart, Director</li> <li>• Samir Khan, Senior Research Analyst Health Systems Development Melissa Follen, Senior Policy Analyst</li> <li>• Office of Inuit Health               <ul style="list-style-type: none"> <li>▪ Onalee Randell, Director</li> </ul> </li> </ul> </li> </ul>

5.c: Additional search: Other contacts
Johnson Research Inc, which houses the Kishk Anaquot Health Research Group, c/o Andrea Johnson
Arctic Council Secretariat (on behalf of International Work Group for Indigenous Affairs)
Arctic Council Secretariat (on behalf of International Work Group for Indigenous Affairs) <ul style="list-style-type: none"> <li>• Nina Buvang Vaaja, Head of Secretariat, Arctic Council Secretariat</li> <li>• Bernard Funston, Executive Secretary of the Sustainable Development Working Group (SDWG)</li> <li>• Kue Young and Peter Bjerregaard, co-chairs, Arctic Human Health Experts Group (AHHEG)</li> <li>• Karen Perdue and Bernard Segal (researchers at the University of Alaska)</li> </ul>
National Native Addictions Partnership Foundation c/o Mike Martin, researcher/analyst (on the advice of Johnson Consultants Inc) <ul style="list-style-type: none"> <li>• Forwarded by Myrtle Morin to Mike Martin</li> </ul>
Centre for Health Research in Greenland at the National Institute of Public Health (Denmark), c/o Anni BS Nielsen <ul style="list-style-type: none"> <li>• Department of health, Government of Greenland pn@gh.gl</li> <li>• Paarisa conducts campaigns on health and preventive measures, leader of Paarisa is Bodil Karslhoej Poulsen, bkp@gh.glmail</li> </ul>
Kue Young (President) c/o International Network for Circumpolar Health Research (this is a network of researchers, not an organization per se)
University of Manitoba <ul style="list-style-type: none"> <li>• Aboriginal Health Collection and Information Services c/o Janice Linton</li> <li>• Aboriginal Health Librarian and Centre for Aboriginal Health Research, c/o Dr. Catherine Cook &amp; Dr. Brenda Elias <ul style="list-style-type: none"> <li>• Referred to Dr. Ab Chudley and Dr. Sally Longstaffe</li> </ul> </li> </ul>
University of Alaska Anchorage: Institute for Circumpolar Health Studies, c/o David Driscoll, Director
Centre for Health Research in Greenland at the National Institute of Public Health (Denmark), c/o Anni BS Nielsen <ul style="list-style-type: none"> <li>• Department of health, Government of Greenland pn@gh.gl</li> <li>• Paarisa conducts campaigns on health and preventive measures, leader of Paarisa is Bodil Karslhoej Poulsen, bkp@gh.glmail</li> </ul>
MIPI "Documentation Centre on Children and Youth", academic staff: Lona Lynge, loly@gh.gl
Indigenous Health Research Development Program, c/o Amanda Ritchie
International Arctic Social Sciences Association, c/o Stefansson Arctic Institute
Inuit Circumpolar Council (Canada), c/o Eva Kruemmel,
Jack Hicks, Iqaluit resident graduate student and consultant

## Search 6: Health Economics of Youth Residential Treatment

### 6.a Cochrane Library & Database Abstracts of Reviews of Effects (DARE)

There are 12 results from 28551 records for: "adolescent in Title, Abstract or Keywords and residential treatment in Title, Abstract or Keywords, from 1995 to 2010 in NHS Economic Evaluation Database"

### 6.b Embase

1: 'residential care'/exp AND ('adolescent'/exp OR 'child'/exp) AND 'cost benefit analysis'/exp 14

#2: 'child health care'/exp AND 'cost benefit analysis'/exp AND 'residential care'/exp 2

### 6.c PsycINFO

(DE "Costs and Cost Analysis" OR DE "Budgets" OR DE "Health Care Costs") and (DE "Adolescent Psychiatry" OR DE "Adolescent Psychology" OR DE "Adolescent Psychopathology" OR DE "Adolescent Psychotherapy") hits 32

### 6.d PubMed

Search	Most Recent Queries	Result
1	Search "Cost-Benefit Analysis"[Mesh]	47634
2	Search "Residential Treatment"[Mesh]	2348
3	Search "Adolescent"[Mesh] OR "Child"[Mesh]	2033242
4	Search "Adolescent Health Services/economics"[Mesh] OR "Child Behavior Disorders/economics"[Mesh]	240
5	Search "Residential Treatment/economics"[Mesh]	61
6	Search "Residential Treatment/economics"[Mesh] AND ("Adolescent"[Mesh] OR "Child"[Mesh])	27
7	Search ("Adolescent Health Services/economics"[Mesh] OR "Child Behavior Disorders/economics"[Mesh]) AND "Cost-Benefit Analysis"[Mesh]	38
8	Search "Cost-Benefit Analysis"[Mesh] AND "Residential Treatment"[Mesh] AND ("Adolescent"[Mesh] OR "Child"[Mesh])	10
9	Search #9 OR #11 OR #12 Sort by: PublicationDate	68
x	Combined and filtered search results from Search 1	429

## 2. About AMSTAR

AMSTAR is a validated tool for the assessment of multiple systematic reviews. It is based on the enhanced Overview Quality Assessment Questionnaire (OQAQ) (Oxman, 1994), 2) a checklist created by Sacks et al (1987), and 3) three additional items recently judged to be of methodological importance. The tool consists of 11 items and has good face and content validity for measuring the **methodological quality** of systematic reviews. For additional information and documentation: (Oxman, 1994; Sacks, Berrier, Reitman, Ancona-Berk, & Chalmers, 1987; Shea et al., 2007a; Shea et al., 2007b).

AMSTAR Item	Answer
<b>1. Was an 'a priori' design provided?</b> The research question and inclusion criteria should be established before the conduct of the review.	Yes/No/Can't answer /Not applicable
<b>2. Was there duplicate study selection and data extraction?</b> There should be at least two independent data extractors and a consensus procedure for disagreements should be in place.	Yes/No/Can't answer /Not applicable
<b>3. Was a comprehensive literature search performed?</b> At least two electronic sources should be searched. The report must include years and databases used (e.g. Central, EMBASE, and MEDLINE). Key words and/or MESH terms must be stated and where feasible the search strategy should be provided. All searches should be supplemented by consulting current contents, reviews, textbooks, specialized registers, or experts in the particular field of study, and by reviewing the references in the studies found.	Yes/No/Can't answer /Not applicable
<b>4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?</b> The authors should state that they searched for reports regardless of their publication type. The authors should state whether or not they excluded any reports (from the systematic review), based on their publication status, language etc.	Yes/No/Can't answer /Not applicable
<b>5. Was a list of studies (included and excluded) provided?</b> A list of included and excluded studies should be provided.	Yes/No/Can't answer /Not applicable
<b>6. Were the characteristics of the included studies provided?</b> In an aggregated form such as a table, data from the original studies should be provided on the participants, interventions and outcomes. The ranges of characteristics in all the studies analyzed e.g. age, race, sex, relevant socioeconomic data, disease status, duration, severity, or other diseases should be reported.	Yes/No/Can't answer /Not applicable
<b>7. Was the scientific quality of the included studies assessed and documented?</b> 'A priori' methods of assessment should be provided (e.g., for effectiveness studies if the author(s) chose to include only randomized, double-blind, placebo controlled studies, or allocation concealment as inclusion criteria); for other types of studies alternative items will be relevant.	Yes/No/Can't answer /Not applicable
<b>8. Was the scientific quality of the included studies used appropriately in formulating conclusions?</b> The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations.	Yes/No/Can't answer /Not applicable
<b>9. Were the methods used to combine the findings of studies appropriate?</b> For the pooled results, a test should be done to ensure the studies were combinable, to assess their homogeneity (i.e. Chi-squared test for homogeneity, I <sup>2</sup> ). If heterogeneity exists a random effects model should be used and/or the clinical appropriateness of combining should be taken into consideration (i.e. is it sensible to combine?)	Yes/No/Can't answer /Not applicable
<b>10. Was the likelihood of publication bias assessed?</b> An assessment of publication bias should include a combination of graphical aids (e.g., funnel plot, other available tests) and/or statistical tests (e.g., Egger regression test).	Yes/No/Can't answer /Not applicable
<b>11. Was the conflict of interest stated?</b> Potential sources of support should be clearly acknowledged in both the systematic review and the included studies.	Yes/No/Can't answer /Not applicable

### 3. Primary research papers cross-referenced against the included systematic reviews

The following tables describe in detail the primary research papers that were referenced by the systematic reviews that we included in our synthesis. Each table also includes measures of overlap by the frequency of multiple citations of the primary research papers. In the interest of saving space, a brief format citation has been used to describe all references. Detailed citations are available in the corresponding systematic reviews.

Youth Residential Therapy as a Generic Treatment				
Overlap				
Primary research papers cited by:				
<ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul>				
Total number of primary research papers: 166				
Primary research paper citation				
Allen, R. E, Ilubin, H. N., Pilnick, S., & Youtz, A. C. (1970)	X			
Andrews, D. A., Kiessling, J. J., Robinson, D., & Mickus, S. (1986).	X			
Asarnow et al. (1996)			X	
Barton, C., Alexander, J. F, Waldron, M., Turner, C. W., B Warburton, J. (1985).	X			
Barton, W. H., & Butts, J. A. (1990).	X			
Bean, J S. (1988).	X			
Beqer, R. J., & Gold, M. (1978)	X			
Bishop, D. M., Frazier, C. E., Lan7a-Kaduce, L., & Winner, L. (1996).	X			
Bleeker, J. K. (1990).		X		
Boendermaker, L. (1998).		X		
Boisvert, M. J., Kenncy, H. J., & Kvaraceus, W. C. (1976).	X			
Borduin, C M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., & Williams, R. A. (1995).	X			
Browne, S F (1975)	X			
Byles, J. A., & Maurice, A. (1979).	X			
Carter-Hosac. K. L. (1992)	X			
Castellano, T. C., Soderstroni, I. K. (1992).	X			
Chamberlain, P., & Reid, J. B. (1998).		X		
Chandler, M. J. (1973)	X			
Compass Management Group, Inc. (1978).	X			
Criminal Justice Coordinating Council and Vera Institute of Justice. (1972).	X			
Cross-Drew. C. (1984).	X			
Crotty, J., & Meier, K. D. (1980).	X			
Davidson, W. S., Seidman. E., Rappaport, J., Berck, P. L., Rapp, N. A., Rhodes, W., & Herring, J. (1977).	X			



Youth Residential Therapy as a Generic Treatment (continued)				
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul> Total number of primary research papers: 166  Primary research paper citation	Lipsey & Wilson, 1998	Knorth, Harder, Zandberg, & Kendrick, 2008	Hair, 2005	Frensch & Cameron, 2002
Davidson. W. S., Redncr, R., Blakely, C. H., Mitchell, C. M., & Emshoff, J. G. (1987)	X			
Delinquency Research Group. (1986).	X			
Dennisori, D., & Prvcct, T. (1980).	X			
Dunivant, N. (1982)	X			
Empey, L T., & Erickson, M. L (1972).	X			
Enns, M. W., Cox, B. J., & Inayatulla, M. (2003).		X		
Erdman, P. M. (1978).	X			
Erker et al. (1993)			X	
Evaluation Unit of the Governor's Commission on Crime Prevention and Control. (1976).	X			
Farmer et al. (2003)			X	
Florida Division of Youth Services. (1977).	X			
Frankfort- Howard & Romm (2002)			X	
Gavidia-Payne, S., Littlefield, L., Hallgren, M., Jenkins, P., & Cocentry, N. (2003).		X		
Goldberg, R. T., & Johnson, B. D. (1972).	X			
Gordon, D A., Graves, K., & Wuthnot, J. (1987).	X			
Greater Egypt Regional Planning and Development Commission. (1979)	X			
Greenbaum et al. (1996)			X	
Greenwood, P W., Deschenes, E. P., & Adams, J. (1993)	X			
Greenwood, P.W., & Turner Rand, S. (1993).		X		
Guerra, N. G., & Slaby, R. G. (1990).		X		
Hauer, M., Bordeaux, G., Cole, J., Davidson, W. S., Martinez, A., Mitchell, C., & Singleton, D. (1980).	X			
Henggeler, S. W., Melton, G. B., & Smith, L. A. (1992).	X			
Henggeler, S.W., Rowland, M. D., Halliday-Boykins, C., Sheidow, A. J., Ward, D. M., Randall, J., et al. (2003).		X		
Higgins, P S. (1974)	X			
Hintikka, U., Viinämäki, H., Pelkonen, M., Hintikka, J., Laukkanen, E., Korhonen, V., et al. (2003).		X		
Homant, R. J. (1981).	X			
Hooper et al. (2000)			X	
Howitt, P. S., & Moore, E. A. (1991).	X			
Hunter, E. I (1968).	X			
Jansen, M. G., & Oud, J. H. L. (1993).		X		
Jessness, C. E, Allison, F. S., McCormc, P. M., Wedge, R. E, & Young, M. L. (1975).	X			
Johns, D., & Botlcher, J. (1980).	X			
Johnson, B. D., & Goldberg, R. T. (1983).	X			

Youth Residential Therapy as a Generic Treatment (continued)				
Overlap	Lipsey & Wilson, 1998	Knorth, Harder, Zandberg, & Kendrick, 2008	Hair, 2005	Frensch & Cameron, 2002
Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul> Total number of primary research papers: 166				
Primary research paper citation				
Kaminsky (1998)			X	
Kantrowitz, R. E. (1980).	X			
Katz, L. Y., Cox, B. J., Gunasekara, S., & Miller, A. L. (2004).		X		
Kelley, T. M., Schulman, J. L., & Lynch, K. (1976).	X			
Kemp, M., & Lee, R. (1975).	X			
Kijewski, K. J. (1983).	X			
Kloss, J. D. (1978).	X			
Koch, J. R. (1986).	X			
Kolko, D. J., Loar, L. L., & Sturnick, D. (1990).		X		
Kraus, J. (1974).	X			
Lamplin, A. C., & Taylor, G. G. (1973).	X			
Landsman, M. J., Groza, V., Tyler, M., & Malone, K. (2001).		X	X	
Langer, S. (1978)	X			
Larzelere et al. (2001)			X	
Lee, K., & Olejnik, S. (1981).	X			
Lee, R., & Haynes, N. M. (1978).	X			
Lee, R., & Huymis, N. M. (1978).	X			
Lehman & Irvin (1996)				X
Leichtman, M., Leichtman, M. L., Cornsweet Barber, C., & Neese, T. (2001).		X		
Leve, L. D., & Chamberlain, P. (2005).		X		
Lewis (1988)				X
Lewis, K. V. (1983).	X			
Lewis, R. V. (1981).	X			
Lichtman, C. M., & Smock, S. M. (1981).	X			
Lincoln, S. B. (1976).	X			
Lipsey, M. W., Cnrdray, D. S., & Berger, D. E. (1981).	X			
Malmgreen, K. W., & Leone, P. E. (2000).		X		
Mann, C. M., & Pratt, M. D. (1980).	X			
Marlowe, H., Reid, J. B., Patterson, G. R., & Weinrott, M. R. (1986).	X			
Mattejat, F., Hirt, B. R., Wilken, J., Schmidt, M. H., & Remschmidt, H. (2001).		X		
Mayes, S. D., Krecko, V. F., Calhoun, S. L., Vesell, H. P., Schuch, S., & Toole, W. R. (2001).		X		
McPherson, S. J. (1981).	X			
McPherson, S. J., McDonald, L. E., & Hyer, C. W. (1983).	X			
Miller, D. (1964).	X			
Miller, M. O., & Gold, M. (1984).	X			
Moody, E. E. (1997).		X		

Youth Residential Therapy as a Generic Treatment (continued)				
Overlap				
Primary research papers cited by:				
<ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul>				
Total number of primary research papers: 166				
Primary research paper citation				
Moore & O'Connor (1991)				X
Moore, R. H. (1987)	X			
Moore, R. H., & Levine, D. (1974).	X			
Morris, J. A. (1970).	X			
Nas, C. N. (2005).		X		
Noble, J. H., Jr. (1967).	X			
O'Brien, W. J. (1964).	X			
O'Connor, G. (1980).	X			
Odell, B. N. (1974).	X			
Orchowsky, S., & Taylor, K. (1981).	X			
Ostrom, T. M., Steele, C. M., Rosenblood, L. K., & Mirels, H. L. (1971).	X			
Palmer, T. (1970).	X			
Palmer, T. (1979).	X			
Palmer, T. B., Neto, V. V., Johns, D. A., Turner, J. K., & Pearson, J. W. (1968).	X			
Palmer, T. B. (1971).	X			
Palmer, T., & Lewis, R. V. (1980).	X			
Palmer, T. (1973).	X			
Pecukonis, E. V. (1990).		X		
Performance Resources, Inc (1979).	X			
Peterson & Scanlan (2002)			X	
Piercy, F., & Lee, R. (1976).	X			
Piersma, H. L., Pantle, M. L., Smith, A., Boes, J., & Kubiak, J. (1993).		X		
Pond, E. M. (1983).	X			
Quinn & Epstein (1998)				X
Quinton & Rutter (1984a)				X
Quinton & Rutter (1984b)				X
Ramirez, M. V. (1976).	X			
Rank, L., Marlowe, J. H., Reid, J. B., Patterson, G. R., & Weinmtt, M. R. (1991).	X			
Reld, J. B. (1983).	X			
Roberts, C. F., & Switzer, A. (1976).	X			
Rohde, P., Jorgerson, J. S., Seeley, J. R., & Mace, D. E. (2004).		X		
Rosen, L., & Fenwick, C. (1975).	X			
Roundtree, G. A., & Faily, A. (1980).	X			
Roundtree, O. A., Parker, J. B., & Jones, A. (1979).	X			

Youth Residential Therapy as a Generic Treatment (continued)				
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul> Total number of primary research papers: 166  Primary research paper citation	Lipsev & Wilson, 1998	Knorth, Harder, Zandberg, & Kendrick, 2008	Hair, 2005	Frensch & Cameron, 2002
Savas, Epstein, & Grasso (1993)				X
Scarpitti, F. R., & Stephenson, R. M. (1968).	X			
Schneider, A. L., & Schneider, P. R. (1985).	X			
Schneider, A. L. (1986).	X			
Scholte, E. M., & Van der Ploeg, J. D. (2003).		X		
Schwitzgebel, R. K., & Boor, D. J. (1967).	X			
Schwltzgebel, R., & Kolb, D. A. (1964).	X			
Seidmao. E., Rappaport, 1., & Davidson, W. S., II. (1980).	X			
Severy, L. J , & Whitaker, J. M. (1982).	X			
Severy, L. J & Morton, O. S. (1981).	X			
Shichor, D., & Binder, A. (1982).	X			
Shorts, I. D. (1986).	X			
Silver, Duchnowski, Kutash, Friedman, Eisen, Prange, Brandenburg, & Greenbaum (1992)				X
Sontheimer, H ., Goodstein, L., & Kovacevk, M. (1990).	X			
State of California, Department of Youth Authority. (1977).	X			
Stephenson, R. M., & Scarpitti, F. R. (1969).	X			
Stephenson, R. M., & Scarpitti, F. R. (1974).	X			
Ten Brink, L. T. (1998).		X		
The prevention of delinquency: An empirical evaluation of the Youth Service Program. (1975, April).	X			
Thompson, R.W., Smith, G. L., Osgood, D.W., Dowd, T. P., Friman, P. C., & Daly, D. L. (1996).		X		
Timbers (1990)				X
True, D A. (1974).	X			
Van der Ploeg, J. D., & Scholte, E. M. (2003).		X		
Vera Institute of Justice. (1972).	X			

Youth Residential Therapy as a Generic Treatment (continued)				
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 165 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul> Total number of primary research papers: 166  Primary research paper citation	Lipsey & Wilson, 1998	Knorth, Harder, Zandberg, & Kendrick, 2008	Hair, 2005	Frensch & Cameron, 2002
Vreeland, A. D. (1982).	X			
Waller, T L, & Mills, C. M. (1980)	X			
Wax, M. L. (1977).	X			
Weeks, S. Z. (1986).	X			
WeisL, J R, Walter, B. R., Weiss, B., Fernandez, G. A., & Mikow, V. A (1990).	X			
Wells & Whittington (1993)				X
Wells, Wyatt, & Hobfoll (1991)				X
Whitaker, Archer, & Hicks (1998)				X
Whittaker & Maluccio (1988)				X
Whittaker, Tripodi, & Grasso (1993)				X
Wiebush, R. G. (1993).	X			
Willman, M. T., & Snortum, J. R. (1982).	X			
Wilmshurst (2002)			X	
Winterdyk, 1., & Roesch, R. (1982).	X			
Wool dredge, J., Hartman, 1., Latessa, E., & Holmes, S. (1994).	X			
Yarborough, J. C. (1979).	X			

Youth with Addictions							
Overlap							
Primary research papers cited by:							
<ul style="list-style-type: none"> <li>a single systematic review: 110 (64%)</li> <li>two systematic reviews: 9 (5%)</li> <li>three systematic reviews: 8 (5%)</li> <li>four systematic reviews: 5 (3%)</li> </ul>							
Total number of primary research papers: 172							
Primary research paper citation							
	Waldron & Turner, 2008	Vaughn & Howard, 2004	D. Gray, Sputore, Bourbon, & Sagers, 2000	Orr-Brown & Siebert, 2007	Watkins, 2006	Williams & Chang, 2000	Perepletchikova, Krystal, & Kaufman, 2008
AADAC (1995)						X	
AARC (1994)						X	
Aktan et al. (1996)					X		
Alati, R. (1993)			X				
Alford, Koehler, & Leonard (1991)						X	
Amini, Zilberg, Burke, & Salasnek (1982)						X	
Azrin et al. (2001)	X						X
Azrin et al., 1994		X		X		X	
Bailey et al. (2004)							X
Barber, J.G., Walsh, C. & Bradshaw, R.			X				
Battjes et al., 2004	X						
Bianco & Wallace (1991)						X	
Braukmann et al (1985)						X	
Brown et al., 2001				X			
Brown, Gleghorn, Schuckit, Myers, & Mott (1996)						X	
Brown, Mott, & Myers (1990)						X	
Brown, Vik, & Creamer (1989)						X	
Cady, Winters, Jordan, Solberg, & Shindfield (1996)						X	
Colby et al., 1998				X			
Conrod et al. (2006)							X
Cornwall and Blood (1998)				X		X	
Currie (2003)					X		
D'Abbs, P. (1990) (Dry Areas)			X				
D'Abbs, P. (1990) (Responding to Aboriginal)			X				
D'Abbs, P. & Togni, S. (1997)			X				
D'Abbs, P., Togni, S. & Crundall, I. (1996)			X				
Daly, A. & Gvozdenovic, A. (1994)			X				
Dauber (2004)					X		
Deas et al. (2000)							X
DeLeon (1984)						X	
Dennis et al. (2004)	X				X		X
Diamond et al., 2002				X			
Dobkin et al. (1998)					X		
Douglas, M. (1998)			X				
Duncan (2000)					X		
Feigelman, Hyman, & Amann (1988)						X	

Youth with Addictions (continued)							
Overlap							
Primary research papers cited by:							
<ul style="list-style-type: none"> <li>a single systematic review: 110 (64%)</li> <li>two systematic reviews: 9 (5%)</li> <li>three systematic reviews: 8 (5%)</li> <li>four systematic reviews: 5 (3%)</li> </ul>							
Total number of primary research papers: 172							
Primary research paper citation	Waldron & Turner, 2008	Vaughn & Howard, 2004	D. Gray, Sputore, Bourbon, & Sagers, 2000	Orr-Brown & Siebert, 2007	Watkins, 2006	Williams & Chang, 2000	Perepletchikova, Krystal, & Kaufman, 2008
Filstead (1992)						X	
Friedman & Glickman (1986)						X	
Friedman & Glickman (1987)						X	
Friedman & Terras (1996)						X	
Friedman (1989)		X				X	X
Friedman, Glickman, & Kovach (1986)						X	
Friedman, Glickman, & Morrissey (1986)						X	
Friedman, Granick, & Kreisher (1994)						X	
Friedman, Granick, Kreisher, & Terras (1993)						X	
Friedman, Schwartz, & Utada (1989)						X	
Friedman, Terras, & Ali (1998)						X	
Friedman, Terras, & Kreisher (1995)						X	
Friedman, Terras, & Glassman (2002)		X					
Friedman, Utada, & Glickman (1986)						X	
Gaus & Henderson (1985)						X	
Gray, D., Sagers, S., Atkinson, D. et al. 1998			X				
Gray, D., Sputore, B. & Walker, J.			X				
Grenier (1985)						X	
Griffen-Shelley, Sandler, & Park-Cameron (1991)						X	
Harrison & Hoffman (1987) CATOR						X	
Harrison and Asche, 2001				X			
Henggeler et al. (1991)		X				X	X
Henggeler et al. (1999)	X	X			X		X
Henggeler et al., 1996				X			
Henggeler et al., 2002	X	X					
Hoffmann & Kaplan (1991) CATOR						X	
Hogue et al. (2002)				X	X		
Hogue et al. (2004)					X		
Hops et al., 2007	X						
Hser, Grella, Hsieh, & Anglin (1999) (DATOS-A)						X	
Hubbard, Cavanaugh, Craddock, & Rachal (1985) (TOPS)						X	
Iverson & Roberts (1980)						X	
Jackson-Gilfort et al., 2001				X			
Jainchill et al. (2000)					X		
Jensen, Wells, Plotnick, Hawkins, & Catalano (1993)						X	

Youth with Addictions (continued)							
Overlap							
Primary research papers cited by:							
<ul style="list-style-type: none"> <li>a single systematic review: 110 (64%)</li> <li>two systematic reviews: 9 (5%)</li> <li>three systematic reviews: 8 (5%)</li> <li>four systematic reviews: 5 (3%)</li> </ul>							
Total number of primary research papers: 172							
Primary research paper citation	Waldron & Turner, 2008	Vaughn & Howard, 2004	D. Gray, Sputore, Bourbon, & Sagers, 2000	Orr-Brown & Siebert, 2007	Watkins, 2006	Williams & Chang, 2000	Perepletchikova, Krystal, & Kaufman, 2008
Joanning, Quinn, Thomas, & Mullen (1992)		X				X	
Kaminer & Burleson (1999)	X	X					
Kaminer et al. (1998)	X	X				X	X
Kaminer et al. (2002)	X	X					X
Kennedy & Minami (1993)						X	
Keskinen (1986) cited in Winters et al (1999)						X	
Knapp, Templer, Cannon, & Dobson (1991)						X	
Latimer et al. (2003)							X
Latimer et al., 2000				X			
Lewis et al (1990)		X				X	X
Liddle et al (1983), as cited in Stanton & Shadish (1997)						X	
Liddle et al (2004)	X				X		X
Liddle et al. (2001)	X	X			X		X
Liddle et al., 2003	X						
Marzen (1990)						X	
McGillicuddy et al. (2001)		X			X		
McPeake, Kennedy, Grossman, & Beaulieu (1991)						X	
Miller, K. & Rowse, T. (1995)			X				
Milne, C., Josif, P. & Lynn, D. (1993)			X				
Monti et al. (1999)							X
Morehouse & Tobler (2000)					X		
Myers, Brown, & Mott (1995)						X	
Niederhofer & Staffen (2003a)							X
Niederhofer & Staffen (2003b)							X
Niederhofer, Staffen & Mair (2003a)							X
O'Connor, R. & Associates LTD (1988)			X				
Orlando et al. (2003)					X		
Peterson et al. (2006)							X
Query (1985)						X	
Ralph & McMenemy (1996)						X	
Richardson (1996)						X	
Richter, Brown, & Mott (1991)						X	
Robbins et al., 2007	X						
Rush (1979) UDCS						X	
Russell (2001)					X		
Samhsa (no date-a)					X		



Youth with Addictions (continued)							
Overlap							
Primary research papers cited by:							
<ul style="list-style-type: none"> <li>a single systematic review: 110 (64%)</li> <li>two systematic reviews: 9 (5%)</li> <li>three systematic reviews: 8 (5%)</li> <li>four systematic reviews: 5 (3%)</li> </ul>							
Total number of primary research papers: 172							
Primary research paper citation							
Samhsa (no date-b)					X		
Samhsa (no date -c)					X		
Samhsa (no date -d)					X		
Samhsa (no date -e)					X		
Santisebastian et al., 1996				X			
Santisteban et al. (2003)	X	X					X
Scopetta et al (1979) as cited in Waldron (1997)						X	
Sealock et al. (1997)		X			X		
Sells & Simpson (1979) DARP						X	
Shane et al. (2003)					X		
Sheehan, M., Schonfeld C., Hindson, E. & Ballard, R. (1995)			X				
Shoemaker & Sherry (1991)						X	
Smith et al. (2006)	X						X
Stanton et al. 2007	X						
Stinchfield, Noforopulos, & Feder (1994)						X	
Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis (1983)						X	
Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis (1986)						X	
Terjanian (2002)					X		
U.S. Dept of Health and Human Services (1997b) NTIES						X	
U.S. Dept of Health and Human Services (1998) SROS						X	
Vaglun & Fossheim (1980)						X	
Waldron et al. (2001)	X	X		X	X		
Waldron et al., 2005	X						
Waldron et al., 2007	X						
Winters et al. (2000)	X	X		X	X		

Youth with Disruptive Behaviours											
Overlap											
Primary research papers cited by:											
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>	B. Armelius & Andraessen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestler, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999
Total number of primary research papers: 257											(Bennett & Gibbons, 2000
Primary research paper citation											
Aldridge et al. 1995		X									
Amerikaner, M., & Summerlin, M. L. (1982)										X	
Amish, P. L., Gesten, E. L., Smith (1988)										X	
Arbuthnot and Gordon (1986)				X							
Armstrong 2003	X										
Axberg et al. 2007							X				
Baer, Nietzel 1991									X		
Bagner and Eyberg 2003							X				
Bank et al. 1991							X				
Barkley et al. 1996							X				
Barnes, Bauza et al 2003					X						
Barnes, Davis, et al 2004					X						
Barnes, Malholtra et al 2005					X						
Barnes, Pendergrast et al 2008					X						
Barnes, Treiber, & Davis 2001					X						
Barnes, Treiber, & Johnson 2004					X						
Beauchemin et al 2008					X						
Bennett, Gibbons 2000									X		
Bernal, Klinnert, and Schultz (1980)				X							
Biegel et al 2009					X						
Bierman (1987)											X
Block (1978)							X				X
Booth 1996								X			
Bor, Sanders, and Markie-Dadds (2002)				X				X			
Borduin et al. 1995								X			
Bottcher 1985	X										
Bradley et al. (2003)				X				X			
Brent et al. (1997)									X		
Brestan, Eyberg, Boggs, and Algina (1997)				X							
Brinkmeyer 2007								X			
Buell, G., & Snyder, J. (1981)										X	
Butler et al. (1980)								X			

Youth with Disruptive Behaviours (continued)												
Overlap	B. Armelius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999	(Bennett & Gibbons, 2000
Primary research papers cited by:												
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>												
Total number of primary research papers: 257												
Primary research paper citation												
Camp (1977)											X	
Cann 2003	X											
Chalmers, J. B., & Townsend, M. A. R. (1990)										X		
Clendenon-Wallen 1991		X										
Coats (1979)				X								X
Coleman, Pfeiffer, and Oakland (1992)				X								X
Connolly et al. 2001							X					
Costin and Chambers 2007							X					
Csapo, M. (1983)										X		
Cunningham et al. 1995							X					
Dadds and McHugh 1992							X					
Deffenbacher, Lynch, Oetting, and Kemper (1996)				X								X
Denkowski & Denkowski (1984)								X				
Deschamps 1998	X											
Dishion & Andrews (1995)				X			X					X
Dishion and Patterson 1995							X					
Drake 2005	X											
Dubey et al. (1983)								X				
Ducharme et al. 2000							X					
Edgerton 1994		X										
Edleson, J. L., & Rose, S. D. (1981)										X		
Eidson 1989		X										
Eisenstadt et al. 1993							X					
Ensink et al 1997									X			
Etscheidt (1984)												X
Etscheidt (1991)				X								
Eyberg, Boggs, and Algina (1995)				X			X					
Factor, D. C., & Schilmoeller, G. L. (1983)										X		
Farrington 2002	X											
Feindler, E. L., Manion, S. A., & Iwata, U. (1984)										X		
Feindler, Ecton, Kingsley, and Dubey (1986)				X								
Feindler, Marriott, and Iwata (1984)				X							X	
Feinfeldt and Baker 2004							X					

Youth with Disruptive Behaviours (continued)												
Overlap												
Primary research papers cited by:												
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>	B. Armeilius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999	(Bennett & Gibbons, 2000
Total number of primary research papers: 257												
Primary research paper citation												
Firestone, Kelly, and Fike (1980)				X								
Fonagy, Target 1994									X			
Forman (1980)				X							X	
Funderburk et al. (1998)				X								
Galvin, M, (1983)										X		
Gardner et al. 2006							X					
Gesten, E. L., Rains, M. H., Rawn (1982)										X		
Glick and Goldstein (1987)				X								
Gottfredson, Jones, and Gore (2002)				X								
Greenleaf, D. O. (1982)										X		
Greenwood 1993	X											
Gregoire et al. 1989		X										
Griest et al. (1982)				X								
Gross et al. (2003)				X								
Grossman (1997)											X	
Grosswald et al 2008					X							
Guerra and Slaby (1990)	X			X							X	
Haines 1989		X										
Hamilton and MacQuiddy (1984)				X								
Harrington et al. 2000							X					
Heath (1979)												X
Heifetz 1977			X									
Helper, M. M., Farber, E. D., & Feldgaier, S. (1982).										X		
Henggeler et al. 1992							X					
Henggeler et al. 1997							X					
Henggeler et al. 2006							X					
Hepler, J. B., & Rose, S. P. (1988).										X		
Hollin & Courtney (1983)				X								X
Horn et al. (1987)								X				
Hudley and Graham (1993)				X								
Huey & Rank (1984)				X		X					X	
Hughes & Wilson (1988)								X				
Hughes et al. 2001							X					

Youth with Disruptive Behaviours (continued)												
Overlap												
Primary research papers cited by:												
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>												
Total number of primary research papers: 257												
Primary research paper citation	B. Armelius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999	(Bennett & Gibbons, 2000
Hunter (1985)												X
Hutchings et al. 2002							X					
Illsley 2003			X									
Irvine, Biglan, Smolkowski, Metzler, and Ary (1999)				X								
Johnson 1981		X										
Jupp, J. J., & Looser, G, (1988)										X		
Kahn & Kehle (1990)								X				
Kazdin (1987)								X				
Kazdin and Crowley 1997							X					
Kazdin and Wassell 2000							X					
Kazdin and Whitley 2003							X					
Kazdin and Whitley 2006							X					
Kazdin, A. B., & Esveldt-Dawson, K., French (1987)										X		
Kazdin, Bass, Siegel, & Thomas (1989)						X		X			X	
Kazdin, Esveldt-Dawson, French, & Unis (1987a)						X						
Kazdin, Esveldt-Dawson, French, & Unis (1987b)				X		X					X	X
Kazdin, Siegel, & Bass (1992)						X	X	X			X	
Kendall (1990)											X	
Kendall P. C., & Zupan, B. A. (1981).										X		
Kendall, P. C. (1982)										X	X	
Kendall, P. C., & Braswell, L. (1982)										X		
Kettlewell & Kausch (1983)				X						X	X	X
Kirschenbaum (1979)												X
Kratter and Hogan 2009					X							
Ladd, G. W. (1981).										X		
Landy and Menna 2006							X					
Larson (1992)				X								X
Laserer-Tschann 1992		X										
Leal et al. (1981)								X				
LeCroy, C. W., & Rose, S. D. (1986)										X		
Lee et al 2008					X							
Lee, Hallberg, and Hassard (1979)				X								X
Leeman 1993	X											

Youth with Disruptive Behaviours (continued)										
Overlap										
Primary research papers cited by:										
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>	B. Armelius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pflingsten, & Lösel, 1994
Total number of primary research papers: 257										
Primary research paper citation										
Leung, Sanders, Leung Mak, and Lau (2003)				X						
Liddle et al. 2004							X			
Liddle, B., & Spetrce, S. H. (1990)									X	
Lochman, Burch, Curry, & Lampron (1984)				X						X
Lochman (1985)				X					X	
Lochman (1992)				X						
Lochman and Lampron (1988)				X						
Lochman et al. (1985)										X
Lochman, Coie, Underwood, & Terry (1993)				X		X	X			X
Lochman, Lampron, Burch, and Curry (1985)				X						
Lochman, Lampron, Gemmer, Harris, and Wyckoff (1989)				X			X		X	X
Long 1993			X							
Luk et al. (1998)								X		
MarkieDadds 2005a			X							
MarkieDadds2005b			X							
Martin (1977)				X						
Martinez and Forgatch (2001)				X						
Martsch 2000							X			
McNeil, Eyberg, Eisenstadt, Newcomb, and Funderburk (1991)				X			X			
McQueen 1975		X								
Michel & Farrell 1973		X								
Michel & Martin 1970		X								
Michelson et al. (1983)				X						X
Michelson, L., Mannarino, A. P., Marchione (1983)									X	
Mihe, J., & Spence, S. H. (1987).									X	
Miran, Lehrer, Koehler, and Miran (1974)				X						
Mize, J., & Ladd, G. W. (1990).									X	
Montello & Coons 1998		X								
Montgomery 2004			X							
Mørch et al. 2005							X			
Morgan 1998							X			
Murnis et al. (1998)								X		
Myers et al. (1992)				X						

Youth with Disruptive Behaviours (continued)												
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul> Total number of primary research papers: 257 Primary research paper citation	B. Armelius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999	(Bennett & Gibbons, 2000
Napoli et al 2004					X							
Nardone, M. J., Tryon, W. W., & O'Connor, K. (1986).										X		
Nelson, G., & Carson, P. (1988)										X		
Nicholson 1999			X									
Nixon et al. 2003							X					
Normand and Robert (1990)				X								
Ogden and Halliday-Boykins 2004							X					
Olexa, D. F., & Forman, S. G. (1984)				X						X		X
Ollendick and Hersen (1979)				X								
Omizo, Hershberger, and Omizo (1988)				X								X
Peed, Roberts, & Forehand (1977)				X		X						
Pepler et al. (1995)											X	X
Pfiffner and McBurnett 1997							X					
Pfiffner et al. 1990							X					
Prinz, Blechman, and Dumas (1994)				X			X				X	X
Reynolds & Coats (1986)								X				
Rickel, A. U., Eshelman, A. K., & Loigman, G. A. (1983).										X		
Ridley, C. A., & Vaughn, S. R. (1982).										X		
Ridley, C. A., Vaughn, S. R., & Wittman, S. K. (1982).										X		
Robinson et al 1999	X								X			
Robinson, Smith, & Miller (2002)				X		X						
Roseby, V., & Deutsch, R. (1985).										X		
Rossello & Bernal (1999)								X				
Sanders 2000b			X									
Santisteban et al. 1997							X					
Santisteban et al. 2003							X					
Sarason 1973	X											
Sayger, Horne, Walker, and Passmore (1988)				X			X					
Saylor, Benson, and Einhaus (1985)				X								X
Schechtman, Ben-David 1999									X			
Scherer et al. 1994							X					

Youth with Disruptive Behaviours (continued)											
Overlap											
Primary research papers cited by:											
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>	B. Armeilius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pflingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999
Total number of primary research papers: 257											(Bennett & Gibbons, 2000
Primary research paper citation											
Schlichter and Horan (1981)				X							X
Schneider (1991)								X			
Schneider, B. H., & Byrne, B. M. (1987).				X						X	X
Schuhmann, Foote, Eyberg, Boggs, and Algina (1998)				X			X				
Scott and Stradling (1987)				X							
Scott, Spender, Doolan, Jacobs, and Aspland (2001)				X			X				
Semple et al 2005					X						
Semple et al 2009					X						
Seymour 1989			X								
Sharp, K. C. (1981).										X	
Shechtman 2000							X				
Shechtman 2003							X				
Sheeber and Johnson 1994							X				
Shivrattan 1988	X										
Shure M.B., & Spivack, G. (1982)										X	
Silverman et al. (1999)								X			
Singh et al 2007					X						
Small, R. W., & Schinke, S. P. (1984).										X	
Snyder & White (1979)											X
Snyder, Kymissis, and Kessler (1999)				X							
Sonuga-Barke et al. (2001)								X			
Spaccarelli, Cotler, and Penman (1992)				X			X				
Spence & Marzillier								X			X
Stark et al. (1987)								X			
Sukhodolsky et al. 2005							X				
Szapocznik et al. (1989)								X	X		
Tanner and Holliman (1988)				X							
Taylor et al. 1998							X				
Teglasi and Rothman (2001)				X							
Tellado, (1984)										X	
Thacker, V. J. (1989).										X	
Tiffen, K., & Spence, S. H. (1986).										X	
Trapani, C., & Gettinger, M. (1489).										X	



Youth with Disruptive Behaviours (continued)											
Overlap											
Primary research papers cited by:											
<ul style="list-style-type: none"> <li>a single systematic review: 206 (80%)</li> <li>two systematic reviews: 31 (12%)</li> <li>three systematic reviews: 12 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 2 (1%)</li> </ul>	B. Armelius & Andreassen, 2007	Gold, Voracek, & Wigram, 2004	Montgomery, Bjornstad, & Dennis, 2006	McCart, Priestester, Davies, & Azen, 2006	Black, Milam, & Sussman, 2009	Eyberg, Nelson, & Boggs, 2008	Fossum, Handegård, Martinussen, & Mørch, 2008	Miller et al., 2008	Harris & Pattison, 2004	Beelmann, Pfingsten, & Lösel, 1994	Taylor, Eddy, & Biglan, 1999
Total number of primary research papers: 257											(Bennett & Gibbons, 2000
Primary research paper citation											
Trautman (1985)											X
van Manen et al. 2004							X				
Vaughn, S. R., Ridley, C. A., & Cox, J. (1983).										X	
Vaughn, S., & Lancelotta, G. X. (1990).										X	
Verdup, C. M., Lord, W., & Forrest, G. C. (1990).										X	
Walker, H. M., McConnell, S., Walker (1983).										X	
Walle, Hobbs, and Caldwell (1984)				X							
Walter and Gilmore (1973)				X							
Webster-Stratton & Hammond (1997)				X		X	X	X			X
Webster-Stratton (1982)				X							
Webster-Stratton (1984)				X							
Webster-Stratton (1992)				X			X				
Webster-Stratton and Hammond 1990				X							
Webster-Stratton 1994							X				
Webster-Stratton 1996							X				
Webster-Stratton, Kolpacoff, and Hollinsworth (1988)			X	X			X	X			
Webster-Stratton, Reid, and Hammond (2001)				X		X	X				
Webster-Stratton, Reid, and Hammond (2004)				X		X	X				
WebsterStratton1989			X								
WebsterStratton1990			X	X			X				
Weiss, Catron, Harris 2000									X		
Weissberg, Gesten, Carnrike et al. (1981)				X						X	X
Weissberg, Gesten, Rapkin et al. (1981)				X						X	X
Weisz et al 1987									X		
Wells & Egan (1988)						X					
Winer, Hilpert, Gesten, Cowen, and Schublin (1982)				X						X	X
Yu, P., Harris, G. E., Solovitz, B. L., & Franklin, J. L. (1986).										X	
Zangwill (1983)				X							
Zylowska et al 2008					X						

Sexually Aggressive Youth														
<p>Overlap                      Primary research papers cited by:                      a single systematic review: 302 (79%)                      two systematic reviews: 50 (13%)                      three systematic reviews: 18 (5%)                      four systematic reviews: 6 (2%)                      five systematic reviews: 4 (1%)</p> <p>Total number of primary research papers: 381</p> <p>Primary research paper citation</p>	Brooks-Gordon, Bilby, & Wells, 2005.	R. K. Hanson et al., 2002.	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007.	R. K. Hanson & Bussiere, 1998.	R. K. Hanson & Morton-Bourgon, 2005.	Winokur, Rozen, Batchelder, & Valentine, 2006.	Hall, 1995).	McCann, 2006	Cottle, Lee, & Heilbrun, 2001.	Redlak, 2003.	Alexander, 1999.	Caldwell, 2009.	C. E. Walker & McCormick, 2005.
Abel, G. G., Mittelman, M, Becker, J. V., Rathner, J., & Rouleau, J. (1988).					X							X		
Abel, G. G., Mittelman, M., Becker, J. V., Rathner, J., & Rouleau, J. L. (1989).						X								
Agee, V. (1985).												X		
Allam, J. (1998).		X												
Allam, J. (1999).		X				X								
Allan, A., Allan, M. M., Marshall, P., & Kraszlan, K. (2003).									X				X	
Archwamety, T., & Katsiyannis, A. (1998).										X				
Ashford, J. B., & LeCroy, C. W. (1988).										X				
Ashford, J. B., & LeCroy, C. W. (1990).										X				
Atcheson, J. D., & Williams, D. C. (1954).													X	
Auslander, B. (1998).									X				X	
Bakker, L., Hudson, S., Wales, D., & Riley, D. (1999).		X												
Barbaree, H. E., & Marshall, W. L. (1988).					X	X								
Barbaree, H. E., & Seto, M. C. (1998).		X				X								
Barbaree, H. E., Seto, M. C., & Maric, A. (1996).						X								
Barbaree, H. E., Seto, M. C., Langton, C. M., & F. E. Peacock, E. J. (2001)						X								
Barlow, K. N. (1996).							X							

Sexually Aggressive Youth														
<p>Overlap</p> <p>Primary research papers cited by:</p> <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul> <p>Total number of primary research papers: 381</p> <p>Primary research paper citation</p>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Barnes, J. M., & Peterson, K. D. (1997).		X												
Beck, A. J., & Shipley, B. E. (1989).					X									
Becker, J.V. 1990			X									X		
Beech, A., Erikson, M., Friendship, C., & Ditchfield, J. (2001).						X								
Berenson, D. (1985).												X		
Berger, P. (2002, September).						X								
Berlin, E (1989).												X		
Berlin, F. S., Hunt, W. P., Malin, M. H., Dyer, A., Lehne, G. K., & Dean, S. (1991).		X												
Berliner, L., Miller, L. L., Schram, D., & Miloy, D. (1991, June).												X		
Berliner, M. L., Schram, D., Miller, L. L., & Milloy, C. D. (1995).		X												
Bleker, E. (1983).										X				
Bluglass, R. (1980).		X			X									
Bonner, Walker and Berliner (1999)	X													
Bonta, J., & Hanson, R. K. (1995).					X	X								
Borduin, C. M., & Schaeffer, C. M. (2001).			X											
Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990).		X		X				X				X		X
Borduin, C. M., Schaeffer, C. M., & Heilblum, N. (2000, May).		X												
Boyd, N.J. (1994)									X		X		X	
Bradford, J., Firestone, P., Fernandez, M., Curry, S., & Larose, M. (1997).						X								
Brannon, J., & Troyer, R. (1991).												X		X
Brannon, J., & Troyer, R. (1995).				X									X	

Sexually Aggressive Youth (continued)														
Overlap Primary research papers cited by:														
<ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul>														
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Brecher, E. (1978).												X		
Bremmer, J. F. (1992).		X		X								X	X	
Broadhurst, R. (1999).						X								
Broadhurst, R. G., & Mailer, R. A. (1991).					X									
Broadhurst, R. G., & Mailer, R. A. (1992).					X	X								
Broadhurst, R., & Loh, N. (2003).						X							X	
Bromberg (1991)														X
Buffington-Vollum, J., Edens, J. F., Johnson, D. W., & Johnson, J. K. (2002)						X								
Byrne, S. M. (1999).	X						X							
Cabeen, C., & Coleman, J. (1961).												X		
Caldwell, M. (2007).													X	
Christiansen, K. O., Elers-Nielsen, M., Le Maire, L., & Sturup, G. K. (1965)					X	X								
Clelland, S. R., Studer, L. H., & Reddon, J. R. (1998).		X												
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Cooper, H. (2000).						X								
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Cox, D., & Daitzman (Eds.). (1980).												X		
CS/RESORS. (1991).		X												
Davidson, P. (1984, March)												X		
Davidson, P. R. (1984, January).		X												
Davis, G. L., Hoffman, R. G., & Stacken, N. (1991, August).					X	X								

Sexually Aggressive Youth (continued)														
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Dembo, R., Schmeidler, J., Nini-Gough, B., Sue, C. C., Borden, P., & Manning, D. (1998).										X				
Dembo, R., Williams, L., Fagan, J., & Schmeidler, J. (1994).										X				
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Dix, G. E. (1976).					X	X						X		
Doshay, L. (1969).											X	X		
Doshey, L. J. (1943).					X	X							X	
Driessen, E. (2002).													X	
Duncan, R., Kennedy, W., & Patrick, C. (1995).										X				
Dwyer, S. M. (1997).		X				X								
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Earls, C. M. (1997).		X												
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Epperson, D. L., Kaul, J. D., & Hesselton, D. (1998).						X								
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Evans, D. (1970).												X		

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Farrell, K., & O' Brien, R. (1988).												X		
Fedoroff, J. P., Wisner-Carlson, R., Dean, S., & Berlin, F. S. (1992).					X	X		X						
Finkelhor, D. (1984).								X						
Firestone, P., Bradford, J. M., McCoy, M., Greenberg, D. M., Curry, S., & Larose, M. R. (1998).						X								
Fischer, D. R. (2000).						X								
Fitch, J. H. (1962).					X	X								
Florida Department of Health and Rehabilitative Services (1976).												X		
Florida Department of Health and Rehabilitative Services. (1984).					X							X		
Frazine-Putnam, E. S. (2002).													X	
Frisbie, L. V. (1969).					X									
Frisbie, L. V., & Dondis, E. H. (1965).					X	X						X		
Funk, S. (1999).										X				
Galaway, A., & Steele, N. (1992).												X		
Gfellner, B. M. (2000).						X							X	
Gibbens, T C. N., Soothill, K. L., & Way, C. K. (1980).					X									
Gibbens, T. C. N., Soothill, K. L., & Way, C. K. (1978).					X									
Gibbens, T. C. N., Way, C. K., & Soothill, K. L. (1977).					X									
Gordon, A. (1989).												X		
Gordon, A., & Bergin, H. (1990, June).					X									
Gordon, A., & Packard, R. (1998)		X												
Gordon, A., & Porporino, F. J. (1990, May).					X									

Sexually Aggressive Youth (continued)														
Overlap														
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Primary research paper citation														
Graham, K. (1994).												X		
Graham, K. R. (1991).					X									
Greenberg, D. M., Da Silva, J., & Loh, N. (2002).						X								
Greenberg, D. M., Firestone, P., Bradford, J. M., & Broom, I. (2000)						X								
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Gretton, H. M. (1995).						X								
Gretton, H., Cacthpole, R., McBride, M., Hare, R., O'Shaghnessy, R. and Regan, K. (2005)									X					
Gretton, H., McBride, M., & Hare, R, D. (1995, October).					X									
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Gretton, H., Rajlic, G., & Clift, R. (2008, April).													X	
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Groth, N. (1982).												X		
Guarino-Ghezzi, S., & Kimball, L. M. (1998).	X	X					X							
Hackett, T. P. (1971).					X							X		
Hagan and Cho (1996)	X			X							X			
Hagan and Gust-Brey (1999)	X													
Hagan, M., Cho, M., Gust-Brey, K., & Dow, E. (2001).													X	
Hagan, M., Gust-Brey, K., Cho, M. and Dow, E. (2001)	X			X					X		X			
Hagan, M., King, R., & Patros, R. (1994).				X								X		

Sexually Aggressive Youth (continued)														
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Haines, Herrman, Baker, & Graber (1986)														X
Hall, G. C. N. (1988).					X	X								
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Hanson, C. L., Henggeler, S. W, Haefele, W F., & Rodick, J. D. (1984).										X				
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Hanson, R. K., & Harris, A. J. R. (2000a).						X								
Hanson, R. K., & Nicholaichuk, T. (2000)		X												
Hanson, R. K., Gordon, A., Harris, A., Marques, J., Murphy, W., Quinsey, V., & Seto, M. (1997).												X		
Hanson, R. K., Steffy, R. A., & Gauthier, R. (1992).		X												
Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993)		X			X							X		
Hanson, R. K., Steffy, R. A., Scott, H., & Gauthier, R. (1993).						X								
Harris, G. T., Rice, M. E., Quinsey, V. L., Lalumiere, M. L., Boer, D., & Lang, C. (2003).						X								
Haversack, G. (1985).												X		
Haynes, A. K., Yates, P. M., Nicholaichuk, T., Gu, D., & Bolton, R. (2000, June).						X								
Hecker, J., Scoular, J., Righthand, S., & Nangle, D. (2002, October).						X							X	
Hersh, K., Baldwin, K., & Gray-Little, B. (1999, September).		X												



Sexually Aggressive Youth (continued)														
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Hildebran, D. D., & Pithers, W. D. (1992).								X						
Hildebrand, M., de Ruiter, C., & de Vogel, V. (2004).						X								
Hiscox, H., Witt, P., & Haran, S. (2007).													X	
Hoge, R. D., Andrews, D. A., & Leschied, A. W. (1996).										X				
Hood, R., Shute, S., Feilzer, M., & Wilcox, A. (2002).						X								
Hudson, S. M., Wales, D. S., Bakker, L., & Ward, T. (2002).						X								
Hunter & Goodwin (1992)														X
Huot, S. (1999, April).		X												
Hurley, S. (2002).			X											
Jeffords, C. (2003).			X											
Jones, I., & Frei, D (1977).												X		
Jung, S., & Rawana, E. P. (1999).										X				
Kahn & Chambers (1991)														X
Kahn and Chambers (1991)											X			
Kahn, T. J., & Chambers, H. J. (1991).				X	X	X			X				X	
Kahn, T. J., & Lafond, M. A. (1988).													X	
Kaplan, Morales, & Becker (1993)														X
Katsiyannis, A., & Archwamety, T. (1997).										X				
Kelley, S. M., Lewis, K., & Sigal, J. (2004).							X							
Kennedy, W. A., & Hume, M. P. (1998).													X	
Kennedy, W. A., Light, M., & Caminez, M. (2004).													X	

Sexually Aggressive Youth (continued)														
Overlap	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
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Khanna, A., Brown, P., Malcolm, P. B., & Williams, S. M. (1989,					X	X								
Knopp, F. H. (1984).												X		
Knopp, F. H. (1985).												X	X	
Knopp, F. H. (1991).													X	
Knopp, F. H. (Ed.) (1985).												X		
Knox (1994)														X
Konopasky, R., Cann, S., & Curry, D. (1991).												X		
Kozol, H., Boucher, R., & Garogalo, R. (1972).												X		
Kramer, S. P. (1985).		X												
Kroth, J. (1979).												X		
Lab, S. P., Shields, G., & Schondel, C. (1993).		X	X	X	X	X							X	
Lang, R., Pugh, G., & Langevin, R. (1988).												X		
Langevin, R., & Fedoroff, J. P. (2000).						X								
Långström, N. (2002a).						X								
Långström, N. (2002b).						X								
Långström, N., & Grann, M. (2000).				X		X		X		X				
Långström, N., Sjöstedt, G., & Grann, M. (2004).						X								
Långström, N. (2002)								X						
Långström, N. 2002				X										
Långström, N., Grann, M. and Lindblad, F. 2000				X										
Langton, C. M. (2003a).						X								
Langton, C. M. (2003b).						X								
Letourneau, E. J., & Armstrong, K. (in press).													X	

Sexually Aggressive Youth (continued)														
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Letourneau, E. J., Bandyopadhyay, D., Sinha, D., & Armstrong, K. (in press).													X	
Liedecke, D., & Marbibbi, M. (2000).													X	
Lindsay, W. R., & Smith, A. H. W. (1998).		X												
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Looman, J., Abracen, J., & Nickolaichuk, T. P. (2000).		X												
Mair, K. J., & Stevens, R. H. (1994)					X									
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Mair, K. J., & Wilson, D. (1995).					X	X								
Malcolm, P. B., Andrews, D. A., & Quinsey, V. L. (1993).					X									
Maletzky, B. (1974).												X		
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Maletzky, B. M. (1980).					X							X		
Maletzky, B. M. (1991).					X			X						
Maletzky, B. M. (1993).					X									
Marques, J. (1994).												X		
Marques, J. (1995).												X		
Marques, J. K. (1999).		X												
Marques, J. K., & Day, D. M. (1996).						X								
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Marques, J. K., Day, D. M., Nelson, C., & West, M. A. (1993).		X			X									
Marques, J. K., Day, D. M., Nelson, C., & West, M. A. (1994).		X						X						

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Marques, J. K., Day, D. M., Wiederanders, M., & Nelson, C. (2002,						X								
Marques, J. K., Nelson, C., West, M. A., & Day, D. M. (1994).					X									
Marshall, P. (1994).					X									
Marshall, W. L., & Barbaree, H. E. (1988).					X	X		X						
Marshall, W. L., Eccles, A., & Barbaree, H. E. (1991).		X						X				X		
Marshall, W. L., & Barbaree, H. E. (1988).		X										X		
Martin, I. (1998)		X												
Martinez, R., Flores, J., & Rosenfeld, B. (2007).													X	
Mathis, J., & Collins, M. (1970).												X		
McBride, M., Gretton, H., & Hare, R. D. (1995, October).					X	X								
McConaghy, N., Blaszczyński, A., & Kidson, W. (1988).								X						
McConaghy, N., Blaszczyński, A., Armstrong, M. S., & Kidson, W. (1989)					X									
McGrath, R. J., Cumming, G., Livingston, J. A., & Hoke, S. E. (2003).						X								
McGrath, R. J., Hoke, S. E., & Vojtisek, J. E. (1998).		X												
McGuire, T. J. (2000).		X												
McGurk, B., Thornton, D., & Williams, M. (Eds.) (1987).												X		
McTavish, T. H. (1996).			X											
Meyer, L. C., & Romero, J. (1980).		X				X								

Sexually Aggressive Youth (continued)														
Overlap <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul> Total number of primary research papers: 381           Primary research paper citation	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Meyer, W. J., Cole, C, & Emory, E. (1992).					X	X		X						
Meyers, L. C., & Romero, J. (1980).					X									
Milloy, C. (1995)									X					
Milloy, C. D. (1994).													X	
Miner, M. H. (2002).						X			X				X	
Miner, M. H., Siekert, G. P., & Ackland, M. A. (1997).													X	
Miner, M., & Dwyer, S. M. (1995)		X												
Minnesota Department of Corrections. (1999)						X								
Minor, K.I., Hartmann, D. J., & Terry, S. (1997).										X				
Mohr, J. W., Turner, R. E., & Jerry, M. B. (1964).					X	X						X		
Money, J., & Bennett, R. G. (1981).					X	X					X			
Morrow, W., & Peterson, D. (1966).												X		
Morton, K. E. (2003).						X								
Motiuk, L. L., & Brown, S. L. (1993)					X									
Motiuk, L. L., & Brown, S. L. (1995).						X								
Mulloy, R., & Smiley, W. C. (1996).		X				X								
Myner, J., Santman, J., Cappelletty, G., & Perlmutter, B. (1998).										X				
Niarhos, F. J., & Routh, D. K. (1992).										X				
Nicholaichuk, T. P. (1996).		X												
Nicholaichuk, T., Gordon, A., Gu, D., & Wong, S. (2000).		X												
Nisbett, I., Wilson, P., & Smallbone, S. (2004).									X				X	
Nunes, K. L., Serran, G. A., Firestone, P., Greenberg, D. M., & Bradford, J. M. (2000, November).						X								

Sexually Aggressive Youth (continued)														
<p>Overlap</p> <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul> <p>Total number of primary research papers: 381</p> <p>Primary research paper citation</p>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Nutbrown, V., & Stasiak, E. (1987).		X			X	X						X		
O'Reilly, Sheridan, Carr, Cherry, Donohue, McGrath, Phelan, Tailon and O'Reilly (1998)	X													
O'Brien, M. (1985).												X		
Ohio Department of Rehabilitation and Correction. (2001).						X								
Otey, E., & Ryan, G. (Eds.) (1985).												X		
Ownbey, M. A., Jones, R. J., Judkins, B. L., Everidge, J. A., & Timbers, G. D. (2001).							X							
Pacht, A. R., & Roberts, L. M. (1968).					X	X								
Pacht, A., Halleck, S., & Ehrmann, J. (1962).												X		
Parks, G. A. (2004).													X	
Pellerin, B., Proulx, J., Ouimet, M., Paradis, Y., McKibben, A., & Aubut, J. (1996).		X												
Perkins, D. (1987).		X			X	X						X		
Pierson, T. A. (1988).		X										X		
Pierson, T. A. (1989).					X									
Piliero (1994)														X
Pithers, Gray, Busconi, and Houchens, 1998	X													
Pithers, W. (1991).												X		
Prentky, R. A., Knight, R. A., & Lee, A. F. (1994, November).					X									
Prentky, R. A., Knight, R. A., & Lee, A. F. (1997).					X									
Prentky, R. A., Knight, R. A., Lee, A. F., & Cerce, D. D. (1995).					X	X								
Prentky, R., & Burgess, A. (1990).												X		

Sexually Aggressive Youth (continued)														
<p>Overlap</p> <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul> <p>Total number of primary research papers: 381</p> <p>Primary research paper citation</p>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Prentky, R., & Knight, R. (1994).												X		
Prentky, R., & Quinsey, V. (Vol. Eds.) (1988).												X		
Prentky, R., Harris, B., Frizzell, K., & Righthand, S. (2000).				X		X			X				X	
Prentky, R., Knight, R. A., & Lee, A. F. S. (1997).						X								
Proctor, E. (1996).		X												
Proulx, J., Ouimet, M., Pellerin, B., Paradis, Y., McKibben, A., & Aubut, J. (1998).		X												
Proulx, J., Pellerin, B., McKibben, A., Aubut, J., & Ouimet, M. (1995).					X	X								
Putnins, A. (1984).										X				
Quinsey, V. L., Khanna, A., & Malcolm, P. B. (1998).		X				X								
Quinsey, V. L., Lalumiere, M. L., Rice, M. E., & Harris, G. T. (1995).					X									
Quinsey, V. L., Rice, M. E., & Harris, G. T. (1990).					X									
Quinsey, V. L., Rice, M. E., & Harris, G. T. (1995).					X	X								
Quinsey, V., Chaplin, T., & Carrigan, W. (1980).												X		
Rabinowitz-Greenberg, S. R. (1999).						X								
Radzinowicz, L. (1957).					X	X								
Rasmussen, L. A. (1999).				X		X			X		X		X	
Rattenbury, F. R. (1986).		X												
Ray, J., Smith, V., Peterson, T., Gray, J., Schaffner, J., & Houff, M. (1995).							X							
Reddon, J. (1994).												X		
Reddon, J. R. (1995).					X									

Sexually Aggressive Youth (continued)														
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul> Total number of primary research papers: 381 Primary research paper citation	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Reddon, J. R., Studer, L., & Estrada, L. (1996).						X								
Repo, E., & Virkkunen, M. (1997).										X				
Report on treatment programs for sex offenders: Summary and recommendations. (1984).		X												
Rice, M. E., & Harris, G. T. (1997).					X									
Rice, M. E., Quinsey, V. L., & Harris, G. T. (1989).					X	X								
Rice, M. E., Quinsey, V. L., & Harris, G. T. (1991).		X			X	X		X						
Rice, M.E., Harris, G. T., & Quinsey, V. L. (1990).					X	X								
Robinson, D. (1995).		X										X		
Roether, H., & Peters, J. (1972).												X		
Romero, J. J., & Williams, L. M. (1983).		X			X							X		
Rooth, F. G., & Marks, I. M. (1974).					X	X						X		
Rosen, I. (1979a).												X		
Rosen, I. (Ed.). (1979b).												X		
Rosner, R., & Schwartz, H. (Eds.) (1989).												X		
Rubenstein, M., Yeager, C.A., Goodstein, C. and Otnow Lewis, D. 1993				X										
Ryan, G., & Miyoshi, T. (1990).					X	X								
Santman (1998)											X			
Santman, J. (1998).						X							X	
Schmidt, F., & Heniz, L. (1999).	X												X	
Schram, D. D., & Milloy, C. D. (1995).						X								



Sexually Aggressive Youth (continued)														
<p>Overlap</p> <p>Primary research papers cited by:</p> <ul style="list-style-type: none"> <li>• a single systematic review: 302 (79%)</li> <li>• two systematic reviews: 50 (13%)</li> <li>• three systematic reviews: 18 (5%)</li> <li>• four systematic reviews: 6 (2%)</li> <li>• five systematic reviews: 4 (1%)</li> </ul> <p>Total number of primary research papers: 381</p> <p>Primary research paper citation</p>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Schram, D. D., Milloy, C. D., & Rowe, W. E. (1991).					X				X		X	X	X	
Schram, D.D. Malloy, C.D. and Rowe, W.E. 1992				X										
Seabloom, W., Seabloom, M. E., Seabloom, E., Barron, R., & Hendrickson, S. (2003).							X						X	
Serin, R. C., Mailloux, D. L., & Malcolm, P. B. (2001).						X								
Serrill, M. (1974).												X		
Seto, M. C., & Barbaree, H. E. (1999).		X												
Sex offender programs: Program manuals, descriptions, evaluations, & research. (1998).		X												
Sex offenses in Washington State: 1998 update. (1998).		X												
Shapiro, Welker and Pierce (2001)	X													
Short, A., & Halvorsen, D. (1991).												X		
Sipe, R., Jenson, E.L. and Everett, R.S. (1998)	X			X					X		X		X	
Sjöstedt, G., & Långström, N. (2001).						X								
Sjöstedt, G., & Långström, N. (2002).						X								
Smets, A. C., & Cebula, C. M. (1987).												X	X	
Smiley, W. (1989).												X		
Smiley, W. C., & Mulloy, R. (1995).		X			X									
Smith and Monastersky (1986)											X			
Smith, T., & Wolfe, R. (1988).												X		
Smith, W. R. (1984).													X	

Sexually Aggressive Youth (continued)														
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Total number of primary research papers: 381														
Primary research paper citation														
Smith, W. R., & Monastersky, C. (1986).					X	X			X					
Smith, W., & Monastersky, C. (1986).													X	
Song, L., & Lieb, R. (1994)						X								
Song, L., & Lieb, R. (1995).		X			X									
Soothill, K. L., Jack, A., & Gibbens, T. C. N. (1976).					X	X								
Soothill, K. L., Way, C. K., & Gibbens, T. C. N. (1980).						X								
Stattin, H., & Magnusson, D. (1989).										X				
Steiger, J. C., & Dizon, C. (1991).													X	
Steiner, H., Cauffman, E., & Duxbury, E. (1999).										X				
Stirup, G. K. (1961).					X									
Sttirup, G. K. (1960).					X									
Studer, L. H., & Reddon, J. R. (1998).		X												
Studer, L. H., Reddon, J. R., Roper, V., & Estrada, L. (1994).		X												
Sturgeon, V. H., & Taylor, J. (1980).					X							X		
Sturup, G. K. (1953).						X								
Sturup, G. K. (1960).						X								
Sturup, G. K. (1953).					X									
Texas Youth Commission. (1999).													X	
The Missouri Sexual Offender Program. (1989).		X												
Thornton, D. (1995).					X									
Thornton, D. (1997).						X								
Thornton, D. (2002).						X								
Tough, S. E. (2001).						X								

Sexually Aggressive Youth (continued)														
Overlap Primary research papers cited by:														
<ul style="list-style-type: none"> <li>a single systematic review: 302 (79%)</li> <li>two systematic reviews: 50 (13%)</li> <li>three systematic reviews: 18 (5%)</li> <li>four systematic reviews: 6 (2%)</li> <li>five systematic reviews: 4 (1%)</li> </ul>	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Total number of primary research papers: 381														
Primary research paper citation														
Towberrnan, D. (1994).										X				
Tracy, F., Donnelly, H., Morgenbesser, L., & MacDonald, D. (1983).					X	X								
Travin, S., Bluestone, H., Coleman, E., Cullen, K., & Melella, J. (1985).												X		
Vandiver, D. (2006).													X	
Vermont Center for Prevention and Treatment of Sexual Abuse, (1991).					X									
Viljoen, J. (2008, April).													X	
Viljoen, J., Scalora, M., Cuadra, L., Bader, S., Chavez, V., Ullman, D., et al. (2007).													X	
Waite, D., Keller, A., McGarvey, E. L., Wieckowski, E., Pinkerton, R., & Brown, G. L. (2005)							X						X	
Waite, D., Pinkerton, R., Wieckowski, E., McGarvey, E., & Brown, G. L. (2002, October).						X								
Walker, D. W. (2000).		X												
Walker, G. (1998).													X	
Weaver, C., & Fox, C. (1984).					X	X								
Weibush, R. G. (1996).													X	
Weinrott, M. R., Riggan, M., & Frothingham, S. (1997).	X						X							X
Wickramasekera, I. (1980).												X		
Wieckowski, E., Waite, D., Pinkerton, R., McGarvey, E., & Brown, G. L. (2003).			X											
Wierson, M., & Forehand, R. (1995).										X				
Wille, R., & Beier, K. M. (1989)								X						

Sexually Aggressive Youth (continued)														
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>• a single systematic review: 302 (79%)</li> <li>• two systematic reviews: 50 (13%)</li> <li>• three systematic reviews: 18 (5%)</li> <li>• four systematic reviews: 6 (2%)</li> <li>• five systematic reviews: 4 (1%)</li> </ul> Total number of primary research papers: 381 Primary research paper citation	Brooks-Gordon, Bilby, & Wells, 2005	R. K. Hanson et al., 2002	Reitzel & Carbonell, 2006	Gerhold, Browne, & Beckett, 2007	R. K. Hanson & Bussiere, 1998	R. K. Hanson & Morton-Bourgon, 2005	Winokur, Rozen, Batchelder, & Valentine, 2006	Hall, 1995)	McCann, 2006	Cottle, Lee, & Heilbrun, 2001	Redlak, 2003	Alexander, 1999	Caldwell, 2009	C. E. Walker & McCormick, 2005
Williams, S. M., & Khanna, A. (1987).					X									
Wing, S. W. (1984).					X	X								
Witte, T., Di Placido, C., & Wong, S. (2001).						X								
Witte, T., Di Placido, C., Gu, D., & Wong, S. (2002, May).						X								
Witzig, J. (1968).												X		
Wolfe, R., & Marino, D. (1975).												X		
Wolk, N. L. (2005).							X						X	
Wonnith, J. S., & Ruhl, M, (1987).					X									
Worling and Curwen (2000)	X													
Worling and Curwen (2001)											X			
Worling, J. R. (2001).				X		X			X					
Worling, J. R., & Curwen, T. (1998).		X												
Worling, J. R., & Curwen, T. (2000).			X	X			X							X
Zimring, F., Piquero, A., & Hayes, S. (2006).														X
Zimring, F., Piquero, A., & Jennings, W. (2007).														X
Zuskin, R. (1992).												X		

Innu and Inuit Youth				
Overlap Primary research papers cited by: <ul style="list-style-type: none"> <li>a single systematic review: 117 (99%)</li> <li>two systematic reviews: 1 (1%)</li> </ul> Total number of primary research papers: 118 Primary research paper citation	Gone & Alcántara, 2007	Jiwa et al., 2008	Delfabbro & Day, 2003	D. Gray, Sagers, Sputore, & Bourbon, 2000
Abbott PJ. 1998		X		
Adcock, T., Powell, D., & Wilson, M. (1997).			X	
Alati, R. (1993)				X
Assembly of First Nations/First Nations Information Governance Committee (2007)		X		
Ave, K., Evans, I., Hamerton, H., Melville, L., Moeke-Pickering, T., & Robertson, N. (1999).			X	
Baikie, B. (1997).			X	
Baker, J. (1998).			X	
Barber, J.G., Delfabbro, P., & Cooper, L. (1999).			X	
BARBER, J.G., WALSH, C. & BRADSHAW, R. (1989)				X
Batten, M., & Russell, J. (1995).			X	
Beresford, Q., & Omaji, P. (1996).			X	
Blagg, H. & Ferrante, A. (1995).			X	
Bourke, Colin J Prof. MBE; Rigby, Ken, Assoc. Prof; Burden, Jennifer (2000)			X	
Boyd-Ball AJ. 2003		X		
Brady, M. (1989).			X	
Bryce, S., Rowse, T., & Scrimgeour, D. (1992).			X	
Burns, C.B. (1996).			X	
Centers for Disease Control & Prevention, 1998	X			
Chamberlin RB. 1991		X		
Chong J, Herman-Stahl M. (2003)		X		
Clark, A.J. (1994).			X	
Coates L. 1991		X		
Commonwealth of Australia, Senate (1985).			X	
Cunneen, C. (1997).			X	
Cunneen, C. (1999).			X	
Cunneen, C., & Libesman, T. (2000).			X	
D'Abbs, P. & Togni, S. (1997)				X
D'Abbs, P. (1990a)				X
D'Abbs, P. (1990b)				X
D'Abbs, P., Togni, S. & Crundall, I. (1996)				X
d'Abbs, P., & MacLean, S. (2000).			X	
Daly, A. & Gvozdenovic, A. (1994)				X
Day, A., Howells, K. & Casey, S. (2003).			X	

Innu and Inuit Youth (continued)				
Overlap Primary research papers cited by: a single systematic review: 117 (99%) two systematic reviews: 1 (1%)				
Total number of primary research papers: 118				
Primary research paper citation				
Delaney, M., & Milne, C. (2002).			X	
Department of Education Training and Youth Affairs (2000).			X	
Diken & Rutherford, 2005	X			
Douglas, M. (1998)				X
Edwards RW, Jumper-Thurman P, Plested BA, Oetting ER, Swanson L (2000)		X		
Ellis BH Jr. 2003		X		
Fisher DG, Lankford BA, Galea RP. 1996		X		
Flores PJ. 1985		X		
Franks, C. (1989).		X	X	
Gale, F and Wundersitz, J (1984)			X	
Gale, F., Bailey-Harris, R. & Wundersitz, J. (1990).			X	
Gardiner, G. (1996).			X	
Giles, G., Day, A., Marshall, B., Sanderson, V. & Nakata, M. (2002).			X	
Gray D, Saggors S, Drandich M, Wallam D, Plowright P. 1995		X		
Gray D, Saggors S, Sputore B, Bourbon D. 2000		X		
Gray, D., Saggors, S., Atkinson, D. et al. (1998)				X
Gray, D., Sputore, B. & Walker, J. (1998)				X
Harding, R. W., Broadhurst, R., Ferrante, A., & Loh, N. (1995).			X	
Health Canada 1998		X		
Hitchen SR. 2001		X		
Hollin, C.R. (1999).			X	
Homel, R. et al. (1999).			X	
Hroec (1997).			X	
Hunter, E. (1998).			X	
Husted, Johnson, & Redwing, 1995	X			
Indian and Northern Affairs Canada. (2003)		X		
Indigenous Issues Fact Sheet Series (2000).			X	
Kahn MW, Fua C. (1992)		X		
Kahn, Lewis, & Galvez, 1974	X			
Kunitz, S.J. (1994).			X	
Lehmann, M. (1988).			X	
Luke, G., & Cunneen (1995).			X	
Lum, M., & Patterson, K. (1996).			X	

Innu and Inuit Youth (continued)				
Overlap Primary research papers cited by: a single systematic review: 117 (99%) two systematic reviews: 1 (1%)  Total number of primary research papers: 118  Primary research paper citation	Gone & Alcántara, 2007	Jiwa et al., 2008	Delfabbro & Day, 2003	D. Gray, Saggars, Sputtore, & Bourbon, 2000
Macfarland, B. (1999).			X	
MacGregor, M. (1997).			X	
Maxwell, G.M., & Morris, A. (1994).			X	
May PA. 1986		X		
May, Serna, Hurt, & DeBruyn, 2005	X			
Miller, K. & Rowse, T. (1995)				X
Mills PA. 2003		X		
Milne, C., Josif, P. & Lynn, D. (1993)				X
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Overlap Primary research papers cited by: a single systematic review: 117 (99%) two systematic reviews: 1 (1%)  Total number of primary research papers: 118  Primary research paper citation	Gone & Alcántara, 2007	Jiwa et al., 2008	Delfabbro & Day, 2003	D. Gray, Saggars, Sputore, & Bourbon, 2000
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## 4. Critical Appraisal of a Source Document

As noted in our peer-review process for this report, Dr. Lyons' referencing of one of his own publications to partially resolve a question arising from the research synthesis in this project presents a potential conflict of interest. To address this potential conflict of interest, we sought out a critique of the Lyons publication by an independent expert in the field of youth mental health and treatment (Dr. Graham Reid). In it, he addressed the methodological quality of the study, the appropriateness of the conclusions that were drawn from the study and any potential sources of bias, other conflicts of interest, or other distorting influences

**Critical appraisal of Lyons, John S.; Woltman, Heather; Martinovich, Zoran; Hancock, Brian. 2009. An outcomes perspective of the role of residential treatment in the system of care. Residential Treatment for Children & Youth, 26(2), pp. 71-91** by Graham J. Reid, Ph.D., C.Psych., Associate Professor, Psychology, Family Medicine & Paediatrics, The University of Western Ontario. October 12, 2010

### Summary

The study by Lyon et al. (2009) utilized data collected for the New Jersey Department of Children and Families from 2002 through 2008 to assess "clinical outcomes of residential treatment within an environment of tightening placements in residential treatment centers." (p. 73). The CANS (Child and Adolescent Needs and Strengths; Lyons, 2004) is used as a standardized assessment measure across the state of New Jersey with assessments being completed at the time each child begins a new program and every three to six months thereafter. Trajectories of change in CANS scores were analyzed separately for six different programs, each a type of residential care service. Those programs are, in order from least to most intensive residential care service:

1. Youth Case Management: supportive case management
2. Case Management Organization: intensive case management with a wraparound philosophy
3. Treatment Home: single child foster home or youth home
4. Group Home: small, community-based congregate care
5. Psychiatric Community Residence: long term hospital model of care for youth with serious mental illness
6. Residential Treatment: large, campus-based congregate care

Inclusion criteria for a trajectory were:

- a. valid program start date;
- b. at least one CANS assessment prior to the start date; and
- c. at least two CANS assessments following the start of a program.

Analyses were based on 4,476 trajectories (where a trajectory is equivalent to one episode of care within each program) from 3,170 children or youth seen between 2004 and 2007. Virtually all (97%) clients contributed more than one (mean = 2.6) trajectory to the analyses.

Key findings include:

- a. The average level of need (i.e., problem severity) increased year-by-year from 2003 through 2007.
- b. The percentage of children who received any residential care services (as a function of the total number of children seen in their mental health care system) decreased over time.
- c. The severity of need across different types of residential care services diverged over time, consistent with changes in the system aimed at having children seen in the least restrictive setting appropriate to their need.
- d. All children demonstrated improved functioning during an episode of residential care across all types of residential care services.
- e. The most rapid rates of improvement in functioning were seen amongst the cohorts of children and youth admitted in 2007 compared to 2005 and 2006.

Additional analyses describe rates of change over time for each of the six types of residential care services, and the impact of delaying a step-down in the intensity of care in terms of improvement in child outcomes.

Results are interpreted to indicate that:

1. Standardized assessments aided in placing children and youth in more clinically rational residential settings.
2. By better matching the intensity of the intervention to the needs of the child, the rate of functional improvement is increased.

Finally, the potential applications of data on expected lengths of stays and rates of improvement are discussed in terms of optimizing outcomes for children and youth.

## Critique

### 1. Was the study design appropriate to meet the stated objectives?

Overall, the study design was appropriate to meet the broadly stated objectives.

### 2. Was the study sample representative? Did compliance within the study sample affect the results?

The study used secondary data analyses of administrative clinical data. The CANS assessment was implemented on “a rolling basis in 2002 and was put into full practice by 2008.” As such, many children and youth would not have had CANS assessments completed during the implementation phase. In addition, as is typical in most clinical settings, it would be expected that children would have been missing the CANS for various reasons. No information is provided on the percentage of all cases seen within the system for whom no CANS data were obtained. No analyses were conducted of children who received residential care comparing:

- a. children with and without CANS data, or
- b. children who met study inclusion criteria vs. those who were excluded.

It would also have been of interest to have documented changes in CANS scores over time for children not in residential care services. Given that the percentage of children treated in residential care services decreased over the study years and the severity of need increased, it should be the case the severity of children who received only out-patient care should have increased as well. On p. 76 the authors report some comparison to the “full New Jersey sample”, but it was unclear if this was referring to more than just the sample of children analyzed.

### 3. Was there an adequate means of comparison for the results?

Most comparisons conducted were reasonable and appropriate. The comparisons of problem severity by year and by type of residential care service, as well as length of stay and percentage of children served in residential care over time are straightforward.

Analyses of the rate of change in CANS scores by type of residential care service were also fairly straightforward. However, trajectories showing change in CANS scores prior to the start of each program were harder to follow. It was unclear if all children were receiving the same type of service prior to the start point of a specific program. For example, functioning for children admitted into Residential Treatment (i.e., large, campus-based congregate care) deteriorated during the year prior to admission. It was unclear if the level/type of service prior to admission was controlled for. Although very complex to analyze, it would be interesting to see if the trajectories varied depending on the prior level of service. Such analyses would assist in planning a stepped or graduated care model of service. The authors discuss the effects of delays in stepped-down care (to a service of lesser intensity). Similar analyses regarding stepped-up care would have been of interest.

The analyses of rates of improvement as a function of calendar year were methodologically most concerning. The analyses were interpreted to indicate that rates of improvement were faster in later years. However, the level of severity also increased over time. In general, higher problem severity at the start of treatment is related to more rapid decreases in problem severity regardless of the type of treatment due to numerous factors,

including statistical artifacts such as regression to the mean. Two alternate analyses could have been conducted. The initial level of problem severity could have been controlled for. Alternatively, subgroups of children with similar levels of problem severity could have been created for each calendar year. If the rates of change within subgroups of children with similar initial problem severity were different across calendar years, there would be greater confidence that these reflect substantive differences in rates of improvement as a function of changes in the systems of care.

#### **4. Was quality of the measurements adequate for the conclusions drawn by the researchers?**

The CANS is an appropriate measure to assess problem severity. It would have been helpful to include any documentation on the processes used within agencies and the child welfare system to ensure standardization of scoring the CANS over time.

##### ***Were there clear outcomes?***

Scoring of the CANS was straightforward. Choices for the time frames used in the analyses were well articulated.

##### ***Were the instruments used in the study valid?***

Validity data for the CANS was reported in the article. Overall, the CANS has demonstrated adequate reliability and validity.

##### ***Were the researchers blinded?***

As these were secondary analyses of clinical data, the issue of blinding of the research is not a fundamental issue.

#### **5. Were there any sources of bias, conflicts of interest, or other distorting influences?**

The study inclusion/exclusion criteria may have biased the findings. No data are provided on the number of trajectories and/or children who did not meet the study criteria. As such, there is no comparison between those trajectories/children who were excluded and those whose data were analyzed. It is possible that excluded trajectories/children were systematically worse or better than those included in the analyses. For example, trajectories with fewer than two CANS assessments following a program start date were excluded. If rapid improvement resulted in discharge prior to completing two CANS assessments, rates of improvement would be under-estimated. However, problems with a placement might result in early discharge and thus failure to have two CANS assessments; in this case rates of improvement would be over-estimated.

J. Lyons is the first author of the manuscript and the author of the CANS. No financial disclosures are stated. If the author received any financial remuneration from the state of New Jersey's children's mental health system this should have been reported.

#### **Additional References**

Lyons, J. S. (2004). *Redressing the emperor: Improving our children's public mental health service system*. New York: Praeger.

#### **Dr. Lyons replies:**

*This research was supported independently of the State of New Jersey, and there were no financial conflicts of interests involved with the project.*

*The proposed analysis that would "control for baseline levels" is based on the assumption that a small reduction in risk for low-need youths is equivalent to a larger reduction in risk for high-need youths. Our experience with child care service research indicates that the converse assumption has greater validity: reducing the risk of high-need youth by a given amount holds greater value to the child care system than an equivalent amount of reduction in risk for a low-need youth. Furthermore, our use of hierarchical linear models addresses that issue by building initial levels into the models.*

*To clarify a question raised by GR ("It was unclear if all children were receiving the same type of service prior to the start point of a specific program"), the pre-admission trajectories were regardless of what program the youths was in. All prior assessments were included for youths admitted into each program.*

## 5. Errata & Updates

### **October 2010**

The initial printing of the full report contained this observation on page 6: “Key Assets (formerly Waypoints and originally named the St. Francis Foundation) provides a variety of residential and support services to children, youth and families.”. Key Assets is separate and distinct organization from Waypoints, and both are still in operation as of October 2010.

The online version of the full report has been amended accordingly, as will any future print versions.

### **November 2010**

The four-page summary report was updated to correct typographic errors and to clarify language.



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