THEORETICAL & CLINICAL PERSPECTIVES ON THE ETIOLOGY, DIAGNOSIS, & TREATMENT OF ANTISOCIAL DISORDERS IN ADOLESCENCE

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Dedication

This thesis is dedicated to my family, for the unconditional and ongoing support over the years. Furthermore, I dedicate this thesis to Keiko; you have been a source of inspiration and motivation. Forever and for always. Finally, I dedicate this thesis to the individuals, families, and communities affected by the topic of this research.

Abstract

This qualitative, constructivist grounded theory research study examined theoretical and clinical perspectives on the etiology, diagnosis and treatment of antisocial disorders in adolescence. The intent of the study was to develop a substantive theory on the cause, assessment and treatment of antisocial disorders, such as Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), based on multiple clinical perspectives. For this study, 6 professionals, from a range of theoretical orientations (psychiatry, psychology and social work), were interviewed in order to gain insight into how theoretical orientations influence the understanding of antisocial disorders and subsequent clinical approaches. For the dissemination of results, this thesis is structured in a manuscript-based format. The thesis will begin with an introduction to the research topic and methodology, and the subsequent chapters will be a collection of research papers, which will be integrated to produce a cohesive unit of qualitative research on antisocial disorders in adolescence. The research papers will, respectively, explore perspectives on 1) etiology; 2) diagnosis; and 3) treatment, and will adhere to a traditional research paper format. The thesis itself will also conclude with a discussion around clinical implications on the assessment and treatment process, study limitations, and areas of future research.

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Table of Contents

Chapter I

Introduction to Topic & Research

The intent of the following thesis is to examine how theoretical and clinical perspectives influence the understanding of the etiology, diagnosis and treatment of antisocial behaviour in adolescence. Antisocial behaviour can be defined as behaviour that lacks consideration for others and can be seen as damaging to society, either intentionally or through negligence (Berger, 2005). From a clinical perspective, pervasive antisocial behaviour can be categorized into approximately two psychiatric diagnoses; Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), which are seen as two classes of disruptive behaviour disorders (APA, 2000) or impulse-control and conduct disorders of childhood and adolescence (APA, 2013).

ODD is defined as a pervasive pattern of anger, disobedience, defiance, and hostile behaviour towards authority beyond what is consider "normal" childhood behaviour (APA, 2000). Whereas CD is characterized as a pervasive and persistent pattern of behaviour in which the basic rights of others, as well as major age-appropriate norms, are violated (APA, 2000). Dependent on the research source, antisocial behaviour in childhood and adolescence is estimated to affect anywhere from 3.9% (Rowe, Maughan, Costello, & Angold, 2005) to 20% of the population for ODD (Hinshaw & Lee, 2003), and 1% to 10% for CD (Hinshaw & Lee, 2003).

However, research has produced conflicting results as to the etiology of the so-called childhood and adolescent antisocial disorders. For instance, various studies have implicated a range of individual and psychosocial factors contributing to the onset of ODD and CD (Aguilar, Sroufe, Egeland, & Carlson, 2000), however, there

continues to be a lack of consensus around the interaction between individual and environmental factors leading to the symptoms of the disorders. Similarly, research has also demonstrated that there is likely controversy around the reliability and validity associated with the application of the diagnostic labels, ODD and CD (Hsieh & Kirk, 2003), which may be a result of the lack of etiological clarity. Further, it appears that current treatment approaches are centered on prevalent paradigms influencing the current understanding of cause, diagnosis and prognosis of antisocial behaviour in children and adolescents.

Due to the lack of etiological clarity of ODD/CD, children and adolescents are often at risk of inconsistent diagnosis and various subsequent treatment modalities, based on the theoretical orientation of the clinician. As a result, it becomes important to gain insight into the varying perspectives on etiology, diagnostic practices and treatment approaches related to ODD and CD, in order to examine current assessment and treatment practices. In doing so, this research will provide an understanding of the assessment and treatment of ODD and CD, based on varying theoretical and clinical perspectives.

Purpose

Due to lack of consensus around the underlying cause of ODD and CD, there exist numerous perspectives on etiology. For instance, individual factors such as genetics (Boden, Fergusson, & Horwood, 2010); personality traits (Fontaine, Rijsdijk, McCrory, & Viding, 2010); neuropsychological functioning (Aguilar et al., 2000); and comorbid psychopathology have been implicated in the etiology of ODD and CD (Aguilar et al, 2000; Latzman, Latzman, Lilienfeld, & Clark, 2013; Maughan, Rowe,

Messer, Goodman, & Meltzer, 2004). Conversely, it has also been suggested that psychosocial factors such as maternal psychopathology; maltreatment/abuse/violence exposure; home environment; socioeconomic status; and parenting practices may also be integral in the onset of antisocial behaviour (Boden, Fergusson, & Horwood, 2010; Schwab-Stone, Koposov, Vermeiren, & Ruchkin, 2012; Webster-Stratton, Reid, & Hammond, 2004). Further, developing a clear understanding of causation becomes complicated with the understanding that the onset of ODD and CD may also be influenced by an interaction between individual and environmental factors (Aguilar et al., 2000; Schwab-Stone et al., 2012). For instance, antisocial behaviour can be seen as a manifestation of individual psychopathology, as well as an adaptive, functional response to the environment (Hsieh & Kirk, 2003). It appears that the varying perspectives may be influenced by the theoretical orientation of the clinician/researcher, and subsequently influence the understanding of cause and the clinical practice of assessment and treatment (Hsieh & Kirk, 2003; Kirk & Hsieh, 2004).

A theoretical perspective can be understood as a set philosophical assumptions underlying and influencing an individual's worldview. Whereas, a clinical perspective can be defined as practitioner's professional opinion, which is often influenced by experience, training, and theoretical orientation. As a result, both theoretical and clinical perspectives are integral in the understanding of antisocial disorders. Therefore, the purpose of the following qualitative grounded theory research study is to understand how theoretical and clinical perspectives of mental

health clinicians influence the assessment and treatment of individuals given the diagnosis of Oppositional Defiant Disorder or Conduct Disorder.

Research questions. The following questions were utilized to guide the purpose of this qualitative grounded theory research study:

- *How do varying theoretical and clinical perspectives influence the understanding of the etiology, diagnosis and treatment of ODD & CD?*
- *How do different practitioners arrive at clinical decisions for individuals with ODD & CD?*

Significance. The study explored current clinical practices, in attempt to develop a theory and model of the assessment and treatment process, in order to provide knowledge and clarity around theoretical and clinical perspectives on adolescent antisocial behaviour. Additionally, this type of qualitative research is valuable in terms of gaining an understanding of antisocial behaviour in adolescence, and is useful in terms of developing more appropriate assessment procedures and treatment modalities. For instance, this research will provide an understanding of theoretical and clinical perspectives that are supported by current research. In doing so, this research will provide clinicians with an understanding of evidence-based approaches to etiology, diagnosis and treatment, as well as inform researchers of areas for future research.

Research Framework

Theoretical model. The research questions in this study were addressed using a qualitative, grounded theory research methodology. Grounded theory is defined as a systematic, qualitative procedure used to generate a theory that explains, at a conceptual level, a process related to a substantive topic (Creswell, 2008). The research framework was chosen for this study, as grounded theory is often employed when the current theory for a phenomenon is inadequate or unknown (Creswell, 2008). As was mentioned in the research problem, the etiology of ODD and CD has been debated and remains inconclusive, as a result the intent of the grounded theory approach is to further develop an understanding of etiology as the current theories are inconsistent.

Philosophical assumptions. The intent of the grounded theory research framework is to generate theory based on deductive and inductive reasoning, with the goal of formulating hypotheses based on conceptual ideas (Glaser & Strauss, 1967). Grounded theory is not a descriptive method, but rather illustrates concepts (Glaser & Strauss, 1967). In grounded theory, hypotheses are developed following the data collection stage, as it is assumed that formulating hypotheses in advance leads to preconceived results that are "ungrounded" from the data (Glaser & Strauss, 1967). As a result, according to grounded theory, conceptual ideas and hypotheses about ODD & CD will be developed following the data collection and data analysis stages of research.

Furthermore, the results from a grounded theory research design are reported based on probability statements, rather than in terms of statistical significance

(Glaser, 1992). The use of probability statements focus on the relationships between concepts. Traditional measures of validity are not considered within a grounded theory framework, but rather validity is assessed by fit, relevance, workability and modifiability (Glaser & Strauss, 1967; Glaser, 1992). A grounded theory approach is not considered to be either right or wrong, but instead possessing varying degrees of fit, relevance, workability and modifiability.

Definitions of Research Terms

ODD - a psychiatric diagnosis, defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM), as a persistent pattern of anger, disobedience, defiance, hostility and negativistic behaviour directed towards authority figures.

CD - a psychiatric diagnosis characterized as a repetitive and persistent pattern of behaviour, which violates that basic rights of others and major age-appropriate social norms.

Antisocial Behaviour - behaviour that causes damage to society and lacks consideration for others, either intentionally or due to negligence. Antisocial behaviour in adolescence is often characterized by marked defiant and/or aggressive behaviour. The DSM considers ODD & CD as two forms of antisocial behaviour.

Grounded Theory - a systematic, qualitative procedure used to generate a theory that explains, at a conceptual level, a process related to a substantive topic.

Research Methods

Research design. The grounded theory methodology is commonly used in social science research, and emphasizes detailed and rigorous data analysis methodologies (Strauss & Corbin, 1998). Constructivist grounded theory expands Glaser and Strauss' original approach to grounded theory, and aims at using data in order to construct abstract categories through an iterative analytical process (Charmaz, 2014). The intent of the constructivist grounded theory is to utilize data collection and analysis in order to develop an abstract conceptualization of the research topic (Charmaz, 2014). The research design incorporated multiple perspectives (e.g. clinician theoretical orientations) and detailed analysis offered through the constructivist design (e.g. initial, focused, axial and theoretical coding).

Design. The grounded theory methodology operates on the assumption that study participants maintain unique perspectives and interpretations, and as a result it becomes the role of the researcher to collect and integrate multiple perspectives into the development of a theory (Strauss & Corbin, 1994). Specifically, a major argument of grounded theory methodology is that the systematic gathering of multiple perspectives is integral to research inquiry and the analysis process (Strauss & Corbin, 1994). The research study aimed to examine the influence of theoretical perspectives on the understanding of antisocial behaviour in adolescence. As a result, the grounded theory research design is useful in terms of emphasizing the importance of gathering multiple perspectives and interpretations regarding the topic under study.

The constructivist design emphasizes adherence to iterative coding procedures (Charmaz, 2014). Coding procedures include the process of initial coding, focused

coding, theoretical coding, memo-writing, theoretical sampling/sorting, and reconstruction of theory (Charmaz, 2014). Aspects of the constructivist design, such as coding techniques, memo-writing, theoretical sampling and theoretical sorting will be discussed in further detail in the *Data Analysis* section.

As a result of the importance of multiple perspectives and analytical procedures in grounded theory, emphasis is placed on the effect of the sample group on theoretical sensitivity (Charmaz, 2014; Strauss & Corbin, 1994). As a result, it would be beneficial to select a diverse sample for the study, in order to gain a range of perspectives while avoiding bias towards one theoretical orientation or perspective. For more information on the sample group and sampling method, please refer to the *Population and Sample* section.

According to Goldkuhl and Cronholm (2010), an important strength of a grounded theory research design is the systematic process of data analysis. The data analysis phase in grounded theory is defined as an iterative process, which includes both categorization and validation (Goldkuhl & Cronholm, 2010). It has been suggested that the systematic procedures in grounded theory are effective in developing new ideas and relations among categories and themes. Another strong point of grounded theory is the concept of *theoretical sampling*, which involves the inclusion of additional information in order to enrich and enhance the developing theory (Goldkuhl & Cronholm, 2010). However, one of the most important strengths in the grounded theory framework is the development of theory from data gathered during the research process. The "grounding" of theory with data implies that there is

traceability between data, codes, categories, concepts and theory (Goldkuhl & Cronholm, 2010).

Grounded theory methodologies have been criticized as being too subjective. For instance, the information provided during an interview is always the result of an interviewee's interpretation. As a result, grounded theory has been criticized for including data without critical analysis of the information provided (Goldkuhl & Cronholm, 2010). It is also assumed that the data collection process can be too unfocused or unrefined. Golkuhl and Cronholm (2010) suggest there is a need to refine and develop an explicit research statement and questions in order to avoid a large and diverging amount of data. Also, the recognition that grounded theory emphasizes the inclusion of multiple perspectives (Strauss & Corbin, 1994), poses a risk for a large and diverse amount of data, which can lead to the research being unfocused (Golkuhl & Cronholm, 2010).

Another criticism is that differing views on grounded theory methodology exist. For example, grounded theorists have proposed avoiding review of literature until data collection has been completed, in order to avoid contaminating the evolving concepts and categories (Glaser & Strauss, 1967; Strauss & Corbin, 1998); however, Goldkuhl and Cronholm (2010) emphasize the importance of building knowledge on existing knowledge, in order for cumulative theory development. For the purpose of this study, a constructivist ground theory approach has been integrated. The intent of utilizing a constructivist approach is to treat the research as construction of knowledge occurring under specific conditions (Charmaz, 2014). The constructivist approach is seen as a flexible method and acknowledges that the resulting theory is an

interpretation of pre-existing knowledge (Charmaz, 2014). For this study, the theory will be generated based on data derived from existing literature, which will be contrasted with data from the interviews. Further, a process of theoretical sampling (Charmaz, 2014) will be integrated to further develop the constructed theory.

Ethical considerations. The Faculty of Education Human Subjects Research Committee (HSRC) at the University of Lethbridge reviewed and granted approval for this study on May 23, 2014. Herein, identifying and demographic information has been removed in order to protect the anonymity and confidentiality of the participants.

Population & sample. This research study included 6 interview participants, specifically:

- 2 Psychiatrists - The intent of selecting psychiatrists was to gain insight into antisocial behaviour from a medical/biological perspective. One of the psychiatrists has been trained and practicing exclusively in central and southern Alberta, whereas the second participant received training in the United Kingdom, with clinical practice occurring primarily in Alberta. Further, both participants possess medical training and specialization in psychiatry, along with extensive clinical experience in excess of 20 years. Also, one of the psychiatrists' clinical experience is exclusively in the area of child psychiatry, whereas the second participant has experience working with both child and adult populations. The psychiatrists also report adhering to a medical model with consideration for biopsychosocial factors. The psychiatrists in this study differ based on the clinical context in which they work. For example, one psychiatrist works primarily in a private practice setting with children and adolescents, ages 5 to

17, comprising approximately “80%” of the practice. Additionally, this psychiatrist is also employed at post-secondary health centre working with a small adult population conducting psychiatric consultation. The second psychiatrist works with individuals across the lifespan, although primarily with adolescent populations. This psychiatrist works part-time in private practice, as well as a part of a large provincial health organization to provide psychiatric consultation. These participants were chosen based on their training and clinical experience working with child and adolescent populations, and can therefore provide a medical/psychiatric perspective on antisocial behaviour.

- 2 Psychologists – The intent of including trained psychologists is to provide a psychological perspective on antisocial behaviour, for instance, cognitive, affective, learning, and contextual factors influencing the onset, assessment and treatment of antisocial behaviour. One psychologist possessed graduate-level training in psychology, along with clinical experience with forensic adult and adolescent populations. The psychologist reported adhering to a biopsychosocial orientation and possessed 17 years of clinical practice experience. The participant’s training and practice has been in central and southern Alberta, primarily working with clinical inpatient and outpatient populations in acute care psychiatric units, including forensic settings. Currently, the participant is employed in a supervisory role on an inpatient child and adolescent unit a part of a large provincial health organization, as well as part-time in private practice conducting assessment and counselling. This psychologist reported integrating a biopsychosocial model with consideration for bio-medical factors, psychological features and the role of the social environment. The

second participant possesses graduate-level training, with clinical and research experience in neuropsychology, and reported adhering to a process oriented approach to neuropsychology. Further, the participant received graduate level training and research experience in British Columbia and Ontario, prior to moving to Alberta to continue private practice, and has accrued in excess of 25 years of experience. This participant also reported experience teaching courses in human neuropsychology at the post-secondary level. Currently, this psychologist is employed in private practice, conducting neuropsychological assessments across the lifespan. It is important to note that the participant does not report possessing experience in a forensic setting, nor consider themselves a pediatric neuropsychologist. The intent of including the two psychologists was to provide forensic and neuropsychological perspectives on antisocial behaviour.

- 1 Social Worker/Psychologist – The participant possesses graduate-level training in both social work and counselling psychology. This participant provided a generalist perspective, while incorporating systemic, behavioural and eclectic approaches. The participant has extensive experience working with child and adolescent populations, across as variety of settings such as residential and school environments. The participant reported adhering to a social-based perspective, which included experience in individual, family and group orientations. Furthermore, the participant emphasized the importance of integrating an eclectic approach, in order to match theoretical models to individual client needs. For example, the participant reported integrating a range of theoretical approaches, such as behavioural interventions, cognitive-behavioural therapy, and existential modalities. However,

this participant also emphasized the role of structural/systemic factors, such as sociopolitical environment and poverty, on emotional and behavioural functioning. The participant's training and clinical experience has primarily occurred in central and southern Alberta, and is currently employed at a post-secondary institution instructing a range of addictions and counselling courses. The intent of selecting this participant was to gain insight into antisocial behaviour, from a psychological and social work orientation, as well as due to the participant's experience in working with behavioural disorders.

- 1 Social Worker/Marriage and Family Therapist – The participant possesses graduate-level training in social work, as well as professional registration with the American Association for Marriage and Family Therapy. The participant adheres to a systemic and biopsychosocial approach, with a strong emphasis on family work. The participant possessed experience working primarily in a clinical setting with mental health populations, and has accrued in excess of 25 years of practice experience. A majority of the participant's clinical experience has occurred in southern Alberta. Following years of experience conducting mental health therapy for child and adolescent populations, the participant is currently employed at a managerial level, a part of a large provincial health organization, overseeing addiction and mental health service delivery for children, adolescents and their families. The intent of selecting this participant was to incorporate a social work and family-based theoretical orientation along with extensive clinical experience working with mental illness.

Sampling method. The sampling method for this study was selected based on concepts from *purposive and convenience sampling.* Maximum variation sampling is

a strategy for purposeful sampling, which aims at describing a central phenomenon through a diverse and variable cross-section of participants (Patton, 1990). Maximum variation sampling is also based on the premise that heterogeneity in a sample can be useful, as common patterns that emerge from great variation are of particular interest and value in terms of describing a central topic (Patton, 1990). For example, intentionally selecting individuals with training in psychiatry, psychology and social work offers a broad cross-section in terms of theoretical orientation, such as; bio-medical, psychological and systemic perspectives. Patton (1990) suggested that small populations can be valuable if the construction of the sample offers diverse characteristics. For instance, each clinician/professional may ascribe to differing theoretical orientations, therefore commonalities that may arise in terms of etiology, diagnosis and treatment can become valuable core/central themes around antisocial behaviour during the data analysis stage of research.

Maximum variation sampling is a purposive sampling method, which intends on drawing data from a heterogeneous population with the assumption that commonalities among the group demarcate core/central areas of interest (Patton, 1990). Also, purposive sampling methods, such as maximum variation, are useful in terms of developing generalizations that are theoretical, analytic, or logical in nature (Patton, 1990). For instance, drawing from a diverse cross-section of professionals is effective in terms of developing generalizations that are consistent across each individual perspective. Patton (1990) identified that maximum variation sampling can still be applied to small sample sizes in order to construct a diverse research population.

A strong criticism to purposive sampling methods is the tendency to be highly prone to researcher bias (Patton, 1990). As a result, it could be interpreted that purposive sampling leads to increased subjectivity, based on the non-probability nature of the method. Although the sample method for the proposed study would utilize elements of maximum variation sampling; the selection of psychiatrists, psychologists and social workers, although diverse in their theoretical orientations, may be rather homogenous in terms of clinical practice. For instance, clinicians will be selected based on familiarity with ODD/CD, and as a result would likely be involved in similar processes of assessment and treatment. As a result, it could be argued that the sample group does not represent an entirely maximum variation of perspectives on antisocial behaviour in adolescence.

Data collection. According to grounded theory, multiple sources of information can be utilized as data. For instance, research literature, interviews, behavioural observations, questionnaires, memo/note-taking, reports, focus groups, and other sources of data, can all be used as means of collecting data (Glaser & Strauss, 1967). Additionally, grounded theory can collect quantitative or qualitative data. However, for the purpose of this research study, data was collected through literature review and semi-structured interviews.

Data collection began with the completion of a literature review, which will aim to develop an understanding of ODD and CD, based on a thematic analysis of existing research literature. The literature review was effective in terms of developing an understanding of the etiology, diagnosis and treatment of ODD and CD. Furthermore, the literature review served to identify gaps in understanding and

problems that exist based on current research, and therefore contributed to the research problem and purpose of this study.

As was discussed in the *Population & Sample* section, it was identified that 6 semi-structured interviews were conducted for this study. Interviews with the participants were conducted between May and September 2014. Each interview was approximately forty-five minutes to an hour in length, and was audio-recorded for later transcription. The interviews were conducted in a semi-structured manner; specifically, questions were focused on theoretical orientation, ODD/CD, etiology, diagnostic processes, and treatment modalities. However, interviews also allowed for clarification and further explanation through the use of open-ended questioning. According to constructivist grounded theory, data analysis occurs during the data collection stages (Charmaz, 2014), as a result questions were added to subsequent interviews in order to clarify arising concepts during the initial coding of completed interviews. As a researcher, I also documented with notes during the interview process, reviewed audio-recordings, typed transcripts and completed the coding stages of data analysis.

Data analysis. The grounded theory framework incorporates intensive data analysis as a part of generating a theory of a central phenomenon (Strauss & Corbin, 1998). As a result, data collected from existing research literature and interview transcripts was subject to extensive systematic analysis. For instance, a constructivist design utilizes the data analysis stages of *initial, focused and theoretical coding* in order to generate categories and reconstruction of theory relating to a substantive topic (Charmaz, 2014).

In initial coding, a researcher begins the process of exploring theoretical categories discerned from the data (Charmaz, 2014). Initial coding practices can include *word-by-word, line-by-line, or incident-with-incident* coding (Charmaz, 2014). Line-by-line coding involves deriving concepts based on line-by-line analysis of the transcripts, whereas incident-with-incident coding involves the comparison of properties between transcriptions (Charmaz, 2014). For the purposes of the analysis in this study, line-by-line and incident-with-incident practices were used. For instance, each transcription was analysed line-by-line to derive initial codes, which were then compared and contrasted with emerging concepts from the additional transcriptions. This process was utilized in order to derive commonalities among the varying theoretical perspectives within the sample. For example, it may be that the interviews elicit a wide range of perspectives on the etiology of ODD/CD, and as a result, the initial coding analysis aimed to identify concepts emerging from various perspectives.

Focused coding is the process of identifying the most significant and/or frequent codes to refine large amounts of data obtained in the transcriptions and initial coding process (Charmaz, 2014). Focused coding involves the process of analyzing the initial codes, as a means to categorize data in a succinct manner (Charmaz, 2014). During the focused coding process, larger segments of data are analyzed into concise categories in order to advance the theoretical direction of the research (Charmaz, 2014). According to early grounded theory approaches, axial coding is often included in order to develop a visual representation, or *coding paradigm,* which illustrates the interrelationship between categories (Strauss &

Corbin, 1998). However, axial coding can been seen as an optional phase in the coding process (Charmaz, 2014). For the purpose of this research study, axial coding has not been included in the dissemination of results, although was a useful procedure during the data analysis stage in order to develop a visual understanding of the relationship between concepts derived during the focused coding stages.

The process of theoretical coding can be described as a sophisticated procedure which involves the introduction of additional codes in order to identify how categories relate to one another (Charmaz, 2014). Theoretical coding serves to make the data analysis more coherent and comprehensible (Charmaz, 2014). For instance, theoretical coding was utilized to integrate various codes and categories, for each the etiology, diagnosis and treatment sections, in order to conceptualize the data into an *analytical story* by illustrating the relationship between codes and categories (Charmaz, 2014).

As was mentioned, qualitative research does not measure validity and reliability as it is assessed in traditional quantitative research, but rather conceptualizes validity and reliability in qualitative terms. For instance, Glaser and Strauss (1967) described measures of fit, relevance, workability and modifiability to redefine a theory's reliability and validity. Patton (1990) also discussed the concept of triangulation, which is defined as the method of cross-referencing various methods and sources of data, both quantitative and qualitative. Further, Charmaz (2014) discussed the process of theoretical sampling and saturation in order to address issue round reliability and validity, but rather uses terms such as *generalizability* and *adequacy*. Theoretical sampling and saturation relates to the strategic refinement of

theoretical categories, which involves the inclusion of new data to elaborate the theory development (Charmaz, 2014). For this research study, developed categories were *saturated* with the inclusion of existing qualitative and quantitative literature as a means to further develop the theory, and increase generalizability and adequacy.

Discussion

As was mentioned, this qualitative, constructivist grounded theory research study aimed to understand how theoretical and clinical perspectives influence the etiology, diagnosis and treatment of antisocial behaviour in adolescence, specifically, ODD and CD. The study attempted to explore current clinical practices, and develop a theory of the assessment and treatment process, in attempt to provide knowledge and clarity around adolescent antisocial behaviour.

The need for such research is evidenced by the lack of clarity around specific causal factors contributing to the behaviours associated with ODD and CD, and as a result it would be beneficial for research to help clarify the relationships between biological, psychological and social factors related to etiology. Through a clearer understanding of etiology, clinicians can begin to develop improved assessment procedures and treatment plans better suited to the individual and psychosocial factors associated with ODD/CD.

As a result of the grounded theory methodology, no formal hypotheses have been developed pertaining to the outcome of the study. Instead, the focus of the research was to develop a conceptual understanding of antisocial behaviour, through the analysis of multiple perspectives. Qualitative grounded theory research possesses strength in terms of grounding a theory to data through the data collection process, as

well as the systematic data analysis and interpretation methodologies. However, this research study potentially has limitations in terms of research design and sampling method. For instance, grounded theory has been criticized as being too subjective and lacking focused data collection. Additionally, there exist potential limitations to the sampling method in this research study. For instance, the sample group may be subject to researcher bias, and may not represent a maximum variation of clinicians working with individuals with ODD/CD.

The phenomena of antisocial behaviour in adolescence could benefit from future qualitative research, for instance, limited research exists which illustrates the phenomenology of ODD/CD. As a result, further qualitative research could focus on the lived experience of individuals with ODD/CD, in order to gain valuable insight into the cognitive, affective, behavioural and interpersonal experiences of antisocial behaviour in adolescence. Further, through conducting ongoing qualitative grounded theory research in the area of antisocial behaviour, valuable insights and hypotheses can be derived in order to spur future quantitative research. Additionally, this vein of qualitative research is valuable in terms of gaining an understanding of antisocial behaviour in adolescence, and is useful in terms of developing more appropriate assessment procedures and treatment modalities.

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Chapter II

Theoretical & Clinical Perspectives on the Etiology of Antisocial Disorders in Adolescence

Abstract

A qualitative, constructivist grounded theory research approach to examine theoretical and clinical perspectives on the etiology of antisocial disorders in adolescence. The intent of the study was to develop a substantive theory based on theoretical and clinical perspectives on the cause of antisocial disorders, such as Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), as there exists a lack of consensus around the cause of such disorders. Current research identifies a range of dispositional and environmental factors that contribute to the onset of antisocial behaviour. As a result, this study aimed to identify various clinical perspectives that influence the understanding of the cause ODD and CD. For this study, 6 professionals, from a range of theoretical orientations, were interviewed in order to gain insight into how theoretical orientations influence the understanding of antisocial disorders and subsequent clinical approaches. The findings from the research interviews suggest a range of clinical perspectives on etiology, such as a variety of predisposing, precipitating, perpetuating and differentiating factors. Interestingly, the results illustrate relative consistency in the understanding of etiology among practitioners from varying theoretical orientations. This type of qualitative research will serve to assist clinicians and researchers in further understanding the onset of antisocial behaviour through a discussion of clinical implications, areas for further research, and study limitations.

Review of Literature

There exists a lack of consensus around the underlying cause of ODD and CD. For instance, individual factors such as genetics, temperament/personality traits, neuropsychological functioning, and comorbid psychopathology have been implicated in the etiology of ODD and CD (Boden, Fergusson, & Horwood, 2010; Bornovalova, Cummings, Hunt, Blazei, Malone, & Iacono, 2014; Latzman, Latzman, Lilienfeld, & Clark, 2013; Moffitt, Lynam, & Silva, 1994). Conversely, research has also suggested that psychosocial factors such as maternal psychopathology, maltreatment/abuse/violence exposure, home environment, socioeconomic status, and parenting practices may also be integral in the onset of antisocial behaviour (Boden, Fergusson, & Horwood, 2010; Schwab-Stone, Koposov, Vermeiren, & Ruchkin, 2012; Webster-Stratton, Reid, & Hammond, 2004). Further, developing a clear understanding of causation becomes complicated with the understanding that the onset of ODD and CD may also be influenced by an interaction between individual and environmental factors. For instance, antisocial behaviour can be seen as a manifestation of individual psychopathology, as well as an adaptive/functional response to the environment (Hsieh & Kirk, 2003).

Dispositional factors. There has been research that indicates that dispositional factors, such as personality and genetic factors, play a significant role in the onset of symptoms characteristic of ODD and CD. Frick (2012) conducted a research review and identified three developmental pathways to aggressive and antisocial behaviour. The three pathways include; i) adolescent-onset which seems to be an exaggeration of normal adolescent rebellion, ii) childhood-onset with the presence of callous-unemotional traits, and iii) childhood-onset with significant

problems with behavioural and emotional regulation (Frick, 2012). Individuals with adolescent-onset antisocial behaviour are said to exhibit fewer neuropsychological, cognitive and temperamental/personality risk factors in comparison to childhood-onset pathways (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Frick, 2012). As a result, it can be interpreted that certain pathways of antisocial behaviour, such as childhood-onset, are under greater influence by dispositional factors.

Fontaine, Rijsdijk, McCrory, and Viding (2010) conducted a longitudinal research study, using twin-set data in order to examine the different developmental trajectories of personality, specifically callous-unemotional traits, which are said to contribute to childhood and adolescent antisocial behaviour. Fontaine et al. (2010) considered specific traits, such as poverty of guilt and lack of empathy, and found four developmental trajectories; stable-high, increasing, decreasing and stable-low levels of callous-unemotional traits. The results indicate that callous-unemotional traits that are relatively stable across development are correlated with consistent conduct problems from adolescence into adulthood (Fontaine et al., 2010). Further, Fontaine et al. (2010) concluded that the stability between personality traits and conduct problems across development can be attributed to genetic factors in combination with environmental influence.

To further support the role of personality dimensions in the onset of ODD and CD, it was found that personality traits (e.g. lack of remorse/guilt, lack of empathy, shallow affect) were uniquely predictive of future conduct problems (Latzman et al., 2013). Latzman et al. (2013) utilized self and parent reports on trait/temperament dimensions, and concluded that personality traits, specifically callous-unemotional

traits, may be useful in conceptualizing anger outbursts. In addition to callous and unemotional traits influencing the onset of conduct problems in youth (Fontaine, et al., 2010; Latzman, et al., 2013), a mixed methods study conducted by Eresund (2007) also identified specific personality characteristics which were commonly present among individuals diagnosed with ODD and CD. For instance, individuals with disruptive behaviour disorders were described as being significantly self-assertive, aggressive, narcissistic, as well as internalizing (Eresund, 2007).

In addition to genetic and personality trait perspectives, research has also implicated comorbid psychopathology in the onset of antisocial behaviour and associated disorders. In a research study conducted by Maughan, Rowe, Messer, Goodman, and Meltzer (2004), which investigated the developmental epidemiology of CD and ODD, it was determined that such diagnoses share substantial comorbidity with other non-antisocial disorders. Through an epidemiological approach, it was identified that there exists a significant comorbidity between ODD/CD and diagnoses such as ADHD, anxiety and depressive disorders (Maughan et al., 2004).

Various research studies have been conducted, which have suggested that comorbid diagnoses, such as depression, anxiety, and ADHD, may also contribute to the onset and presentation of ODD/CD symptoms (Ezpleta, Domenech, & Angold, 2006; Kahn, Frick, Youngstrom, Youngstrom, Feeny, & Findling, 2013; Kumpulainen, Räsänen, & Puura, 2001; Maughan et al., 2004; Rowe, Maughan, Costello, & Angold, 2005). As a result of the seemingly strong associations between CD/ODD and other psychiatric disorders, it appears that there are significant diagnostic implications.

Maughan et al. (2004) explored the relationship between rates of comorbid ODD and ADHD. The study concluded that as a result of the comorbidity of ODD and ADHD certain neurocognitive impairments may be indexed between the two disorders (Maughan et al., 2004). However, a longitudinal study conducted by Aguilar, Sroufe, Egeland and Carlson (2000) assessed neuropsychological functioning (e.g. perception, memory, verbal expression, auditory comprehension, intelligence and achievement) among individuals with early-onset and adolescence-onset antisocial behaviour, and found that the only significant neuropsychological impairment was decreased verbal functioning into late-adolescence among individuals with early-onset conduct problems. Further, there does not appear to be a significant neuropsychological profile unique to the different forms of childhood and adolescent antisocial behaviour, and that existing differences may result from an interaction with environmental influences (Aguilar et al., 2000).

As was mentioned, Fontaine et al. (2010) explored the developmental trajectories of personality traits contributing to conduct problems, which were concluded to be largely influenced by genetic factors, according to results from twin-set data. Also, researchers concluded that sex-differences do not play a role in the etiology of callous/unemotional personality traits, and that individual genetic differences are currently not known (Fontaine et al., 2010). Similarly, an epidemiological study conducted by Maughan et al. (2004) revealed that significant sex-differences are difficult to ascertain, however, CD is significantly more common among males and that a greater comorbidity of ADHD and CD exists in females.

Genetic influences, personality traits/temperament, and comorbid psychopathology have been described as individual factors contributing to the etiology of ODD/CD. However, many research studies have been conducted which support psychosocial/environmental factors as necessary and sufficient influences contributing to the onset of behaviours suggestive of ODD/CD.

Environmental factors. A criticism to research examining individual factors contributing to the etiology of antisocial behaviour could be that research designs often exclude important psychosocial variables. For example, Fontaine et al. (2010) studied the development of personality traits contributing to conduct problems, and concluded that developmental trajectories are influenced by genetic factors, and further stated that environmental influences are not known. However, the study by Fontaine et al. (2010) did not implement measures to assess environmental variables, such as parental psychopathology, abuse, neglect, and so on. As a result, it becomes important to determine the role of social/environmental factors that may contribute to the etiology of ODD/CD.

A study conducted by Aguilar et al. (2000) was aimed at distinguishing antisocial behaviour types in childhood and adolescence by measuring three variables; temperament, neuropsychological functioning and psychosocial factors. Although individual differences existed in terms of temperament and neuropsychological functioning, the research groups were most significantly distinguished by indices of social-emotional history (Aguilar et al., 2000). The study concluded that distinguishing factors in early years of development were primarily related to psychosocial experience, such as maternal depression, maternal stress,

feeding, home environment and parental involvement, rather than early temperament and neuropsychological factors (Aguilar et al., 2000).

Similarly, a study using data from a New Zealand birth cohort was conducted to examine social, familial and individual risk factors that precede ODD/CD (Boden et al., 2010). The intent of the study was to determine how predictive symptoms of ODD/CD were, using environmental and individual risk factors, specifically, variables such as maternal smoking, socioeconomic adversity, parental maladaptive behaviour, exposure to abuse, gender, cognitive ability and deviant peer groups (Boden et al., 2010). It was found that the strongest correlations exist between socioeconomic disadvantage and deviant peer affiliation with the symptoms of ODD/CD (Boden et al., 2010). Boden et al. (2010) concluded that environmental factors were the strongest predictors of ODD/CD symptoms, and more specifically, individuals with ODD/CD are more likely to have been raised in an environment with multiple social and economic adversities, as well as greater exposure to child abuse and family violence.

It is also important to note that in addition to the significant correlation between child abuse exposure and antisocial behaviour, there exist additional deleterious side effects associated with childhood abuse and household dysfunction. Felitti et al. (1998) conducted a study examining the relationship between exposure to emotional, physical and sexual abuse in childhood to risk behaviour and disease in adulthood. Results indicated that individuals exposed to childhood abuse were at significantly increased risk for such health concerns as alcoholism, drug abuse, depression, suicide, smoking, sexual promiscuity and sexually transmitted disease,

physical inactivity and severe obesity (Felitti et al., 1998). Felitti et al. (1998) concluded that adverse childhood experiences were strongly correlated with multiple health risk factors in adulthood. Given the correlation between antisocial behaviour and adverse childhood experiences, as well as the association between childhood abuse and household dysfunction and health risks, it is likely that future research would benefit from examining the relationship between ODD and CD and later health risk behaviour and disease.

Environmental risk factors such as maternal smoking, socioeconomic status, parental behaviour, and exposure to violence have been implicated in the etiology of ODD and CD. Although single, specific etiological factors have not been established, research has begun to incorporate an interactionist or biopsychosocial perspective, which considers the interaction between specific individual predispositions with environmental risk factors in the elicitation of ODD and CD symptoms.

Biopsychosocial perspectives. As the name suggests, a biopsychosocial perspective considers biological, psychological and social factors in formulating constructs, such as ODD and CD. Individual factors, such as genetics, personality, neuropsychological functioning and psychopathology, as well as psychosocial or environmental factors, have been discussed. However, a biopsychosocial perspective would suggest that symptoms characteristic of ODD and CD are a manifestation of the interaction between biological factors (e.g. genetics), psychological (e.g. neuropsychological functioning, personality, etc.) and social factors (e.g. family environment, socioeconomic status, etc.). It appears that research has acknowledged the influence of biological predisposition on psychological and psychosocial

functioning, as well as the effect of environmental factors on a biological and psychological level.

In a longitudinal study, Aguilar et al. (2000) attributed a significantly influential role to psychosocial factors in the onset of childhood and adolescent antisocial behaviour; however, it was also identified that neuropsychological deficits exist, specifically, decreased verbal expression abilities. It was also identified that neuropsychological deficits began to appear later into adolescence following the onset of conduct problems, which lead Aguilar et al. (2000) to infer that neuropsychological deficits are progressive and may be consequent to adverse environmental experience. It was also identified in the study that individuals with lower levels of abuse, neglect and maltreatment were assessed to be of higher neuropsychological functioning (Aguilar et al. 2000). The conclusion supports the biopsychosocial perspective that individual factors and environmental experience interact with one another.

A study conducted by Schwab-Stone et al. (2012) also confirmed the conclusion made by Aguilar et al. (2010) that adverse environmental experience can lead to increased levels psychopathology. Schwab-Stone et al. (2012) conducted a cross-cultural study intended to investigate the difference between community violence exposure and psychopathology among three diverse cultures. Results indicated that violence exposure and psychopathology were correlated, and that levels of psychopathology increase with severity of exposure (Schwab-Stone et al., 2012). The findings also indicate that the relationship between violence exposure and individual psychopathology is universal and not culturally bound. To further exemplify the interrelationship between individual and environment, it was also

identified that individuals prone to engaging in antisocial behaviour, were also at greater risk of violence exposure and, in turn, increased risk for victimization (Schwab-Stone et al., 2012). Kahn et al. (2013) explored the development of personality trajectories, and also concluded in their findings that high rates of trauma may also lead to the development of callous/unemotional traits contributing to conduct problems.

Research studies have also indicated that adverse environmental experiences such as violence exposure, victimization, and maltreatment, is also connected to psychopathology and altered brain development (Whittle et al., 2013). Using MRI neuroimaging, self-report measures and diagnostic interviewing, Whittle et al. (2013) determined that maltreatment was found to be associated with altered brain development during adolescence. Specifically, it was identified that structural changes were evidenced in the hippocampus and amygdala in individuals exposed to maltreatment. The research study concluded that there is a relationship with maltreatment and structural changes in brain development, which may be correlated with structural changes found in Axis I psychopathology (Whittle et al., 2013). Similar to the Aguilar et al. (2010) study, which identified delayed neuropsychological deficits into late-adolescence, Whittle et al. (2013) found that the structural changes in the brain, and continuing effects on psychopathology, also occurred into adolescence. Further supporting that personality, neuropsychological and psychiatric concerns may be consequent to an interaction between individual factors and adverse environmental experiences.

As has been mentioned, the etiology of antisocial behaviour disorders, such as ODD and CD remain rather inclusive, although research has implicated a range of individual factors, social factors, and a biopsychosocial perspective on the interaction between person and environment. However, it appears that without a clear and concise understanding of causation, there are implications around diagnosing behaviour often associated with ODD and CD in a clinical setting. As a result, it would seem beneficial to conduct the following study in attempt to generate a substantive theory on the etiology of antisocial disorders utilizing theoretical and clinical perspectives.

Methods

For the purposes of brevity, please refer to the *Research Methods* section found within *Chapter I: Introduction to Topic & Research* in order to gather details relating to the research methodology, such as design, population/sample, data collection and analysis, pertaining to this qualitative grounded theory study.

Findings & Discussion

In the analysis, a substantive theory was generated in attempt to provide insight into clinical perspectives on the etiology of antisocial disorders in adolescence. Five categories were derived from the interviews, specifically, antisocial disorders were viewed by participants as: 1) predisposed by biological and developmental correlates; 2) precipitated by attachment, parenting and trauma; 3) perpetuated by learning and the environment; 4) differentiated by affect, affective impulsivity and behavioural impulsivity; and 5) misunderstood due to discrepancies between research and clinical practice. The five core categories were developed based

on commonalities present across theoretical orientations. Differing perspectives have also been included as part of the discussion of the categories. It is likely that the similarities across disciplines may be related to clinical practices that each participant adheres to, which may demarcate a limitation to the study. Once the categories were developed, a process of theoretical sampling was integrated, in order to further support and maintain the core categories. An explanation of the core-categories is presented in the following:

Predisposed by biological & developmental correlates. As was outlined in the *Review of Literature* section, various predisposing factors are said to influence the onset of antisocial behaviour in adolescence. For instance, current research has emphasized the role of dispositional factors such as genetics, cognitive/intellectual ability, development, and temperament in the etiology of conduct disorders (Frick, 1998). Further, three developmental pathways have been identified in the onset of antisocial behaviour, specifically; adolescent-onset; childhood-onset with problems with emotional regulation; and childhood-onset with presence of callous-unemotional traits (Frick, 2012). The various developmental pathways are said to possess varying biological and dispositional factors. During this study, all of the participants also identified the role of certain biological and developmental factors that appear to correlate with ODD and CD, however, it seems that the specific underlying biological mechanisms remain unclear. Although it appears that many of the clinicians a part of this study consider antisocial behaviour to be predisposed by certain biological and developmental influences, such as genetic factors, cognitive functioning, age of onset and temperament.

During this study, it would seem that dispositional factors, such as cognitive functioning, are understood in terms of acting as either risk or protective factors. For instance, one psychiatrist described the concept of "positive protective factors" in reference to the protective nature of an individual possessing such predisposing traits as higher intellectual functioning. A second psychiatrist went on to describe factors such as cognitive/intellectual functioning, temperament and impulsivity as influencing "how the behaviour occurs", which suggests that an individual's cognitive abilities may influence how antisocial behaviour is manifested, but is not to be considered causal in terms of the onset of ODD and CD. Further, another participant, a psychologist from a neuropsychological background, suggested that there may exist a relationship between conduct disorders and learning disabilities. Specifically, the participant cited that "difficulties with academic kinds of issues, often sort of verbal kinds of learning disabilities" are frequently present. Neuropsychological research has indicated that learning disabilities are common among conduct disorders, however, behaviour disorders remain rather heterogeneous and no specific neuropsychological profile exists (Närhi, Lehto-Salo, Ahonen, & Marttunen, 2010). As a result, it can be interpreted that cognitive functioning can be seen as related, although not causal in the onset of antisocial disorders.

In addition to identifying the potential risk and protective factors associated with cognitive functioning, another theme was identified in terms of antisocial behaviour being distinguished by temperament and age of onset. Specifically, many of the participants interpret the development of antisocial behaviour as differentiated into subtypes as determined by temperamental factors and the age of onset. For

instance, one psychiatrist described the presence of two subtypes: “unsocialized” and “socialized” behaviour, whereas another psychologist identified “type A” and “type B” antisocial behaviour. In both descriptions, the dichotomy represents one developmental trajectory which is seen as pervasive and beginning in childhood, and a second that is seen as developing later on and in response to learning and environmental factors. For example, another psychologist described early-onset antisocial behaviour as possibly related to “brain dysfunction” or “genetics”, whereas late-onset may be attributable to “a reaction to complex psychological trauma”. Research has suggested that childhood-onset conduct problems are considered to be progressive and increasing in severity over the course of development (Frick, 1998). Further, research has identified a significant risk allele for externalizing behaviour in early childhood (Young, et al., 2002). As a result, it is interpreted that early-onset behaviour problems are more strongly associated with biological and genetic factors (Beauchaine, Hinshaw, & Pang, 2010), whereas late-onset antisocial behaviour is seen as potentiated due to environmental factors, which will be discussed later on.

In addition to the age of onset being seen as influence by biological and genetic factors, participants in this study also identified the early presence of temperament traits that distinguish subtypes of antisocial disorders. Several participants identified that in certain populations of individuals with ODD and CD, differences in temperament could be identified early on. For example, one psychiatrist described a subgroup of individuals as “difficult”, “reactive” and “hyperactive” from an early stage of development. As in age of onset, it was perceived that temperament is also correlated with severity and prognosis, and can

therefore provide valuable information in terms of understanding the different developmental trajectories of antisocial behaviour. However, it was also identified that although temperament may be valuable in terms of understanding cause, the specific role of temperament continues to remain unclear. As one participant from a social work and psychology background explained; "I don't know about personality traits, because there is a part of that that develops as a result of an interaction between somebody's temperament, whatever that is, and the environment they are in". Additionally, it is often assumed that temperament results exclusively from genetics and disposition, however, many of the participants see temperament as developed based on an interaction between genetic and environmental factors.

Although the cognitive profile and role of temperament in ODD and CD is seen as variable, there appears to be a relationship between the two factors. For instance, a study conducted by McKenzie and Lee (2014) identified that there is a negative correlation between IQ and the expression of callous-unemotional traits. The connection between IQ, temperament and antisocial behaviour is consistent with what was described by clinicians in this study. For instance, one psychiatrist described that "those (IQ and temperament) more or less influence how the behaviours occur". Further, another participant, a psychologist from a forensic background, identified that temperament and IQ can influence the responsiveness to treatment, stating that IQ and temperament can "reduce the outcomes". However, the specific mechanisms between dispositional factors, such as IQ and temperament, and antisocial behaviour are not readily understood, as a result cognitive functioning and

difficult temperament can be seen as related, although not predictive of antisocial behaviour from a clinical standpoint.

Another consistent theme that was identified in this study is that clinicians emphasize an interactionist perspective, in that dispositional factors are seen in a reciprocal relationship with environmental factors. From a clinical perspective, biological and developmental factors are seen as likely influencing the expression of antisocial behaviour, however, biological and developmental factors do not exist in isolation from the environment. A majority of participants seemed to emphasize that the cause of ODD and CD is multifactorial, and not limited solely to genetics or the environment. In particular, four of the six participants, from each theoretical orientation, reported integrating a "biopsychosocial" theoretical approach to understanding causation; suggesting a multifactorial understanding of cause. Current research supports the multifactorial perspective on etiology. For instance, Bornovalova et al. (2014) found that maladaptive parenting and marital discord elicit strong environmental effects, however, the presence of parent psychopathology also indicates a passive gene-environment relationship and increases vulnerability to externalizing behaviour. As a result, vulnerability towards antisocial behaviour can be seen as influenced by a gene-environment interaction, from both a clinical and theoretical perspective.

In addition to factors which are understood to act as a predisposition to conduct problems, attachment injury and trauma were also identified as playing a significant role, and may account for the precipitation of antisocial behaviour which is developed later on into adolescence.

Precipitated by attachment, parenting, & trauma. Existing literature on ODD and CD often emphasizes biological, environmental or interactionist perspectives. However, during the conducting of this study, themes began to emerge which implicated the potential role of disrupted attachment and exposure to trauma. One participant, with a background in social work and psychology, expressed that "the role of attachment and attachment injury is often overlooked in the diagnosis of ODD and CD". Additionally, other clinicians from a range of orientations reported that ODD and CD can begin to be understood based on disturbances to early attachment relationships. Further, it appears that the development of behaviours associated with ODD and CD can be understood as a "functional, survival-based, coping mechanism resulting from an attachment disorder", as described by the participant from a social work and psychology background. Disorganized attachment patterns are characterized by avoidant and resistant behaviour, which is said to be influenced by inconsistent parenting practices that yield feelings of both comfort and fear in the child (Main & Solomon, 1986). Further, Lecompte and Moss (2014) found that children exhibiting disorganized attachment patterns in infancy, were correlated with high externalizing behaviours into adolescence.

During the current study, one psychologist, from a neuropsychological background, suggested that on a theoretical level, attachment experiences "modify brain development" and can also influence an individual's "stress response". This position is supported by current research that has suggested attachment directly influences neural development, genetics and temperament (Vaughan, Bost, & van IJzendoorn, 2008). The recognition of the impact of attachment on neural

development, genetics, and temperament further implicates the relationship between attachment and the dispositional factors often associated with antisocial behaviour in adolescence. However, it would seem that it would be difficult to ascertain whether biological predisposition or attachment precede one or the other in the onset of antisocial behaviour, and as a result the relationship between attachment and dispositional factors appears to be an area for future research.

Further, a participant from a social work and family therapy orientation defined attachment as a reciprocal interaction, whereby disruption "affects a child's behaviour, as well as the caregiver's behaviour towards the child". The recognition that attachment not only affects one individual, but rather acts as an interpersonal phenomenon, demonstrates the impact on both child and caregiver. Many of the participants, from across theoretical orientations, identified the significance of factors effecting parenting practices. For example, family structure (e.g. single-parent, blended families, etc.), parenting style (e.g. authoritarian, authoritative, and permissive parenting) and family environment (e.g. disharmony, parent psychopathology, addictions, poverty, neglect) were all implicated as factors influencing parenting practice, and subsequently can be seen as correlated with attachment and antisocial behaviour.

Several participants in this current study identified the role of trauma in the onset of antisocial behaviour. For instance, antisocial behaviour was described as an environmental reaction or coping strategy in response to such experiences as "violence exposure", "abuse", and "physical and psychological trauma" according to a psychologist with a background in forensics. Research has been conducted which

has emphasized the significance of psychosocial factors associated with attachment, parenting and the family environment (Aguilar et al, 2000; Boden et al, 2010). As a result, it would seem reasonable to assume that parenting practices preceding the onset of ODD and CD would be sub-optimal. Similarly, research has indicated that ODD and CD have been significantly correlated with exposure to childhood maltreatment (Afifi, McMillan, Asmundson, Pietrzak, & Sareen, 2011; Whittle et al, 2013). Similar to the effect of attachment, childhood maltreatment and traumatic exposure has also been found to have profound effect on a biological/structural level (Whittle et al, 2013). In addition to the correlation between ODD/CD and early adverse experience, research has indicated that child abuse and home dysfunction can have deleterious effects on health into adulthood (Felitti, et al., 1998).

It appears that the role of trauma can be understood as strongly correlated, rather than causal. For instance, one psychologist, with forensic background, differentiated subgroups of antisocial behaviour into early-onset and late-onset categories, and identified that the late-onset subgroup is better understood as a "reaction to complex psychological trauma", whereas the early-onset subgroup does not appear to present with similar environmental exposures and may index greater biological involvement. This perspective is consistent with research that has identified that early-onset and late-onset antisocial behaviour differs based on indices such as impulsivity, cognitive/neuropsychological deficits, family dysfunction, and social skill (Moffitt, Lynam, & Silva, 1994; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). Additionally, a social worker from a marriage and family therapy orientation, provided an anecdotal account of two previous clients who were

described as exhibiting “similar patterns of aggressive and violent behaviour”, however experienced distinctly different attachment patterns, family environments and traumatic exposure. The participant went on to conclude; “that kind of blows the abuse/neglect business out of the water”. As a result, it can be interpreted that although maltreatment and trauma can be seen as influencing antisocial behaviour, it is not sufficient or solely required for the onset.

Attachment, parenting practices and trauma are perceived to emphasize the interactional relationship between an individual and the environment. As was mentioned, attachment can influence a child’s behaviour as well as the parent’s response to the child, subsequently influencing parenting practices. The parent-child interaction then becomes perpetuated by learning processes, which will be discussed in greater depth in the following section. Further, antisocial behaviour can also begin to be understood based on the impact of environmental experience and deviant peer affiliation on learning and the overall expression of antisocial behaviour.

Perpetuated by learning & the environment. The interaction between biology, attachment and trauma have been discussed thus far in terms of understanding predisposing and precipitating factors leading to the development of antisocial behaviour. As a result, antisocial behaviour can be seen as possessing multiple foundational mechanisms contributing to the onset. However, it also becomes important to understand processes that lead to the maintenance of such behaviours. Liabø and Richardson (2007) concisely summarized antisocial disorders as impairments to social functioning. Therefore, it would seem necessary to consider the role of social interactions as a way of understanding how behaviour can be

reinforced and maintained.

During this study, many participants implicated the role of learning in the development of antisocial behaviour. The influence of learning processes were discussed, specifically, social learning theory. A psychologist, from a neuropsychological background, discussed "modeling of aggressive behaviour" through "observation" and "reinforcement". This perspective is consistent with past research on social learning theories of conduct problems. Social learning theory can be a valuable perspective in terms of understanding how the environment can contribute to the development and perpetuation of antisocial behaviour. The foundations of social learning theory began with an investigation of the role of observation and imitation on learning. It was found that children observing adults behaving aggressively; imitated and expressed the exact aggressive behaviours (Bandura, 1969). Further, Bandura (1969) found that aggressive behaviour was more likely to be maintained based on positive reward. From a social learning perspective, behaviours indicative of ODD and CD can be interpreted as a manifestation of observational learning and imitation based on the individual's environmental context, particularly if the behaviour is reinforced.

Several participants discussed the development of antisocial behaviour based on the result of exposure to adverse environmental experience, and also suggested that one's worldview and temperament development is ultimately shaped by environmental learning. One participant with a background in social work and psychology went on to describe personality as developing "as a result of an interaction between somebody's temperament and the environment they are in". The

participant went on to illustrate the effect of a "poor fit between the two" resulting from adverse experiences, such as "punitive or neglectful parenting". This perspective points toward the effect of environmental experience on temperament development.

The perspective that personality develops based on an interaction between dispositional factors and the environment illustrates a gap in understanding between theoretical perspectives on personality development. For instance, research has suggested that temperament can develop as a result of biological or environmental factors, or an interaction between the two. For example, Latzman et al. (2013) described personality/temperament development resulting primarily from dispositional factors, whereas Bornovalova et al. (2014) emphasized environmental factors and gene-environment interactions. Therefore, temperament development in antisocial behaviour can be seen as an area for future research.

As was mentioned in the *Precipitated by Attachment, Parenting and Trauma* section, several participants identified that the family environment and parenting practices play a significant role in antisocial behaviour. During this study, many of clinicians identified that antisocial behaviour can be seen as transmitted through parental antisocial behaviour and parenting practices. Specifically, a participant who is a registered social worker and psychologist described "punitive/neglectful parenting approaches". Interestingly, a participant from a psychiatric background also emphasized the role of "authoritarian and permissive parenting styles" contributing to antisocial behaviour. Learning of antisocial behaviour can be understood from a theoretical standpoint, specifically, through coercive process theory. Patterson (1982) expanded Bandura's work to explore a social interaction

perspective on antisocial behaviour. The theory suggests that individuals exposed to negative and hostile demands are prone to engage in a "coercive process" that involves the escalation of hostility and aggression, which becomes reinforced when the negative demands are overcome (Patterson, 1982).

Research has identified several environmental risk factors, which can be seen as producing negative and hostile demands. For instance, research has suggested that the home environment is a significant source of risk for antisocial behaviour, due to factors such as parental psychopathology, parenting practices, and abuse (Boden, Fergusson, & Horwood, 2010; Schwab-Stone et al, 2012; Webster-Stratton, Reid, & Hammond, 2004). From a social interaction perspective, it can be interpreted that parent psychopathology, parenting practices and abuse create negative environmental demands, and as a result children are susceptible to learn that escalation of hostility and aggression can be useful in terms of managing consequences (Patterson, 1982). For example, if parents employ verbal aggression as a means to manage behaviour, children can learn, through coercive process, that escalation of their own verbal or physical aggression can serve to have the parents "back down" from confrontation. Thus the child learns that use of hostility, aggression and/or violence can be an effective means to manage a variety of environments. Similarly, many clinicians in this current study reiterated that, given the environmental context, antisocial behaviour can be interpreted as a learned functional strategy. For instance, a registered social worker and psychologist described disruptive behaviour as a "means to obtain predictability, structure and boundaries", as well as a means to meet communicative and protective needs.

In addition to learning within the family environment, deviant peer affiliation has been identified as a significant contributing factor from both a research and clinical perspective. Participants reported that socialization is an integral factor in antisocial behaviour, and often youth are involved with peers groups which increases exposure to criminality and substance abuse, which in turn increases risk for learning of antisocial behaviour. However, one psychiatrist, interestingly, identified that antisocial behaviour can be distinguished based on degree of socialization and learning. For instance, the psychiatrist described that individuals with "unsocialized conduct problems" differ from those who have been socialized into antisocial behaviour. Similarly, research has been conducted which implicates the effect of peer involvement in conduct problems. Boden et al (2010) identified exposure to violence/abuse and deviant peer affiliations as significant risk factors for the expression of antisocial behaviour. From a social learning perspective, exposure to violence, and in particular deviant peer affiliations, can act as a means of exposure to antisocial behaviour (e.g. theft, vandalism, substance abuse, violence, etc.) that effectively becomes imitated and expressed by the individual. Antisocial behaviour can also be seen as instrumental and adaptive (Hsieh & Kirk, 2003), and as a result the behaviour becomes reinforced. For example, if violence or theft can be seen as a means to meet survival or economic needs, an individual learns that the use of such behaviour can be an effective and functional instrument.

Learning provides an understanding of the processes that lead to the maintenance of antisocial behaviour. During this research it became clear that the foundations and pathways of antisocial behaviour can understood based on biological

factors, attachment and learning processes. However, it appears that antisocial behaviour can also be distinguished based on underlying emotional factors and the role of impulsivity.

Differentiated by affect, affective impulsivity, & behavioural impulsivity. Emotion and impulsivity can have a direct effect on behaviour. As one participant who is a registered social worker and psychologist identified, the behaviours associated with ODD and CD are thoroughly described, although "the affective underpinnings are not well understood". During the course of conducting this research, general themes around emotion, impulsivity, and the interaction between the two began to emerge. Specifically, the findings appear to suggest that although the behaviours associated with ODD and CD may present as similar, the emotional experience underlying the behaviour can differ greatly. For instance, the presence, or absence, of anxiety and depressive symptoms can influence the onset of antisocial behaviour. Similarly, it appears that impulsivity can also mediate one's emotional experience and subsequent behaviour. As a result, emotion and impulsivity can be seen as significant factors differentiating the subjective experience of antisocial disorders.

ODD and CD are often described based on externalizing behaviours. However, internalizing dimensions are often overlooked in the understanding of cause, as well as in the diagnostic process. The emergence of behaviours associated with ODD and CD are found to be significantly connected with the presence of internalizing dimensions (Muratori, Salvadori, Picchi, & Milone, 2004). As one psychiatrist noted during this current study, ODD, in particular, is often seen as

"preceded by anxiety and depression". However, a number of participants, from each theoretical orientation, also identified that a small subset of individuals exhibiting antisocial behaviour also present with a significant "lack of empathy", or so-called callous-unemotional traits. As a result, it can be interpreted that anxiety, depression and callous-unemotional traits can serve to differentiate ODD and CD based on the differing emotional dimensions underlying the behaviour.

Every participant within the study suggested that affective factors contribute to the onset of antisocial behaviour. Anxiety and depression were both implicated in the behaviour, however, were often viewed as separate conditions that co-occur with ODD and CD. However, it was unclear whether or not affective factors precede or co-occur with the behaviour disorders. As one psychiatrist expressed; "other conditions that seem to travel with conduct problems, or maybe even the antecedents to it, would be anxiety and depression". This perspective recognizes the correlation between affective factors and behaviour, however, there remains ambiguity in the relationship between the two variables. However, Muratori et al. (2004) identified that conduct disorders are often preceded by a primary internalizing disorder. Further, research has identified that conduct problems are not strongly correlated with the later onset of an internalizing condition (Lavigne, Gouze, Bryant, & Hopkins, 2014). As a result, it becomes important to begin to understand what specific role anxiety and/or depression plays in eliciting similar behaviours characteristic of ODD and CD. For instance, if anxiety and depression are seen as distinct emotional states preceding ODD and CD, then it would be reasonable to assume that the manifestation of externalizing behaviours would also be a part of distinct conditions connected to

the underlying emotional experience. However, behaviour associated with ODD and CD are often seen as a part of the same condition, despite vastly disparate emotional experiences. As a result, it would seem that future research would benefit from further examining affective antecedents to antisocial behaviour in order to gain insight into cause, as well as subsequent diagnostic and treatment methodologies.

In order to further illustrate the role of affective factors in differentiating the presentation of antisocial behaviour, one psychologist, with a forensic background, recounted two individuals diagnosed with CD; one experiencing high anxiety and the other exhibiting a marked lack of emotion. The first individual could be understood to have developed conduct problems "as a coping mechanism resulting from anxiety", whereas the second individual's conduct problems were said to arise from an entirely different developmental trajectory; "he has not suffered trauma…it is a part of his personality, and it is a part of who he is". Callous-unemotional traits are described as the presence of a lack of empathy, lack of remorse, poverty of guilt and deficient affect (APA, 2013). The presence of callous-unemotional traits suggests a more persistent subtype of CD, and are also typified by reduced emotional and nervous system responses (Fontaine, Rijsdijk, McCrory, & Viding, 2010). During this current study, participants from across theoretical orientations identified a small subgroup of CD, as being distinguished by the presence of callous-unemotional traits. For instance, one participant who is a registered social worker and psychologist described a small demographic of individuals who exhibit "absolute coldness", "lack of concern for someone else", and "glibness". Further, a psychiatrist recounted working with a small population of individuals who did not appear to exhibit empathy, and were

described as “cool and aloof, with a non-galvanic skin response”. However, a psychologist expressed there exists uncertainty as to what defines callous-unemotional traits and therefore creates a degree of subjectivity in terms of understanding what should be considered within the definition.

In addition to affective factors, affective impulsivity can be seen as playing an integral role in antisocial behaviour. Rather than viewing impulsivity as strictly representative of behaviour, one psychiatrist in this study discussed the role of “affective impulsivity”. Specifically, the participant identified that although anxiety and depression likely influence ODD and CD; unstable mood, low frustration tolerance and affective impulsivity are important contributing factors. Affective impulsivity was defined as similar to emotional dysregulation, and it was identified that affective impulsivity can contribute to “rapid escalation of irritability” and “explosiveness”. From a theoretical standpoint, behavioural impulsivity and emotional dysregulation has been linked with the prefrontal cortex and limbic region functioning (Bertocci et al., 2014).

In addition to affective impulsivity and emotional regulation, behavioural impulsivity is seen as an important differentiating factor contributing to antisocial behaviour. ODD and CD are often seen as co-occuring with ADHD (Maughan, Rowe, Messer, Goodman, & Meltzer, 2004). Further, impulsivity has been identified as an important predictor of aggressive and violent behaviour (Krakowski & Czobor, 2014). Moffitt et al. (1996) identified that subtypes of conduct disorder (childhood versus adolescent-onset) differ on measures of impulsivity. The recognition that impulsivity is a variable unique to differing subtypes of CD, suggests that impulsivity

is useful in terms of differentiating the development of antisocial behaviour. The concept of varying degrees of impulsivity is consistent with reports from clinicians that although ADHD is highly correlated, not every individual with ODD/CD presents with ADHD, and conversely not every individual with ADHD exhibits ODD/CD.

Behavioural impulsivity is variable among antisocial disorders. As a result, impulsivity can be understood as related although not causal, which would suggest that impulsivity is a factor that differentiates the presentation of antisocial behaviour. In order to exemplify the variability of behaviour impulsivity, one participant with a background in psychology and clinical forensic experience provided an example of a dichotomy in aggressive behaviour. The psychologist discussed "reactive" versus "calculated" aggression. From the psychologist's perspective, reactive aggression is impulsive in nature and is often "in response to an environmental trigger", whereas calculated aggressive behaviour is premeditated and predatory with reduced levels of impulsivity. Although both reactive and calculated aggression can present as similar, the underlying impulse-control differs the two behaviours, and may suggest differences on a biological level, such as frontal lobe functioning.

Although biological factors are implicated in emotional regulation and impulsivity, ODD and CD are not readily understood on a pathophysiological level. As a result, it would seem that significant discrepancies exist between research and clinical practice, in terms of understanding contributing factors to ODD and CD, such as emotional regulation and impulsivity.

Discrepancies between research & clinical practice. As was mentioned, existing research has been pointing towards the identification of biological substrates underlying the onset of antisocial disorders. In particular, antisocial behaviour is said to be influenced by impulsivity (Krakowski & Czobor, 2014) and impulsivity is said to be linked to biological substrates such as the prefrontal cortex and limbic regions (Bertocci, et al., 2014). Therefore it becomes assumed that there is a direct link between antisocial behaviour and specific cortical regions. As a result, a copious amount of research has been directed towards the understanding of biological underpinnings. However, following this study it became evident that although research has been directed toward biological, genetic and neuropsychological factors, there exists a lack of pragmatic information available at this time to guide an exact clinical understanding of cause, diagnosis and treatment. Similar to the perspectives in this study around discrepancies between research and clinical practice, Frick (2012) recommended that research and clinical practice could benefit from future direction. For instance, it was stated that research could benefit from more appropriate research methods, linking risk factors to developmental pathways, and clarifying unique emotional, cognitive, neurological and parenting roles (Frick, 2012).

Both research and clinical perspectives view the cause of antisocial behaviour as multifactorial, with the identification of a single, primary cause remaining unclear. In general, there appears to be some confusion around what specifically causes antisocial behaviour. For instance, cause cannot be attributed solely to dispositional factors, environmental factors or even a specific interaction, due to the varying

developmental pathways to antisocial behaviour. From a clinical perspective, it was reported that there appears to be a general "lack of understanding" around etiology. As a result, diagnosis and treatment practice are implemented in attempt to address a construct that is not readily understood.

As was mentioned, research has been conducted in order to understand a variety of contributing factors. Further, antisocial behaviour is often characterized as a psychiatric condition, without a clear understanding of the underlying mechanisms. As one psychiatrist reported, "there exists a lack of a solid understanding of the pathophysiology of the disorders (ODD and CD)". A participant from a social work and family therapy orientation also shared the same perspective and expressed, "we don't definitively understand either one of the diagnoses well enough". Research has been aimed at understanding antisocial behaviour at a biological level (Bertocci et al., 2014; Fontaine, Rijsdijk, McCrory, & Viding, 2010; Latzman et al., 2013). However, many participants reported that the current biological understanding of ODD and CD is not advanced enough for the development of sophisticated clinical interventions. For example, both psychiatrists reported that although there are theoretical links to biological substrates (e.g. neurochemical and structural areas) involved in ODD/CD, however, the understanding is not such that "sophisticated" interventions can be developed to treat at an "organic and molecular" level.

The realization that gaps between research and clinical practice exist, allows for a discussion around areas for future research. One participant, from a psychiatric background, noted that the current "understanding of cause is more theoretical than real". Similarly, many other participants also expressed that the current

understanding of antisocial behaviour is in the early stages of research. The clinicians in this study often cited the theoretical connection between impulse-control and frontal lobe function. Although impulsivity is implicated in the onset of antisocial behaviour, the preceding sections illustrated that impulsivity is a single differentiating factor, with varying degrees of impulsivity expressed in varying pathways of antisocial behaviour. As a result, it would seem reasonable to conclude that identifying rudimentary brain-behaviour connections, such as frontal lobe functioning and impulse-control, would provide limited utility from a clinical perspective. That is unless the biological understanding of ODD and CD advances to the extent that specific biomarkers can be identified for the disorders.

Further research on antisocial behaviour may also serve to develop a reclassification of ODD and CD. Many participants identified that research is currently in the early stages of understanding etiology. However, research that has been conducted has helped to identify how complex and multifactorial the cause of antisocial behaviour is. As one psychiatrist reported, "with greater understanding, it may be identified that the disorders (ODD and CD) need to be classified differently, altogether". This perspective not only provides diagnostic implications, but also suggests that the behaviours associated with ODD and CD, along with the varying subtypes and developmental trajectories, may in fact be manifestations of different conditions altogether. As a result, further research, whether on a biological and/or environmental level, may serve to provide valuable information that will have a host of diagnostic and treatment implications in the future.

Limitations

The present study illustrates clinical perspectives on the etiology of antisocial behaviour through 6 in-depth semi-structured interviews, and for methodological (e.g. qualitative constructivist grounded theory) reasons should not be interpreted as a definitive understanding of cause. Rather, the present study is intended to serve as a substantive theory of etiology derived from the examination of theoretical and clinical perspectives. Also, the results from this study should not be generalized to conditions other than antisocial behaviour. Additional methodological limitations arise in terms of sampling. For instance, participants in the current study, although varying in theoretical orientation, possess experience working in a clinical capacity, and as such the results may be perceived as influenced by dominant paradigms on antisocial behaviour.

Conclusion

Research has produced multiple perspectives on the etiology of antisocial behaviour. From individual to environmental factors, multiple dynamics are implicated in the cause of ODD and CD. Therefore, the goal of this study was to address; 1) *how do varying theoretical and clinical perspectives influence the understanding of the etiology of ODD and CD?* and, 2) *how do different practitioners arrive at clinical decisions for individuals with ODD and CD?* To answer these questions, this study employed a qualitative grounded theory approach. Participants from a range of theoretical orientations were interviewed in a semi-structured format. From a clinical perspective, it appears that ODD and CD can be seen as predisposed by biological and developmental correlates, such as such as genetics, cognitive/

intellectual ability, development, and temperament. ODD and CD can also understood to be precipitated by the effect of attachment and trauma. Additionally, the role of learning and the environment is seen as integral, for instance, as a result of parenting practice and peer affiliation. Further, it appears that the presentation of antisocial behaviour is differentiated based on indices such as affect, affective impulsivity and behavioural impulsivity. Finally, this study identified that discrepancies exist between research and clinical practice, and therefore areas of future research are implicated.

Overall, the understanding of the etiology of ODD and CD can be seen as influenced by a range of theoretical and clinical perspectives. However, there appears to be general consistency among practitioners in this current study. It would appear that adherence to a biopsychosocial paradigm lead to commonalities among clinical approaches by practitioners of varying theoretical backgrounds. Practitioners in this study viewed ODD and CD from a particular clinical and theoretical viewpoint, but also integrated multiple perspectives in order to understand the etiology of the disorders. As a result, there appeared to be general consistency among practitioners in terms of clinical decision making, despite differing theoretical orientations.

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Chapter III

Theoretical & Clinical Perspectives on the Diagnosis of Antisocial Disorders in Adolescence

Abstract

A qualitative, constructivist grounded theory research approach to examine theoretical and clinical perspectives on the diagnosis of antisocial disorders in adolescence. The intent of the study was to develop a substantive theory on the assessment and diagnostic process of antisocial disorders, such as Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) based on multiple clinical perspectives. Current research identifies that the diagnosis of antisocial disorders can be confounded by the presence of comorbid conditions and social context. For this study, 6 professionals, from a range of theoretical orientations, were interviewed in order to gain insight into how theoretical orientations influence the diagnostic process of antisocial disorders. The findings from the research interviews suggest clinician's perceive a multifaceted approach to assessment and diagnosis. For instance, participants emphasized the importance of individualized assessment, differential diagnosis, the role of context and impairment, and the functional and stigmatizing effects of diagnostic labels. Interestingly, the results illustrate relative consistency among practitioners from varying theoretical orientations in the assessment and diagnostic process. This type of qualitative research served to develop a conceptual understanding of the assessment and diagnostic process related to antisocial disorders, such as ODD and CD. Clinical implications, study limitations and areas of further research will also be discussed.

Review of Literature

From a clinical perspective, ODD is categorized as a repetitive pattern of negativistic, hostile and defiant behaviour, in which four or more diagnostic criteria are present, such as often loses temper; argumentative; actively defies or refuses compliance; deliberately annoys others; blaming of others; easily annoyed; resentful; spiteful and vindictive (APA, 2000). Further, CD is defined as a persistent pattern of behaviour in violation of the basic rights of others or major societal norms or rules, including the presence of three or more diagnostic criteria, such as aggression to people or animal; destruction of property; deceitfulness or theft; and serious violations of rules (APA, 2000). With the inception of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), disruptive behaviour disorders saw minor revisions; however, ODD and CD are now classified under a section of disruptive, impulse-control and conduct disorders (APA, 2013). ODD is now considered to be classified into three types; angry/irritable mood, argumentative/defiant behaviour, and vindictiveness. Also, ODD and CD can be diagnosed concurrently, and there is an inclusion of frequency requirements and measures of severity (APA, 2013).

According to the various editions of the DSM, it appears that the diagnostic criteria attempts to provide straightforward inclusion and exclusionary standards to meet each disorder. However, research around the diagnosis of behavioural disorders has indicated that differential diagnosis and co-morbidities, as well as social context, complicate the presumed clarity around reaching a reliable and valid consensus on a diagnosis of ODD or CD.

Differential diagnosis & comorbidities. As was discussed in the etiology chapter, research has indicated that antisocial behaviour disorders, such as ODD and CD, often co-occur with other forms of individual psychopathology. For example, ODD and CD have been found to be significantly correlated with ADHD, mood disorders, and anxiety disorders (Ezpleta, Domenech, & Angold, 2006; Maughan, Rowe, Messer, Goodman, & Meltzer, 2004; and Rowe, Maughan, Costello, & Angold, 2005). Additionally, research has identified that approximately 65% to 90% of individuals meeting the diagnostic criteria for conduct disorders also met the criteria for a comorbid diagnosis of ADHD (Abikoff & Klein, 1992; Trites & Laprade, 1983). Anxiety and depression has also been identified as occurring at a rate of 60 to 75% and 15 to 31%, respectively (Zoccolillo, 1992). As a result, distinguishing between behaviours associated with ODD/CD and symptoms associated with co-occurring disorders becomes necessary.

This realization suggests that there may be a significant relationship between the presence of internalizing/externalizing features of comorbid psychopathology and the behaviours often associated with ODD/CD. Ezpleta, Domenech and Angold (2006) conducted a comparison study of "pure" and comorbid forms of ODD/CD and depression, and found that few differences exist in the distribution of symptoms between groups. However, results from the study indicated that the co-morbidity appeared to mostly accentuate functional impairment (Ezpleta, Domenech & Angold, 2006). Interestingly, Ezpleta, Domenech and Angold (2006) did not find major differences in terms of internalizing behaviour, which may suggest that individuals

with ODD/CD maintain similar emotional experiences as individuals with anxiety and depressive symptoms.

To further illustrate the role of comorbid disorders in the diagnosis of ODD/CD, Maughan et al. (2004) also found a significant overlap between ODD and CD symptoms, as well as substantial comorbidity with other disorders such as ADHD, anxiety and depression. However, Maughan et al. (2004) found that ADHD and anxiety symptoms were more strongly correlated with ODD, and depression was more strongly correlated with CD. Maughan et al. (2004) also suggested that the presence of anxiety may be functional in terms of inhibiting or promoting the development of conduct problems. For instance, anxiety may inhibit conduct problems through avoidance, or promote conduct problems through increased reactivity. In addition to a correlation with ADHD and anxiety, Rohde, Clark, Mace, Jorgensen and Seeley (2004) also found ODD/CD to be strongly correlated with Major Depressive Disorder, substance abuse and suicidal ideation in a study evaluating the treatment response of individuals with disruptive behaviour along with comorbid disorders. Aguilar, Sroufe, Egeland and Carlson (2000) also identified that the etiology and diagnosis of ODD/CD is likely confounded in individuals who also exhibit patterns of substance abuse.

Rowe et al. (2005) evaluated the diagnostic criteria for ODD and CD by comparing the symptoms lists between the DSM and the International Classification of Diseases (ICD). It was reported that approximately 3.9% of clinical populations of youth would meet the criteria for a diagnosis under the DSM, whereas 5.4% of clinical youth populations would meet the diagnostic requirements under the ICD,

which views ODD/CD criteria jointly (Rowe et al., 2005). Results from the study indicated that the DSM excludes individuals from receiving a diagnosis in comparison to the ICD, despite experiencing functional impairment based on individual and parental reports. Rowe et al. (2005) also suggested that it may be more beneficial, from a research and clinical standpoint, to view ODD/CD from a developmental perspective, rather than two separate and distinct categories of diagnosis.

Another important consideration in the diagnosis of ODD and CD is the role of environmental factors. As was previously discussed in Chapter II, research has indicated the importance of the interaction between individual and environmental factors in the etiology of the disorders. However, Whittle et al. (2013), in a study examining the effects of childhood maltreatment and psychopathology on brain development, found that approximately 18% of individuals exposed to maltreatment developed an externalizing disorder (e.g. ODD/CD), and that 32% of those individuals developed a comorbid internalizing and externalizing disorder (e.g. anxiety + ODD/CD, mood disorder + ODD/CD, etc.). These findings emphasize the relationship between social context, emotional experience and the exhibition of disruptive/antisocial behaviour. As a result, it seems necessary to consider the role of social context in the diagnostic process.

Social context. Hsieh and Kirk (2003) conducted a quantitative study to examine the effect of social context on psychiatric judgements of adolescent antisocial behaviour. The intent of the research was to challenge the assumption, and test the validity, that mental disorders can be identified independent of social context.

What was found was that individuals may exhibit antisocial behaviour indicative of a DSM diagnosis, however, receive inconsistent diagnoses. It was identified that individuals received different psychiatric conclusions in terms of course, etiology and treatment, even when identical behaviours occurred in different social contexts (Hsieh & Kirk, 2003).

Further, it was found that judgements and corollary clinical decisions were made outside of the basis of social context. It appears that psychiatrists often view the etiology of ODD/CD symptoms as a result of individual, internal dysfunctions, rather than environmental reactions (Hsieh & Kirk, 2003), despite evidence supporting the role of individual and environmental factors contributing to etiology (Aguilar et al., 2000; Boden, Fergusson, & Horwood, 2010; Schwab-Stone, Koposov, Vermeiren, & Ruchkin, 2012). As will be discussed later on, this current study illustrated that relative consistency exists among practitioners from varying theoretical orientations in terms of conceptualizing the etiology and diagnosis, as a result of taking individual and psychosocial variables into consideration. It appears that the exclusion of social context in the diagnostic process may lead to increased false-positive diagnoses in disadvantaged communities where antisocial behaviour may be adaptive. Specifically, in disadvantaged communities antisocial behaviour could be interpreted as adaptive or instrumental in terms of meeting financial or survival needs. Hsieh and Kirk (2003) concluded that antisocial behaviour can be a manifestation of individual psychopathology, as well as a normal/adaptive response to the environment, and as a result it becomes imperative to distinguish between

pathological and adaptive antisocial behaviour through the consideration of an individual's immediate social context.

Boden et al. (2010) identified several environmental risk factors for ODD/CD, such as socioeconomic adversity, parental maladaptive behaviour, exposure to abuse/violence and deviant peer affiliations, and concluded that individuals with multiple social and economic adversities were at greatest risk. As Hsieh and Kirk (2003) indicated, the development of antisocial behaviour may be adaptive in certain contexts, such as in disadvantaged communities, therefore challenging the belief that such behaviour is pathological and diagnosable. Further, Webster-Stratton, Reid and Hammond (2004) hypothesized that antisocial behaviour may also be a functional, learned behaviour resulting from parenting practices. For instance, it is suggested that individuals develop functional behaviour, based on coercive process theory, in order to avoid parental criticism through the escalation of negative behaviours (Patterson, 1982; Webster-Stratton, Reid, & Hammond, 2004). A qualitative study conducted by Eresund (2007) also highlights the potentially functional patterns of antisocial behaviour.

From a psychodynamic perspective, Eresund (2007) described individuals with ODD/CD as self-assertive, aggressive and narcissistic, as well as sensitive and internalizing. From this perspective, Eresund (2007) concluded that aggressive and antisocial behaviour was protective from strong feelings of vulnerability. It was also suggested that the protective nature of the behaviour arises from dependence on validation and subjugation from others in the social environment, and when the protective "false-self" is not validated, it can result in explosive externalizing

behaviour (Eresund, 2007). It appears, from different theoretical perspectives, that the social environment can play a significant role in the manifestation of functional behaviours associated with ODD/CD. The identification of ODD/CD symptoms can be complicated by differential diagnosis due to the frequent co-occurrence of existing mental health concerns, such as ADHD, depression, anxiety, substance use and suicidal ideation, as well as the due to the impact of social context, environmental factors and functional learned behaviour. The following study will attempt to identify important clinical considerations in the diagnostic process.

Methods

For the purposes of brevity, please refer to the *Research Methods* section found within *Chapter I: Introduction to Topic & Research* in order to gather details relating to the research methodology, such as design, population & sample, data collection and analysis, pertaining to this qualitative grounded theory study.

Findings & Discussion

In the analysis, a substantive theory was generated in attempt to provide insight into clinical perspectives on the diagnosis of antisocial disorders in adolescence. Five categories were derived from the interviews, which were central to the diagnostic process: 1) importance of comprehensive individualized assessment; 2) defined by symptoms, covariation, context and impairment; 3) identification of comorbid conditions; 4) dimensional versus categorical diagnoses; and 5) functional and stigmatizing effects of diagnostic labels. The five core categories were developed based on commonalities present across theoretical orientations. Differing perspectives have also been included as part of the discussion of the categories. It is likely that the similarities across disciplines may be related to clinical practices that

each participant adheres to, which may demarcate a limitation to the study. Once the categories were developed, a process of theoretical sampling was integrated in order to further support and maintain the core categories. An explanation of core categories is presented in the following:

Importance of comprehensive individualized assessment. As a result of the multifactorial nature of antisocial behaviour, it becomes necessary to develop a comprehensive assessment framework in order to understand and identify factors relevant to the individual. Antisocial disorders possess a heterogeneous group of behaviours or symptoms, and multiple causal pathways are implicated in the development of the disorders (Frick, 1998). For example, identifying the wide range of developmental, biological, psychological and social factors can have important diagnostic and treatment implications. As a result, assessment, like etiology, can be conceptualized as multifaceted. For instance, clinical interviewing, collateral information, standardized assessment, behavioural observation and diagnostic criteria have be identified as integral components of the assessment process.

Comprehensive individualized assessment to determine the causal nature of antisocial behaviour is identified as an important stage in the diagnostic process (Barry, Golmaryami, Rivera-Hudson, & Frick, 2013). In this current study, a majority of participants emphasized that it is necessary to utilize clinical interviews, with individuals and collateral contacts, in order to develop an understanding of the nature of the problem. Specifically, identifying the nature of the problem would provide insight into the pervasiveness and frequency of the symptoms. One social worker reported that it is necessary to "consider behaviour that is typical for development,

also identifying the onset, the context in which the behaviour occurs, as well as precipitating and perpetuating factors". Additionally, a participant who is a registered social worker and psychologist illustrated the importance of incorporating a "needs-based assessment", in order to identify the underlying needs of the individual, rather than solely focusing on pathology. The participant identified that in order to develop an assessment that is individualized and needs-based, it is necessary to gather comprehensive background information. The importance of individualized and needs-based assessment was illustrated by the psychologist and social worker who also cited that assessments which are "not individualized can lead to increased false-positive diagnoses".

According to the participants in this study, comprehensive background information involves gathering information such as developmental history, family composition and history, social and interpersonal functioning, educational/academic history and psychiatric/medical history. As one psychiatrist described, a "thorough psychiatric assessment" can help gain insight in "the nature of the problem, and also look for possible psychosocial factors that could play a role as well". Gathering a comprehensive background history provides valuable information into causal factors, developmental onset and conceptualizations for treatment planning (Barry et al., 2013). During the current study, it was identified that the gathering of background information provides important information in order to begin differentiating between streams of antisocial behaviour. Similarly, one psychologist reported that background information was necessary to help determine whether or not the presenting concerns were early-onset versus an environmental reaction. For example, the participant

provided an anecdotal account of "Type A" and "Type B" antisocial behaviour, whereby "Type A" is early-onset and may represent a potential "brain dysfunction", and "Type B" which the participant described as "a reaction to complex psychological trauma". Moffitt, Caspi, Dickson, Silva and Stanton (1996) concluded that antisocial behaviour can be distinguished based on age of onset, which provides valuable information into pervasiveness and severity. As a result, understanding subtypes of antisocial behaviour based on background information can provide an understanding of development, course, as well as important treatment implications.

In addition to identifying the nature of the problem and background information through interviewing and collateral information, participants also discussed the utility of standardized assessment measures in order to assist in the diagnostic process. Standardized assessments, such as personality inventories and behavior rating scales, can provide insight into personality and affective components of antisocial behaviour (Frick, 1998). As a participant with a background in social work and psychology expressed, "that assessment tends to be behavioural rather than affective", suggesting that the affective components are often overlooked in ODD and CD, and provide important differentiating information. For instance, conduct problems in the presence of anxiety or depression differ greatly from conduct problems in the absence of affective factors. As a result, standardized instruments can provide valuable insight into dimensions such as vigilance, impulsivity, anxiety, depression, and peer relations.

One psychologist, from a forensic background, reported utilizing such instruments as the Millon Adolescent Clinical Inventory (MACI), Minnesota

Multiphasic Personality Inventory–Adolescent (MMPI-A), and Personality Assessment Inventory (PAI). The participant reported that the use of such measures provides valuable insight into not only personality characteristics, but also important dimensions around attitude and intentionality. Specifically, the participant expressed that it is beneficial to administer "personality tests to get a handle on what their attitude is". It was reported that standardized personality instruments can assist in differentiating antisocial behaviour based on the individual's attitude, which can aid in distinguishing between intentional behaviour versus coping mechanisms. The participant reported that understanding attitude is critical is differentiating streams of antisocial behaviour. For instance, the participant provided the comparison of two attitudes; "I want to do this because I can" versus "I want to lash out before anyone else can hurt me", and concluded that a critical difference exists between calculated and defensive aggression. As a result, personality measures can be utilized to identify and differentiate attitudes and motivations that may be underlying the onset of antisocial behaviour.

Behavioural observation was also identified to provide critical insight in the assessment of conduct problems. Behavioural observation can occur in natural or "analogue" settings, for example, within the home or classroom versus within a clinical environment (Frick, 1998). Behavioural observation can occur through unstructured or standardized observation procedures. An example of standardized observation would be the BASC-Student Observation System (Reynolds & Kamphaus, 1992), which incorporates a standardized procedure to assess adaptive and problem behaviours. One psychologist, with forensic experience, described

behavioural observation as an integral role in the assessment of conduct disorders. For instance, the participant described behavioural observation occurring in a naturalistic setting in residential care, whereby observation served to provide valuable insight into the production, maintenance and exacerbation of conduct problems. Specifically, the participant provided an example of using behavioural observation to help discriminate between the initiation of aggressive behaviour and defensiveness.

In addition to utilizing clinical interviewing to gather a comprehensive understanding of the nature of the problem and background information, standardized assessment measures, and behavioural observations, participants also reported comparing assessment information with diagnostic criteria. A majority of participants in this study identified that although diagnostic criteria is considered in the assessment process, there appears to exist conflicting views, between participants, on the utility of ODD and CD as diagnostic categories, which will be discussed later on. The diagnostic criteria list in the DSM-5 is an example of a singular way of defining ODD and CD. However, it also became apparent that it is beneficial to understand how the disorders are defined based not only on symptoms, but also behavioural covariation, social context and degree of impairment.

Defined by symptoms, covariation, context, & impairment. As was discussed in the preceding section, the process of assessment of antisocial behaviour is seen as multifaceted. In order to determine whether or not antisocial behavior is considered abnormal, a process of diagnosis takes places which involves classification based on criteria in order to determine the presence of a disorder. However, it becomes integral to identify how a "disorder" is defined. Current

theoretical and clinical perspectives appear to define and classify antisocial disorders based on the presence of behavioural "symptoms", statistical covariation of behaviours, social context to determine pervasiveness, and degree of impairment to determine severity.

The symptom list in a diagnostic classification system attempts to provide clear and explicit criteria for determining a disorder. However, in addition to meeting symptom list criteria, the process of diagnosis attempts to determine abnormal behaviour based on clinical impairment (Frick, 1998). One social worker and psychologist in this study expressed concern around the process of diagnosis, citing that the process can inadvertently "pathologize normal variance or functional behaviour that may not be internal pathology". This concern reflects the imprecision that diagnostic symptom lists possess in terms of defining behavioural disorders.

During the development of diagnostic classification systems, a process of behavioural covariation has been used in order to identify symptoms that are statistically correlated with one another (Achenbach, 1995). One of the psychiatrists in this current study defined ODD and CD as diagnoses that attempt "to describe a particular group of behaviours" that are "statistically correlated". This perspective suggests that behaviours associated with ODD and CD are categorized based on research that suggests that there is a statistical probability that certain behaviours are likely to cluster together. The problem with defining behavioural disorders, such as ODD and CD, based on covariation is how highly variable the different combinations of symptoms can be. Frick (1998) expressed that although statistical analysis can identify emerging patterns, it can be difficult to find consistent patterns of conduct

problems across research and clinical populations.

In addition to identifying behavioural symptoms, it is important to consider the role of context in the diagnostic process. A psychiatrist in the study identified that "context helps determine how pervasive the behaviour is", and further explained that the role of context can provide insight into whether or not the presentation is in relation to a psychosocial or psychiatric issue. Similarly, another psychiatrist stated, "the more pervasive the symptoms, the more likelihood it is more than just a parenting issue or psychosocial issue". The findings in this study suggest that clinicians view behaviour occurring in multiple contexts as more pervasive and more representative of the presence of a psychiatric disorder. Research has identified that the process of diagnosis without consideration for social context can lead to increased false-positive diagnoses (Hsieh & Kirk, 2003). Additionally, social context can influence whether or not a clinician perceives antisocial behaviour as an internal dysfunction versus a normal reaction to a problematic environment (Kirk & Hsieh, 2004; 2009). It would seem that rather than defining antisocial behaviour as an internal dysfunction based solely on prevalence in multiple contexts, it would be necessary to also determine the role of social context in the onset of the behaviour. These findings are consistent with the reports of the clinicians in this current study in terms of emphasizing the role of psychosocial factors and the environment.

Similar to the role of context, degree of impairment is understood as necessary in defining antisocial disorders. As was mentioned, diagnostic classification systems often define disordered behaviour based on symptoms and clinical impairment. Similarly, participants from social work, psychological and psychiatric backgrounds

discussed integrating DSM criteria and "determining and defining impairment" in the diagnostic process. However, the consistency around integrating DSM criteria is likely related to the clinical environment which each participant worked. The DSM describes *distress* and *disturbances* that cause *clinically significant impairment* in a variety of contexts (APA, 2013). Specifically, a social worker in this study discussed identifying impairment occurring in a range of environments, such as academic, familial and peer environments. The participant went on to describe the necessity of determining functioning through "collateral contacts, such as teachers, parents and the child". However, another participant, from a psychiatric orientation, expressed that identifying problematic behaviour can be subject to perspective and provided an anecdotal account how one family may perceive impairment, whereas another family may normalize antisocial behaviour. The psychiatrist went on to provide an anecdotal account of ODD and CD in different contexts and the perception of impairment. For instance, the psychiatrist stated "what they do at home is not necessarily seen as problematic, depending on the family and how they view these things". As a result, the diagnosis of ODD and CD can be interpreted, based on the participant's perspective, as less about the presence of "abnormal" behaviour and more about a clinical determination of impairment.

The aim of diagnostic classification is to define what constitutes a disorder, and requires clear criteria, as well as identification of the role of context and impairment. However, the diagnosis of ODD and CD can become complicated due to high prevalence of comorbidity with other conditions. Another theme emerged in this study which was related to the necessity of differential diagnosis and identification of

comorbid conditions.

Identification of comorbid conditions. The previous sections illustrated perspectives on the comprehensive assessment process and classification of ODD and CD based on symptoms, covariation, context and impairment. However, participants also appear to identify the process of differential diagnosis, in order to identify co-occurring conditions that may confound that diagnostic process, as a necessary aspect of assessment. As was mentioned, research has indicated significant comorbidity between ODD/CD and other conditions. For example, ADHD, anxiety, depression and substance abuse have been identified as sharing a relationship with ODD and CD diagnoses. As one psychiatrist expressed there is necessity in administering "anxiety screens, ADHD screens and depression screens". The psychiatrist also went on to describe the importance of identifying comorbidities, as well as co-occurring psychosocial problems. For instance, the participant expressed that identifying comorbid factors is integral in case conceptualization, as such factors can "confound the diagnostic process". As a result, it becomes necessary to identify the presence of comorbid conditions that may differentiate the development and presentation of antisocial behaviours.

Participants in this study identified that numerous factors interact with one another in the onset of antisocial behaviour. As one psychiatrist reported, it is necessary to explore; "What are the biological factors that could be involved in producing the symptoms or behaviours? What are some psychological factors? And what are the social/cultural factors that play a role?" Similarly, a psychologist expressed that it is necessary to incorporate a biopsychosocial model. Specifically,

the participant identified the need to consider “a biomedical perspective”, “individual psychological features”, and “the social environment”. Research has also suggested that the etiology of antisocial disorders results from a confluence of numerous variables, involving a range of dispositional and environment factors (Bornovalova, Cummings, Hunt, Blazei, Malone, & Iacono, 2014). It has also been suggested that affective factors can serve as antecedents (Muratori, Salvadori, Picchi, & Milone, 2004), and further conduct disorders can present with varying degrees of impulsivity (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). As a result, it becomes integral to identify the affective and impulsive factors that may be related to comorbid conditions and therefore contribute to the onset of antisocial behaviour. Additionally, it is necessary to recognize potential confounding variables in the diagnostic process, specifically, the presence of medical conditions that may present as similar to ODD and CD on a behaviour level.

The process of diagnosis can become confounded by the presence of comorbid conditions. As a result, it becomes imperative to distinguish between primary conditions that may manifest as behaviour that can be interpreted as consistent with ODD and/or CD. In this study, the need for assessing potential medical causes for aggressive behaviour consistent with ODD and CD was discussed. For instance, participants from across theoretical backgrounds expressed that a variety of medical conditions, such as fetal alcohol spectrum disorder (FASD), brain trauma, diabetes and epilepsy can present similarly on a behavioural level. For example, one psychologist, from a forensic background, identified the need for assessing potential medical causes, such as “diabetes”, “tumours”, and “FASD”,

which may be “causing irritability, defensiveness and defiance”. Further, another psychologist, from a neuropsychological background, discussed the physical manifestations of aggression by stating it can be seen in “structural injuries, lesions, animal studies, and sometimes we see some kinds of these behaviours in epileptic patients”. This finding is consistent with existing literature on medical manifestations of aggression. For instance, research has found that certain seizure types in epilepsy are correlated with increased aggression (Hermann, Schwartz, Whitman, & Karnes, 1980; Piazzini et al., 2012). Similarly, research has also indicated that FASD (Ware et al., 2013), traumatic brain injury (Cole et al., 2008) and diabetes (McDonnell, Northam, Donath, Werther, & Cameron, 2007) are correlated with increased aggressive and externalizing behaviour.

In addition to providing assessment to identify potential underlying medical causes, it is necessary to identify the underlying psychological domains of ODD and CD. Specifically, the findings in this study would suggest that ODD and CD can be differentiated based on the affective underpinnings of the behaviour, such as anxiety, depression or the absence of emotion. One participant from a social work and psychology background noted, “the presence or absence of affect greatly influences the understanding of the behaviour”. As was mentioned, research has implicated internalizing and affective factors in the onset of ODD and CD (Ezpleta, Domenech, & Angold, 2006; Muratori et al., 2004). Research has even indicated that ODD may be better conceptualized as a disorder of emotional regulation (Cavanagh, Quinn, Duncan, Graham, & Balbuena, 2013). However, it appears that from a research and

clinical standpoint it remains unclear the exact relationship between affective factors and externalizing behaviour.

Two participants, from differing theoretical orientations, expressed that there continues to be uncertainty whether affective factors, such as anxiety and depression, precede ODD and CD. However, participants from each theoretical orientation agreed that anxiety and mood concerns likely contribute to antisocial behaviour. A psychiatrist provided an anecdotal account of the prevalence of increased "anxiety in pre-pubertal youth, and depression in pubertal youth". However, another participant from a social work and psychological orientation expressed, "the subjective emotional experience is not fully understood". Further, another psychologist, with a forensic background, stated that "it is easy to overlook comorbid conditions". As a result, it would seem necessary to provide further research into the phenomenology of antisocial behaviour, as well as to further emphasize the identification of comorbid conditions, such as anxiety and depression, in clinical practice.

All participants in this current study consistently identified the comorbidity with ADHD and conduct disorders as significant. One psychiatrist reported that it was believed that "probably 70%, or thereabouts of individuals with ODD have comorbid ADHD". Similarly, a psychologist, with forensic experience, discussed the high prevalence of comorbid ADHD by stating, "ADHD was there pretty much 100%...no, maybe 90% of the time". Hummer et al. (2011) found that due to the correlation between disruptive behaviour disorders and ADHD, it may be valuable to identify subgroups of disruptive behaviour disorders based on the presence of impulsivity associated with ADHD. One psychiatrist noted that the *Angry/Irritable* dimension of

ODD is more associated with long term anxiety and depression, whereas the *Argumentative/Defiant* and *Vindictive* dimensions are more associated with ADHD and impulsivity. As a result, the presence of affective factors and impulsivity implicates treatment approaches, specifically, the use of antidepressant and psychostimulant medication.

Despite the recognition that ADHD is often comorbid with ODD and CD, there appears to be uncertainty between the underlying mechanisms of the behaviour. For example, a psychiatrist t reported that; "it is unclear if ADHD drives the behaviour, or occurs at the same time". This uncertainty represents a gap in understanding between research and clinical perspectives. Specifically, this perspective reflects a lack of understanding of causal mechanisms involved in antisocial disorders, for instance whether or not ADHD can lead to or occur alongside ODD and CD. Additionally, there appears to be some debate whether or not clinicians view ODD and/or CD as diagnoses that exist in isolation, absent from comorbid conditions.

There exists conflicting clinical perspectives on the conceptualization of ODD and CD as unique and distinct diagnoses. From a research and clinical standpoint, there is agreement upon the presence of a range of comorbid conditions, such as ADHD, anxiety and depression, which implicates a range of treatment approaches toward ODD and CD. However, one psychiatrist reported that their clinical perspective has evolved from viewing antisocial disorders as a "progression from ADHD to ODD to CD", to an understanding that ODD and CD can exist as distinct diagnostic categories that are capable of occurring in isolation. Whereas

another participant, from a psychological perspective, reported viewing diagnoses such as ODD and CD as primarily resulting from comorbid conditions, and lacking clinical utility as distinct diagnostic categories. For example, the participant expressed, "I almost never diagnose ODD, because I think it is misdiagnosed and over-diagnosed, when it could be explosive behaviour, undeveloped frontal lobe…it could be just so many things". Another theme arose in this study regarding a debate over viewing ODD and CD as dimensional versus categorical diagnostic entities.

Dimensional versus categorical diagnoses. ODD has historically been conceptualized as a developmental precursor to CD. According to the current study, it would seem there appears to be some consistency in terms of viewing ODD and CD as distinct diagnoses. For example, one psychiatrist reported that the two diagnoses possess considerable overlap, although clarified; "I think they would probably be distinct; I don't think they are at one end, or either end of a spectrum". Similarly, a social worker reported that ODD and CD can be seen "as two distinct entities" that "maybe in relation". Past research has questioned the utility of distinguishing ODD and CD as two different disorders (Rey et al., 1988). However, Biederman et al. (1996) found that ODD did not increase risk for CD later on in life. Further, research has supported the position that many adolescent patterns of antisocial behaviour do not indicate ODD as a precursor to CD (Frick, 1998). Diagnostic classification of antisocial behaviour has also evolved over the various editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM). For instance, the DSM-IV-TR indicated that ODD and CD could not be diagnosed concurrently (APA, 2000), however, DSM-5 saw changes which allowed for the comorbid diagnosis of ODD

and CD (APA, 2013). The decision to allow for ODD and CD to be diagnosed concurrently was influenced by research which suggested that although ODD is not a precursor to CD, a subset of individuals do progress from ODD to CD (Burke, Waldman, & Lahey, 2010). Additionally, research has suggested that antisocial disorders are better conceptualized as dimensional, rather than categorical (Barry, Marcus, Barry, & Coccaro, 2013).

There appears to be agreement among participants that ODD and CD can be viewed as dimensional diagnoses. In support of a dimensional perspective on diagnosis, Frick and Nigg (2012) conducted a review and concluded that the removal of the CD exclusionary criteria for ODD is necessary in order to improve classification. Burke, Waldman and Lahey (2010) concluded that the DSM method of classification was too restrictive due to the categorical structure, in comparison to the dimensional structure of the International Classification of Diseases (ICD), and therefore functionally impaired individuals are unable to meet the diagnostic threshold within the DSM. Although research has supported a perspective of ODD and CD being both dimensional and distinct, there appears to be some uncertainty whether ODD and CD are conceptualized on a continuum or as distinct entities from a clinical perspective. However, the findings from this study would suggest that clinicians view ODD and CD primarily as distinct diagnoses that are dimensional due to varying subtypes, which can also present as progressive based on age of onset. For example, one psychologist reported that "it is quite probable, in my mind, that there are different subgroups, and that some are an interaction of perhaps adolescence and dissocial environment, whereas there are some individuals who I think really are

much more ‘hardwired’”.

As was mentioned, age of onset can influence the course and progression of antisocial behaviour. The onset of oppositional behaviour at a young age (e.g. stubborn, tantrums, irritability, argumentative, etc.) often progresses into more severe conduct problems (e.g. lying, aggression, bullying, cruelty, etc.) (Frick, 1998; Lahey & Loeber, 1994). In the current study, there was agreement among the participants that early-onset antisocial behaviour was seen as more pervasive and progressive. However, there was also consensus among psychiatric and social work orientations that ODD and CD is “not a continuum that one simply develops through” and that youth are not “destined to progress to CD if diagnosed with ODD”. To further support the dimensional nature of antisocial behaviour and role of age of onset, Moffitt et al. (1996) identified that individuals who exhibit adolescent-onset antisocial behaviour are much less likely to continue antisocial behaviour into adulthood, as opposed to those exhibiting childhood-onset behaviour problems. This result suggests that antisocial behaviour does not develop on a fixed trajectory, and is largely influenced by age of onset.

Early editions of the DSM viewed ODD and CD as categorical entities, whereby each diagnosis is viewed as a taxonomic category. The DSM-5 has attempted to become more dimensional through allowing concurrent diagnosis of ODD and CD (APA, 2013; Barry et al., 2013). However, this current study would suggest that many clinicians adopt a view of ODD and CD as distinct entities, which may be influenced by adherence to diagnostic classification systems such as the DSM. Every participant in this study identified that ODD and CD are seen as

distinct, although likely related. For example, one psychiatrist described, "The disorders (ODD and CD) are seen as related, but distinct; not on a spectrum or continuum".

Although a majority of the participants describe ODD and CD as distinct entities, it was also identified that it is probable that subtypes exist, which would differentiate the disorders. For example, participants reported that antisocial disorders could likely be differentiated based on dimensions of affect, impulsivity and age of onset. To illustrate the differentiating role of affect, one participant with a background in social work and psychology identified that "conduct problems and low anxiety is a much different problem than conduct problems with high anxiety". Further a psychiatrist identified that affective factors (e.g. "angry/irritable dimension associated with long-term anxiety") and impulsivity (e.g. "argumentative/defiant and vindictive dimensions may be more impulse-related") can differentiate subtypes of conduct problems. Additionally, a psychologist, from a neuropsychological orientation, reported that there exists a "discussion of child-onset versus adolescent-onset and whether those are different". The participant went on to describe that child-onset is likely more correlated with "genetic factors". Although it would seem that identifying ODD and CD as distinct would support a categorical approach, the recognition of differentiating variables, such as affect, impulsivity and age of onset, would suggest a dimensional structure to the disorders.

As was mentioned, support for a dimensional structure of ODD and CD was influenced by the restrictive, categorical structure of previous DSM editions. However, it could be interpreted that with dimensional classification of ODD and CD,

a greater number of individuals would likely meet the diagnostic criteria in the DSM-5. As a result, with a less restrictive classification process, it is likely that a greater number of individuals may be subject to diagnosis and subsequent treatment modalities. Therefore, future research will likely be necessary to monitor the prevalence of ODD and CD following the inception of DSM-5.

Functional & stigmatizing effects of diagnostic labels. The process of diagnosis can be interpreted as a method of classification in attempt to establish clear and explicit rules to determine the presence of a disorder (Frick, 1998). As was mentioned, the DSM (APA, 1980; 1987; 1994; 2000; 2013) and the ICD (WHO, 1977; 1992) are examples of diagnostic systems that can be used to classify antisocial disorders. Specifically, conduct disorders began appearing in the ICD-9 (WHO, 1977) and DSM-III (APA, 1980), respectively. However, childhood behaviour disorders did begin to be identified in earlier editions of the diagnostic manuals. There have been criticisms to the utility of diagnostic classification systems (Zigler & Phillips, 1961; Rutter & Shaffer, 1980; Frances, 2009), however, the process of diagnosis is often seen as necessary in clinical practice (Frick, 1998). During the course of this study, various professionals identified a range of functional and stigmatizing effects associated with the application of diagnostic labels. For instance, clinicians described the utility of diagnosis as a means of description, classification and communication. As one psychiatrist indicated; “we are just describing and being descriptive…we are just at the very early stages of describing what we see”. Further, a psychologist expressed the communicative potential of diagnostic labels by stating; “it (diagnosis) gives a common language to provide care”. However, the application of diagnoses,

such as ODD and CD, may result in scrutiny due to perceived subjectivity of behavioural diagnoses and associated stigmatization.

The process of classification can be conceptualized as a means of description, classification and communication. In this current study, various professionals discussed the utility of the diagnostic process. In particular, it can understood that the process of diagnosing antisocial behaviour is a descriptive method, whereby the aim is to identify particular behaviours that co-occur. As one psychiatrist noted, ODD and CD "are descriptive disorders of a particular group of behaviours". Identifying ODD and CD as descriptive, suggests that diagnosis relies heavily on observable behaviours, which is consistent with the critique offered by a participant from a social work and psychology orientation that "affective underpinnings are often overlooked (in ODD and CD)". Further, Cavanagh et al. (2013) identified that ODD may be better conceptualized as a disorder of emotional regulation, rather than a disruptive behaviour disorder. The inclusion of callous-unemotional traits in the DSM-5 can be interpreted as an attempt to be explanatory rather than descriptive (Frick, 1998; Latzman, Latzman, Lilienfield, & Clark, 2013), however, callous-unemotional traits are limited to a particular sub-type and cannot be generalized as explanatory for all forms of antisocial behaviour.

Further, participants defined ODD and CD as effective descriptions, but ineffective in terms of providing valuable prognostic information. As one participant with a background in social work and psychology summarized; "ODD and CD labels are useful descriptors, but are not useful predictors". This perspective was expressed across theoretical orientations, and appears to reflect a limited understanding of cause

and ability to anticipate the course of the disorders throughout development. However, existing research would suggest that developmental trajectories of antisocial behaviour would provide insight into prognosis. For instance, early-onset antisocial behaviour is said to be more pervasive and severe (Moffitt et al., 1996), and provides a prediction into antisocial behaviour persisting into adulthood. However, pervasive antisocial behaviour represents a small subset of individuals, and is not likely generalizable to each individual meeting the diagnostic criteria for ODD and CD. As a result, the diagnostic labels of ODD and CD remain highly descriptive, rather than explanatory.

ODD and CD will likely remain as descriptions without further understanding of causation. The etiology of antisocial behaviour is understood as multifactorial, and a range of biological and environmental perspectives exist (Aguilar et al., 2000; Boden, Fergusson, & Horwood, 2010; Frick, 1998), however the exact etiology remains inconclusive at this time. During the course of this study, the lack of etiological clarity became identified as problematic in terms of diagnosis. As several participants identified; ODD and CD can only be seen as descriptions in the absence of a sophisticated level of causal understanding. One psychiatrist cited; "the descriptions are created without an organic substrate to understand cause", and as a result, "without the presence of a biomarker, conditions are just labels and descriptors". This position was further supported by another psychiatrist who stated that the descriptive nature and definition of disorder is often seen as problematic in most diagnostic classification systems. For example, the psychiatrist expressed, "it (the DSM) is descriptive, and they create criteria based on descriptions of people or

situations, there isn't, yet, physical, organic substrates for any of this".

Communication and facilitation of future research can be seen as a functional means of diagnosis. Diagnosis can also be understood as a precursor to the implementation of a treatment protocol. It was identified that the use of diagnostic labels provide a common classification, language, and continuity of care for providers. From a clinical perspective, several participants in this study cited that a benefit to the use of diagnostic labels is in the ability to provide a sanctioned intervention, based on the communicative potential of diagnostic labels. Additionally, it can be conceptualized that diagnosis is intrinsically linked with research. As one psychiatrist noted; "the current goal of clinical practice is to describe and classify" which demarcates an "early stage of understanding", and lends to future research. It can also interpreted that because diagnosis allows for communication and treatment approaches, it can also facilitate questioning around etiology and what interventions are effective. Due to the link between clinical practice and research, Morey (1991) identified that as our understanding of conduct disorders change, so should our criteria for defining them. As one psychiatrist in this study noted, that as our understanding of antisocial behaviour evolves, it may be determined that "ODD and CD may need to be classified differently altogether". The realization that the current understanding and diagnosis of ODD and CD is in early stages of description identifies that, despite the presence of classification systems, diagnosis remains a rather subjective process.

As was mentioned, ODD and CD are defined and classified based on the presence of behavioural criteria (APA, 1980; 1987; 1994; 2000; 2013; WHO, 1977;

1992), which often covariate or statistically occur with one another (Achenbach, 1995). In doing so, diagnostic boundaries are developed in attempt to distinguish between normal and abnormal behaviour (Frick, 1998). However, it is important to understand that establishing a threshold between normal and abnormal behaviour is an inexact and somewhat arbitrary practice. As one psychiatrist identified; "symptoms are statistically correlated, but are not understood at a pathophysiological level". As a result, without a clear understanding of cause; assessment and diagnosis becomes a subjective process. Due to the subjectivity of diagnosing descriptive disorders, clinical perspectives become integral in influencing the assessment and treatment process. Kirk and Hsieh (2004) identified that the consistency of diagnosis of antisocial behaviour is modest and varies based on context and profession. As a result, it can be interpreted that the theoretical orientation of the clinician has significant implications on the reliability and validity of diagnosis.

The subjectivity of behavioural diagnosis is also identified in the definition of problematic behaviour. Diagnostic criteria in classification systems attempt to provide clear and precise "symptoms", however, as one psychiatrist described; "problematic behaviour is subject to perspective". This refers to varying perspectives from individuals, family members, and clinicians in terms of identifying what constitute conduct problems. Further, a psychologist identified that ODD is often "misdiagnosed" and "over-diagnosed", suggesting that the imprecise application of diagnostic labels may likely result from the subjectivity associated with understanding and defining problematic behaviours. Kirk and Hsieh (2004) identified modest diagnostic consistency among individual practitioners, however, there also

exists inconsistency between diagnostic classification systems. For example, Burke, Waldman and Lahey (2010) identified that the ICD and DSM diagnostic systems are not equivocal, and that the DSM in particular is more restrictive in terms of diagnosing ODD. As a result, it can be interpreted that the understanding and diagnosis of ODD and CD is subjective and varies based on social context, practitioner, theoretical orientation, and diagnostic system.

In addition to effects of subjectivity, the diagnosis of ODD and CD can also be conceptualized as stigmatizing due to the medicalization of psychosocial concerns. Diagnostic labels can also be interpreted as leading to stigmatization (Ben-Zeev, Young, & Corrigan, 2010; Hinshaw & Stier, 2008). It was mentioned previously that participants can perceive ODD and CD labels as "over-diagnosed" and "misdiagnosed". Interestingly, one psychiatrist, attributed this phenomena to the "medicalization of psychosocial issues and behaviour". In addition to concerns around misdiagnosis and over-diagnosis, one participant also identified potential harm associated with imprecise diagnosis. Specifically, one social worker and family therapist identified that the application of ODD and CD labels "can create harm, due to the lack of knowledge, understanding and accuracy". Hsieh and Kirk (2003) identified that misdiagnosis can often occur as a result of a lack of consideration for social context and perception of antisocial behaviour as deriving from internal dysfunction. Moreover, another participant from a social work and psychology background posed the "social construction of mental disorder" argument, citing that "ODD and CD diagnoses can be seen as a means of social control, rather than an acceptance of differing worldviews".

In addition to the "medicalization of psychosocial issues", ODD and CD labels can be conceptualized as creating an "expectation of bad behaviour". Several participants identified that ODD and CD labels can been seen as stigmatizing based on the effect of how the disorders are understood and interpreted by people involved in with the youth. For instance, a participant with a background in social work and psychology provided an anecdotal report of the effect of ODD and CD labels evoking fear in schools and communities based on assumptions around the diagnoses. The participant provided an example of teachers and staff expecting "horrible" and "destructive" behaviour as a result of the diagnostic label. The participant further elaborated this concern by stating; "it is kind of questionable whether they (ODD and CD labels) are accurate or not, then we actually cause a lot of harm".

Further, it was reported that labels, such as CD, are often interpreted as a threat and subsequently influences how individuals react. A psychologist also identified that the labels often overgeneralize behaviour, creates an expectation of future behaviour, and "halts hope". The participant discussed the concept of halting "hope" in that a youth is treated differently based on the presence of the diagnostic label. The participant provided an anecdotal example of assumptions around diagnostic labels, such as "oh, it is just another conduct disordered kid", and "I have conduct disorder….okay, that's who I am". This perspective alludes to the role of efficacy expectations on identity development. Specifically, participants not only identified that labels may influence how people react, but also influences the youth's sense of self and identity, which may perpetuate behaviour. As a result, it would seem beneficial for areas of future research to explore the phenomenology of

antisocial behaviour, as well as the effect of stigmatization associated with ODD and CD labels.

Limitations

The present study illustrates clinical perspectives on the diagnosis of antisocial behaviour through 6 in-depth semi-structured interviews, and for methodological (e.g. qualitative constructivist grounded theory) reasons should not be interpreted as a definitive approach to diagnosis. Rather, the present study is intended to serve as a substantive theory of the assessment and diagnostic process derived from the examination of theoretical and clinical perspectives. Also, the results from this study should not be generalized to the assessment and diagnosis of conditions other than ODD and CD. Additional methodological limitations arise in terms of sampling. For instance, participants in the current study, although varying in theoretical orientation, possess experience working primarily in a clinical capacity, and as such the results may be perceived as influenced by dominant paradigms on the diagnosis of antisocial disorders.

Conclusion

The assessment and diagnosis of antisocial disorders is perceived as multifaceted. Due to the multiple factors implicated in the cause of ODD and CD, assessment can be seen as difficult task. Therefore, the goal of this study was to address; 1) *how do varying theoretical and clinical perspectives influence the understanding of the diagnosis of ODD and CD?* and, 2) *how do different practitioners arrive at clinical decisions for individuals with ODD and CD?* To answer these questions, this study employed a qualitative grounded theory research

methodology. Participants from a range of theoretical orientations were interviewed in a semi-structured format.

From a clinical perspective, emphasis is placed on conducting comprehensive individualized assessments in order to gain insight into background information and nature of the presenting problem through the use of clinical interviewing, collateral information, standardized assessment, behavioural observation and diagnostic criteria. Antisocial disorders are also understood to be defined based on the presence of symptoms according to diagnostic classification systems, as well as influenced by social context and degree of impairment. This study also served to illustrate the importance of identifying comorbid conditions, which may confound or differentiate the diagnosis of ODD and CD. Further, it was identified that clinicians primarily view ODD and CD as distinct, although related diagnoses that are differentiated by subtypes, which would support a dimensional approach to diagnosis. Finally, the study illustrated that the process of diagnosis is functional in terms of description and communication. Although there exists perceived stigmatization associated with the application of ODD and CD diagnostic labels.

The understanding of the diagnosis of ODD and CD is influenced by a range of theoretical and clinical perspectives. However, there appears to be general consistency among practitioners in terms of understanding the diagnosis of ODD and CD. In this current study, it would appear that adherence to a biopsychosocial paradigm lead to commonalities among clinical approaches by practitioners of varying theoretical backgrounds. Practitioners in this study viewed ODD and CD from a particular clinical and theoretical viewpoint, but also integrated multiple

perspectives in order to understand the diagnostic process. As a result, there appeared to be general consistency among practitioners in terms of clinical decision making, despite differing theoretical orientations.

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Chapter IV

Theoretical & Clinical Perspectives on the Treatment of Antisocial Disorders in Adolescence

Abstract

A qualitative, constructivist grounded theory research approach to examine theoretical and clinical perspectives on the treatment of antisocial disorders in adolescence. The intent of the study was to develop a substantive theory on the treatment of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), based on multiple clinical perspectives. Current research identifies a range of treatment modalities, such as individual psychotherapy, psychopharmacology and parent training. However, no conclusive evidence has been established on the most effective approaches for antisocial disorders. For this study, 6 professionals, from a range of theoretical orientations were interviewed in order to gain insight into how theoretical orientations influence the treatment of antisocial disorders and subsequent clinical approaches. This study identified the necessity of a multidisciplinary approach in treatment. The findings from the research interviews also suggest a range of clinical perspectives on psychotherapy and behavioural intervention, psychopharmacology, environmental interventions, and the role of maturation in leading to improved outcomes. Interestingly, the results illustrate relative consistency among practitioners from varying theoretical orientations in the treatment process. This type of qualitative research will serve to assist clinicians and researchers in further understanding, at a conceptual level, the treatment process of antisocial behaviour. A discussion of clinical implications, study limitations, and areas for further research will also be included.

Review of Literature

Varying perspectives exist regarding the treatment of antisocial behaviour in childhood and adolescence. It appears that the disparate treatment approaches vary based on the understanding of etiology and diagnosis of ODD and CD. For instance, theoretical perspectives may view the cause of such disorders as an individual, internal dysfunction, and as a result ascribe to individual-based treatments, such as psychopharmacology and individual psychotherapy. Whereas other perspectives view the onset of psychopathology as a manifestation of the interaction between individual and environmental risk factors, and therefore emphasize the importance of intervention at an individual and environmental level. The following will attempt to summarize and synthesize research examining treatment responses of individuals with ODD/CD, specifically, the efficacy of individual psychotherapy, psychopharmacology, and parent training.

Individual psychotherapy. Multiple psychotherapeutic modalities exist, and research studies have attempted to evaluate the effectiveness and treatment response of individuals with ODD and CD. For example, research has evaluated cognitive-behavioural approaches (Rohde, Clark, Mace, Jorgensen, & Seeley, 2004), behavioural modification and psychoeducation around problem-solving and social skill building (Haas, Waschbusch, Pelham, King, Andrade, & Carrey, 2011), therapeutic alliance (Kazdin, Whitley, & Marciano, 2006) and psychodynamic psychotherapy (Eresund, 2007).

Rohde et al. (2003) conducted an efficacy/effectiveness study of group cognitive-behavioural treatment for adolescents with comorbid depression and conduct problems. Rohde et al. (2003) found that cognitive-behavioural interventions

were more efficacious than life-skill training and psychoeducation groups, and resulted in a reduction in scores measuring depression and social functioning at post-treatment follow-up. However, it was identified that at six and twelve month follow-up measurements, cognitive-behavioural intervention was rather ineffective in terms of maintaining sustained improvement to depressive symptoms and conduct problems (Rohde et al., 2003). Rohde et al. (2003) concluded that cognitive-behavioural intervention did not significantly influence the course of CD, and suggested that cognitive-behavioural treatment was an effective acute/short-term intervention; however, was ineffective in terms of maintaining sustained change.

Haas et al. (2011) conducted a study examining the role of callous/unemotional traits in treatment response, using psychoeducation and behavioural modification strategies, among individuals with conduct problems. It was identified that individual exhibiting callous/unemotional traits and conduct problems demonstrated minimal improvement in response to social skill building and problem-solving, and therefore require more intense or novel social skill intervention (Haas et al., 2011). It was also concluded that administering a behavioural approach, such as the use of consequences, was rather ineffective and often resulted in escalation of behaviour. Further, it appears that individuals with callous/unemotional traits and conduct problems were more responsive to positive reinforcement (Haas et al., 2011).

In addition to the efficacy of positive reinforcement, Kazdin, Whitley and Marciano (2006) studied the effect of evidence-based treatment (cognitive-behavioural therapy) for children referred for oppositional, aggressive and antisocial

behaviour. Kazdin, Whitley and Marciano (2006) found that despite the incorporation of a cognitive-behavioural modality, the strongest predictor of therapeutic change was the quality of alliance between child and therapist. Although, it was unclear whether therapeutic change was attributed to other domains, such as socioeconomic standing, parental involvement or severity of child dysfunction, it was identified that the reported strength of the therapeutic alliance was most positively correlated with the increased behavioural improvement (Kazdin, Whitley, & Marciano, 2006).

Alternative approaches to "evidence-based" psychotherapy, may also be efficacious in treating symptoms of ODD/CD. Eresund (2007) conducted a qualitative research study evaluating the effectiveness of a psychodynamic perspective with integrated aspects of expressive play therapy and verbal interventions. The intent of psychodynamic psychotherapy, in this study, was to promote awareness, reflection and expression of thoughts and feelings. Eresund (2007) found that integrating a psychodynamic orientation was effective in promoting improved social skills and self-esteem, and that a significant number of individuals no longer met the diagnostic criteria for ODD; however, it was identified that individuals with comorbid ADHD were less responsive to treatment.

To further support the value of integrating alternative approaches to treatment, it appears to be beneficial in terms of integrating a trauma-informed approach to work with individuals with ODD/CD. There is a significant correlation between individual antisocial behaviour and levels of violence exposure and victimization (Schwab-Stone, Koposov, Vermeiren, & Ruchkin, 2012). Whittle et al. (2013) also found that

early childhood maltreatment was associated with altered brain development and individual psychopathology. Further, Kahn et al. (2013) established that high rates of childhood trauma were related to the development of callous/unemotional traits contributing to conduct problems. As a result, it appears that there is significant validity in terms of integrating a trauma-informed therapeutic approach with individuals exhibiting symptoms of ODD/CD.

Psychopharmacology. There are numerous research studies that have been conducted to measure the effectiveness/efficacy of treating ODD/CD symptoms, including the use of psychostimulants; antidepressants; mood regulators, such as lithium carbonate and valproic acid; and atypical antipsychotics (Turgay, 2009). Research has also suggested that psychostimulant medication is efficacious in treating ADHD and ODD symptoms, specifically, impulsivity and aggression (Hinshaw, 1991). Alternatively, Newcorn, Spencer, Biederman, Milton and Michelson (2005) suggested that the use of antidepressant medication, specifically atomoxetine, is a reliable, well tolerated alternative to stimulant medication; however, it was identified in this short-term, placebo-controlled study that there appeared to be an increased risk of suicidal ideation and adverse side-effects, such as liver and heart complications.

Masi et al. (2009) conducted a study measuring the effectiveness of lithium as a monotherapy treatment for CD, as well as lithium in combination with atypical antipsychotic medication. Results from the study indicated that lithium as a monotherapy, and in adjunct with atypical antipsychotic use, was effective in terms of a statistically significant improvement to physical and verbal aggression toward objects and others (Masi et al., 2009). However, it was identified that the positive

results were mostly correlated with impulsive and affective aggression, rather than predatory aggression (Masi et al., 2009), which may suggest that lithium is most effective in terms of addressing impulsiveness and emotional regulation as opposed to other criteria necessary for a diagnosis of CD, such as intentional aggression, deceitfulness, and vindictiveness. Further, the study conducted by Masi et al. (2009) identified numerous adverse side-effects to the medication intervention. Specifically, 1/3 of participants faced adverse side-effects including gastrointestinal effects, polydipsia, transient enuresis, tremors and increase thyroid stimulating hormone levels. Additionally, 54% of participants receiving atypical antipsychotic preparations experienced increased appetite and weight gain, and another 30% of subjects experienced moderate to severe sedation (Masi et al., 2009).

Although research studies have indicated that psychopharmacological treatments are effective in terms of improvement to symptoms of ODD/CD, it appears that many of the medication interventions are aimed at addressing symptoms of comorbid diagnoses rather than the behaviours associated with the diagnostic criteria of ODD/CD. For example, psychostimulant medication to address impulsivity often associated with comorbid ADHD, and antidepressant and mood regulating medications for anxiety and depression often seen co-occuring with ODD/CD (Turgay, 2009). Further, it appears that psychopharmacological interventions promote significant adverse side-effects in addition to the reports of behavioural and emotional improvement.

Parent training. In addition to individual pharmacotherapy, research has provided evidence to support the efficacy of parenting training in terms of managing the symptoms of ODD/CD. Webster-Stratton, Reid and Hammond (2004) conducted a study evaluating various treatments for individuals with conduct problems, specifically, by examining the intervention outcomes of parent, child and teacher training. It was concluded that treatment was effective when parent training focused on interpersonal communication, support, conflict resolution, parenting skill and management of parent psychopathology, for instance, depression (Webster-Stratton, Reid, & Hammond, 2004).

Based on Patterson's Coercive Process theory, Webster-Stratton, Reid and Hammond (2004) focused on providing parents with social skills building, conflict resolution, empathy, and communication. Results indicated that parent-training was effective in reducing coercive interaction and promoted positive interactions between parents and children. It was also found that parent training yielded clinically significant reductions in conduct/behaviour problems at home and at school (Webster-Stratton, Reid, & Hammond, 2004). To further support the effectiveness of parent training, Drugil, Larsson, Fossum and Mørch (2010) conducted a study to measure long-term outcomes for youth with ODD/CD treated with parent training. Results from the study concluded that both parent training, and parent training in combination with individual psychotherapy supports long-term effectiveness for treatment of ODD/CD (Drugil et al., 2010). To further illustrate the effectiveness of parent and child training, Drugil et al. (2010) found that at five-six year follow-up, approximately 2/3 of the children no longer met the diagnostic criteria for ODD/CD.

Webster-Stratton, Reid and Hammond (2004) and Drugil et al. (2010) have provided evidence to support the efficacy of parent training in terms of managing the behaviours associated with ODD/CD. However, it was identified that the involvement of individual psychotherapy promoted further improvement. For instance, Webster-Stratton, Reid and Hammond (2004) concluded that although parent training appeared to be an effective intervention, it was necessary to also address individual concerns, such social skill building, problem solving and emotional regulation. Further, it was identified that parent training in adjunct with individual psychotherapy was most effective in terms of promoting positive interactions and maintenance.

Methods

For the purposes of brevity, please refer to the *Research Methods* section found within *Chapter I: Introduction to Topic & Research* in order to gather details relating to the research methodology, such as design, population & sample, data collection and analysis, pertaining to this qualitative grounded theory study.

Findings & Discussion

In the analysis, a substantive theory was generated in attempt to provide insight into clinical perspectives on the treatment of antisocial disorders in adolescence. Five categories were derived from the interviews, which were central to the treatment process: 1) need for a multidisciplinary approach; 2) psychotherapeutic and behavioural interventions to unlearn responses; 3) use of psychopharmacology to treat comorbid conditions; 4) altering the environment to promote structure and consistency; and 5) improved outcomes due to maturation and development. The five

core categories were developed based on commonalities present across theoretical orientations. Differing perspectives have also been included as part of the discussion of the categories. It is likely that the similarities across disciplines may be related to clinical practices that each participant adheres to, which may demarcate a limitation to the study. Once the categories were developed, a process of theoretical sampling was integrated in order to further support and maintain the core categories. An explanation of core categories is presented in the following:

Need for a multidisciplinary approach. The recognition that no singular, causal factor can be identified in ODD and CD, implicates how to approach intervention. The etiology of antisocial disorders is multifactorial, therefore the treatment approach needs to be as well. As one psychologist identified, because there is "no one cause" there is "no one treatment". Since the onset of conduct disorders involves the convergence of multiple dynamics, it would seem intuitive that a multidisciplinary approach would be the most effective method of intervention.

In order to emphasize the importance of approaching intervention through a multidisciplinary perspective, one psychologist, from a neuropsychological background, expressed that "isolated treatments are going to be ineffective". The participant was referring to the inadequacy of addressing ODD and/or CD through singular modalities, such as psychotherapy, behavioural modification or psychopharmacology in isolation. Frick (1998) discussed that much of the existing research has focused on treatments that are designed to address a single process believed to be important in the development and course of conduct disorders. However, no single-treatment has proven to have a dramatic effect on youth with

conduct disorders (Kazdin, 1995). Additionally, research has indicated that intervention needs to be *multicomponent* (Muratori et al., 2013) or *multimodal* (Zuddas, 2014), emphasizing multiple interventions and communication. As a result, it can be interpreted that isolated interventions focused on single underlying factors (e.g. affect, impulsivity, comorbid conditions, parent-child relationship, peer affiliation, etc.) are likely going to be insufficient.

Zuddas (2014) emphasized multimodal intervention and communication. This concept was reflected in the current study, as participants consistently reiterated that "it takes a team" in order to provide treatment for antisocial behaviour. Additionally, in order to provide a particular treatment, it is necessary to begin with effective assessment. As one psychiatrist noted, "good assessment is necessary for good treatment". Similarly, a social worker and family therapist explained that for effective treatment it is necessary to assess and "really look at the parenting process, caregiver process, attachment, and attending to any other issues there may be". The participant also emphasized the need to incorporate a "team-approach". It becomes imperative to gain an understanding of the multiple developmental trajectories of conduct disorders. Pardini and Frick (2013) identified age of onset, affective factors, and emotional regulation as developmental pathways to conduct disorders. Similarly, participants in the current study identified multiple factors in the etiology of ODD and CD, such as biological correlates, attachment, trauma, learning, affect and impulsivity. As a result, assessment of causal factors becomes very important in terms of treatment planning. The various causal pathways can implicate specific treatment approaches which are individualized and comprehensive. For instance, utilizing assessment to

determine if psychopharmacology is appropriate or what type of therapeutic modality to incorporate, such as attachment-based, trauma-informed, parent training, behaviour modification, and so on.

There was generally a consensus among participants that a multidisciplinary approach to treatment is most effective in terms of treating antisocial disorders in adolescence. However, there was also the acknowledgement that a multidisciplinary approach possesses certain limitations. For instance, one psychologist expressed that "treatment is effective when there are adequate resources" available. Further, a social worker noted that treatment "requires more resources to focus on prevention and intervention". Similarly, Frick (1998) acknowledged that effective prevention and intervention strategies are available. However, such interventions are limited by a willingness to provide the resources necessary to make multidimensional approaches available to the children and their families.

Although research and clinical perspectives support the incorporation of a multidisciplinary approach to treatment, it is also beneficial to discuss the themes that arose around the utility of singular intervention approaches. However, it is important to keep in mind, in the following sections, that the participants in this study primarily advocate for the use of a combination of the intervention approaches. Incorporating a combination of treatments will allow for intervention that is individualized for the heterogeneous presentation of antisocial behaviour in ODD and CD. The following sections will explore psychotherapeutic, behavioural, psychopharmacological, and environmental perspectives on treatment, as well as a theme identifying the relationship between maturation and improved behavioural outcomes.

Psychotherapeutic & behavioural interventions to unlearn responses.

Multiple theoretical perspectives exist in regards to counselling and psychotherapy (Corey, 2009). Additionally, numerous research studies have examined the efficacy of a range of psychotherapeutic approaches aimed at treating ODD & CD. Psychodynamic therapy (Eresund, 2007), psychoeducation/child training (Haas et al., 2011; Webster-Stratton, Reid, & Hammond, 2004), cognitive behavioural therapy (Rohde et al., 2004) and mode deactivation therapy (Bayles, Blossom, & Apsche, 2014; Swart & Apsche, 2014) are just an example of psychotherapeutic approaches that have been aimed at treating conduct disorders. The current study identified a large degree of variability among psychotherapeutic approaches, emphasized engagement and relationship building, as well as challenges to the efficacy of individual psychotherapy. Additionally, behavioural intervention was identified as a means to promote learning and alter behavioural responses.

Participants identified that there is variability among potential therapeutic approaches in order to address antisocial disorders. In particular, a social worker from a marriage and family therapy orientation reported that therapy can be aimed at promoting “self-reflection/awareness”, “empathy building”, “emotional regulation” and “impulse-management”. Additionally, multiple participants, from varying orientations, reported that therapy can also be focused on addressing issues around “anxiety”, “depression”, “low self-esteem” and “defensiveness”. However, the utility of the therapeutic approach would be dependent on the individual’s presenting concerns based on the developmental pathway of the conduct problems (Pardini & Frick, 2013). Muratori, Salvadori, Picchi and Milone (2004) identified a correlation

between internalizing problems and externalizing behaviour. Additionally, conduct problems are often seen as correlated with comorbid conditions (Maughan, Rowe, Messer, Goodman, & Meltzer, 2004), such as anxiety (Zoccolillo, 1992) and depression (Greene et al., 2002). As a result, psychotherapeutic techniques can be integrated which address internalizing and affective concerns unique to the individual.

To further illustrate the variability of therapeutic approaches, Liabø and Richardson (2007) conducted a review of research and concluded that three types of psychotherapeutic programmes exists: 1) skills programmes; 2) affective education; and 3) problem-solving programmes. Although skill-based, affective, and problem-solving approaches have been evaluated, current research has also identified the role of trauma on psychopathology (Whittle et al., 2013) and attachment (Lecompte & Moss, 2014) in the development of conduct problems. Similarly, participants in this study from across theoretical orientations discussed trauma and attachment. For example, a psychologist with a background in forensics cited the role of "complex psychological trauma". Also, a social worker and psychologist stated that "we don't think enough about the role of attachment or attachment injuries or insecure attachment". Further, a psychiatrist emphasized the role of trauma and attachment; "trauma not only as exposure to abuse, but trauma as in attachment relationships being disturbed…we have got to consider those as well". As a result, it would likely be beneficial for future research and clinical practice to examine trauma-informed and attachment-based therapies. A wide-range of individual approaches have been implicated, however, it appears that differing perspectives exist on the efficacy of

psychotherapeutic approaches to ODD and CD.

Participants reported certain challenges to individual psychotherapy, and it appears that the effectiveness of therapy is seen as influenced by subtype. For instance, participants described subtypes of conduct disorders, which differ based on age of onset. For example, one social worker and family therapist expressed that the prognosis of the behaviour is "much more difficult than if it is later onset". Similarly, a psychologist, with forensic experience, identified that individuals with late-onset behaviour are seen as more "amenable to treatment". Research has also indicated that subtypes of conduct disorders are determined to be more severe and pervasive based on earlier age of onset (Aguilar, Sroufe, Egeland, & Carlson, 2000; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). Additionally, multiple participants consistently reported that individuals with ODD symptoms were seen as more responsive to therapy than those with CD. In particular, a participant from a social work and family therapy orientation described symptoms of CD as "more difficult to shift" in comparison to symptoms of ODD. Furthermore, several participants viewed psychotherapy as more effective as a long-term treatment approach. This perspective is consistent with existing research, which identified that therapies are often ineffective in maintaining sustained change in the course of conduct disorders (Rohde et al., 2003).

In addition to age of onset confounding the treatment process, the presence of callous-unemotional traits also appears to impact treatment responsiveness. For example, a psychologist, with a forensic background, explained that psychotherapy with individuals exhibiting callous-unemotional traits can be rather ineffective, citing

"for talk therapy, you might as well talk to a wall". Frick (1998) characterizes callous-unemotional traits as lack of guilt, lack of empathy and low emotionality. One psychologist in the current study expressed that the presence or absence of emotion can be influential in determining whether or not the individual is treatable. This perspective is consistent with current research which identifies the presence of callous-unemotional traits as having a negative impact on treatment responsiveness (Fontaine, Rijsdijk, McCrory, & Viding, 2010; Haas et al., 2011). However, there appears to be a lack of research evaluating the effectiveness/efficacy of specific psychotherapeutic approaches aimed at callous-unemotional traits. As a result, psychotherapy for callous-unemotional traits can be seen as an area for future research.

Given the recognition of challenges to psychotherapeutic approaches with this demographic, participants also discussed the potential efficacy of emphasizing engagement and relationship building approaches. As was mentioned, attachment can be seen as playing a role in the development of conduct disorders (Lecompte & Moss, 2014). A participant with a background in social work and psychology emphasized the role of attachment, and stated that "interventions that are attachment-informed may promote prevention of ODD/CD" behaviours. Furthermore, participants consistently discussed the importance of attachment, and the need for engagement and relationship building. For example, as one participant expressed "exposure to a variety of relationships leads to control over attachment, rather than forcing attachment". As a result, treatment programs have been developed to integrate attachment-based interventions (Moretti, Holland, & Peterson, 1994).

In addition to an attachment-informed approach to treatment, participants emphasized a needs-based approach, rather than a pathology focused approach. As one participant who is a registered social worker and psychologist put it; "environments that are focused on meeting needs, engagement, and foster relationship building are most effective". This perspective is supported by existing research which has suggested that therapeutic alliance can be utilized to enhance change in antisocial behaviour (Karver, Handelsman, Fields, & Bickman, 2006; Kazdin, Whitley, & Marciano, 2006). Given the reported effectiveness of engagement and relationships, youth mentoring is implicated in the treatment of conduct disorders. A participant, with a background in social work and psychology, discussed youth mentoring as an effective means to "model positive relationships" and address the social learning that has occurred in other environments. However, research is unclear around effectiveness, and there is an emphasis to incorporate research-based practice in mentoring (Rhodes, 2008; Roberts, Liabø, Lucas, & Dubois, 2004). It would seem that an area of future research could explore the specific role of attachment and relationships in the etiology and treatment of antisocial disorders.

In addition to psychotherapy, another theme arose around the incorporation of behavioural interventions as means to focus on learning rather than internal dysfunction. Additionally, participants identified the need to integrate behavioural approaches that promote immediate rewards and reduced punishment. Social learning has been implicated in the development of antisocial disorders (Bandura, 1969; Patterson, 1982; Snyder, Reid, & Patterson, 2003). As a result, it would seem necessary to incorporate interventions that focus on promoting learning. One

psychologist, from a forensic background, viewed behavioural modification as a "more effective" strategy than psychotherapy in terms of promoting alternative behavioural responses. This perspective is somewhat consistent with existing literature which would suggest that younger children are more responsive to behavioural intervention, and adolescents are more response to cognitive-behavioural approaches (McCart, Priester, Hobart Davies, & Azen, 2006).

To emphasize the utility of behavioural interventions, a psychologist, from a neuropsychological background, expressed that "behaviour is learned, and treatment attempts to "unlearn" and/or modify learning". Consistent with the increased pervasiveness of conduct problems developed in early childhood (Moffitt et al., 1996), the participant explained that "learning that has occurred earlier on will be more difficulty to modify". In terms of modifying behaviour, participants from across theoretical orientations identified the need to promote prosocial attitudes and behaviours through the use of "clear and immediate consequences" and "reinforcement of appropriate, alternative behaviour". Research has been conducted which would suggest that it is most effective to target direct causes as opposed to underlying causes (Liabø & Richardson, 2007). Direct causes are the explicit behaviours that manifest with ODD and CD, and it is suggested that addressing the overt behaviour is most effective (Kurtz, 2002). However, it appears that although behavioural interventions can be effective, it is necessary to focus on increased reinforcement and reduced punishment.

A participant with a background in social work and psychology described the necessity of focusing treatment on "accountability as opposed to a punishment

model". Further, it was reiterated during this study that it is integral to provide "immediate positive rewards for individuals who struggle with delaying gratification". These findings reflect two important characteristics of conduct disorders; 1) individuals with conduct problems are more responsive to reward, and less responsive to punishment, and 2) conduct disorders are highly correlated with impulse-control issues. Individuals with antisocial behaviour were historically viewed as unresponsive to punishment (Lykken, 1957). However, more recent research has suggested that individuals have a tendency to focus on reward and exclude attention to punishment, which has been described as a "reward-dominant" response style (Newman, Patterson, & Kosson, 1987; O'Brien, Frick, & Lyman, 1994). As a result, interventions which maximize positive reinforcement and minimize aversive experiences are likely to be most effective.

In addition to emphasizing positive reinforcement and reducing aversive consequences, participants, in particular psychologists and social workers, expressed that is it necessary to utilize "immediate" reinforcement. As was mentioned, difficulty delaying gratification and the utility of immediate reinforcement likely reflects the correlation between conduct disorders and impulsivity. ADHD has long been understood to correlate with conduct disorders (Abikoff & Klein, 1992). Research has also suggested that individuals who exhibit impulse-control issues, often seen in ADHD, are more responsive to the immediacy of the positive reinforcement, as opposed to the quality of the reinforcement (Neef et al., 2005). It would seem that incorporating immediate reinforcement would be an effective approach for individuals who present with conduct problems differentiated by

impulsivity, however, it is important to note that not all individuals with conduct problems exhibit high levels of impulsivity (Moffitt et al., 1996). As a result, it is necessary to consider the role of impulsivity during the assessment process, in order to integrate an effective treatment approach.

Psychotherapy and behavioural interventions to address underlying affective concerns and to promote learning have been discussed. Additionally, it was mentioned that conduct disorders vary in terms of degree of impulsivity, often resulting from comorbidity with ADHD. The presence of comorbid conditions can be viewed as an integral component in the understanding of the etiology, diagnosis and treatment of conduct disorders. Further, research and clinical perspectives view multidisciplinary approaches to treatment as most effective. As a result, it becomes beneficial to examine treatment interventions directed at comorbid conditions, such as psychopharmacology.

Use of psychopharmacology to treat comorbid conditions. The use of psychopharmacology to treat conduct disorders has been widely debated in the research literature (Turgay, 2009; Wolpert et al., 2006). According to the findings in this current study, psychopharmacology can be seen as a useful treatment modality to address comorbid conditions influencing conduct disorders, as opposed to the specific constellation of behaviours. For instance, psychopharmacology can be seen as effective in managing "underlying impulse-control and affective issues". However, it can be interpreted that impulsivity and affective factors represent only two variables in the multifactorial development of antisocial behaviour. As a result, the use of medication is not to treat ODD and CD as singular conditions, but rather to address

symptoms that are seen as preceding and co-occurring with the behaviours. Further, according to participants in this study it would seem that there exists a cost-benefit relationships with the use of medications.

Participants in this study reported the potential benefit of utilizing psychostimulant medication for the treatment of impulsivity associated with conduct disorders. For example, one psychiatrist who identified that the "successful treatment of ADHD can improve ODD symptoms". This result is consistent with existing research, for instance, Gerardin, Cohen, Mazet and Flament (2002) found that conduct disorder and ADHD possess an overlap of impulsivity symptoms. Further, research has revealed that psychostimulants have been effective in reducing antisocial behaviour (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002; Gerardin et al., 2002). It can be interpreted that effective treatment of antisocial behaviour with the use of psychostimulant medication is attributable to management of the underlying impulse-control issues. However, the development of antisocial behaviour is not limited to impulse-control, but also issues around affective control and emotional regulation (Pardini & Frick, 2013). As a result, psychopharmacological treatment of affective concerns are considered.

Conduct disorders are correlated with affective concerns, such as anxiety and depression (Zoccolillo, 1992). Further, ODD can be differentiated based on anger and irritability, which represent affective dimensions (APA, 2013). As a result, psychopharmacological approaches to address affective dimensions have been implicated in the treatment of conduct disorders. In particular, both psychiatrists in this study discussed the use of antidepressant medications, such as fluoxetine and

citalopram. However, research has produced conflicting results as to the efficacy of antidepressant medication use. For instance, Liabø and Richardson (2007) identified that no quality studies support the use of selective serotonin reuptake inhibitors (SSRIs) in the treatment of aggression in youth. However, additional research has suggested that the use of antidepressant medication may be efficacious for associated anxiety or mood disorders (Turgay, 2009). In addition to antidepressant medication, there appears to be some debate around the use of atypical antipsychotic medication.

The use of atypical antipsychotics to treat aggression has been increasing, and it has been suggested that medications, such as risperidone, can be effective in the treatment of severe aggression (Farmer et al., 2011). However, according to the psychiatrists in this current study, there is apprehension with the use of atypical antipsychotics to treat ODD and CD. One participant referenced the Treatment of Severe Childhood Aggression (TOSCA) study, and the results that suggested risperidone can be effective after psychostimulant and psychosocial intervention (Farmer, et al., 2011). However, the participant expressed that atypical antipsychotics should only be considered "as a last resort". Additionally, the other psychiatrist in this study expressed that atypical antipsychotics might "lower the intensity of the reaction". However, the participant expressed that there is "uncertainty around the effectiveness of antipsychotic medication to manage impulsivity and explosiveness". Interestingly, both psychiatrists reported limitations to medication, and emphasized the need for psychosocial intervention. Research has also lead to uncertainty around the efficacy of atypical antipsychotic use. For instance, Reyes, Croonenberghs, Augustyns and Eerdeckens (2006) found risperidone to be an effective maintenance

treatment, and also identified that risperidone effectively reduced symptom recurrence. However, Liabø and Richardson (2007) have criticized the methodology in which risperidone has been tested, and called into question the generalizability and utility of the medication. The preceding discussion around psychostimulant, antidepressant and antipsychotic use, has also led to another theme around the benefits and limitations of medication use.

There appears to be a cost-benefit relationship with the use of medications to treat antisocial disorders. For instance, one social worker described medication use as a "double-edge sword", suggesting that medication may provide short-term positive improvement, however, the results may not be sustained. Similarly, a psychiatrist also questioned the long-term efficacy of medication use by stating, "…some of these conditions, like ODD and CD, people might look back at intervention (medications) over a long period and question whether it has made any difference". In addition to a lack of sustained change, a participant from a social work a family therapy orientation expressed that medications may also bring the potential for adverse "side-effects". These perspectives are consistent with research literature which has suggested psychostimulant may produce short-term benefits, although there is a lack of longitudinal research examining the efficacy of medication use (Torgersen, Gjervan, & Rasmussen, 2008). Similarly, the long-term effect of psychopharmacological treatment on individuals with conduct disorders is also limited (Liabø & Richardson, 2007). Furthermore, research also suggests potential adverse side-effects associated with medication use (Fonagy et al., 2002; Gerardin et al., 2002; Turgay, 2009). As a result, it would seem that long-term follow-up of individuals receiving medication for

conduct problems, as well as the ethical implications of psychopharmacological treatment of conduct disorders, would be areas for further research.

From a research and clinical perspective, there appears to be utility of psychopharmacology to address underlying impulse-control and co-morbid affective conditions. However, psychopharmacological treatment of conduct disorders remains rather inconclusive at this time. Further, research and clinical perspectives appear to support pharmacotherapy of co-occurring conditions, rather than conduct disorders themselves.

Altering the environment to promote structure & consistency. The preceding sections discussed psychotherapeutic, behavioural and psychopharmacological treatments of antisocial disorders. However, it is also beneficial to explore the role of the environment. Liabø and Richardson (2007) defined antisocial disorders as characterized by impaired social functioning. Further, psychosocial experience has been implicated as a significant casual factor in the onset of antisocial behaviour. For instance, psychosocial experiences such as home environment, parental involvement, parental maladaptive behaviour, and peer affiliation have been identified as factors contributing to antisocial behaviour (Aguilar et al., 2000; Boden, Fergusson, & Horwood, 2010). As a result, intervention strategies should be considered that address the environment. During this study it became clear that participants view the importance of intervention in the home environment, such as parent education/training and family-based approaches. Furthermore, research has also suggested school and community-based programmes are effective environmental interventions.

In the *Psychotherapeutic and Behavioural Interventions to Unlearn Responses* section, behavioural management approaches were discussed. However, it is important to acknowledge that behavioural intervention does not simply occur in a clinical environment. Due to the recognition that an individual's environment plays an integral role in the development and maintenance of the behaviour, it is necessary to incorporate environmental interventions. As one psychologist, from a neuropsychological background, put it; "in order to undo learning, the system that creates and perpetuates the learning must be modified". This perspective shifts the focus of intervention away from antisocial behaviour as solely an internal dysfunction, and recognizes the necessity of environmental intervention. As a result, treatment can be focused on the major environments that may be contributing to the behaviour. Therefore, importance can be placed on major environments, such as the home environment.

Participants in this current study emphasized the importance of parenting training and education. As was mentioned, parenting practices have been implicated in the onset of problematic behaviour (Aguilar et al., 2000; Lecompte & Moss, 2014; Patterson, 1982). Additionally, research has indicated that specific parenting styles can influence the onset of conduct disorder. For instance, Freeze, Burke and Vorster (2014) identified that low care from the mother and overprotection from the father, can form an affectionless, controlling parenting style. It was concluded that this type of parenting style can contribute to the onset of conduct disorders (Freeze, Burke, & Vorster, 2014). As a result, it can be inferred that interventions aimed at modifying parenting approaches may be an effective means to prevent and intervene in the

development of antisocial behaviour. This finding is consistent with reports from participants in this current study. For instance, several participants identified parental education and strategies can be an effective means of prevention. In particular, one social worker and family therapist emphasized the importance of "looking at the parenting process, caregiver process and attachment". Further, a participant from a social work and psychological orientation identified that parent training can serve to promote "structure, consistency and predictability" in the home environment.

Parent Management Training (PMT) is based on the theoretical assumption that conduct problems are influence by social learning and maladaptive parent-child interaction (Liabø & Richardson, 2007). PMT is described as a treatment where parents are trained to identify, define and observe behaviours in a different way (Liabø & Richardson, 2007). The intent of PMT is to promote prosocial, rather than coercive behaviour in the parent-child interaction. A participant in this study, from a social work orientation, echoed the importance of parent-child interactions, stating that intervention identifies a "need for parents to respond in a positive manner". However, research has suggested that PMT is more effective with younger children, rather than adolescents (Fonagy et al., 2002). In addition to PMT, research has implicated a range of family-based therapeutic approaches, such as Strategic Family Therapy (SFT) and Functional Family Therapy (FFT) (Fonagy et al., 2002; Liabø & Richardson, 2007). However, Liabø and Richardson (2007) criticized SFT and FFT as expensive and lacking adequately trained practitioners. As well, there exists a lack of conclusive research on the efficacy of such treatment approaches.

Due to increased severity of conduct problems, it is possible that

parent/family-based approaches may be insufficient, and the youth may no longer be able to reside within the family environment. Several participants in this current study discussed the potential need to enforce more invasive environmental interventions. As one psychiatrist expressed, regarding severe presentations, "you are never going to cure the condition, it is about containing the damage". It appears that several participants view environmental interventions as a need to promote safety. This perspective reflects a "containment versus curing" position on intervention. As one psychologist noted, there is a "need to provide support and structure for pervasive presentations, in order to keep (the behaviour) within a reasonable parameter". Further, another participant with a background in social work and psychology stated that "containment may be necessary to promote safety of family and communities". However, it would seem that removing a child from the environment is not only about providing safety for the family, but may also serve to protect the youth themselves. For instance, one psychologist, from a forensic background expressed that removing a child may serve as a preventative measure by intervening on the youth's exposure to a "traumatic environment'.

Participants reiterated that accessing interventions such as parent training, family therapy, and more invasive interventions such as respite, foster care and residential treatment can be effective means of promoting structure and consistency. Lipsey and Wilson (1998) found that placement in structured foster homes or residential care units were effective in reducing re-offending behavior for those involved in criminal activity. Additionally, Preyde et al., (2011) conducted a longitudinal study that found that statistically significant symptom improvements

were maintained at 36-40 months following residential treatment. However, Liabø and Richardson (2007) identified barriers to family intervention programs, such as attrition, family stress and lack of social support. Further, family interventions have been extensively researched and are said to be promising, however, it remains inconclusive which interventions are most effective (Liabø & Richardson, 2007). As a result, a comparison of the effectiveness of specific family interventions, such as family-based therapy, respite, foster care, and residential care, could be seen as areas for future research.

Improved outcomes due to maturation & development. The role of psychotherapy, behavioural interventions, psychopharmacology, and environmental interventions have been discussed thus far. However, a final theme emerged during the course of this study pertaining to the role of maturation and development on the improvement of behaviours often associated with ODD and CD.

It appears that many participants adhere to the theoretical perspective supporting a relationship between prefrontal cortex functioning and impulsivity. Specifically, one psychiatrist cited that the "development of the frontal lobes leads to reduced impulsivity". Another psychiatrist also discussed "maturational differences" in the frontal lobe, which may be due to high comorbidity with ADHD. Similarly, a social worker and psychologist referenced theories on psychopathy involving "delayed frontal lobe development" and impulsive behaviour. As has been discussed, ODD and CD are both highly correlated with ADHD. Also, research has suggested that ADHD, ODD, and CD are often associated with abnormalities in the prefrontal cortex and amygdala (APA, 2013; Bertocci et al., 2014). Further, it is inferred that the

differences in the prefrontal cortex are responsible for the impulse-control issues that are often seen amongst the disorders (Bertocci et al., 2014). Interestingly, however, research has been conducted which suggests that impulsivity and risk-taking behaviour may be more related to limited exposure to novel adult situations, rather than solely a structural deficit in brain maturation (Romer, 2010). As a result, it can be interpreted that exposure in the social environment plays an integral role in brain development and impulsivity.

Further, Baarendse, Counotte, O'Donnell and Vanderschurer (2013) concluded that early social experience is critical in the development of the prefrontal cortex and subsequent modulation of impulsivity. The recognition that social experience can directly influence brain development and maturation, emphasizes the importance of the interaction between an individual and their environment. However, although it can be beneficial to understand the role of social experience on brain development and impulsivity, conduct disorders possess varying degrees of impulsivity (Moffitt et al., 1996). As a result, understanding the effect of maturation on the prefrontal cortex and impulsivity is insufficient in terms of understanding the effect of maturation on antisocial disorders as a whole. Therefore, it appears that until ODD and CD are understood at a pathophysiological level, it will remain difficult to identify the effect of maturation on the biological mechanisms associated with the disorders. This recognition identifies the need for research to further examine the biological underpinnings of ODD and CD, in order to develop a greater understanding of the developmental courses of the disorders.

Participants in this study provided anecdotal accounts of individuals "outgrowing" the behaviours associated with ODD and CD. For example, one psychiatrist cited a study which identified that approximately "30 to 40% outgrew all or most of it (behaviour disorder)". Additionally, a social worker identified that the "prognosis for ODD is not that bad", once children develop "agency". However, according to research, the life course of the disorders is largely dependent on the age of onset. As was mentioned, in youth with childhood-onset conduct disorders, the behaviours are typically more pervasive and severe (Frick, 1998; Moffitt et al., 1996). Further, research has identified a substantial stability of conduct disorder into adolescence and even adulthood. For example, Kratzer and Hodgin (1997) identified that 64% of boys and 17% of girls diagnosed with conduct disorder had criminal records into adulthood. However, individuals in the adolescent-onset trajectory have been identified to be much less likely to continue antisocial behaviour into adulthood, in contrast to the childhood-onset group (Hinshaw, Lahey, & Hart, 1993). Further, the stability of antisocial disorders is also influenced by comorbidity. Lavigne et al. (2001) identified that in addition to childhood-onset, the presence of comorbid conditions, such as ADHD, anxiety and depression, can increase the stability of the disorders over time.

Although not every instance of antisocial behaviour will persist into adulthood, and clinicians report individuals "outgrowing" their symptoms, it appears that the stability of the disorders is influenced by various factors. For example, a psychiatrist provided an anecdotal account of individuals "outgrowing" their symptoms, citing "ODD, on average, can last about 6 years". However, research

indicates that the pervasiveness of the behaviour is influenced by the age-of onset, as well as the presence of comorbid diagnoses. Additional predictors of stability include; ODD versus CD symptoms, low intelligence, parental history of antisocial behaviour, dysfunctional environments and economic disadvantage (Frick, 1998). Although participants in this current study suggest improved outcomes due to maturation and development, research would indicate that there exist numerous conditions which promote the maintenance of the disorders into adulthood. As a result, it can be interpreted that individuals presenting with less aggressive behaviour, developed in adolescence, without co-occurring disorders, of higher intelligence, and with fewer environmental risk factors, are more likely to "outgrow" their antisocial behaviour.

Limitations

The present study illustrates clinical perspectives on the treatment of antisocial behaviour through 6 in-depth semi-structured interviews, and for methodological (e.g. qualitative constructivist grounded theory) reasons should not be interpreted as definitive understanding of cause. Rather, the present study is intended to serve as a substantive theory of treatment derived from the examination of theoretical and clinical perspectives. Also, the results from this study should not be generalized to conditions other than antisocial behaviour. Additional methodological limitations arise in terms of sampling. For instance, participants in the current study, although varying in theoretical orientation, possess experience working in a clinical capacity, and as such the results may be perceived as influenced by dominant paradigms on antisocial behaviour.

Conclusion

The treatment of antisocial disorders is perceived as multifaceted. Therefore, the goal of this study was to address; 1) *how do varying theoretical and clinical perspectives influence the understanding of the diagnosis of ODD and CD?* and, 2) *how do different practitioners arrive at clinical decisions for individuals with ODD and CD?* To answer these questions, this study employed a qualitative grounded theory research methodology. Participants from a range of theoretical orientations were interviewed in a semi-structured format.

From a clinical perspective, a multidisciplinary approach to treatment is understood as the most effective method of intervention. As a result, treatment approaches can therefore incorporate a range of psychotherapeutic, behavioural and environmental interventions. Varying theoretical and clinical perspectives on the efficacy of psychotherapy exist. However, research and clinical perspectives would suggest utility in terms of incorporating a range of therapeutic approaches to address issues, such as self-awareness, empathy building, impulse-control, anxiety, depression and self-esteem. Behavioural interventions are also understood as an effective approach to treat antisocial disorders, particularly, behavioural interventions that increase positive reinforcement and reduce punishment. Further, it appears that conflicting views on psychopharmacological treatment exist. Specifically, psychostimulants, antidepressants, and atypical antipsychotics have been implicated in the treatment of ODD and CD. However, according to participants in this study it appears that medications are seen as having the greatest utility in terms of addressing impulsivity and comorbid affective concerns, rather than specific behaviours.

Environmental interventions, such as parent training, family-based therapy, and residential treatment can also be seen as promising methods to manage the disorders. Finally, the study illustrated that improvement can at times be attributed to maturation and development. However, the stability of the disorders can be influenced by a range of factors, such as age of onset, comorbid conditions, intelligence, and environmental risk factors.

The understanding of the treatment of ODD and CD is influenced by a range of theoretical and clinical perspectives. However, there appears to be general consistency among practitioners in terms of understanding the treatment of ODD and CD. In this current study, it would appear that adherence to a biopsychosocial paradigm lead to commonalities among clinical approaches by practitioners of varying theoretical backgrounds. Practitioners in this study viewed ODD and CD from a particular clinical and theoretical viewpoint, but also integrated multiple perspectives in order to understand the treatment process. As a result, there appeared to be general consistency among practitioners in terms of clinical decision making, despite differing theoretical orientations.

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Chapter V

Discussion

The intent of the preceding thesis was to examine how theoretical and clinical perspectives influence the understanding of the etiology, diagnosis and treatment of antisocial behaviour in adolescence. The study explored current clinical practices, in attempt to develop a theory and model of the assessment and treatment process, in order to provide knowledge and clarity around theoretical and clinical perspectives on adolescent antisocial behaviour.

The intent of this research was to specifically answer the questions: 1) *how do varying theoretical and clinical perspectives influence the understanding of the etiology, diagnosis and treatment of ODD and CD?* and, 2) *how do different practitioners arrive at clinical decisions for individuals with ODD and CD?* The research questions in this study were addressed using a qualitative, constructivist grounded theory research methodology. This type of qualitative research was valuable in terms of gaining an understanding of antisocial behaviour in adolescence, and was useful in terms of developing an understanding of assessment procedures and treatment modalities. For instance, this research attempted to provide an understanding of theoretical and clinical perspectives that are also supported by current research. In doing so, this study could provide clinicians with an understanding of approaches to etiology, diagnosis and treatment across theoretical orientations, as well as inform researchers of areas for future research.

Research has produced multiple perspectives on the etiology of antisocial behaviour. From individual to environmental factors; multiple dynamics are implicated in the cause of ODD and CD (Boden, Fergusson, & Horwood, 2010;

Fontaine, Rijsdijk, McCrory, & Viding, 2010; Frick, 1998; Lahey & Loeber, 1994). From a clinical perspective, ODD and CD can be seen as predisposed by biological and developmental correlates, such as genetics, cognitive/intellectual ability, development, and temperament. During this study, it was identified that clinicians view dispositional factors, such as genetics, cognitive functioning and temperament, as acting as either risk or protective factors. Although clinicians across theoretical orientations implicated a range of dispositional factors, an exact consensus on causal factors has not been achieved. As a result, it can be interpreted that dispositional factors can be perceived as related, although not exclusively causal in the onset of antisocial disorders. However, it appears that exploring various perspectives on dispositional factors can be beneficial in terms of understanding etiology.

Participants in this study identified the presence of dispositional factors in distinguishing antisocial disorders. For example, participants from across theoretical orientations suggested factors such as genetics, age of onset and temperament likely influence etiology. However, it was identified that although temperament may be valuable in terms of understanding cause, the specific role of temperament continues to remain unclear. Additionally, it was identified that it is often assumed that temperament results exclusively from genetics and disposition. However, many of the participants see temperament as developed based on an interaction between genetic and environmental factors. The specific mechanisms between dispositional factors and antisocial behaviour are not readily understood across orientations. As a result, dispositions, such as genetics, cognitive functioning, and temperament, can be interpreted as related although not predictive of antisocial behaviour from a clinical

standpoint. Given there is a lack of specificity on dispositional factors and etiology across disciplines, areas for future research could be beneficial.

Another consistent theme that was identified in this study is that clinicians emphasized an interactionist perspective. It is likely that consistency across perspectives is due to adherence to similar clinical paradigms and philosophical assumptions across theoretical orientations. For instance, although participants were selected from a range of theoretical orientations (e.g. psychiatry, psychology and social work), each participant reported integrating a biopsychosocial approach to clinical practice. As a result, each participant emphasized an interaction between individual and environmental factors, rather than understanding cause from a singular theoretical perspective. As a result, clinicians perceive dispositional factors in a reciprocal relationship with psychological and environmental factors. Similarly, current empirical research has supported the role of both genetic and environmental factors (Boden et al., 2010; Bornovalova, Cummings, Hunt, Blazei, Malone, & Iacono, 2014). As a result, vulnerability towards antisocial behaviour can be perceived as influenced by a gene-environment interaction, from both a clinical and theoretical perspective.

According to the results of this study, ODD and CD can also understood to be precipitated by the effect of attachment, parenting, and trauma. Participants from each theoretical orientation implicated the role of attachment, parenting and trauma in the etiology of antisocial behaviour. Additionally, research has been conducted which has suggested that psychosocial factors such as attachment, parenting and trauma are strongly correlated with ODD and CD (Afifi, McMillan, Asmundson, Pietrzak, &

Sareen, 2011; Whittle et al, 2013). Further, it is recognized that individuals with ODD and CD are at greater risk for disrupted attachment (Lecompte & Moss, 2014) and traumatic exposure (Schwab-Stone, Koposov, Vermeiren, & Ruchkin, 2012). As a result, it is likely beneficial that future research examine the impact of attachment and trauma on associated dispositional correlates of ODD and CD, such as cognitive functioning, development and temperament.

In addition to the role of attachment, participants consistently identified the relationship between parenting practices and learning. For instance, attachment can influence a child's behaviour as well as the parent's response to the child, subsequently influencing parenting practices. The parent-child interaction can then be perceived as perpetuated by learning processes. Similarly, research has indicated that a range of learning processes, such as social learning and coercive process theory, can result in the exhibition of antisocial behaviour (Bandura, 1969; Patterson, 1982). Additionally, a range of clinicians identified that learning occurs both in the home environment, as well as due to interpersonal relationships and peer affiliation. Therefore, the role of learning and the environment can be seen as integral, as a result of parenting practice and peer affiliation. Due to perspectives on learning and environmental factors, treatment approaches are implicated beyond individual intervention.

The presentation of antisocial behaviour can be perceived as differentiated based on indices such as affect, affective impulsivity and behavioural impulsivity. Clinicians in this study perceive that the emotional experience underlying antisocial behaviour can differ greatly. For instance, the presence or absence of anxiety and

depressive symptoms can influence how antisocial behavior is manifested. Similarly, it appears that impulsivity can also be understood to mediate one's emotional experience and subsequent behaviour. In conducting this study, the concept of affective impulsivity was discussed pertaining to etiology. Affective impulsivity was defined as related to emotional dysregulation, and it was identified as contributing to rapid escalation of irritability and explosiveness. Additionally, individuals with ODD and CD can be perceived as possessing varying degrees of behavioural impulsivity, for instance, possessing high reactivity/defensiveness versus calculated aggression. As a result, affect, affective impulsivity, and behavioural impulsivity can be seen as differentiating subgroups of ODD and CD. Further, it would seem differing emotionality and degrees of impulsivity would be implicated in the assessment and treatment process.

Participants in this study identified that discrepancies exist between research and clinical practice in terms of understanding etiology. For instance, it was evident that although research has been directed toward a range of biological, genetic and neuropsychological factors (Aguilar, Sroufe, Egeland, & Carlson, 2000; Boden, Fergusson, & Horwood, 2010), there exists a lack of pragmatic information available at this time to guide an exact clinical understanding of cause, diagnosis and treatment. Further, it would seem reasonable to conclude that identifying rudimentary brain-behaviour connections, such as frontal lobe functioning and impulse-control, would provide limited utility from a clinical perspective. That is unless the biological understanding of ODD and CD advances to the extent that specific biomarkers can be identified for the disorders. It can also be theorized that with greater understanding of

etiology, ODD and CD may need to be classified and treated differently altogether. As a result, further research, whether on a biological and/or environmental level, may serve to provide valuable information that will have a host of clinical diagnostic and treatment implications in the future.

The assessment and diagnosis of antisocial disorders is understood to be multifaceted. Due to the multiple factors implicated in the cause of ODD and CD, assessment can be interpreted as a somewhat imprecise process. This current study illustrated that relative consistency exists among practitioners from varying theoretical orientations in terms of conceptualizing the etiology and diagnosis, as a result of taking multiple biological, psychological, and social variables into consideration. From a clinical perspective, emphasis is placed on conducting comprehensive individualized assessments in order to gain insight into background information and nature of the presenting problem through the use of clinical interviewing, collateral information, standardized assessment, behavioural observation and diagnostic criteria.

Comprehensive individualized assessment was illustrated by participants as necessary in order to mitigate the risk of increased false-positive diagnosis. Further, it became clear that individualized assessment is necessary in terms of understanding differing subtypes of antisocial behaviour. Particularly, subtypes of ODD and CD can be differentiated through the inclusion of background and collateral information in order to provide an understanding of development, course, and treatment implications. Standardized instruments can also provide valuable insight into dimensions such as vigilance, impulsivity, anxiety, depression, and peer relations.

Additionally, the use of personality measures can provide insight into important dimensions around attitude and intentionality. Beyond clinical interviews, collateral information, and standardized assessment, behavioural observation was also identified as means to gather information into the production, maintenance and exacerbation of conduct problems. Finally, participants expressed that gathered information should then be compared with criteria found in diagnostic classification systems, such as the DSM. Although participants were selected from differing theoretical perspectives, the consistency within the diagnostic process is likely related to clinical practice, as opposed to consistency among theoretical orientations. As such, the clinical-focus of this study could be interpreted as a limitation.

ODD and CD can be defined based on the presence of symptoms according to diagnostic classification systems. The symptom list in a diagnostic classification system attempts to provide clear and explicit criteria for determining a disorder. Diagnosis of ODD and CD has been criticised, due to research and clinical perspectives citing that diagnostic symptom lists are inexact and imprecise in terms of defining behavioural disorders (Frick, 1998). Participants in this study identified that the intent of diagnosis is to describe a particular group of behaviours that correlate together. Additionally, it is important to consider the role of context in the diagnostic process. Further, degree of impairment can be understood as integral in defining antisocial disorders. For instance, the diagnosis of ODD and CD can be interpreted, across theoretical perspectives, as less about the presence of abnormal behaviour and more about a clinical determination of impairment. There existed relative consistency among participants in terms of conceptualizing ODD and CD. However, the greatest

disparity was in terms of describing the utility of ODD in particular. Participants seemed to be divided in terms of describing ODD as a pragmatic diagnosis. Interestingly, however, it did not seem that the differing views on ODD were exclusively related to theoretical orientation, as much as individual, clinical impressions.

This study also served to illustrate the importance of identifying comorbid conditions, which may confound or differentiate the diagnosis of ODD and CD. Further, it was highlighted by clinicians to identify the affective and impulsive factors that may be related to comorbid conditions. Also, participants emphasized the necessity of assessing potential confounding variables in the diagnostic process. Specifically, the presence of medical conditions that may present as similar to ODD and CD on a behaviour level, for example, FASD, diabetes, traumatic brain injury, epilepsy, and so on. Additionally, ODD and CD are perceived as sharing substantial comorbidity with diagnoses such as ADHD, anxiety, depression and substance use. This recognition would suggest that ODD and CD can be differentiated based on the impulsive and affective underpinnings of the behavior. As a result, the presence of affective factors and impulsivity implicates treatment approaches, specifically, the use of antidepressant and psychostimulant medication, respectively. Due to the variability of impulsivity and affective experiences it would seem beneficial to provide further research into the phenomenology of antisocial behaviour. Further, this current study emphasizes the necessity of assessing for comorbid conditions, such as anxiety and depression, in clinical practice.

There exists conflicting perspectives on the conceptualization of ODD and CD as distinct, categorical diagnoses (Rey et al., 1988; Burke, Waldman, & Lahey, 2010). Clinicians in this study viewed ODD and CD primarily as distinct diagnoses that are dimensional due to varying subtypes. However, the clinicians also consistently expressed that ODD and CD can present as progressive based on age of onset. For example, there was agreement among the participants that early-onset antisocial behaviour was seen as more pervasive and progressive, whereas late-onset can be interpreted as a reaction to environmental influences. This conclusion suggests that antisocial behaviour is not understood as developing on a fixed trajectory, and is largely differentiated by a range of variables. Although it would seem that identifying ODD and CD as distinct diagnoses would support a categorical approach, the recognition of differentiating variables, such as affect, impulsivity and age of onset, would suggest a dimensional structure to the disorders.

The process of diagnosis can be seen as functional in terms of description and communication. Participants from across theoretical orientations described the utility of diagnosis as a means of description, classification and communication. Further, the process of diagnosis can be interpreted as functional in terms of facilitating sanctioned intervention and further research. However, participants reported the application of diagnoses, such as ODD and CD, may result in scrutiny due to perceived subjectivity of behavioural disorders and associated stigmatization. Further, participants defined ODD and CD as effective descriptions, but ineffective in terms of providing valuable prognostic information. This perspective was expressed across theoretical orientations, and appears to reflect a limited understanding of cause and

ability to anticipate the course of the disorders throughout development. As a result, the diagnostic labels of ODD and CD remain highly descriptive, rather than explanatory. The descriptive nature and definition of disorder was seen as problematic across theoretical perspectives.

As was mentioned, there is consensus that the use of diagnostic labels provides a common classification, language, and continuity of care for providers. However, it was perceived that as our understanding of antisocial behaviour evolves, it may be determined that ODD and CD need to be classified differently altogether. Research has criticized the process of establishing a threshold between normal and abnormal behaviour as an inexact and somewhat arbitrary practice (Frick, 1998; Hsieh & Kirk, 2003). As a result, it can be interpreted that the understanding and diagnosis of ODD and CD is subjective and can vary based on social context, practitioner, theoretical orientation, and diagnostic system. Further, diagnostic labels were criticized as "medicalizing" psychosocial issues. Additionally, ODD and CD labels can be conceptualized as perpetuated by efficacy expectations associated with the diagnoses. As a result, it would seem beneficial for areas of future research to explore the phenomenology of antisocial behaviour, as well as the effect of stigmatization associated with ODD and CD labels.

The treatment of antisocial disorders is perceived as multifaceted. From a clinical perspective, a multidisciplinary approach to treatment is seen as the most effective method of intervention. Treatment approaches can therefore integrate a range of psychopharmacological, psychotherapeutic, behavioural and environmental interventions (Liabø & Richardson, 2007). It was identified that due to the perception

that the etiology of antisocial disorders is multifactorial, the treatment approach needs to be as well. As a result, it can be interpreted that isolated interventions focused on single underlying factors (e.g. affect, impulsivity, comorbid conditions, parent-child relationship, peer affiliation, etc.) are likely going to be insufficient. Therefore, the comprehensive assessment of causal factors becomes integral in terms of treatment planning. From a clinical standpoint, in order to provide appropriate treatment, it would appear necessary to provide assessment around the different developmental trajectories contributing to the onset. For example, assessment around biological/developmental correlates, attachment, trauma, learning, affective factors and impulsivity can be seen as essential. Further, it would seem that as research contributes to the evolving understanding of cause, the current assessment and treatment approaches would need to evolve as well.

Varying theoretical and clinical perspectives on the efficacy of psychotherapy exist (Eresund, 2007; Kazdin, Whitley, & Marciano, 2006; Rohde, Clark, Mace, Jorgensen, & Seeley, 2004). Clinical perspectives in this study would suggest utility in terms of incorporating a range of therapeutic approaches to address issues, such as self-awareness, empathy building, impulse-control, anxiety, depression and self-esteem. Participants reported certain challenges to individual psychotherapy, and it appears that the effectiveness of therapy is seen as influenced by subtype. For example, age of onset, presence of callous-unemotional traits, and presence of comorbid conditions were seen by participants as complicating the effectiveness of psychotherapy. Additionally, participants from each theoretical orientation consistently reported that individuals with ODD symptoms were seen as more

responsive to therapy, and treatment in general, than those with CD. Behavioural interventions are also understood as effective approaches to treat antisocial disorders (Kurtz, 2002). Particularly, behavioural interventions that increase positive reinforcement and reduce punishment are perceived as the most effective, from all theoretical orientations. As was mentioned, a range of variables such as age of onset and presence of callous-unemotional traits are seen as adversely impacting treatment responsiveness. However, there appears to be a lack of research evaluating the effectiveness/efficacy of specific psychotherapeutic approaches directed towards callous-unemotional traits. As a result, psychotherapy for callous-unemotional traits can be seen as an area for future research.

In addition to an attachment-informed approach to treatment, participants emphasized a needs-based approach, rather than a pathology focused approach. For instance, youth mentoring was described as an effective means to model positive relationships, address social learning that has occurred in other environments, and promote prosocial attitudes. However, research and clinical perspectives remain unclear around the effectiveness of relationship building approaches such as youth mentoring (Rhodes, 2008; Roberts, Liabø, Lucas, & Dubois, 2004). As a result, it would seem that an area of future research could be to further explore the effectiveness of relationship-building and youth mentoring with adolescence with antisocial disorders. Another area of future research would be to further examine the specific role of attachment contributing to etiology, as well as attachment-informed approaches to treatment of antisocial disorders.

It appears that differing perspectives on psychopharmacological treatment exist (Farmer et al., 2011; Liabø & Richardson, 2007). Specifically, psychostimulants, antidepressants, and atypical antipsychotics have been implicated in the treatment of ODD and CD. However, according to participants in this study it appears that medication is perceived as having the greatest utility in terms of addressing impulsivity and comorbid affective concerns, rather than specific behaviours. However, it can be interpreted that impulsivity and affective factors represent only two variables in the multifactorial development of antisocial behaviour. As a result, the intended use of medication could be interpreted not to treat ODD and CD as singular conditions, but rather to address symptoms that are seen as preceding and co-occurring with the behaviours. For instance, it can be interpreted that effective treatment of antisocial behaviour with the use of psychostimulant medication is attributable to management of the underlying impulse-control issues. Additionally, antidepressants and atypical antipsychotic medications to address affective dimensions (e.g. anxiety and depression) have been implicated in the treatment of conduct disorders. Across perspectives, there appears to be some debate around antidepressant and atypical antipsychotic medication use, from both a research and clinical standpoint (Farmer et al., 2011; Liabø & Richardson, 2007). Participants consistently identified a cost-benefit relationship with the use of medications, as well as uncertainty around sustained change. As a result, it would seem that long-term follow-up of individuals receiving medication for conduct problems, as well as ethical implications of psychopharmacological treatment of conduct disorders would be areas for further research.

Environmental interventions, such as parent training, family-based therapy, and residential treatment can also be seen as promising methods to manage antisocial disorders (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002; Lipsey & Wilson, 1998; Preyde, French, Cameron, White, Penny, & Lazure, 2011). Due to the recognition that an individual's environment plays an integral role in the development and maintenance of the behaviour, it is likely beneficial to incorporate environmental interventions. Environmental intervention can be seen as focusing treatment on social factors, rather than solely on internal dysfunction. The consideration of environmental intervention is consistent with the multifactorial perspective on etiology and diagnosis that participants reported. For instance, participants in this current study emphasized the importance of parent-training and education. Further, participants identified that parent training can serve to promote structure, consistency and predictability in the home environment. The recognition of a need for environmental intervention is consistent with the perspective that learning processes occurring in the environment contribute to the etiology of antisocial behaviour.

Several participants in this current study discussed the potential need to enforce more invasive environmental interventions. The need for the inclusion of invasive environmental interventions arose from the perspective that in a small subset of individuals, "you are never going to cure the condition; it is about containing the damage". Participants reiterated that accessing interventions such as parent training, family therapy and more invasive interventions such as respite, foster care and residential treatment are effective means of promoting structure and consistency. Further, family interventions have been extensively researched and are said to be

promising, however, it remains inconclusive which interventions are most effective (Fonagy et al., 2002; Liabø & Richardson, 2007). As a result, a comparison of the effectiveness of specific family interventions, such as family-based therapy, respite, foster care, and residential care could be seen as areas for future research.

Finally, the study illustrated that improvement can at times be attributed to maturation and development. However, the stability of the disorders can be influenced by a range of factors, such as age of onset, comorbid conditions, intelligence, and environmental risk factors (Frick, 1998). Participants in this study provided anecdotal accounts of individuals "outgrowing" the behaviours associated with ODD and CD. However, according to research, the life course of the disorders is largely dependent on multiple variables (Frick, 1998; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). Although not every instance of antisocial behaviour will persist into adulthood, it appears that the stability of the disorders is understood as influenced by various factors. For example, research indicates that the pervasiveness of the behaviour is influenced by the age-of onset, as well as the presence of comorbid diagnoses (Lavigne, Cicchetti, Gibbons, Binns, Lene, & Devito, 2001). As a result, it appears that until ODD and CD are able to be understood at a pathophysiological level, it will remain difficult to identify the effect of maturation on the biological mechanisms associated with the disorders. The lack of understanding around maturation and biological mechanisms identifies the need for research to further examine the biological underpinnings of ODD and CD in order to develop a greater understanding of the developmental courses of the disorders. Further, with a greater understanding of the developmental course, it is reasonable to assume that

there will be greater consistency among theoretical orientations and clinical decisions around the assessment and treatment of antisocial disorders in adolescence.

Throughout the course of this study, it has been reiterated that clinicians from varying theoretical backgrounds understand the etiology, diagnosis and treatment from a relatively consistent perspective. In particular, it can be interpreted that despite differing theoretical backgrounds, clinicians view ODD and CD from largely a biopsychosocial paradigm. The biopsychosocial approach involves consideration for biological, psychological and social factors involved in understanding complex conditions, illnesses and healthcare delivery (Engel, 1980). The biopsychosocial model has been credited with limiting biological dogmatism and guiding the application of medical knowledge in an individualized manner (Borrel- Carrió, Suchman & Epstein, 2004). However, the biopsychosocial model has also received criticism as being falsely narrow, possessing unclear boundaries, and has also been seen as confusing treatment and etiology (Ghaemi, 2011). Although, it can be interpreted that given the current multifactorial understanding of etiology, diagnosis and treatment within research literature, clinicians also consider multiple biological, psychological and social factors in formulating their clinical impressions around ODD and CD.

The conclusions of this study are two-fold, answering the questions of; 1) *how do varying theoretical and clinical perspectives influence the understanding of the etiology, diagnosis and treatment of ODD and CD?,* and 2) *how do different practitioners arrive at clinical decisions for individuals with ODD and CD?* In regards to the first question, it was interpreted that the understanding of the etiology,

diagnosis and treatment of ODD and CD can be influenced by a range of theoretical and clinical perspectives outlined in the preceding chapters. However, there appears to be general consistency among practitioners in terms of understanding the cause, diagnosis and treatment of ODD and CD. It can be interpreted that the consistency among practitioners is attributable to the paradigm to which they subscribe. In this current study, it would appear that adherence to a biopsychosocial paradigm lead to commonalities among clinical approaches by practitioners of varying theoretical backgrounds. Furthermore, in answering the second question, it would seem that different practitioners arrive at clinical decisions based on clinical training and adherence to particular theoretical orientations. Practitioners in this study viewed ODD and CD from a particular clinical and theoretical viewpoint, but also integrated a biopsychosocial perspective in order to understand the etiology, diagnosis and treatment. As a result, there appeared to be relative consistency among practitioners in terms of clinical decision making, despite differing theoretical orientations.

Clinical Practice & Research Recommendations

- Clinical assessment needs to consider the multifactorial pathways to antisocial behaviour, such as biology, development/age of onset, attachment, parenting practices, trauma, learning, affective factors and impulsivity.
- The process of diagnosis should integrate a comprehensive, individualized assessment process, such as clinical interviewing, collateral information, standardized testing, behavioural observation and comparison with diagnostic criteria.

- It is integral to focus assessment on differential diagnosis and the identification of comorbid conditions that may confound the diagnostic process, such as medical conditions and concurrent psychopathology.
- Based on the multifactorial cause of antisocial disorders, it is therefore necessary to integrate a multidimensional treatment approach, such as psychotherapy, psychopharmacology and environmental interventions in combination.
- There is a lack of a definitive understanding of etiology, and as a result future research would likely benefit from further exploring the specific role and interaction of individual factors and environmental factors, as well as, attachment and trauma on the etiology of ODD and CD.
- Future qualitative research could benefit from examining the phenomenology of ODD and CD, in order to gain insight in the cognitive, affective and interpersonal experiences of the individual.
- Current research has examined the role of callous-unemotional traits within CD, however, there is limited research exploring the effectiveness of treatment approaches tailored for individuals exhibiting callous-unemotional traits.
- Current research has supported the role of attachment and trauma in precipitating antisocial behaviour, therefore it would likely be beneficial for future research to examine the effectiveness of attachment and trauma-informed treatment approaches for ODD and CD.

- It would be valuable to conduct future research exploring the long-term effectiveness of medication use, as well ethical implications associated with the use of psychopharmacology to treat behavioural disorders.

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