Antecedent Correlates of Aggressive Incidents in Individuals with a Dual Diagnosis

By

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DEDICATION

This project, all the blood, sweat and tears, is dedicated to my family and friends. To my mother, Jackie Wilmink, who never stopped believing in me, providing love and care the whole way. To my partner, Matt Rushworth, who helped me deal with the stress as well as enjoy each step toward my goal. To my friends and peers, who made the long journey worth it.
ABSTRACT

The project conducted a secondary analysis of data as part of a larger study. The purpose was to delineate antecedent predictors to aggressive behaviour in individuals with a dual diagnosis residing in group homes based on incident reports provided by 31 community agencies across Ontario. The sample included 25 participants randomly selected from a subgroup of 199 clients with five or more aggressive incidents. Participants ranged in age from 20 to 60 years ($M=37.56$, $SD=10.473$), with 10 female and 15 male. Incident reports were coded based on antecedent descriptions provided. Behaviour was rated for severity based on the weighted scoring of the modified overt aggression scale for each form of verbal, environmental and physical aggression. Relationship between antecedents and aggression severity was then analyzed using a Pearson correlation. Results showed no correlational relationship. It is not clear whether there was no relation between the variables investigated, or if this was an issue of design. It is possible that with individualized analyses functional relationship patterns may be present.
ACKNOWLEDGEMENTS

This project, the culmination of 4 years and countless hours devoted to research and writing could not have been possible, if not for the guidance and support of a number of key individuals. I would like to express my utmost appreciation for my thesis supervisor, Deborah Smith, whose insight and encouragement throughout the process helped me see the woods through the trees. Thank you to my agency supervisors, Lisa Orsi and Dr. Yona Lunsky who assisted me in getting this project off the ground, from conception through data collection. Finally, I would also like to express my gratitude for the faculty and staff of the Behavioural Psychology Program, for providing the training, education and supports throughout my college career.
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Chapter I: Introduction

High rates of aggression are the most documented reason for referral to mental health professionals and services for individuals with an identified developmental disability (Crocker, Mercier, Lachapelle, Brunet, Morin & Roy, 2006). Management of aggression in group residential settings often uses a reactive management rather than a preventative approach. This reactive approach is not usually a satisfactory treatment of the presenting behavioural problem, and may not result in the decrease of aggression in the future. The primary concern instead is often the safety of others and efficient management of the immediate situation. Reactive management can include minimal to more intrusive means of intervention including restraint, “pro re nata” (PRN) medication, or even seclusion (Allen, 2000).

Individual and environmental setting events contribute to the frequency, intensity and motivating operations of presenting aggression in those with developmental disabilities. The goal of this project is to analyze incident reports from a variety of group home settings to identify and describe specific setting events that lead to aggression to delineate functional patterns that may predict such behaviour. Knowledge and understanding of the circumstances leading to aggression is an important component in providing individualized services and preventing such behaviours from occurring in the future (Tenneij & Koot, 2008). Aggressive behaviour will be analyzed in terms of operant behaviour principles, contextual and environmental antecedents and consequences to the aggressive behaviour. It is hypothesized that common antecedents will reliably precede specific forms of aggressive behaviour.

Definitions:
The term developmental disability will be used throughout this study to encompass the terms often referred to in the literature as intellectual disability, mental retardation, or learning disability. When a developmental disability is accompanied by a mental health disorder, the term dual diagnosis will be used.

For the purpose of this study, aggression is defined as any verbal or physical behaviour directed towards another person and/or object intending to physical or psychological threaten, as defined in Jahoda and Wanless (2005).

Other challenging behaviours are at increased likelihood to occur when aggression occurs (Allen, 2000; Hemmings, Gravestock, Pickard & Bouras, 2006); these other challenging behaviours include self-injurious behaviour, property destruction, non-compliant behaviour, stereotyped behaviours, socially inappropriate behaviour and withdrawal. These behaviours comprise the definition of challenging behaviours, according to Emerson, Kiernan, Alborz, Reeves, Mason, Swarbrick, Mason, and Hatton (2001); all behaviours that are risky to the person or to others, or jeopardizes access to ordinary services due to the intensity, frequency or duration of these behaviours.

In the literature aggressive behaviour has been referred to as challenging behaviour, to encompass many of the behaviours listed above. For the purposes of the present paper we will use the term aggression to refer to property destruction, non-compliant and socially inappropriate behaviours. Behaviour referred to as challenging behaviour is included for the purpose of the
literature review, excluding identified sub-categories such as self-injurious, stereotyped and withdrawn behaviours normally encompassed in the term.
Chapter II: Literature Review

The current literature review looks at aggression and challenging behaviors experienced by individuals with a developmental disability as well as those with a dual diagnosis. Information on the prevalence, etiology, predictive factors and treatment of aggressive behaviour is examined. An emphasis is given to individuals residing in residential settings, specifically a community group home. The following comprehensive review presents the foundation for the current project’s rationale.

Prevalence
There has been a disparity between reported the prevalence rates of aggressive behaviour in individuals with developmental disabilities (DD), however, is generally agreed to be present between 2-20% (Sigafoos et al., 1994; Allen, 2000; Embregts, Didden, Huitink & Schreuder, 2009). The discrepancy in the findings can be attributed to the varying sampling procedures chosen and are further complicated by the diverse population being sampled in the studies reviewed.

Lunsky, Bradley, Drubin, Koegl, Canrinus and Goering (2008) reported that individuals with a developmental disability have more reported displays of aggression than the general population, with these incidents of aggression often resulting in increased seclusion and restraints at 69% of the patients.

In a meta-analytic review (McClintock, Hall & Oliver, 2003) looking at types of aggressive behaviours in the literature it was found that self-injurious behaviours were studied over twice as much as aggression directed towards others or property, where outward aggression was only included in 7 out of 26 studies (Crocker et al., 2006). A gender difference in the presentation of aggression was also noted with higher reported rates found in males than females (Embregts et al., 2009).

Settings:
The rates of aggression for DD individuals are higher in residential settings when compared to community services (Tyrer, McGrother, Thorp, Donaldson, Bhaumik, & Watson, 2006). This finding is expected, as it can be assumed that individuals with the most challenging behaviours are those more likely to utilize in-patient services. In fact, high rates of aggression are the most often documented reason for referral to mental health services and institutional placement (Fovel, Lash, Barron & Roberts, 1989, as cited by Crocker et al., 2006).

Reviewing the research into the topography of aggression presented in those with developmental disabilities, Tenneij and Koot (1999) examined outwardly directed incidents versus auto-aggressive incidents. Focusing on the outwardly directed incidents, verbal aggression was the most frequently reported means at 80% of the incidents, occurring independent of other forms of aggression in 50% of these incidents. While just 19.5% of all outwardly directed aggression reported verbal aggression as the sole means, it is surprising to see that the others presented or rather escalated to some form of physical aggression. These incidents of physical aggression involved punching or kicking others. Tenneij and Koot also found that as age increased, the occurrences of aggression decreased.
In contrast, another study found that verbal aggression was the primary means used in 37% of the DD adults sampled, 18% of the incidents of aggression were directed towards objects, and only 14% showing physical aggression to others. Furthermore, it was found that of the most severely rated behaviour, nearly 6% included verbal aggression, where almost 5% of the total sample showed physical aggression leading to injury (Crocker, et al., 2006).

Examining aggression in relation to diagnosis and level of functioning, it was found that those most likely to aggress verbally were functioning in the mild to moderate range of disability (41.4%) with rates at only 29.4% for those in the severe to profound range. Those in the severe to profound level of functioning were found to display more physical aggression over the moderate to mild functioning (31.6% and 21% respectively) (Crocker et al., 2006).

Setting & Maintaining Factors:
The variables associated with the occurrence of aggression are not often obvious or simple. Any setting includes both internal and external setting cues. In the current study, both individual and environmental setting cues will be discussed as possible determinants of aggression.

Individual settings pertain to the person’s internal variables, relating to biological/physiological, psychiatric/mental health diagnosis, history, skill deficits or level of functioning (Crocker et al., 2006; Tyrer et al., 2006; Allen, 2000). It has been suggested that all of these variables may contribute to the likelihood of presenting aggression in individuals with a developmental disability. The study by Felce, Kerr and Hastings (2009) also found that the use of antipsychotic medication showed a positive association with an increase in behaviour disorders.

Level of Functioning
The level of disability has been shown to be significantly associated with varying types of behaviour disorders and often present in the form of aggression, destruction and self-injurious behaviours (Felce, Kerr & Hastings, 2009). Emerson et al. (2001) also found that those with more proficient expressive communication skills were more likely to present with verbal aggression. As increased communication skills are seen more in milder levels of disability, it can be assumed that the aggression may take differing forms along the scale of functioning.

Mental Health
There is growing evidence for a relationship between the presence of psychopathology and the presence of aggressive behaviours (Hemmings et al. 2006; Tenneij & Koot, 2008). Often detecting and diagnosing mental health disorders such as depression, in those with developmental disabilities is complicated. Where previously behaviours such as withdrawal or low mood state might have been assumed as indicating depression in those with disability, now there is evidence to suggest that such mood disorders may also present in the form of behaviour problems such as aggression (Tyrer, et al., 2006; Felce, Kerr & Hastings, 2009). Felce, Kerr and Hastings (2009) also showed that those who met the criteria for mental health disorders were four times more likely to have a severe challenging behaviour, such as aggression. These results provide further support for the relationship between mental status and challenging behaviour. At the same time, it is important to recognize the circular reasoning: whereby an individual with DD is diagnosed with depression as the result of presenting aggression, therefore depression is now associated with the original presenting aggression.
Environmental
Bijou and Baer (1961 as cited in McGill, 1999) proposed that setting events could be assigned to a category of biological or organismic factors describing two categories of environmental variables: physical and social/cultural. External settings were considered environmental settings to aggressive behaviour by these authors. These settings were described in terms of environmental/physical variables, temperature and noise levels and social/cultural variables, or the presence or absence of others in the direct space.

Physical
Features of services utilized by individuals with developmental disability include stimuli such as noise, heat, crowds, staff, structure and styles. An extreme low or high level of any number of these factors is associated with increased risk of aggressive behaviour (McGill, 1999).

Social/Cultural
The social and cultural settings for individuals with a developmental disability might include, for example the presence or absence of peers or staff in the direct surroundings; the arousal level of environment, or demands and schedules. Setting events related to social/cultural and task related events were reported to precede aggressive behaviour. Specific forms that were recognized as eliciting an increased probability of aggression were the presentation of corrective feedback, negative staff attitudes, client wants or needs not met, overly stimulating environment, novel or difficult task, and change in everyday schedule (Embregts et al., 2009).

Social/cultural and task/related events preceded aggressive behaviour more frequently than biological and physical setting events. Also, Tenneij and Koot (2008) found that denial of requests of clients was most often followed by an outward directed incident of aggression, and particularly directed toward the staff.

Consequences:
It is assumed that behaviours can be elicited by different cues. As well, actions that follow an aggressive incident are of importance in investigating the possible function of the behaviour. Positive or negative reinforcement can maintain or strengthen aggression, for example by either providing access to tangibles or the removable of an aversive. These both demonstrate the social learning theory of aggression according to Bandura (1985), whereby aggression is modeled and shaped by reinforcement. Also contributing is the use of aggression as a means to escape undesirable situations as presented by Breakwell (1989 as cited by Allen, 2000) as the aversive stimulation model. To follow are studies that examined the consequences of aggression in individuals with a developmental disability.

Tenneij and Koot (2008) investigated aggressive behaviour in treatment facilities for individuals with a developmental disability. Here the types and characteristics of challenging behaviour described in terms of outwardly direct and auto-aggressive incidents. Results showed that staff responded to these incidents by calmly removing the client, and then implementing physical restraint or seclusion (2008). It was found that staff generally responded to auto-aggression with less severe strategies than outwardly direct. In the study, only 4% of the outwardly directed
incidents resulted in need for medical attention (2008). It was implied that staff are more readily able to deal with auto-aggression over the possibly more dangerous outward form of aggression.

Thompson and Iwata (2001) focused on describing the consequences of aggressive behaviour in terms of functional analysis. The consequence categories considered are often attention, escape, demand or tangible. Attention was found to most frequently follow the problem behaviour, at nearly 90% of the time. Specifically, aggression was followed by a combination of attention and escape over that of disruptive behaviour or self-injury. Staff responded with social consequences more frequently to incidents of aggression than to incidents of disruption or self-injurious behaviour. These findings suggest that the clients’ behaviour may have an influence on staff responses. Thompson and Iwata suggested that some client behaviours act as establishing operations for the staff response of attention in attempt to terminate the behaviours (2001). Establishing operations are the affect of environmental events, operations or stimulus conditions on an organism’s behaviour, by altering the effectiveness of a stimulus or event as a punisher or reinforcer, or altering the frequency of the current behaviour(s) occurrence punished or reinforced by that stimulus or event, as according to Michael (1993).

Lambrechts, Kuppens and Maes (2009) also considered the relationship between staff reactions and clients’ behaviours. Significant associations were found between aggression and the level of staff emotional responses. In particular, staff responded to aggressive and destructive behaviour most often with positive alternative interventions and environment restrictions. It was shown that increased staff emotional reaction was positively correlated with a higher behaviour severity score recorded at \( r=0.59 \), as well as the frequency score of aggressive behaviour at \( r=0.47 \) (Lambrechts, Kuppens & Maes, 2009).

**Behavioural Association:**

The literature has shown that behavioural approaches are some of the most effective in treating aggressive behaviours (Allen, 2000). Recently, there has been more focus on the functional relationships of the antecedent and consequences of challenging behaviours (McGill, 1999). Emerson et al. (2001) have suggested that the environmental consequences shape challenging behaviour. Considering the variables that contribute to aggression in the population of developmental disabilities is an important cause as the consequences can be aversive, restricting the individuals’ access to services. While some identified setting events have been suggested, the nature and extent to which the events contribute needs to be further investigated. Understanding the circumstances that lead and maintain aggressive behaviour is crucial to support effective staff management of clients at risk. The outcome of not adequately supporting staff in these contexts can ultimately increase service costs in health and safety (Health & Safety Executive, 1994, as cited by Allen, 2000). Where Tenneij and Koot (2008) found that a small group of clients were presenting with the highest frequency and severity rates of aggressive behaviour, it is suggested that focused management for this small set may produce a larger overall decrease in these behaviours. By addressing the contexts that are establishing operations for the occurrence of aggression, the individual or environmental setting events can be manipulated to affect a reduction in aggressive behaviour.

This project adds to the literature by identifying and describing the setting events that contribute to increased probability of aggressive behaviour in individuals with a developmental disability.
from group home settings. Given the prevalence rates, the extent to which individual and environmental settings and consequences contribute to the presentation of aggression in the population of developmental disabilities, it is important to look at the function of aggression so as to develop targeted interventions and prevention.
Chapter III: Methodology

Participants:
Criteria for inclusion/exclusion: Participants were part of a sample of 25 individuals residing in group homes who were all diagnosed with a developmental disability and five or more reported incidents of verbal, physical, property (environmental) aggression or injury to others. The sample excluded any incidents of medical, self-injurious behaviour (SIB), suicidal threat/attempt, withdrawal, crying, absent without official leave (AWOL), injury to self or other category that did not describe verbal, physical, or environmental aggression, occurring without any of the above inclusion criteria. Incidents were excluded if reports did not have a sufficient description of the antecedents/consequences included.

Recruitment procedure: The project is a series of secondary analyses of data collected as part of a larger study. Thirty-one agencies completed forms on all clients’ behavioural incidents, and provided the research lab with copies.

Informed consent: Informed consent was waived as the research department received information previously de-identified. This meaning the incident reports for each agency and client were encrypted with an agency code and client number to identify the origin of the incident report. No names or identifying information were included in the reports.

Design:
Independent variables
Research program staff provided agency training on completion of the incident reports. Forms were modified for some agencies incorporating the required information into the agency’s standard incident reports, so as to reduce the response effort of completing two similar reports. The specific independent variables are presented below.

Dependent variables
Incident reports originally collected information on all challenging behaviours as well as medical crisis. The current study focused on aggression only, specifically verbal threat, verbal aggression, physical threat, physical aggression, injury to other, and property destruction.

Assigning subjects to groups: Three categories of aggressive behaviour were identified encompassing these target behaviours; verbal aggression, physical aggression and environmental aggression. Verbal aggression included verbal threat or follow through of aggression. Physical aggression included physical threat or follow through directed at other(s) and injury to other(s). Environmental aggression included property destruction or attempt, or physical aggression or attempt not direct at other(s). Subjects were identified initially by the category indicated on incident report, and then descriptions were reviewed to determine the validity of the category placement.

Setting and Apparatus:
The study was conducted at the Dual Diagnosis Program Research Department via community agencies’ submitted incident reports. The research department is located on the second floor of the Dual Diagnosis Resource Services office. Access is restricted with key access through the
front door, locked access to the stairwell leading to the offices, locked filing cabinet and secure computers. The Statistical Package for the Social Sciences (SPSS, INC., 1999) were used for analyses of all data, as well as case files including original Incident Reports and Client Background Information forms.

**Measures:**

*Client Background Information Form (Appendix A)*

Information on client demographics was collected using a Client Background Information Form. These were completed for the first incident occurrence and attached to each subsequent incident report, adding changes as needed. The form provided a description of the client by age, gender, cultural background, residence, and programming supports. As well, medical information on psychiatric and medical diagnosis was provided, along with known level of cognitive functioning. History was provided for aggression, self injury, suicidal behaviour, arson, sexual deviance, criminal or legal issues, as well as emergency room visits and psychiatric inpatient admissions. Finally, a select list of significant life events was also indicated for the past year.

**Measure of dependent variables**

Information describing a behavioural crisis was provided using a one page Incident Report (Appendix B). The report was based upon Hurley’s sequential analysis of behaviour (1997) through describing antecedents, behaviour and consequences or interventions. Incident reports are used as quality assurance activities and generally accepted as protocol in the developmental disability services. Information on the report provided details of the presenting behaviour or crisis, such as the date and time of day, location, duration, number and type of staffing present, a description of the presenting crisis as well as a checklist to select the category of crisis as well as a rating scale for the intensity of aggressive behaviour and the response to the behaviour.

**Measure involving human judges, raters, and observers**

In the original study, 31 community agencies participated in completing the Client Background Information Form and Incident Report Form for each resident upon every occurrence of a critical incident. Criteria for a critical incident were included in the form of a categorical checklist describing the event, i.e., injury to self, verbal aggression, property damage, etc. Often times the agencies already had a protocol for completing incident reports, and whenever possible the forms were adapted to more closely fit this format.

**Agency Training**

Training was provided for a minimum of two staff involved from each agency. These individuals were to act as the facilitator for training within their agency staff. Opportunities were given for questions and clarification, and practice runs. As ambiguity arose, clarification was provided to all agencies participating, with the aim of increasing standardization of item and measure interpretation between agencies. The research department was available for contact throughout the collection of incident reports.

**Procedure:**

Informed consent was not warranted as the information came to the study previously de-identified, and identified as a client code. Consent was only required if there were any further information required, or if the incident resulted in an emergency room visit and the research
department required access to the clients ER report. Participants have contact with agency staff only.

**Sequence and timing of tasks**

Staff completed both the Incident Report and the Client Background Form for each client psychiatric/behavioural crisis. These forms were sometimes modified to meet the needs of the agency incident form protocol already in place, and therefore were not considered consistent forms between agencies.

**Coding Process:**

Of a total 3448 incident reports submitted for 751 clients, 444 clients were identified in the multiple crisis dataset. Of the 444 clients, 199 were found to have 5 or more incidents. The sample was then determined based on both inclusion and exclusion criteria. Incidents that indicated as medical, suicidal threat or attempt, AWOL, withdrawal or crying or injury to self or described as ‘other’ were removed when they occurred in the absence of indicated verbal threat, physical threat, property damage or injury to other. Of these incidents 564 were reported as exclusionary categories, and 416 were reported as other, in the absence of inclusion criteria of verbal/physical threat, property damage, or injury to other. Of the remaining incidents, only those with five or more reports meeting inclusion criteria were kept. Of the 1345 incident reports left, 119 clients were identified as still meeting the criterion of 5 or more incidents related to verbal, physical threat, property damage or injury to other, reporting 1231 incidents. The sample was then cross referenced with the client demographic information dataset to determine group home residence, as required for inclusion. Of those 97 clients resided in a group home reporting 1008 incidents. Information on residence was not indicated for three clients and therefore was excluded. Of the 97 clients, each was numbered 1-97 and a random selection of 25 clients were made using a random number generator. The 25 selected resulted in 247 incidents.

**Selecting Subgroups**

In the final sample, each incident was reviewed in order to categorize each within the appropriate subgroup aggression; verbal, physical or environmental. Incidents with only one category indicated were placed in the appropriate subgroup. Those with more than one category indicated were put in each subgroup for each category selected. Subgroups were rated as per the reported severity of the behaviour based on the weighted scoring of the modified overt aggression scale (Appendix C) in a study by Crocker (et al., 2006). Each verbal, physical or environmental aggression was rated on a scale of 0-4, where zero indicated no occurrence and 4 was the most severe. Verbal aggression included (1) yelling, shouting in anger, mild cursing or insults; (2) increased cursing, severe insults with temper outburst; (3) Threatening violence towards others or self on an impulse (1-2 times); (4) deliberate threats of violence to others or self more than twice, or with the purpose of gaining a tangible/activity/attention/escape). Environmental Aggression included (1) slamming a door or furniture, ripping clothing, urinating on floor; (2) throwing items not at another, kicking, pushing or slamming furniture, objects or walls; (3) breaking objects, furniture, walls or windows; (4) setting fire, throwing objects dangerously (glass VS plastic items). Physical aggression included (1) attempting or making menacing gestures, strike without contact to other, grab at clothing, throwing items at others; (2) contact striking (with hand or object), kicking, pushing, pulling, scratching, grabbing hair of others (without injury); (3) attacking others by means of level 2 physical aggression resulting in mild
injury to other (bruises, sprains, scrape, welts, etc.); (4) attacking others by means of level 2 physical aggression resulting in serious injury (fracture, loss of teeth, deep cuts, loss of consciousness, hospitalization/ER, etc.).

ABC descriptions were then reviewed and coded into various antecedent and consequence categories. Antecedents included alone/unoccupied, engaged in task, interacting with others, demand, request denied, tangible, tangible removed, physically ill, psychotic symptoms, and other (transition?). Consequences included; attention, ignored, escape from demand/activity, offered tangible, removed tangible, offered activity, removal of activity, removal of client, removal of others, physical redirection/restraint, and other.

Cases were excluded where the description lacked a clear antecedent or not enough information to code in any category. If the resulting number of incidents per client was less than 5, the client cases were removed and the next randomly selected number with 5 of more incidents with sufficient information to code was selected.
Chapter IV: Results

In general the participants included in the current project were quite variable in regards to descriptive statistics. The overall findings for the 25 participants evaluated are presented. The participants ranged in age from 20 to 60 years ($M=37.56, SD=10.473$), with 40% female and 60% male presentation for gender. Of the 25 participants, 24 indicated a history of aggression (96%); as well 9 of 25 (36%) indicated a previous inpatient admission. Participants documented diagnosis representations is as follows; (2) 8% mood disorders, (4) 16% anxiety disorders, (4) 16% psychotic disorders, (6) 24% autism spectrum disorders, and (4) 16% behaviour disorders. Reports indicate incidents occurred 84 percent of the time in the participants group home setting, with 8% in the work setting, 4% in the community and 8% indicated other. A total of 12 participants (48%) reported receiving behavioural therapy supports.

In the multiple incident reports, seven participants (28%) were reported to have had a minimum of five incident reports for 14.2% of the 204 incidents reported, ten participants (40%) were reported to have had six to ten incidents for 32%, six participants (24%) were reported to have greater than ten and less than 21 incidents for 50.6% of reports, and finally two participants (8%) had 21 and 22 incidents reported for 17.4% of 247 incidents reported. These findings are consistent with other studies reporting that the majority of aggressive incidents are reported by a smaller number of individuals.

A frequency of recoded antecedents was tabulated for the sample (Table 1), interacting with others was found to be the most frequently occurring antecedent to aggressive incidents at 60 times and 24.3% of the incidents reported. Next, 55 times the client was engaged in a task, for 22.3% of the incidents reported, followed by 52 times the client was reported to be in transition between task or activity at 21.1%. The three least frequent antecedents identified was removing a tangible occurring once, for .4% of the incidents; giving the client a tangible twice, for .8%, and loud noises was reported four times, for 1.6% of aggressive incidents.

The frequency of behaviours was also calculated stating the types of aggression participants presented. Two participants presented environmental aggression only and another two presented physical aggression only. Four participants presented both verbal and physical aggression, while two participants presented a combination of physical and environmental aggression. Finally 15 participants presented each form of aggression; verbal, environmental, and physical.

Table 1

<table>
<thead>
<tr>
<th>Frequency of Antecedents by Type</th>
<th>Alone</th>
<th>Noise</th>
<th>Attention to Others</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.09</td>
<td>.15</td>
<td>.02</td>
<td>.03</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.279</td>
<td>.362</td>
<td>.126</td>
<td>.177</td>
</tr>
<tr>
<td>Sum</td>
<td>21</td>
<td>38</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 2 shows the severity of verbal, physical and environmental aggression. Reports show that physical aggression ($M=1.15, SD=.978$) was rated the highest on the weighted modified overt aggression scale. This was followed by verbal aggression ($M=.92, SD=1.262$) and lastly environmental aggression ($M=.82, SD=1.151$). Compared to the verbal and environmental aggression, physical aggression received a rating of 2 for severity more often than not. This indicates that physical aggression was occurring at a moderately level, including contact with others, not including harm.

Table 2

*Severity of Aggression by Type*

<table>
<thead>
<tr>
<th></th>
<th>Verbal</th>
<th>Physical</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.92</td>
<td>1.15</td>
<td>.82</td>
</tr>
<tr>
<td>Median</td>
<td>.00</td>
<td>1.00</td>
<td>.00</td>
</tr>
<tr>
<td>Mode</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.262</td>
<td>.978</td>
<td>1.151</td>
</tr>
<tr>
<td>Sum</td>
<td>228</td>
<td>284</td>
<td>203</td>
</tr>
</tbody>
</table>

Providing more detail on the severity ratings per incident, Tables 3-5 show the frequency of each aggression by individual type. Verbal aggression in Table 3 shows that 57.1 percent of the
incidents did not involve any verbal aggression. This may be due to varying levels of functioning by a given client. It is possible that a non-verbal client is more likely than a verbal client to aggress physically or within their environment due to the lack of means to communicate otherwise. The same pattern presented in the frequency and ratings of environmental aggression, with 62.8 % of the incidents free of environmental aggression. In contrast, physical aggression had a cumulative 63.6% of incidents involving some form of physical aggression. Interestingly, none of the incidents reached criteria for level (4) severity; attacking others by means of level 2 physical aggression resulting in serious injury (fracture, loss of teeth, deep cuts, loss of consciousness, hospitalization/ER, etc.).

Table 3

Verbal Aggression Severity

<table>
<thead>
<tr>
<th>Severity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>141</td>
<td>57.1</td>
<td>57.1</td>
</tr>
<tr>
<td>1</td>
<td>36</td>
<td>14.6</td>
<td>71.7</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>12.6</td>
<td>84.2</td>
</tr>
<tr>
<td>3</td>
<td>26</td>
<td>10.5</td>
<td>94.7</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>5.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4

Physical Aggression Severity:

<table>
<thead>
<tr>
<th>Severity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>90</td>
<td>36.4</td>
<td>36.4</td>
</tr>
<tr>
<td>1</td>
<td>42</td>
<td>17.0</td>
<td>53.4</td>
</tr>
<tr>
<td>2</td>
<td>103</td>
<td>41.7</td>
<td>95.1</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>4.9</td>
<td>100.0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 5

*Environmental Aggression Severity:*

<table>
<thead>
<tr>
<th>Severity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>155</td>
<td>62.8</td>
<td>62.8</td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>5.3</td>
<td>68.0</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>19.8</td>
<td>87.9</td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>11.3</td>
<td>99.2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The Pearson Correlation was computed to assess the relationship between each recorded antecedent and each identified form of aggression; the findings are presented in Table 6. Four recorded antecedents were found to be significant at the 0.05 level of probability (two-tailed), and only one at the 0.01 level of probability (two-tailed). The variable of being alone and the presentation of verbal aggression were found to have a very low negative correlation, \( r(245) = -0.132, p < .05 \). Attention to other(s) showed a very low positive correlation with physical aggression, \( r(245) = 0.136, p < .05 \), and a very low negative correlation with environmental aggression, \( r(245) = -1.31, p < .05 \). Next the variables request denied and verbal aggression showed a very low positive correlation, \( r(245) = 0.128, p < .05 \). The only antecedent to report significant at the 0.01 level (two-tailed) was being engaged in task with verbal aggression with a very low negative correlation, \( r(245) = -1.68, p < .05 \). Overall, there was very low level of correlation between antecedents and verbal, physical or environmental aggression. The presence of any given antecedent did not indicate an increase or decrease in the presence of aggression in any form. However, data should be interpreted with the consideration of base rates, where as the data included an incident 100 percent of the time. The nature and severity of the incident is the only thing that changes in each incident. Thus, the presence of one given antecedent with a presenting behaviour is not suggested to illicit aggressive behaviour over another, unless the frequency is comparable.

Table 6

*Correlation of Type of Antecedent and Type of Aggression*

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Verbal</th>
<th>Physical</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>Pearson Correlation</td>
<td>-.004</td>
<td>.013</td>
</tr>
<tr>
<td>Alone</td>
<td>Pearson Correlation</td>
<td>-.134*</td>
<td>.027</td>
</tr>
<tr>
<td>Noise</td>
<td>Pearson Correlation</td>
<td>-.043</td>
<td>-.053</td>
</tr>
<tr>
<td>Category</td>
<td>Pearson Correlation</td>
<td>$p$-value</td>
<td>$p$-value</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Attention to Other(s)</td>
<td>-.025</td>
<td>.136*</td>
<td>-.131*</td>
</tr>
<tr>
<td>Demand</td>
<td>.123</td>
<td>.036</td>
<td>-.020</td>
</tr>
<tr>
<td>Request Denied</td>
<td>.128*</td>
<td>-.011</td>
<td>-.033</td>
</tr>
<tr>
<td>Engaged in Task</td>
<td>-.168**</td>
<td>-.082</td>
<td>.066</td>
</tr>
<tr>
<td>Physically Ill</td>
<td>-.074</td>
<td>-.078</td>
<td>.116</td>
</tr>
<tr>
<td>Tangible Given</td>
<td>-.066</td>
<td>.079</td>
<td>.014</td>
</tr>
<tr>
<td>Tangible Removed</td>
<td>.055</td>
<td>.056</td>
<td>-.046</td>
</tr>
<tr>
<td>Interact with Others</td>
<td>.035</td>
<td>.039</td>
<td>-.044</td>
</tr>
<tr>
<td>PRN</td>
<td>.081</td>
<td>.081</td>
<td>.087</td>
</tr>
<tr>
<td>Transition</td>
<td>.118</td>
<td>.002</td>
<td>.071</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Chapter V: Conclusion/Discussion

Frequency findings were consistent with previous research, such that verbal aggression occurred in only 42.9% of the incidents, where Crocker et al. (2006) reported 37% of their sample presented with verbal aggression. However, the environmental and physical aggression rates do not show similar patterns with rates much lower in the current study, at 18% and 14% respectively. Although none of the incidents reported met criteria for level 4 severity for physical aggression resulting in serious injury (fracture, loss of teeth, deep cuts, loss of consciousness, hospitalization/ER, etc.), it is interesting to note that the 4.9% of those that met criteria for level 3 severity physical aggression (attacking others by means of level 2 physical aggression resulting in mild injury to other; bruises, sprains, scrape, welts, etc.) is consistent with Crocker et al. where only 5% presented the most severe form of aggression causing injury.

Strengths
The current project has a number of strengths, one of which is what can be learned in the process of attaining and reviewing the behavioural data from incident reports. This data is generally collected for the purpose of documentation records, and might otherwise go without any scientific review of the data presented. By collecting the reports from the 31 participating agencies, the findings may serve to shed light on significant issues around aggressive behaviour relevant to the greater dual diagnosis population.

Another strength of the project is the in-depth analysis of the reported antecedents as possible predictors of aggressive behaviour. In understanding the predictors, overarching patterns of aggressive behavioural responses may be identified or discounted. This provides additional information that may be important for preventing such aggressive behaviour in the population with dual diagnosis in group home settings. As such, these findings may have implications for topics of future staff training, such as increasing awareness of common predictors, as well as providing training in ways to better support those individuals who may be at higher risk of displaying aggressive behaviours. Though, as stated above, these antecedent predictors should be viewed independent of others, as the base rates do not account for relative frequency of occurrence.

An increase in the level of training for the front-line staff may aid in the slowing the progression of an individual client’s aggressive behaviour and being able to avert in-patient admission, preventing those individuals with the more severe levels of aggressive behaviour from escalating, and lessening the number of aggressive incidents which require support beyond the group home level. After all an overall goal of treatment at the group home level is to maintain the clients in the community setting whenever possible, so as to provide the least restrictive living environment.

This project contributes to the growing literature as it provided further investigation into interventions for the population of dual diagnosis. In the past mental health issues were not considered possible or inherent within the population of those diagnosed with a developmental disability and, therefore, were not addressed in assessment or treatment. Needs of this population are now seen as relevant to service delivery and treatment.
This project was also able to recode the information so as to provide more detail in regards to the severity level for each type of aggression, including specific topographies of aggression commonly presented.

**Behavioural Contribution/Implications**

The project provides direction as to how to train frontline workers in a group home setting. This information can be used to send the message that the aggressive behaviour is modifiable and that there are strategies, which can be implemented to support the needs of these clients to live a more normal life.

**Limitations**

An important weakness of the project approach is the descriptive method. Identifying common antecedents that predict aggressive behaviour is only one step in understanding the overall function of an individual’s behavioural and psychological challenges. To better understand the function of the behaviour more information regarding each incident needs to be provided, including clearer definitions of the setting events, antecedents, the specific incident behaviour(s), and the resulting consequences. Initially, the project had aimed to include the consequences, however, detailed descriptions of intervention procedures and consequences were not provided in sufficient enough detail that was needed to determine the function of aggressive incidents. Furthermore, the incident reports submitted for this project were often lacking in description regarding the interventions used or the consequences for the client’s behaviour.

Any relationship between the antecedents and aggressive behaviour suggested by these results are preliminary and should be subjected to more direct investigation of the data and observations. Also, the correlations conducted in the project do not indicate a causal relationship between the antecedents identified and the presented aggressive behaviour.

The population of this project is a pilot sample of individuals with a dual diagnosis residing in group homes, specifically those identified as reporting 5 or more aggressive incidents during the time of the project. A total of 25 participants is not a large enough sample nor is it representative of all individuals with a developmental disability and mental health needs from group home settings. As the sample population included only those requiring and accessing group home residential services, those with a moderate to profound level of disability may be over represented, as individuals with mild to borderline disability may not require group home residential services. Therefore, these findings are assumed to generalize to only individuals accessing group home residential services.

The data for this study was collected by a variety of group home front line staff, including agency full-time, part-time and occasional staff, and therefore, is limited by individual recall of observed client behaviour. This may have contributed to an under reporting of milder incidents or inaccurate reporting of more severe incidents, due to the time and effort required during crisis interventions. At the same time, as a number of agencies participated in the project, each agency may differ in regards to documentation of incidents.

Finally, the recoding of the aggressive behaviour for level of severity was completed by a single rater, and therefore, was not subject to inter-rater comparison as to reliability. This increases the
possibility for results to be affected by experimenter bias. Including several trained raters and calculating inter-rater reliability would strengthen conclusions that could be made based on this data. As well, both a strength and limitation of the study is that the study was completed with a nonrandom sample of clients with a dual diagnosis. This method provides more homogeneous results, but is less generalizable.

Recommendations
The incident report measure did not provide as much detailed client or behavioural characteristics as would have been ideal, and this study should be considered a pilot project as it provided preliminary information describing aggressive behaviour in group home settings. It is suggested that further detailed and descriptive information regarding the client, staff and context of the incidents may allow further investigation into possible predictors to aggressive behaviours and help in providing more beneficial interventions.

As to service delivery and participant training, it is recommended that front-line staff and management be included in future studies and that staff required to conduct data collection via incident reports are provided with increased supports and further training on behavioural principles relevant to behavioural data recording of antecedent, behaviour and consequences for incidents. This is important for a meaningful analysis of the information as the validity of any analysis relies on the accuracy of the documentation. It is also recommended that the incident report measure be revised to include a more detailed description of the antecedents and consequences of the behaviour. This may be done by the presentation of required fields in sequential order as in most common antecedent, behaviour, consequences reporting. In each category there should be examples of typical functional behaviour components (i.e., what is included or excluded as a given antecedent, behaviour or consequence) so that each description is presented in the appropriate field.

A more specific description of diagnosis on the incident report which would indicate the type and degree of developmental disability and the mental health diagnosis would be helpful, so groups may be assessed as to diagnosis. Also, including a broader sample, beyond 25 participants, would strengthen the generalizability of the results to other dual diagnosis populations.

Summary
It was hypothesized that common antecedents would predict specific forms of aggression; verbal, environmental and physical. The findings in the project did not support this hypothesis. The recoded antecedents provided in the incident reports did not show any relationship with the presentation of verbal, environmental or physical aggression in the sub-sample presented here. Although the antecedents did not differentially affect the three types of aggression, it is still possible that antecedents such as refusing requests may be worth examining further in this population. It is not clear whether there was really no relationship between the variables investigated, or if this was an issue of design. It is possible that analysis of the population of dual diagnosis in this manner is too general due to particular diagnosis and combinations of developmental disabilities and mental health issues. It is also possible that with more individualized analyses functional relationship patterns would be identified.
**Multilevel Challenges to Service Implementation Report**

*Client Level*
The needs of individuals with a dual diagnosis vary widely due to the uniqueness of their disability, combined with mental health diagnosis. The form of challenging behaviour most often cited at admission to inpatient services is aggression (Crocker et al., 2006). These individuals are unable to be maintained within the community or family home due to the extreme difficulties their behaviours present. At times, these clients’ history is not clear, often without a clear diagnosis of developmental or intellectual disability. This causes difficulties in interpreting functions of behaviours such as aggression. A comprehensive investigation and understanding of the individuals learning history, maintaining variables, along with strengths and weaknesses are crucial in providing effective treatment supports and in helping to maintain their quality of life in the least restrictive environment. Often times, these misunderstood or undiagnosed clients meet many challenges in access to services, sometimes appearing with a veil of competence to care providers, resulting in little change to their situation.

*Program Level*
The community agencies and individuals involved in the project vary widely in education, resources and insight into the client’s challenges. It is important to recognize that the group home setting is not always an ideal therapeutic environment. Often the clients are in their care due to extreme strain on the individuals’ family leaving them unable to care for them in their home. This results in increasingly more difficult to deal with individuals. Staff may be overwhelmed with challenging behaviours. Providing services means working within these means, offering resources, supports as well as on going training and education whenever possible. Patient and community adherence to treatment depends on a clear understanding of the overall purpose of the study, increasing the quality of life for the client and those involved.

*Organization Level*
In a group home, each decision is mandated by each organizations protocol. Staff are only allowed to respond within these predetermined guidelines. Protocols, regardless of each unique situation, dictate much of the crisis intervention responses. These protocols limit the care providers ability to provide quality individual care and may affect integrity of treatment. In determining such practices and procedures, the organization should be sensitive to the needs of the frontline staff and the individuals with whom they are working with directly. This may be achieved through on-going consultation and collaboration with workers, as well as with frequent assessment of clients changing needs in relation to prescribed procedures.

*Societal Level*
Services for individuals with dual diagnosis are very limited. Individuals are doubly disadvantaged with a developmental disability and mental health issues, while too often staff is specialized in mental health or developmental services, not both. A mental health issue may be overlooked and misunderstood as a symptom of the developmental disability, and go untreated. Even when recognized, access to relevant services is limited, such as psychology or health services that will not accept this clientele. This leaves services understaffed and under qualified to support these clients. If the services to support and treat these individuals are restricted, the population will continue to be stigmatized.
References:


Appendix A: Crisis/Critical Incident Form

Agency Code: ____  Crisis/Critical Incident Form  Client Initials: ____

Instructions: Please complete this form each time a client experiences a crisis and place a copy in the research file attached to a copy of the Client Background Form.

1. Date of Critical Incident: ___________________ Time of Day: ____________________

2. How long did the critical incident last: _______________________________________

3. Where did it occur: [ ] residence [ ] work/day program [ ] community [ ] other _______

4. Describe the critical incident: (Check all boxes that apply)

   [ ] Verbal threat  [ ] Physical threat  [ ] Property damage  [ ] Medical issue
   [ ] Injury to self  [ ] Injury to other  [ ] Suicidal threat  [ ] Suicide attempt
   [ ] Serious Withdrawal  [ ] Uncontrollable crying  [ ] AWOL  [ ] Other _______

5. Describe what led up to the critical incident:

   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________

6. If injury to self or others, did it require medical attention?
   [ ] No  [ ] Yes please describe:___________________________________________

7. FOR ACTS OF AGGRESSION: How serious would you rate the incident on a scale of 1 to 5 (circle one response)

   1  Not serious (verbal aggression e.g. threats)
   2  Slightly serious (verbal aggression with non-contact behaviour e.g. slamming, hitting walls and/or minor property damage)
   3  Moderately serious (minor contact behaviour e.g. pushing and/or major property damage)
   4  Very serious (physical aggression without tissue damage e.g. hitting, kicking, biting)
   5  Extremely serious (physical aggression with tissue damage e.g. lacerations, broken)

8. a) Number of caregivers that attended to the client during the acute stage of the crisis: ___

   b) Type of caregivers attending (select all that apply)
   [ ] full-time staff  [ ] part-time staff  [ ] family
   [ ] temporary agency staff [ ] supervisor/manager  [ ] other: __________ (specify)
9. Was 911 called: [ ] NO [ ] YES
    If yes, who responded (select all that apply)
    [ ] Police [ ] Police Crisis Team [ ] Ambulance [ ] Fire [ ] No one

10. On a scale of 1 to 5, how satisfied were you with the 911 service the client received?

    1 2 3 4 5
    Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

Please explain:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

11. Did the client go to a Hospital Emergency Room?
    [ ] YES - Please complete Emergency Room Visit Form
    [ ] NO - Please describe other follow-up or intervention that occurred

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix B: Client Background Form

Agency Code: Client Background Information Form Client Initials: 

Instructions: Please complete for the first crisis/critical incident. For subsequent crises copy the original and indicate any changes in information or indicate no change, attach to incident report

Date Completed:____________________________________

1. Demographics:
   a. Age: ______
   b. Gender: [ ] Male [ ] Female
   c. Cultural Background:
      [ ] Caucasian [ ] African descent [ ] East Indian [ ] Hispanic/Latino
      [ ] Asian [ ] Aboriginal [ ] Unknown [ ] other ________
         (specify)

2. Residential Setting:
   [ ] Family [ ] Group Home [ ] Independent [ ] SIL [ ] Street
   [ ] Shelter [ ] Boarding Home [ ] Nursing Home [ ] other ________
      (specify)

2.b. Postal Code Residential Setting:__________________________

3. Type of Day Program (select all that apply):
   [ ] None [ ] Sheltered Workshop [ ] Day Program
   [ ] School [ ] Supported Employment [ ] Independent
   [ ] Employment

4. Other Supports – Does Client have regular: (Don’t Know = DK)
   a. General Practitioner [ ] No [ ] Yes [ ] DK
   b. Psychiatrist [ ] No [ ] Yes [ ] DK
   c. Behavioural Therapist [ ] No [ ] Yes [ ] DK
   d. ACT Team [ ] No [ ] Yes [ ] DK
   e. Counseling [ ] No [ ] Yes [ ] DK
   f. Crisis Plan [ ] No [ ] Yes [ ] DK
   g. Case Manager [ ] No [ ] Yes [ ] DK
   h. Service Coordinator [ ] No [ ] Yes [ ] DK
   i. APSW [ ] No [ ] Yes [ ] DK
   j. Other [ ] No [ ] Yes Specify_________________

5. Medical Information
   a. Current psychiatric diagnoses (including Autism Spectrum Disorder):

____________________________________________________________________________
____________________________________________________________________________
b. Medical Diagnoses (i.e. diabetes, epilepsy, genetic disorder i.e. Downs, Fragile X)

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

c. Medications (please state all)

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

d. Level of Cognitive Disability:

[  ] Borderline/Normal  [  ] Mild
[  ] Severe            [  ] Moderate
[  ] Severe            [  ] Profound
[  ] Profound
[  ] Unknown
6. Does client have history of:
   a. Trouble with the law / legal issues [ ] No [ ] Yes
   b. Aggression or danger to others [ ] No [ ] Yes
   c. Self-injurious behaviour / suicidal risk [ ] No [ ] Yes
   d. Fire setting behaviour [ ] No [ ] Yes
   e. Sexual Deviance [ ] No [ ] Yes
   f. Previous ER visits [ ] No [ ] Yes # times in past yr
   g. Previous inpatient psychiatric admission [ ] No [ ] Yes # times in past yr

7. Please circle the specialized services that the client is currently involved with:
   [ ] DDRS CAMH, [ ] Dual Diagnosis Program CAMH, [ ] Surrey Place Centre,
   [ ] Peel CAMH, [ ] Whitby Dual Diagnosis Program, [ ] COTA Dual Diagnosis Program
   [ ] Griffin Community Support Network,

8. Significant Life Events: Below is a list of life events. Please indicate the event(s) the client has experienced in the PAST YEAR. Select all that apply.

   [ ] Death of a 1st degree relative (parent, child, spouse, sibling) [ ] Serious problem with a close friend caregiver, neighbor, relative
   [ ] Death of a close family friend, caregiver or other relative [ ] Unemployed/seeking work for more than one month
   [ ] Serious illness or injury [ ] Retirement from work
   [ ] Serious illness of close relative, caregiver or friend [ ] Problems with police or other authority
   [ ] Change in residence [ ] Something valuable lost or stolen
   [ ] Change in roommates [ ] Laid off or fired from work
   [ ] Break up of steady relationship (a girlfriend or boyfriend) [ ] Change in client’s primary staff/worker
   [ ] Separation or divorce [ ] Sexual Problem
   [ ] Alcohol Problem [ ] Major financial crisis
   [ ] Drug Problem [ ] Recent trauma/abuse
   [ ] Any other change of routine which may have caused stress to the individual (Describe briefly)

________________________________________________________________________________________
________________________________________________________________________________________
### Appendix C: Overt Aggression Scale

<table>
<thead>
<tr>
<th>Time Begin</th>
<th>Time End</th>
<th>Verbal Aggression</th>
<th>Physical Aggression Against Self</th>
<th>Physical Aggression Against People</th>
<th>Physical Aggression Against Objects</th>
<th>Your Response/ Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>_</td>
<td>_</td>
<td>Loud noises, shouts</td>
<td>_ Minor Injury</td>
<td>_ Threatens, swings</td>
<td>_ Slams doors, makes mess</td>
<td>_ None</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
<td>Yells mild insults</td>
<td>_ Moderate injury/bangs head</td>
<td>_ Strikes, kicks, pushes</td>
<td>_ Throws objects</td>
<td>_ Talk</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
<td>Curses viciously</td>
<td>_ Minor cuts, bruises, burns</td>
<td>_ Causes mild to moderate injury</td>
<td>_ Breaks objects, windows</td>
<td>_ Observe</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
<td>Moderate threats to self/others</td>
<td>_ Bleeding, loss of teeth, loss of consciousness</td>
<td>_ Causes severe injury</td>
<td>_ Sets fires, dangerous behavior</td>
<td>_ Hold</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
<td>Clear threat of violence</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_ Medicate (p.o. or i.m.)</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
<td>Loud noises, shouts</td>
<td>_ Minor Injury</td>
<td>_ Threatens, swings</td>
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<td>_</td>
<td>_</td>
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<td>_ Threatens, swings</td>
<td>_ Slams doors, makes mess</td>
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<td>_</td>
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<td>_</td>
<td>_</td>
<td>_</td>
<td>_ Medicate (p.o. or i.m.)</td>
</tr>
</tbody>
</table>

**Please note the time each incident began and ended. Then check the behavior that occurred and your response to the behavior. See the complete definitions for each category on the attached sheet.**

**Rater’s Relationship to Patient**