Assaults in Juvenile Correctional Facilities:
An Exploratory Study

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Abstract

Scant research exists exploring the conditions contributing to assaults within juvenile corrections facilities. In fact, very little research exists that addresses violence within prison and detention facilities in general. This lack of research, particularly juvenile corrections research, ignores the fact that incidences of assaults in many juvenile facilities have increased or remained constant in recent years. The study of violence in juvenile correctional facilities is important because unsafe and unstable facilities cannot provide the necessary therapeutic milieu. This manuscript reports on a study that explored the various factors surrounding 10,985 documented incidents involving potential and actual injury assaults involving youth detained within the Arizona Department of Juvenile Corrections. This exploratory research found that both individual and contextual factors must be considered when attempting to reduce violence in juvenile facilities. A key finding addresses the common call to expand correctional capacities as the way to resolve many problems. During a time when the institutional population decreased, we found an increase in the assault rate. This finding signifies that population density alone does not fully explain correctional violence.
Introduction

The vast majority of juveniles in correctional facilities are chronic offenders who have failed in less restrictive community placements such as probation. Judges place youth in juvenile corrections facilities because they require a secure environment to ensure public safety and to receive the appropriate rehabilitative services. The management and rehabilitation of a large number of chronic delinquents in a secure correctional environment frequently results in tense, emotion-laden situations which quickly escalate into injury assaults involving both youth-on-youth violence and assaults by youth against corrections staff. Such tense situations may prove inevitable given that incarcerated juveniles often have extensive histories of delinquency and/or abuse. Recent data from the Performance-based Standards (PbS) for Youth Correction and Detention Facilities system revealed that the rate of assaults on youth in corrections facilities increased between October 2004 and April 2005, and youth assaults against staff increased during the same period (Council of Juvenile Correctional Administrators, 2005).

Most juvenile correctional facilities differ from their adult counterparts in their emphasis upon rehabilitative programming. Juveniles committed to correctional facilities undergo assessment and classification processes designed to identify their unique criminogenic needs and to place them into the appropriate rehabilitative programs. Meanwhile, some juvenile offenders are committed to correctional facilities because the treatment they need is unavailable elsewhere. The study of violence in juvenile correctional facilities is important because unsafe and unstable facilities cannot provide the environment necessary for youths’ rehabilitative programming to succeed. The lack of scholarly research examining violence in juvenile facilities denies correctional managers with
valuable references for making informed decisions on how to provide safe, rehabilitative environments.

**Background/Review of Literature**

Most published research on prison violence has involved adult prisons. The most recent prison violence studies focused on predictors of adult prisoner violence and the utility of risk assessment instruments to predict such assaults (Wagoner, 2004; Belfrage, Fransson, and Strand, 2004). At least three factors discourage the study of violence in juvenile correctional facilities. First, the number of incarcerated juveniles is considerably smaller than the number of incarcerated adults, thus inhibiting the study of large samples of cases. It is normally easier for researchers to identify an appropriate cohort of adult inmates than juvenile offenders on which to conduct research. Second, obtaining parental consent places a huge impediment in the way of efforts to study an adequate number of juvenile subjects. Many times the parents or legal guardians of incarcerated youth are difficult to locate and therefore informed consent cannot be obtained. Third, adult offenders are typically sentenced for much longer periods of incarceration than juveniles. Youth receive shorter terms than adults due to various factors including age, jurisdiction limitations, and a desire to return youth to the community as soon as possible.

Despite these difficulties, some published research examining violence in juvenile facilities exists. **Research shows that younger inmates tend to assault others more than older offenders do. In addition, "(P)risoners of all ages tend to commit more injury assaults in institutions dominated by youth" (Light, 1990, p. 282).** Offenders who assault others tend to be disparaged in adult prisons, whereas in juvenile facilities they are respected. Young offenders are more likely to assault others because:
1. they are more likely to be motivated to violence;
2. they are given more opportunities for violence;
3. they are rewarded for violence;
4. they are less aware of the punishments for violence; and
5. correctional staff are less likely to punish them for assaultive behavior (Ellis, Grasmick and Gilman, 1974).

Violence within juvenile facilities is promoted by the failure of some staff to address or punish aggression because such action is viewed as youth behaving as "just kids" (Ellis, Grasmick and Gilman, 1974).

Research examining the characteristics of the perpetrators and victims of correctional violence have found connections between age, type of committing offense, and prior history of violence or incarceration to inmate violence. Inmates have justified assaults in the context of an "inmate code" which requires violence for one of three reasons: because of a problem paying back a debt, to save face, or as retribution for a previous assault (Gaes and McGuire, 1985). A survey of adult and juvenile inmates revealed that a key predictor of becoming an assault victim was having assaulted others in the past (Edgar and O'Donnel, 1998). In addition, the number of inmate assaults in which correctional staff are the victims is surprisingly large given the power that staff have over inmates (Hepburn, 1989). Light's (1991) study of inmate assaults on correctional officers identified 14 factors that accounted for assaults, with the most predominant factor identified as "unexplained" due to inmates' reluctance to be forthcoming about what
prompted an assault. Previously, Light (1990) found that institutional factors dominated inmate factors in his analysis of the severity of assaults upon correctional officers: factors such as the lower mean age of the prison population, higher percentage of inmates with drug abuse histories and higher rates of misbehavior reports per inmate were found to correlate with assaults.

Violence is a function of three forces: the aggressor, the victim and the situation (Light, 1991). A common approach to studying correctional violence consists of an analysis of the relative effects of individual and institutional characteristics (Ellis, Grasmick and Gilman, 1974; Gaes and McGuire, 1985; MacDonald, 1999; Wooldredge, 1994). Some researchers have identified key factors affecting correctional violence, including the sentence length given to the offenders, as well as the amount of time served at the time of the violence (Wooldredge, 1994). Research demonstrates that inmates are most docile at the beginning and end of relatively long sentences, and are most troublesome if given short sentences or if they are in the middle of long sentences (Gaes and McGuire, 1985). Variables found to correlate with inmate violence include: length of sentence, the percent of the sentence served, the amount of time inmates spend daily in constructive activities, number of visitors received, and attitudes toward correctional officers and programs (Wooldredge, 1994).

Additional research has demonstrated that inmates assault others for three purposes: (1) to achieve higher status in the inmate community; (2) to reassure the winners of their competence in an environment of forced passivity; and (3) for defensive purposes,
because if inmates are successful in attacking others, they are less likely to be attacked themselves (Bowker, 1982). Given that correctional facilities limit the freedom of inmates, some of whom have very violent tendencies in addition to other behavior disorders, it is not unusual for social pressures to accumulate inside these facilities producing tensions that are released through violence. Bowker (1980) found that the judicious use of violence was a real status enhancer within adult prisons. Oftentimes, the demonstration of violence within a prison yields long-term benefits insofar as the individual who uses violence finds it is unnecessary to use violence again once dominance is established. Violence in male facilities has been found to be more common than violence in female facilities (Bowker, 1980).

Wooldredge (1994) maintains that an offender’s likelihood of being victimized in prison is related to the institutional activities that increase or decrease his/her opportunities for victimization. To a certain extent, victims may facilitate violence by placing themselves at risk. It is usually a number of factors, that when combined, contribute to a person’s increased likelihood of victimization. Inmates themselves identified six assault risk factors (Edgar and O’Donnel, 1998):

1. being sex offenders;
2. displaying weakness or unwillingness to fight;
3. displaying fear;
4. lacking self-esteem to defend their interests;
5. expressing feelings of vulnerability;
6. being assaulted in public without fighting back.
Inmates who are not kept occupied in classes, work or other structured recreational activities, as well as inmates who spend more time watching television, have a higher likelihood of being victimized (Wooldredge, 1994). Situations in which the inmates had a lot of unstructured time or a lot of time to watch television were correlated with violent behavior (Clarke, 1980; Wooldredge, 1994). Lending items to other offenders is common in correctional institutions, and is a common assault risk factor (Edgar and O'Donnel, 1998). Inmates learn that they need to be careful about the image they project within correctional institutions, because those that convey a potential for violence are less likely to be assaulted (Edgar and O'Donnel, 1998). One study (Wooldredge, 1994) found that inmate characteristics had an effect upon violence. In fact, fights between two strong, high-status prisoners were rarely reported in incident reports, but those that were reported usually involved both strong and weak participants (Bowker, 1982).

Numerous researchers have identified environmental factors which relate to correctional violence. One researcher characterized correctional facilities as *controlled war* because they “…combine the ready availability of homicidal weapons, prisoners who are violence-prone, inadequate architecture and supervision and a constant round of explosive situations and pressures…” (Bowker, 1980, p. 31). Offenders deal with these institutional pressures in various ways. Clarke (1980) found that when juvenile inmates are in situations that make them anxious, they frequently respond in recalcitrant ways. Edgar and O'Donnell (1998) found that inmates will initiate assaults in front of correctional staff because they know the fights will get stopped before the fight gets out.
of hand. The greater influence of institutional characteristics over inmate characteristics is encouraging news for correctional managers, because inmate characteristics are difficult or impossible to change while institutional attributes are dynamic and open to change (Light, 1990).

Overcrowding of correctional institutions is perhaps the most commonly considered contributor to prison violence (Cox, Paulus and McCain, 1984; Gaes and McGuire, 1985). Other factors examined as potential correlates of inmate violence include population density and staff turnover (Light, 1990). Wortley (2002) developed a comprehensive typology of what influences prison violence and what can be done to reduce it. His two-staged model identifies both precipitators (prompts, pressures, permissibility and provocations) and regulators (perceived effort and risks, anticipated rewards and punishments). "Situations can present cues that prompt the individual to perform antisocial acts, they can exert social pressure on an individual to misbehave, they can reduce self-control and permit individuals to engage in behavior that they would otherwise self-censure, and they can produce emotional arousal that provokes a violent response (Wortley, 2002, p. 57).

Dilulio (1987) found that formal controls varied inversely with prison violence, and correctional facilities with more formal controls had less violence. Wener and Olsen (1980) conducted a study of two pretrial detention centers and found that the appearance of a correctional facility contributed to inmate violence, and as a result of this finding, have advocated for correctional facilities that use a variety of colors and textures. Clarke
(1980) found that the correctional environment provided both the cues and motivating stimuli for violence. In some instances the institutional environment limited aberrant behavior, and in others “...the climate of the school and the way it was run were of fundamental importance...” (Clarke, 1980, p. 116). Weather was an important factor, in that absconding from school was found to be least prevalent during the most extreme months and most prevalent during the mildest months.

Assaults within correctional facilities are frequently studied using official records (Maitland and Sluder, 1998), however, “(T)here is always the possibility that official records tell us more about the operation of the prison administration than they do about the behavior of prisoners” (Krisberg, 2003, p. 197). When comparing reported assaults to actual assaults it was found that “…the assault problem as viewed by prisoners is 11 times as great as the assault problem that is officially recognized by prison administrators.” (Bowker, 1980, p. 26).

The Present Study

The Arizona Department of Juvenile Corrections (ADJC) is responsible for juveniles adjudicated delinquent and committed to its jurisdiction by the county juvenile courts. It became a department separate from the Arizona Department of Corrections in 1990. ADJC operates and maintains four secure care facilities for the custody, treatment, and education of committed juveniles: Adobe Mountain School, Catalina Mountain School, and Eagle Point School are the three facilities that house male youth, while Black Canyon School is the only facility that houses females. Each juvenile placed in a secure Safe
School, receives rehabilitative services appropriate to the juvenile's age, risk, needs, abilities, and committing offenses. These services include education, individual and group counseling, psychological services, health care, and recreation. In addition, treatment groups and specialized housing units focus on juveniles with histories of violence, substance abuse or sexual offenses. Each ADJC Safe School is organized into housing units or cottages, and the housing units' average population is 24 juveniles. ADJC housing units vary in design and age, but all are composed of rooms rather than dormitories, and most of the rooms are designed for double occupancy. ADJC has a juvenile population that is largely Hispanic (46.1%) or white (34.1%). In comparison, 21.4% of agency staff are Hispanic and 60.7% are white.

The present study examined 10,985 incidents which occurred within ADJC during 2003 and involved situations with actual or potential injury assaults between and among juveniles and staff. These incidents were categorized into eight types. (see Table 1). However, all of them involve an injury assault or had the potential for escalating into an injury assault. The department's automated incident reporting (IR) system was the source for this data, and any event that was coded in the system as involving injury assault was categorized by our study that way.

Table 1 Here

Injury assaults were examined to understand the effect of both pre-existing individual juvenile characteristics such as age or delinquent history, as well as characteristics pertaining to the correctional facility environment such as the composition of juveniles in a particular unit and the relative safety of different locations within the facilities. Injury
assaults rather than all assaults were the focus of our study because we felt like the injury assaults by being more serious deserved careful attention while many non-injury assaults appeared to be more trivial in nature. It has been said of adult prisons that "...the quality of prison life depends far more on management practices than on any other single variable...prisons can be improved." (Difulio, 1987, p.6). This study was based on the presumption that safety in juvenile correctional facilities can also be improved through appropriate management decisions based upon timely and relevant research literature.

Methods

Incidents examined by this research include only those documented by Incident Reports (IRs) in ADJC's automated information system, Youthbase. Some (Bowker, 1980; Wooldredge, 1994) maintain that correctional records, like ADJC's automated IR system, provide an incomplete picture of what occurs within correctional facilities and suggest alternative data sources be utilized. The known shortcomings of the ADJC IR system do not appear to be any greater than those of other government data commonly used for research purposes. ADJC IR data were considered valid and reliable measures of potential and actual injury assaults for two reasons. First, a large number of relevant incidents were documented by the IR system during 2003, and while they may not include all incidents, the number is sufficiently large as to invite a careful review. Second, government public record data are widely used sources for social science research.
During 2003, ADJC had an average daily population of 679 juvenile offenders in four secure facilities. All documented incidents which occurred at an ADJC Safe School in 2003, and which involved situations with actual or potential violence between and among juveniles and staff, are included in this study. A total of 10,985 incidents were examined. These incidents were organized into eight categories, and all of them included an injury assault or had the potential for resulting in an injury assault. Three incident categories encompass actual injury assaults (juveniles assaulted by juveniles, mutually instigated fights, and staff assaulted by juveniles) and five incident categories capture potential injury assaults (see Table 1).

Findings

Most assaults in 2003 involved juveniles assaulting juveniles (927 or 46.5%), followed by mutually instigated fights (581 or 29.1%), or staff assaulted by juveniles (484 or 24.3%).

Approximately half (47.6%) of the assaults occurring within ADJC in 2003 resulted in injuries. Injury assaults increased by 19.7% between 2002 and 2003. In fact, between August and December of 2002, ADJC had an average of 56.4 injury assaults per month, and this average increased to 76.1 per month in calendar year 2003. The period of August through December of 2002 was used for comparison purposes because the ADJC incident reporting system was audited in August of 2002, and assault data recorded previous to the audit were considered unreliable. The largest increase in type of injury assault involved
juveniles assaulting staff (69.2%), followed by mutually instigated fights (55%) and finally juveniles assaulted by juveniles (20.5%).

Figure 1 Here

Figure 1 demonstrates the increase in the injury assault rate (per 100 juveniles). In fact, ADJC had an injury assault rate of 6.7 in August of 2002, and that rate increased to 12.4 by December of 2003; ADJC’s injury assault rate increased by 85% between August of 2002 and December of 2003.

Two of the three assault categories (Juveniles Assaulted by Juveniles and Mutually Instigated Fights) experienced decreases between 2002 and 2003, but there was an increase in Juvenile Assaults Against Staff. On average, ADJC secure facilities had 35.2 Juvenile Assaults Against Staff per month in 2002 and 40.3 per month in 2003.

A temporal examination of injury assaults revealed that most injury assaults tended to occur early in the week. Mondays (17.6%) and Tuesdays (16.8%) had a disproportionate number of injury assaults while Saturdays (13.3%) and Sundays (12.2%) had the fewest. Injury assaults tended to occur most often in dayrooms/lounges/halls (36%) followed by youth rooms (21%), classrooms (12%), facility grounds (7%), recreation (7%), dining areas (6%) and other areas (10%). Certain locations had more assaults than would be expected; potential trouble spots were indicated by large differences between the estimated amount of time spent at those locations and the percentage of injury assaults that occurred there. As shown in Table 2, more injury assaults occurred while juveniles
were in lounges, hallways, or grounds\(^1\) than would be expected and fewer injury assaults than expected occurred in juveniles' rooms or in education\(^2\).

Table 2 Here

Logistic regression analysis was employed to analyze both individual and contextual variables that predicted potential or actual injury assaults, and the .05 level was used to determine statistical significance. The data for this analysis consisted of the 10,985 potential and actual injury incidents which occurred at ADJC in 2003. The incidents analyzed involved 882 juveniles; 430 of whom were involved in injury assaults and 452 who were not. Twenty-one independent variables were included in the analysis: 11 individual and 10 contextual (see Table 3). Logistic regression analysis yielded four equations, and variables found to be statistically insignificant in the first equation were subsequently dropped from the next three equations.

The variables included in our analysis met two criteria. First, prior research had identified them as having some type of a relationship with institutional correctional violence. Second, we were able to find relevant measures for them within ADJC. The individual variables included in the study were: age; race; sex; assault history prior to commitment to ADJC; number of times committed to separation\(^3\) excluding self-referrals; whether committing offense was a weapons or persons offense; emotional stability/mental health status; delinquent peer relationships; history of abuse/neglect; documented substance abuse problem; and whether youth was a parole violator returned to ADJC. The contextual variables included in this study consisted of whether the housing units under examination were characterized in the top 25\% rate for the following: self-referral to
separation rate; youth with prior adjudicated assault offenses; youth with any previously adjudicated weapons or persons offenses; emotional/mental instability; delinquent peers; history of abuse/neglect; documented substance abuse problem; parole violators; and number of security calls made from the housing unit.

Table 3 Here

The exploratory analysis yielded the following findings:

- Age, sex and race played no role in distinguishing between actual injury assault incidents and potential injury assault incidents;
- The more often a juvenile was placed in separation for reasons other than self-referral, the greater the chances that the incident(s) he or she was involved in would result in an injury assault;
- Juveniles placed in housing units in the top 25% in terms of separation rate, whether due to self- or staff-referrals, were more likely to be involved in injury incidents;
- If a juvenile had two or more prior assault offenses, then the likelihood of being involved in an injury assault was higher than if the juvenile had only one or no prior assault offense;
- Juveniles who were mentally unstable were more likely to be involved in an injury assault incident than a juvenile who was mentally stable; and
- Juveniles in housing units within the top 25% of assault rates were more likely to be involved in injury assault incidents.
Summary and Conclusion

This exploratory study revealed several notable findings regarding youth violence within one juvenile corrections agency. First, during a time when both the institutional population and overall number of assaults decreased, we found an actual increase in the assault rate. In fact, the monthly assault rate for calendar year 2003 nearly doubled (85%) from the monthly assault rate in the previous period for which reliable data were available. This finding signifies that population density alone does not fully explain correctional violence. As the ADJC population decreased in 2003, there were times when the department had more bed space than demand. While adequate capacity may be a necessary condition for institutional safety, this research suggests that adequate capacity alone is not a sufficient condition to prevent institutional violence.

Second, this study found that a disproportionate number of injury assaults occurred in certain locations. Injury assaults tended to occur most often in dayrooms/lounges/halls (36%) or youth rooms (21%) than elsewhere in the facilities. The lack of supervision or structured activities in those locations may have been a contextual influence which contributed to injury assaults. As stated in a recent study of juveniles with delinquent peers, “one recurring theme is that unsupervised time creates opportunities for delinquent conduct” (Warr, 2005, p79).

Third, the assault category that experienced the largest increase was staff assaulted by youth. ADJC has a high employee turnover rate. In fact, the turnover rate in 2003 was 29.6%, and that rate was almost twice the statewide average of 15.4%. Youth
Correctional Officers provide most of the direct supervision for ADJC youth, and they had a 48.7% turnover rate. Juveniles can get frustrated when regularly forced to interact with inexperienced staff. Oftentimes, new staff are unsure of policies and procedures and must consult others to answer routine questions or requests. Unfamiliar with the daily routines of a juvenile corrections facility, new staff may also misread situations and respond to juveniles in ways that provoke frustration and, at times, even violence (Vivian et al. 2004). In addition, the racial disparity between staff and youth may contribute to the escalation of youth assaults against staff.

Finally, the analysis revealed that both individual and contextual factors worked together to yield conditions that contributed to institutional violence. The following individual factors were predictors of an incident escalating into an injury assault: (1) the incident involved a juvenile with a high number of referrals to separation; (2) a juvenile involved in the incident had two or more prior assault offenses; and (3) the incident involved a juvenile with mental instabilities. The contextual factors that predicted the escalation of an incident into an injury assault were: (1) placing juveniles in housing units in the top 25% of separation rates; and (2) placing juveniles in housing units within the top 25% of assault rates. Thus, emotionally unstable juveniles, and juveniles with extensive assault and behavior histories, were more likely to participate in injury assaults. Housing units with a lot of turmoil, as evidenced by high separation and assault rates, experienced more injury assaults than other ADJC housing units. Combining the individual and contextual factors reveals that violent situations were most likely to result from the assignment of
mentally unstable juveniles or juveniles with extensive assault histories to units that are already in turmoil.

The study of violence involving incarcerated juveniles is important to anyone interested in juvenile justice and, more specifically, juvenile corrections. Correctional violence can result in serious injuries to juveniles and/or staff and it undermines the establishment of a therapeutic milieu. With all of the attention devoted to “what works” in corrections (Cullen, 2005), it is surprising that such little attention has been devoted to the study of correctional violence. Even though violence in juvenile corrections facilities may not be perceived as problematic as violence in adult prisons, juvenile correctional violence can distract staff and juveniles from rehabilitative efforts. The juvenile justice system was created for the dual purposes of recognizing that juvenile offenders are different than their adult counterparts and to provide juveniles with rehabilitative services that will enable them to lead law-abiding lives. By overlooking juvenile correctional violence, researchers and juvenile justice officials are doing a disservice to the juveniles who are committed to these agencies. This exploratory study examined 10,985 incidents that resulted in potential or actual injury assaults within the Arizona Department of Juvenile Corrections during 2003. Agency trends and potential relationships among various individual and contextual factors contributing to assaults were identified that may help to explain and predict assaults, but further research is necessary to increase the understanding of factors that contribute to violence in juvenile corrections facilities. The author calls upon other researchers to dedicate their efforts to this worthwhile research endeavor.
### Table 1

<table>
<thead>
<tr>
<th>Assault Type</th>
<th>Incident Category</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury Assault</td>
<td>Juvenile Assaulting Juvenile</td>
<td>8.1%</td>
</tr>
<tr>
<td>Injury Assault</td>
<td>Mutually Instigated Fights</td>
<td>5%</td>
</tr>
<tr>
<td>Injury Assault</td>
<td>Staff Assaulted by Juveniles</td>
<td>4.4%</td>
</tr>
<tr>
<td>Potential Injury Assault</td>
<td>Failure to Comply</td>
<td>37%</td>
</tr>
<tr>
<td>Potential Injury Assault</td>
<td>Threatening or Acting out</td>
<td>35.4%</td>
</tr>
<tr>
<td>Potential Injury Assault</td>
<td>Horseplay</td>
<td>4.1%</td>
</tr>
<tr>
<td>Potential Injury Assault</td>
<td>Inappropriate Sexual Behavior</td>
<td>3.7%</td>
</tr>
<tr>
<td>Potential Injury Assault</td>
<td>Inappropriate Sexual Language</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>n=10,985</strong></td>
</tr>
</tbody>
</table>

### Table 2

Comparison Between Estimated Time Juveniles Spend at Different Locations to the Injury Assaults That Occurred There

<table>
<thead>
<tr>
<th>Location</th>
<th>Time Spent</th>
<th>Adobe Mountain</th>
<th>Black Canyon</th>
<th>Catalina Mountain</th>
<th>Eagle Mountain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>48.3%</td>
<td>15.5%</td>
<td>28%</td>
<td>30%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Education</td>
<td>24.3%</td>
<td>12.9%</td>
<td>17%</td>
<td>21%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Lounge/Hall</td>
<td>16.3%</td>
<td>44%</td>
<td>35%</td>
<td>28.2%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Dining Area</td>
<td>5.2%</td>
<td>6.7%</td>
<td>8%</td>
<td>3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Grounds</td>
<td>2.1%</td>
<td>7%</td>
<td>7%</td>
<td>7.8%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Movement</td>
<td>3.8%</td>
<td>1.8%</td>
<td>0%</td>
<td>2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Recreation</td>
<td>unknown</td>
<td>8.8%</td>
<td>3%</td>
<td>5%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>3.3%</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Time spent estimates were provided by Eagle Point
### Variables Included in Logistic Regression Analysis by Type

<table>
<thead>
<tr>
<th>Individual</th>
<th>Contextual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Housing unit self-referral to Separation rate</td>
</tr>
<tr>
<td>Race</td>
<td>Housing unit Separation rate</td>
</tr>
<tr>
<td>Sex</td>
<td>Housing unit assault rate</td>
</tr>
<tr>
<td>Assault history prior to ADJC</td>
<td>Housing unit committing offense rate</td>
</tr>
<tr>
<td>Separation commitments</td>
<td>Housing unit emotional/mental stability rate</td>
</tr>
<tr>
<td>Committing offense</td>
<td>Housing unit delinquent peers rate</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>Housing unit history of abuse/neglect rate</td>
</tr>
<tr>
<td>Delinquent peer relationships</td>
<td>Housing unit substance abuse rate</td>
</tr>
<tr>
<td>History of abuse/neglect</td>
<td>Housing unit parole violator rate</td>
</tr>
<tr>
<td>Substance abuse problem</td>
<td>Housing unit security call rate</td>
</tr>
<tr>
<td>Parole violator</td>
<td></td>
</tr>
</tbody>
</table>

### Figures

**Figure 1: ADJC Injury Assault Rates, August 2002 - November 2003**

![Graph showing ADJC injury assault rates from August 2002 to November 2003](image)
REFERENCES


NOTES

1 The amount of time juveniles spend at recreation during the week was unavailable. For comparison sake, it was estimated that juveniles spend 4.2% of their time on the weekends at recreation.

2 More injury assaults occurred in education than expected at the Eagle Point School.

3 Separation is one component of the agency's Behavior Management system. It is the most restrictive therapeutic intervention available within ADJC. However, Separation is a
short-term intervention designed to return a juvenile to his/her assigned treatment program in as expedient a manner as possible.