YOUNG OFFENDERS IN CUSTODY: RISK AND ADJUSTMENT

CARLA CESARONI
Centre of Criminology

MICHELE PETERSON-BADALI
University of Toronto

This article explored results from a study of 113 incarcerated male youths, who were age 12 to 15 at the time of their indexed offense. Using a widely used, normed measure of psychosocial functioning, the study examined the relationship between preexisting risk factors and/or institutional risk factors and adjustment in custody. Preexisting risk or vulnerability significantly predicted adjustment to custody, as did several risk factors within facilities (worry about victimization, perceiving victimization as likely, and experiencing conflicts with inmates as difficult). Risk factors associated with institutional life appeared to contribute to a young person’s adjustment beyond the risk factors a young person may walk into an institution with. One commonly used measure of institutional functioning, number of custodial rule infractions, did not appear to be a valid indicator of how a youth felt or adjusted to a facility. Limitations and implications of the findings are discussed.

Keywords: young offenders; custody; adjustment; risk

In both Canada (Stevenson, Tufts, Hendrick, & Kowalski, 1998) and in the United States (Snyder & Sickmund, 1999), more young offenders are being sentenced to custody now than in the past. In the

AUTHOR NOTE: Address correspondence to Carla Cesaroni, 172 Hastings Ave., Toronto, Ontario, Canada M4L 2L3. The preparation of this article was supported by a research grant from the Social Sciences and Humanities Research Council of Canada to A. N. Doob. The authors gratefully acknowledge the support and assistance of Lee Tustin and the Ministry of Community and Social Services (Ontario), Anthony N. Doob, all of the facilities that supported this research, and the young men who participated in the project.

CRIMINAL JUSTICE AND BEHAVIOR, Vol. 32 No. 3, June 2005 251-277
DOI: 10.1177/0093854804274370
© 2005 American Association for Correctional and Forensic Psychology
United States in 1996, custody was the most serious disposition for juveniles in 28% of cases (Snyder & Sickmund, 1999). In Canada, the comparable figure was 33% (Hendrick, 1996), and by 1999 this figure had increased to 35% (Carriere, 1999).

For many young offenders, incarceration is likely the most significant time spent away from family and friends (Biggam & Power, 1997). Life in prison is expected to be “uncomfortable” (McCorkle, 1993), and research suggests that, similar to adult offenders, young offenders are strongly influenced by the “pains of imprisonment” (Bartollas, 1982). Most youth in custody experience the stresses of the loss of liberty and the coercion of a punishment-oriented environment (Bartollas, 1982). According to Liebling (1999), imprisonment can be deceptively difficult and unpredictable and may have devastating psychological consequences. Interestingly, there is a paucity of empirical data regarding how youth experience custody, despite calls for research on the subject (Maitland & Sluder, 1996). The implications of locking up increasing numbers of young people are particularly important when one considers which youth are likely to be incarcerated.

The prevalence of psychiatric disorders in incarcerated youth is known to be high (Ulzen & Hamilton, 1998). These include, but are not limited to, unipolar and bipolar depression, alcohol dependence, attention deficit hyperactivity disorder, conduct disorder, posttraumatic stress disorder, and separation anxiety disorder (Duclos et al., 1998; Ulzen & Hamilton, 1998). The prevalence of behavioral, emotional, personality, and psychophysiological disorders among young offenders is higher than in the general population, perhaps as high as 60% (Cocozza & Skowyra, 2000; Hunzeker, 1993). There have been several attempts to estimate prevalence rates of psychiatric diagnoses among young offenders in the youth justice system, but rates appear highly variable among studies (Kazdin, 2000). Using the most conservative estimates, however, the prevalence rate of mental disorder is much higher (approximately 4 times higher) among young offenders than in community samples (Kazdin, 2000).

In addition, research has suggested that up to 75% of incarcerated young offenders may have a learning disability (Henteleff, 1999). Young offenders are also likely to have come in contact with the child welfare system prior to custody (Doob, Marinos, & Varma, 1995), and
there are many significant measures of family adversity that are associated with incarceration status, including physical abuse, family breakup, and violence between parents (Bortner & Williams, 1997). Thus, as a group, incarcerated young offenders are characterized by multiple forms of familial, socio-emotional, and academic disadvantages.

A substantial body of research indicates that these factors place children and adolescents at risk for a number of poor developmental outcomes in addition to justice system contact, including teenage pregnancy, dropping out of school, depression, and suicide (Cowan, Cowan, & Schultz, 1996). In the developmental psychopathology literature, risk typically has been examined in relation to measures of psychological maladjustment (e.g., “acting out” and antisocial behavior as well as depression, social withdrawal, and anxiety; see Beam, Gil-Rivas, Greenberger, & Chen, 2002; Taussig, 2002). A central finding across this literature is that risk factors operate in an additive, or cumulative, fashion. Whereas the presence of one risk factor (versus none) may not increase the likelihood of psychopathology, the risk of negative psychological outcomes increases as vulnerabilities accumulate (Garmezy, 1983; Gore & Eckenrode, 1994; Haggerty & Sherrod, 1994; Rutter, 1983).

In contrast, the term risk in criminological literature is used somewhat differently, often describing an actuarial approach to the prediction of recidivism and institutional misconduct (see Cottle, Lee, & Heilbrun, 2001). Although there is overlap between those characteristics that place young people at risk for psychopathology and those that predict criminal justice outcomes such as post-release failure, the outcome measures that underlie the developmental psychopathology and criminological approaches are quite different, as are the interventions that flow from these approaches. The current study takes a developmental psychopathology approach to examine the relationship between putative risk factors and measures of young offenders’ psychosocial and institutional adjustment.

In addition to the risk factors or vulnerabilities that young people bring with them into custody (i.e., preexisting risks), life within the custodial environment also can be explored from a risk perspective (i.e., in terms of institutional risks). There is substantial literature describing the high incidence of victimization of inmates by their
peers (Beck, 1995; Connell & Farrington, 1996; Mutchnick & Fawcett, 1991; Power, Dyson, & Wozniak, 1997; Shields & Simourd, 1991). There is also some indication that bullying experiences are a salient part of doing time for most youth, as between 20% to 45% of prisoners in young offender institutions report that they have been victimized during the course of their current sentence (Adler, 1994; Beck, 1995).

Despite findings suggesting that the nature of prison life breeds bullying and violence is entrenched as normal behavior (Howard League for Penal Reform, 1995), certain youth are at greater risk than others for victimization. Adams (1992) suggested that “predatory inmates tend to select as victims inmates who are perceived to be weak and easy targets, either because they are physically unimpressive or because they are intellectually or emotionally limited” (p. 311). Maitland and Sluder (1998) found that victims are generally less psychologically healthy, have greater levels of fear of being victimized, and experience the pains of imprisonment more severely than do nonvictims. Research also suggests that inmates who are afraid of being victimized tend to have more conflicts with both other inmates and guards (MacKenzie, 1987).

Outcomes of victimization in the general adolescent population include low self-esteem, depression, loneliness, and anxiety (Boulton & Smith, 1994; Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Hawker & Boulton, 1998; Olweus, 1993). Within the offender population, McCorkle (1993) and Maitland and Sluder (1996) reported that inmates’ fear of being victimized in prison is a strong predictor of psychophysiological well-being in young offenders. Maitland and Sluder (1996) stated that “the inmate with a high level of fear regarding personal safety reports more problems and has prominent concerns for his overall well-being” (p. 28).

Gibbs (1982) argued that group formation is a common reaction to the deprivations of confinement, and it has been noted that peers can play an important role in reducing stress in jail. With respect to the impact of peer relations on young offenders’ functioning, Maitland and Sluder (1996) found that social isolation (i.e., not spending free time with friends) negatively predicted general well-being, whereas the belief that friends would assist if an inmate was attacked positively predicted well-being. Therefore, friends or the lack of friends may
play a critical role in the psychosocial adjustment of youth in custody. Unfortunately, developing friendships may be difficult given that delinquents’ peer relations are often characterized by a higher degree of conflict and instability (i.e., more arguments, greater aggressive and impulsive behavior, and poorer empathy and role taking; Markus, 1996) than those of non-delinquents.

Despite increased literature within the developmental psychopathology field on the impact of risk factors in childhood and adolescence on both short-term and long-term psychosocial outcomes, there is relatively little research on the relationship of these factors to the adjustment of incarcerated young offenders. Noteworthy exceptions to this include work by Biggam and Power (1997, 1999), Gover (2000), Maitland and Sluder (1996, 1998), and Martin, Sigda, and Kupersmidt (1998). Biggam and Power’s (1997) study of the structure and function of social support in a group of incarcerated young offenders and Maitland and Sluder’s (1996) study of the general well-being of youthful inmates and related institutional, social, psychological, and individual variables (e.g., victimization experiences, fear of victimization, prison support, and correctional experience) provided important evidence for the influence of factors associated with institutional risk, social relations, and social skills on the adjustment of youth in custodial facilities. However, although these studies focus on institutional functioning, they do not attempt to draw conclusions or connections regarding preexisting vulnerabilities.

Gover’s (2000) study on previous child maltreatment and youth adjustment within custodial institutions and Martin et al.’s (1998) study on the effects of family and neighborhood violence on depressive symptomatology among incarcerated youth have provided important insights into the influence of preexisting factors that are associated with risk. These studies examined how several risk factors were individually related to psychosocial adjustment. However, there remains a paucity of research that examines the adjustment of young offenders from a multiple or cumulative risk perspective. Further information is needed about whether preexisting or institutional factors (either individually or in combination) place young offenders at risk for psychosocial or behavioral difficulties while in custody.

The present study constitutes an exploration of the question of whether there are characteristics of young offenders that correlate
with their psychosocial, as well as institutional adjustment while in custody. It is based on a developmental framework that attempts to bring together two important bodies of research.

Young offenders serving custody sentences were interviewed to gather information about factors associated with risk as well as their adjustment while in custody. Using a combination of previously published and newly developed measures, information was obtained on preexisting risk factors (i.e., those that young people “walked into” custody with, such as child welfare contact, poor school performance, and low self-esteem) as well as institutional factors associated with risk (i.e., those that were specific to custody, such as fear of victimization and problematic peer relationships). Data were also gathered on psychosocial adjustment (using the Achenbach Youth Self-Report; Achenbach, 1991) and institutional adjustment (i.e., number of rule infractions and level of privileges).

The authors were interested in whether risk factors that have been identified in the developmental psychopathology literature as predicting poor developmental outcomes for youth in a broad variety of domains would also correlate with problematic psychosocial and institutional adjustment of youth in custody. To date, psychosocial function of youth in these two domains has tended to be analyzed separately. It was conceded that a variety of factors associated with risk would be present in most youth in custody. The authors argue that over and above the presence of preexisting risk factors, factors unique to being held in a facility would also contribute to how well a young person was able to adjust to incarceration.

METHOD

SAMPLE

One hundred thirteen incarcerated male youths, who were age 12 to 15 at the time of their indexed offense, were interviewed. Participants were 13 to 19 years old ($M = 15.1, SD = 1.05$) at the time of the interview. The authors chose not to include females in the study because they represent a very small proportion of young offenders serving custody dispositions. In addition, the authors did not interview young
offenders within the first 3 weeks of their custody disposition because there is sufficient evidence to suggest that there is an elevated level of anxiety or stress during the initial time that most inmates face in prison, which is reduced as the inmate adjusts to the prison environment (Liebling, 1999; Wheeler, 1961; Zamble & Porporino, 1990).

Fifty-nine percent \((n = 67)\) of respondents defined themselves as White, and the remainder defined themselves as Black \((16\%, n = 18)\), Aboriginal, \((15\%, n = 17)\) or of other racial/ethnic origins \((10\%, n = 11)\). The charges relating to the term of custody that respondents were serving at the time of the interview included a wide range of offenses. Although many \((53\%, n = 60)\) of the respondents’ charges included a violent charge, many also included property offenses \((59\%, n = 67)\) and administration of justice offenses \((57\%, n = 64)\), such as breach of probation and failure to appear. Violent offenses included murder, manslaughter, sexual assault, assault with a weapon, aggravated assault, assault, robbery, and various weapons offenses. Almost half of the respondents were first charged with an offense at the age of 12, which is the youngest age in Canada at which a person can be charged with a criminal offense. Participants were serving custodial sentences that ranged from 3 weeks to 2 years.

Sixty participants were from secure custody facilities, and 53 were from open (group-home-like) custody facilities. Of all potential participants contacted, only 4 eligible youths chose not to participate in the study. An additional 2 eligible youths were unable to be interviewed because of difficulties with schedules, resulting in an overall response rate of 95%.

PROCEDURE

Eleven facilities (5 secure and 6 open) in southern Ontario, Canada, were included in the study. The first author made an initial visit to each facility, giving a brief talk about the study to all potential participants. All involvement was on a volunteer basis. Youths who were interested were given the name of one staff member with whom they could speak should they wish to participate. This same staff member also acted as the liaison between the interviewer and the facility, thereby minimizing the involvement and knowledge of other staff regarding which youths had participated. The first author carried out all of the inter-
views. A formal consent protocol was read to each participant outlining the purpose of the study, the interview’s risks and benefits to the participant, and the limits of confidentiality. Each respondent was told the facility could not punish them for participating, nor would they get special treatment from the facility for participating. They were told, however, that they would receive a small monetary compensation from the first author. Each respondent was advised that some questions may make them uncomfortable, and they were free to refuse to answer any question if they chose without fear of reprimand. Interview questions were administered orally, with each interview taking approximately an hour.

MEASURES

Risk. An interview protocol was developed to probe issues of preexisting risk factors based on the risk and resilience literature (Burt, Resnick, & Novick, 1998; Farrington, 2000; Garmezy, 1983; Gore & Eckenrode, 1994; Haggerty & Sherrod, 1994; Loeber & Farrington, 1997; Rutter, 1983). This included items that probed instability in living (e.g., How many places have you lived in the past year? Were you homeless in the past year? Have you ever had contact with the Children’s Aid Society?), school-related problems (e.g., In the past year were you ever suspended from school? How well were you doing in school in the past year? In the past year were you ever suspended from school? How well were you doing in school in the past year? In the past year did you have problems with the principal or teachers?), drug and alcohol use (e.g., Do you use alcohol/drugs? If so, how often?), and criminal justice contact (e.g., Do you have friends who are also in trouble with the police? How many times have you been stopped and talked to by the police? How many times have you been brought to court?). This section of the interview schedule was introduced to respondents by noting that each question was in regards to their life on the outside. In addition, within the domain of preexisting risk factors, self-esteem and self-perception were measured using the Harter Self-Perception Profile for Adolescents (Harter, 1988). This widely used instrument taps domain-specific judgments of competence or adequacy in eight separate domains (scholastic competence, athletic competence, physical appearance, social acceptance, behavioral conduct, job competence,
close friendship, and romantic appeal) as well as global self-worth. This measure has good internal consistency within the domains, and factor analysis supported the eight-domain structure of the instrument (Harter, 1988). For the purposes of this study, the global self-worth (i.e., total) score was used, and youth were asked to respond according to how they feel “normally” or when they are not in custody.

To explore factors associated with risk within the institution, each of the items from Maitland and Sluder’s (1996) Fear of Victimization Scale, Prison Stresses Scale, and Indicators of External/Internal Support were used. Particular attention was paid to items that probed peer-on-peer violence among inmates and their peers, including: “How safe do you feel in this prison?” with responses ranging from 1 (very safe) to 4 (very unsafe); “How much do you worry that you’ll be attacked during this sentence?” with responses ranging from 1 (very little) to 3 (a great deal); “Do you feel the chance of being attacked in this prison is (low, medium, or high)?”; and “How difficult do you find conflicts with other young offenders?” with responses ranging from 1 (not hard) to 5 (very hard). Several items measuring institutional peer relationships were also administered: “How many friends do you have in this prison?” (many, a few, none), “Do you spend most of your free time in this prison alone or with friends?” and “If you were going to be attacked, could you count on friends to help?” (Maitland & Sluder, 1996).

Adjustment to incarceration. To obtain information on the participants’ socio-emotional and behavioral functioning, Achenbach’s Youth Self-Report (YSR) protocol (Achenbach, 1991) was administered. The YSR is a widely used, normed measure of both social competence and behavior problems in youths 11 to 18 years of age. The YSR’s reliability and validity have been extensively documented in both clinical and non-referred samples (Achenbach, 1991). This study included the administration of the 112 items that comprise the behavior problem scales. Using these items, t scores were computed for internalizing problems, externalizing problems, and total behavior problems. In this study, the authors were particularly interested in the Internalizing scale, which probes withdrawn (e.g., I refuse to talk, I am shy), somatic complaints (e.g., aches and pains without known medical causes), and anxious/depressed behaviors (e.g., I am sad, I
feel too fearful or anxious). Standard administration of the YSR asks youths to respond to the behavior problem items using a time frame of “now or within the past 6 months.” However, to obtain a measure of respondents’ adjustment since entering custody, participants were asked to respond to the items in terms of their current functioning. To obtain institutional measures of the participants’ adjustment, participants were asked how many infractions they had committed since arriving at the institution. Infractions were the total number of self-reported incidences of being consequenced, being taken down a level of privilege, or having a bad behavior report written up about them. In most youth custody facilities, youth must be advised by staff each time they are given an infraction/bad behavior report as it has an impact on reports to a young person’s probation officer or temporary passes and reviews. Infraction reports are commonly used by custodial staff to assess how well offenders are coping in custody.

ANALYSIS OF DATA

The analysis section began with a description of the sample in terms of the risk and adjustment variables measured. Next, the relationships between the preexisting risk factors and psychosocial and institutional adjustment were reported. For these analyses, a “preexisting risk index” was created that was comprised of items demonstrating a significant positive relationship to internalizing behaviors. The index consisted of the following eight items: previous child welfare contact, previous police contact, failing all subjects in school, low self-esteem, moved in the past year, homeless in the past year, institutionalized in the past year (either hospitalized and/or custody), and more than four moves in the past 3 years. Each item was recoded into dummy variables to reflect the presence or absence of a risk. For self-esteem, the sample was divided into low self-esteem and medium/high self-esteem based on Harter’s (1988) norms for the general population. Items were then summed to yield a total score representing cumulative vulnerability. Participants’ scores on the risk index ranged from 0 to 8, with a mean of 2.77 and standard deviation of 1.86. Of the eight variables, 27 correlations range from .00 to .54.
Examining functioning in relation to the number of factors associated with risk or vulnerabilities experienced by a young person has been a common approach in the risk and resilience literature (Garmezy, 1983; Gore & Eckenrode, 1994; Haggerty & Sherrod, 1994; Loeber & Farrington, 1997; Rutter, 1983). Research indicates that it is not the occurrence of a particular risk factor but the additive or cumulative effect of multiple stressors that tends to produce consistently negative outcomes (Burt et al., 1998; Smith, Lizotte, Thornberry, & Krohn, 1995). In addition, individuals who show a deficit in one are likely to show deficits in others (Gore & Eckenrode, 1994). However, although risk factors tend to co-occur, it is not clear if they are necessarily intercorrelated (Farrington, 2000). Thus, it may be prudent to explore risk in a similar fashion to life event indexes, which provide a cumulative index of stress exposure. A risk index provides a cumulative index of risk exposure without the expectation that items will be correlated.

To explore the relationship between cumulative preexisting risks and adjustment, the sample was divided into low-, medium-, and high-risk groups based on total risk scores. The low-risk group \( (n = 34) \), defined as those who endorsed zero or one of the identified risk factors, comprised 30% of the total sample; the medium-risk group \( (n = 38) \), which endorsed two or three risk factors, comprised 34% of the sample; and the high-risk group \( (n = 41) \), which endorsed four or more factors associated with risk, comprised 36% of the sample.6

Following the exploration of preexisting factors, institutional factors (i.e., victimization and peer relationships) were examined in relation to psychosocial and institutional measures of adjustment using chi-square analyses or Fisher’s exact tests (the latter for 2 × 2 tables with one degree of freedom). Institutional factors associated with risk were examined individually to determine which specific aspects of peer relationships were related to adjustment.

Finally, to compare the contribution of preexisting and institutional risk factors to psychosocial and institutional adjustment, hierarchical regression analyses were performed, with preexisting factors entered in the first step of the analysis and institutional risk factors entered second.
RESULTS

CHARACTERISTICS OF SAMPLE

_Preexisting risk factors._ The fact that 58% \((n = 66)\), or a majority of respondents, reported having contact with child welfare authorities at some point during their childhood confirms previous research that indicates there is often significant overlap between youth who are brought to court for offending and those with previous contact with child welfare or mental health agencies (Doob et al., 1995). However, contact with child welfare was only one of a number of characteristics of these boys’ family lives that seemed to indicate general instability. Only a quarter of respondents had lived at home with both parents before being imprisoned. A third had moved two or three times in the past 3 years, and an additional quarter had moved four or more times in the past 3 years. Thirty-seven percent (a minority of youths) had mothers or fathers who were working at the time of the interview \((n = 42)\). Three quarters of respondents indicated that they had friends in trouble with the police, which is consistent with previous findings regarding antisocial peers (Elliot & Menard, 1996; Farrington, 1996; Sutherland & Cressey, 1970).

Seventy-eight percent \((n = 88)\) of respondents had been suspended from school in the year prior to their incarceration, 45% \((n = 51)\) for some form of violence. Suspension from school appeared to be just one marker for a number of difficulties that this group had in school. Almost half, or 47% \((n = 53)\), indicated that they were failing some or all of their courses the year before they came into custody. Many, or 61% \((n = 69)\), indicated that during that same period of time, they were having problems with the teachers and principals at their school.

Although it is not surprising to find that a high number of these youths reported using alcohol or drugs, what sets this group apart from other adolescents was the frequency with which they reported doing so: 58% \((n = 66)\) of respondents said that they used drugs daily, 18% \((n = 20)\) said weekly, 17% \((n = 19)\) said that they drank daily, and 33% \((n = 37)\) reported consuming alcohol weekly. Within the general high school population, 9% report using drugs daily and 19% report weekly alcohol consumption (Centre for Addiction and Mental Health Ontario, 1999).
Institutional risk factors. When asked about the stress of being in custody, almost a quarter of the sample (24%, n = 27) cited conflicts with other young offenders to be a “somewhat” or “very difficult” part of doing time. A third (35%, n = 40) felt that the likelihood or chance of attack by another young person was either “medium” or “high.” Although 81% (n = 91) of youth indicated that they worried “very little” about being attacked, 20% (n = 23) reported worrying “a little” or “a great deal” that they would be attacked. Twelve percent (n = 13) felt “very unsafe” in their facility. As noted previously, peer-on-peer conflict appears to be part of the reality of being in a young offender facility. Although a substantial number of youth may be aware of the day-to-day tension that exists among their peers, the above findings suggest that this does not affect all youth equally.

Self-reported adjustment in custody. Respondents’ internalizing scores ranged from 26 to 85, with a mean of 54 (SD = 10), which falls within the normal range. Fourteen participants (12%) had borderline-clinical internalizing scores, and 12 (11%) had scores higher than the clinical cutoff. According to Achenbach’s (1991) norms, approximately 16% of the general population of young people falls within the borderline-clinical or clinical range of internalizing scores. Thus, borderline or clinical levels of internalizing were slightly overrepresented in the present sample.

RELATIONSHIPS BETWEEN PREEXISTING RISK AND INSTITUTIONAL ADJUSTMENT

A one-way analysis of variance (ANOVA) indicated that raw internalizing scores increased as the number of preexisting risk factors increased. The relationship was not statistically significant, although it was close to being so, $F(2, 108) = 3.04, p < .052$, and the mean scores for all three groups fell within the normal range (low risk, $M = 9.6, SD = 4.91$; medium risk, $M = 12.5, SD = 8.13$; and high risk, $M = 14.0, SD = 9.13$).

Institutional adjustment, defined here in terms of the number of rule infractions reported by respondents, was unrelated to level of preexisting risk factors and therefore not statistically significant, $\chi^2(4, N = 113) = 3.01, p = .052$. Interestingly, institutional adjustment was
also not statistically significant and therefore unrelated to whether respondents’ internalizing scores fell within the normal versus borderline or clinical ranges, $\chi^2 (2, N = 113) = 2.71, p = .26$. Thus, the most at-risk and distressed respondents did not differ from those least at-risk and distressed in terms of how compliant or well behaved they reported themselves to be by institutional standards.

RELATIONSHIPS BETWEEN INSTITUTIONAL RISK FACTORS AND INSTITUTIONAL ADJUSTMENT

In the present study, institutional risk was explored in terms of perceptions about victimization and peer relationships within the custody facility. Level of internalizing behavior was divided into two groups: normal ($n = 81$) and borderline or clinical ($n = 26$). Perceptions of safety, including a youth’s worry about whether he might be attacked by another inmate or what he thought the chance of an attack by another youth was, appear critical to a youth’s sense of well-being. For example, as Table 1 indicates, a substantial majority of youth who worried a great deal that they would be attacked (80%, $n = 4$) had borderline or clinical internalizing scores, in contrast to their peers who expressed little concern regarding attack (21%, $n = 22$), $\chi^2 (1, N = 111) = 21.4, p < .01$. This finding is not surprising given that anxiety and worry are important components of the internalizing construct. However, this relationship also held when youth were asked to consider what the chance of attack would be. Youth who were more likely to feel the chance of attack by a peer was high were more likely to report borderline or clinical levels of internalizing behaviors (38%, $n = 15$) than were participants with a low expectation of attack (15%, $n = 11$), $\chi^2 (1, N = 111) = 7.6, p < .05$.

Friendships also seemed to play a critical role in the general well-being of youth. Respondents who reported having no friends within the institution were more likely to report borderline or clinical levels of internalizing than those who reported having many friends (50% vs. 16%), $\chi^2 (2, N = 111) = 9.7, p < .05$, or even a few friends (50% vs. 19%; see Table 1). Similarly, youth who reported experiencing conflicts with other young offenders as “moderately” or “very hard” were more likely to report borderline or clinical levels of internalizing than youth who reported that relationship conflicts were “not hard” (41%
vs. 17%) or “a little hard” (41% vs. 21%), χ² (2, N = 111) = 6.1, p < .05 (see Table 1). When respondents were asked whether friends would help if they were attacked, those youth who indicated that friends would not help were more likely to have borderline or clinical levels of internalizing scores (44%, n = 11) than those who indicated that friends would assist them (18%, n = 15), χ² (1, N = 107) = 6.9, p < .05 (see Table 1). In sum, many difficulties with peer relationships in custody, including having no friends and worries about peer victimization, were associated with high levels of internalizing symptoms. An added risk for these youths is that, unlike victims of peer violence in
schools, victims in a custody center cannot extricate themselves from the circumstance and have little hope of escape from abuse (Ombudsman Province of British Columbia, 1994).

**PREDICTING PSYCHOSOCIAL ADJUSTMENT USING PREEXISTING AND INSTITUTIONAL RISK FACTORS**

To examine the relationship between both preexisting factors and institutional risk factors and psychosocial adjustment, a hierarchical regression analysis was carried out, with internalizing raw scores as the outcome variable. The cumulative risk index scores were entered in the first step of the analysis, and the institutional factors were entered in Step 2. As Table 2 shows, in Step 1 the model was significant in predicting internalizing scores, $F(1, 107) = 6.75, p < .05$, and preexisting risk factors predicted 6% of the variance. The model remained significant at Step 2, $F(7, 100) = 11.06, p < .01$ and accounted for 47% of the variance in internalizing scores. Four institutional risk factors significantly predicted internalizing: worry of attack, chance of attack, conflict with other inmates, and how inmates chose to spend their free time (alone or with friends). The $R^2$ change when the institutional risks were added was significant (see Table 2). The finding that worry regarding being attacked was the strongest predictor of internalizing scores is consistent with previous research examining the relationship between fear of victimization and mental health in juvenile (Maitland & Sluder, 1996) and adult (McCorkle, 1993) offenders. To examine the relationship between both preexisting and institutional risks and psychological adjustment by type of institution, (i.e., secure versus open custody) separate hierarchical regression analyses were conducted with the open and secure custody groups. Compared to the previous regression analysis, there was slight variation in which items were more or less predictive, and there was a slight change in significance levels due to reduced sample size. However, as in the main model, preexisting risk factors contributed to internalizing and there was a significant impact when institutional risk factors were added in Step 2. However, preexisting risk did not contribute significantly in the analysis with the open-custody sample.

A hierarchical regression analysis was also carried out with institutional infractions as the outcome variable. Neither preexisting cumu-
Relative risks nor institutional risk items were significant in predicting institutional infractions, $F(8, 102) = .70$, $p < .70$; $F(7, 95) = 1.28$, $p < .26$, respectively; one item within institutional risk factors was significant in predicting infractions: how many friends an inmate had ($\beta = –.25$, $p < .05$) indicating that the fewer friends an inmate had, the more likely he had institutional infractions.

**DISCUSSION**

The purpose of the present study was to explore the relationship between a number of risk factors, both those that young offenders bring with them into custody and those that are custody-specific and psychosocial and institutional adjustment in custody. When analyzed separately, both types of factors were associated with young offenders’ self-reported internalizing behaviors. Specifically, internalizing scores increased as a function of the number of preexisting risks.

<table>
<thead>
<tr>
<th>Type of Custody</th>
<th>Combined Secure and Open ($N = 113$)</th>
<th>Secure ($n = 60$)</th>
<th>Open ($n = 53$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preexisting Risk Index (8 items)</td>
<td>.24*</td>
<td>.26*</td>
<td>.21</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.06*</td>
<td>.07*</td>
<td>.04</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preexisting Risk Index (8 items)</td>
<td>.21*</td>
<td>.23*</td>
<td>.18</td>
</tr>
<tr>
<td>Institutional risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflicts with other inmates</td>
<td>.21**</td>
<td>.32**</td>
<td>–.07</td>
</tr>
<tr>
<td>How safe you feel</td>
<td>.05</td>
<td>.04</td>
<td>.10</td>
</tr>
<tr>
<td>Worry of attack</td>
<td>.31***</td>
<td>.27**</td>
<td>.28**</td>
</tr>
<tr>
<td>Chance of attack</td>
<td>.18*</td>
<td>.02</td>
<td>.33**</td>
</tr>
<tr>
<td>How many friends here</td>
<td>.09</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>If attacked, friends would help</td>
<td>.07</td>
<td>.23**</td>
<td>.03</td>
</tr>
<tr>
<td>How free time is spent</td>
<td>.22**</td>
<td>.31**</td>
<td>.11</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.47</td>
<td>.63**</td>
<td>.38**</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td>.41***</td>
<td>.57***</td>
<td>.34***</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
reported by young offenders. In addition, consistent with Maitland and Sluder’s (1996) findings, several institutional risks were related to high levels of internalizing: having no friends, experiencing peer conflicts as difficult, and worry about, anticipation of, and lack of peer support during victimization. Three of these variables (experiencing conflicts with inmates as difficult, worry about victimization, and perceiving victimization as likely) emerged as significant predictors of internalizing even after controlling for preexisting cumulative risk.

The present results are consistent with the notion that young people who have already experienced multiple developmental risks will be more adversely affected by the custody experience in terms of psychosocial adjustment (specifically internalizing behavior) than those who enter custody with very few or no preexisting risk factors. This interpretation is congruent with the developmental psychopathology research that indicates these same cumulative risks render children and adolescents vulnerable to a variety of negative developmental outcomes.

In addition, the present study results suggest that risk factors specifically associated with institutional life contribute to how a young person adjusts to custody above and beyond the preexisting risk with which a youth enters a facility. However, the nature of the present study design precludes inferences about causality, so the results must be interpreted with caution. Although participants responded to historical questions about risk, their self-reports were obtained at the same time they answered questions about institutional risk and psychosocial adjustment. It is possible that their current situation influenced reporting of events. More important, perhaps, is the fact that the authors did not obtain a measure of respondents’ psychosocial adjustment prior to entering the custody facility. Thus, it is possible that participants who entered custody with internalizing symptoms were more socially isolated and worried about victimization as well as reporting more internalizing concerns while in custody. Despite the limitations imposed on causal interpretations, the significant relationship of both preexisting and institutional risks to adjustment in custody warrants further discussion as well as additional research.

It is of interest to note that neither preexisting nor institutional risk factors were predictive of one commonly used institutional measure of functioning: number of custodial rule infractions. Although infrac-
tions are only one institutional measure of functioning, this finding suggests that institutional measures of behavior are not a valid indicator of how a youth is feeling or adjusting to a facility. Perhaps this is not surprising given that infractions capture a range of behaviors from violence to simple noncompliance. It is also possible that participants’ reports were not a reliable measure of compliance or misconduct. Records of official prison misconduct could actually underestimate infractions such as physical bullying (Dyson, Power, & Wozniak, 1997) as well as more mundane victimization or minor harm (e.g., threats, verbal abuse, exclusionary behavior; O’Donnell & Edgar, 1999). Future studies may need to incorporate multi-informant measures of institutional functioning including youth self-reports on infractions and placement in solitary confinement, official records and staff assessments, and finally, parental evaluation.

The justice system is increasingly the gatekeeper for youths suffering from emotional and/or behavioral disorders who need mental health services (Duclos et al., 1998). Yet identifying juveniles who have significant internalizing problems may be difficult in youth justice systems such as Ontario’s, where youth are not systematically screened for mental health difficulties. Generally, both in Canada and in the United States, facilities rely on prior information regarding receipt of mental health services as an indicator of current service need (Wasserman, McReynolds, Lucas, Fischer, & Santos, 2002). This is problematic given that incarcerated youth are less likely to have ever received outpatient mental health services compared to community samples, despite higher rates of disorder (Wasserman et al., 2002).

This difficulty of identification is compounded by the fact that young offenders, like most adolescents, may find it difficult to ask for help when distressed. As Gottlieb (1991) argued, there is an “adolescent code” that makes it problematic for youth to signal their distress. Young offenders have the added burden of the “inmate code.” For example, in a recent study of incarcerated young offenders (Peterson-Badali & Koegl, 2001), 49% suggested that if something bad happened, there was an adult/staff/professional inside or outside of the institution whom they could ask for help. However, of these, 42% said that they would be unwilling to do so for fear of being labeled a “rat.” In sum, the lack of relationship between institutional indicators of
adjustment and internalizing problems, compounded by juveniles’ reluctance to seek help when distressed, means that staff may have little means of identifying and obtaining help for those youth who are experiencing significant levels of emotional distress. In sharing the results with the facilities involved in the study, many administrators suggested that their staff were quite good at being able to identify distressed youth through more informal means. Empirically examining the accuracy of staff identification of young offenders with poor adjustment in custody (with a particular focus on internalizing difficulties, which are less observable than externalizing problems) is an important task for future research.

Irrespective of whether imprisonment is damaging or difficult for all persons, the present study also suggests that there is an identifiable group of young persons who find the adjustment to life in custody to be particularly arduous. For the most part, these are young people who enter facilities with a moderate to high amount of preexisting risk, who have few friends and fear victimization in custody, and who report internalizing behaviors in the clinical range. Therefore, using the model described in Step 2 of Table 2, youth with a high score on the cumulative risk index and high scores for institutional risks predicts an internalizing score in the clinical range. One wonders whether this particular group of youthful offenders has sufficient coping resources to deal with the stress of imprisonment, an event that research on adolescent coping suggests is a severe acute life stressor, ranked only behind the death of a parent or parental divorce (Frydenberg, 1997).

As Biggam and Power (1999) suggested, the ability to predict vulnerability before an inmate experiences conflict and distress would be of value to the management of offenders. Certainly “identifying juveniles with high anxiety levels, whether caused by institutional conditions, past experiences, or a combination of both, would allow staff to direct attention to those who experience negative emotional reactions to confinement” (Gover, MacKenzie, & Armstrong, 2000, p. 451). As Wasserman et al. (2002) argued, “An untreated mental disorder, or emotional impairment resulting from a negative reaction to confinement, might result in poorer adjustment during confinement that
would negatively affect both discipline and a youth’s capacity to take advantage of available program components” (p. 314).

Facilities cannot rely on other systems to provide mental health information for youths at entry (Wasserman et al., 2002). There are some jurisdictions that have become proactive in the needs assessment process, and they provide examples of best practices. For example, the California Youth Authority (CYA) uses four assessment instruments, the Achenbach YSR, the Massachusetts Youth Screening Instrument (MAYSI), the Weinberger Adjustment Inventory (WAI), and the Drug Experience Questionnaire (DEQ) to screen for mental health and substance abuse problems (see Haapanen & Ingram, 2000 for full description of instruments and protocol).

Although there may be a necessity to identify vulnerable youth as soon as possible on admission and although this may be feasible, as mentioned above, it is important to remember that youths themselves are often reluctant to demonstrate overt signs of weakness for fear of retribution from their peers (Howard League for Penal Reform, 1995; Leschied, Cunningham, & Mazaheri, 1997). This makes the responsibility of staff more problematic, particularly when staff skills may be lacking and institutional measures of adjustment may not be reliable.

A number of limitations to the present study should be noted. First, as is often the case in this type of research, the sample of young offenders and custodial facilities was nonrandom and was drawn from a particular geographic region (southern Ontario). Thus, there are limitations to our ability to generalize the study findings to other populations of juveniles.

Second, as discussed, the study design was cross-sectional and correlational in nature, which precludes specifying causality with a high level of confidence. Longitudinal research could help to elucidate the nature of the relationships among these variables. For example, it seems quite possible that there is a reciprocal and cyclical relationship between young offenders’ experiences in custody and internalizing problems. Many of the participants in our study who reported elevated internalizing scores may have experienced such difficulties prior to incarceration. As a result, social withdrawal, problematic peer relationships, and worries about victimization character-
ized their custodial experience and contributed further to internalizing problems in custody. Clearly, it is necessary to obtain pre-custodial measures of psychological functioning, including diagnostic status and behavioral adjustment, to understand the nature of these relationships.

Finally, the self-report measures that constitute the data for our study were not corroborated by other sources and thus are subject to possible biases of memory, impression management, and social desirability. The authors deliberately chose to focus on the self-reported, subjective experiences of youths, as these may differ from the perceptions of others, particularly when considering internalizing behaviors, which tend to be covert. Clearly, it will be important for future studies to employ a multi-measure, multi-informant approach to gathering data on risk and adjustment to increase the validity of the results.

Research suggests that the promise of reduced recidivism in young offenders resides in delivering appropriate correctional rehabilitative services to young people at risk in an ethical and humane way (Leschied, Jaffe, Andrews, & Gendreau, 1992). Unfortunately, instead of rehabilitating those youth most at risk, instead of providing support, the custodial experience may be adding further adversity to an already painful life. Matthews and Pitts (1998) suggested that warehousing young offenders in custodial facilities is not a neutral position if youth do not emerge the same as when they went in. Although custodial institutions may be well intentioned, intervention by the criminal justice system into the life of a young person is not invariably good or even neutral (Doob et al., 1995; Petrosino, Turpin-Petrosino, & Finckenauer, 2000).

This study, as well as others (Maitland & Sluder, 1996), suggests that peer relations within a facility may play a critical role in how youth adjust to custody. In addition, discrepancies between the emotional support that youthful inmates desire and that which they receive from peers and staff can be the greatest predictor of anxiety, depression, and hopelessness in prison (Biggam & Power, 1997). Custodial facilities, therefore, may need not only to meet the challenge of identifying vulnerable youth but also to help them to foster relationships within the institution. Ironically, the company of other delinquent youth, which is a risk factor on the outside world, may turn out to be a protective factor while incarcerated.
NOTES

1. It is possible that the peer relationship and fear of victimization variables we have chosen to call “institutional” risks are risk factors that characterize certain individuals in the broader environment as well as in the custody context and thus might not be solely “custody-specific” risks. However, because of the growing literature on peer relationships and peer victimization in custody, we were interested in exploring these variables as specific institutional risk factors for poor psychosocial adjustment in custody.

2. Although the term risk is used to describe the questions measuring young people’s vulnerabilities prior to entering the custody facility, it is important to note that due to the concurrent nature of the study design, these variables should be thought of as “correlates of adjustment” rather than risk factors in the traditional longitudinal sense.

3. A copy of the interview protocol is available from the first author.

4. The authors chose not to focus on the Externalizing scale, which largely measures aggressive and delinquent behavior, because the nature of the sample population (i.e., incarcerated offenders), by definition, tends to show elevated scores on the Delinquent and Aggressive subscales that make up the Externalizing factor. In addition to the fact that the externalizing construct overlaps significantly with that of “delinquency” is the fact that externalizing may not be a valid outcome measure for adjustment in custody because the number of items that measure behaviors is not feasible while in confinement (i.e., I steal from home, I run away from home).

5. Two participants were excluded from analyses involving internalizing scores as their questionnaire protocols contained missing data on more than eight items (see Achenbach, 1991).

6. There was a significant difference in the number of preexisting risks that youth in secure custody (M = 2.78, SD = 1.61) reported over youth in open facilities (M = 2.13, SD = 1.69; t = 2.08, p < .05). This difference remained even after controlling for the amount of criminal justice contact, supporting previous literature that suggests that youth in secure custody tend to be higher-need individuals (Bortner & Williams, 1997). However, there were no differences in the individual measures of institutional risk based on level of custody. There was also no difference in the outcome measure (psychosocial adjustment) according to custody level. This is consistent with studies by Zamble and Porporino (1988) and Reitzel and Harju (2000), who found no differences in level of depression based on level of custody.

7. As recommended by Achenbach (1991), raw internalizing scores were used for all analyses because standard scores (in this case, t scores) have smaller variance.

REFERENCES


