



# Maladaptive Coping, Victimization, and Recidivism Among Japanese Adolescents and Emerging Adults

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**Maladaptive Coping, Victimization, and Recidivism Among Japanese Adolescents and Emerging Adults**

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**ABSTRACT**

**Background:** Substance use and victimization are known to be related to juvenile recidivism. Self-harm, a factor that commonly accompanies substance use and victimization, is not known to be related to said recidivism but may be so in a welfare-oriented juvenile justice system as found in Japan.

**Objective:** We examine the extent to which maladaptive coping, comprising substance use and self-harm, increases the rate of persistence in correctional institutions in light of other well-replicated factors of youth recidivism. The study, too, investigates the role of maladaptive coping in explaining the impact of victimization on correctional recidivism.

**Methods:** We draw from a sample of 348 adolescents and emerging adults, between ages 12 to 19 years, who were initially detained at a Juvenile Classification Home and followed-up for an average of 3.35 years.

**Results:** Findings indicate that maladaptive coping is significantly related to persistence in the system, although history of probationary supervision and gang membership also were significant explanatory factors. In addition, the direct effect of victimization was larger than the indirect effect of victimization through maladaptive coping.

**Conclusions:** Unlike previous studies, self-harm is significantly related to recidivism. This suggests that recidivism reflects a need for help more so than for punishment. The wider implications are that juvenile justice systems characterized as punitive seem outdated in managing detained young people as they lack adequate prevention supports.

*Key words:* Self-harm, Substance use, Victimization, Recidivism, Japanese juvenile corrections

## **Maladaptive Coping, Victimization, and Recidivism Among Japanese Adolescents and Emerging Adults**

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Research on recidivism has lately focused on young people described as the following: high-risk; serious and violent; seriously delinquent; chronic or persistent offenders (Baglivio et al., 2018; Kennedy et al., 2019; Loeber & Ahonen, 2014; Loeber & Farrington, 1998). These descriptors indicate that repeat offending reflects a complexity that no superficial intervention can resolve. The offending behavior of these particular young people is depicted as serious and repetitive, and they are distinct from others who offend because their individual and contextual risk factors are more marked (Skeem et al., 2014). These young people are of special concern because of the consistent finding that a small minority will go on to commit a disproportionate amount of crime – about 5% for nearly 50% of all offenses committed among the youth population (Vaughn et al., 2014).

Current understanding of youth recidivism, however, has shifted increasingly towards perceiving young people exposed to the criminal justice system as vulnerable. In a global systematic review that included 245 articles published between 1980 to 2018, primarily from the US, Borschmann et al. (2020) concluded that a high lifetime prevalence of poor health and adverse experiences existed among these young people, and were more common amongst them compared to young people who were not detained. It seemed that only when these vulnerable young people were involved in the justice system were their needs addressed, suggesting access to services in the community was lacking. This was noted a decade ago in findings from assessments from 57 sites in the US (N= 9,819) collected by Wasserman et al. (2010): increased justice-involvement seemed to indicate need, as, on average, those who reoffended were 1.5 times more likely to meet criteria for a mental disorder and three times as likely to report recent suicide attempts. In addition, they noted that those in the “deep end” of the justice system appeared to have much higher comorbidity and more lifetime suicide attempts than those at system intake.

Numerous studies have appeared identifying factors for youth reoffending, and they confirm that many factors related to one-off offending are relevant: offense history (Trulson et al., 2011); substance use and abuse (Cox et al., 2018); anger/ irritability (Hein et al., 2017); low

self-control (Hay et al., 2018); victimization, especially child maltreatment (Wolff et al., 2017); single-parent home and family problems (Cottle et al., 2001); peers (Leverso et al., 2015) and gang affiliation (Caudill, 2010; Dooley et al., 2014); school difficulties (Joo & Jo, 2015); and neighborhood disadvantage (Intravia et al., 2017). The present study elaborates on these previous findings on youth recidivism by examining the relationship between maladaptive coping, specifically substance use and self-harm, and repeated returns to correctional institutions among adolescents and emerging adults in Japan.

Japanese juvenile justice adheres to the welfare model (Dawkins & Gibson, 2019; Ellis & Kyo, 2017), with its emphasis on informal procedures, diagnosis, treatment, and the needs of the young person (Muncie & Goldson, 2006); it differs from the one primarily characterized as justice, as found in the US, which focuses on accountability, punishment, and formal legal processes (Cavadino et al., 2013). Hence, it is likely better at identifying issues of well-being than an approach centered on justice. By examining forms of maladaptive coping, repeated returns to correctional institutions within a welfare-oriented context may have more to do with need than with chronic and serious offending per se. The focus on self-harm may be peculiar as it is not a known factor for recidivism. Within this context, however, it may be so, suggesting that a juvenile system that takes on characteristics of the justice model provides relatively less adequate support for involved young people who exhibit suicidal behaviors; it is somewhere they would turn to for help.

### **Substance use, self-harm, and justice involvement**

Although substance use and self-harm are prevalent among young people generally (Degenhardt et al., 2016; Hawton et al., 2012; O'Connor et al., 2018), they can escalate into more serious health problems. Opportunities and vulnerabilities during adolescence and emerging adulthood are significant for a number of health and psychosocial outcomes, and substance use could become habitual and turn into abuse, even a disorder, while self-harm can heighten into suicide attempts and deaths (Baldwin et al., 2019; Hall et al., 2016; Turecki & Brent, 2016). Among youth offending populations, the prevalence of self-harm and substance use are higher than in the general youth population (Björkenstam et al., 2011; Doran et al., 2012; Knowles et al., 2011; Schubert et al., 2011; Teplin et al., 2015; Wasserman & McReynolds, 2006).

A number of recent studies demonstrate a strong link between substance use and reoffending among young people (Cox et al., 2018; Denney & Connor, 2016; Guebert & Olver, 2014; van der Put et al., 2014). Two meta-analyses in the last decade confirmed medium effect

sizes for substance use problems on recidivism (Assink et al., 2015; Wibbelink et al., 2017); their results were based on studies, except for one, that were geographically limited to Australia, New Zealand, Europe, and North America. Echoing past research on rising poor health outcomes with increased justice-involvement, Hoeve et al. (2013) observed that substance use disorder heightened the risk for reoffending and that new offenses were more serious than previous ones in a sample of 1,167 youths in five counties of Alabama in the US.

In contrast to substance use, little evidence exists for the relationship between self-harm and recidivism (see Asscher et al., 2011; Assink et al., 2015; Cottle et al., 2001; van Vugt et al., 2011; Wibbelink et al., 2017). Returning to the systematic review conducted by Borschmann et al. (2020), 56 identified articles reported that the most common methods of self-harm were cutting, poisoning, and hanging or strangulation, and although suicide was uncommon among detained adolescents, the risk of it following release was substantially higher compared to those who did not self-harm. It might be that a relationship between self-harm and recidivism exists, but it depends on the context: a welfare-based system, which best characterizes the Japanese juvenile system, may evidence this link because of better detection and attention to this; this may be the product of the system's emphasis on prevention, reflected in community outreach and support, as well as the use of Article 3 in the Juvenile Act<sup>1</sup> to detain young people for pre-delinquency at the Juvenile Classification Home (JCH). Repeated returns to correction institutions, in this case, may be the option for access to help.

The purposes of the JCH are threefold: (1) conduct a classification, which is a comprehensive assessment of the young person's psychosocial circumstances that may influence their present and future offending, based on the requirements of the Family Court<sup>2</sup>; (2) provide treatment for those who are to be committed to the JCH and for those who are to undergo protective detention measures; and (3) deliver support such as workshops for crime prevention and counselling for young people and their families in local communities (Correction Bureau, 2016). The classification could comprise a number of measures obtained from group and individual psychological tests, examinations of the medical, physical, and psychiatric, as well as information gathered externally (Mori et al., 2017). Once the

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<sup>1</sup> In section three, a young person can be considered a "pre-delinquent" and referred to the JCH (and a subsequent hearing and decision of the Family Court) if she (a) is unlikely to abide to her parents' or guardians' supervision; (b) stays away from home with no justifiable reason; (c) associates with antisocial peers, or frequents areas that are considered antisocial ("of ill repute"); or (d) has a likelihood to harm her morality or that of others.

<sup>2</sup> An independent lower court that deals specifically with domestic issues including juvenile delinquency. It not only makes legal decisions, but also can implement measures tailored to individual cases that address the causes of the issue/ delinquency (Supreme Court of Japan, 2018) .

classification is completed, it is used to inform the Family Court's decision on sentencing and rehabilitation of the young person.

### **Victimization and maladaptive coping among justice-involved young people**

Substance use and self-harm tend to be not only prevalent among young people involved in the justice system but comorbid with each other and a consequence of victimization trauma (Ford et al., 2013). Both substance use and self-harm are considered forms of maladaptive coping, which general strain theory posits as ways of dealing with distress from adverse experiences (Agnew, 2006). Victimization, in particular, can be traumatic and forms of coping with it vary. According to Agnew (1992; 2006), victimization is considered a strain – an unwanted and undesirable event – and certain coping strategies, such as substance use, may increase the likelihood to offend (Bender, 2010; Turanovic & Pratt, 2013).

More often than not, young people who offend enter correctional institutions with complex histories of trauma (Espinosa & Sorensen, 2016; Ford et al., 2012; McNair et al., 2019; Vitopoulos et al., 2018). Victims and offenders overlap (Jennings et al., 2012), so it is no surprise that a high prevalence of victimization history is present among this population. A large proportion of detained adolescents self-reported using illicit substances within the past year, and a number of established risk factors for substance use, in particular child maltreatment, were prevalent among them compared to those in the community (Borschmann et al., 2020).

In the general population, Baldwin et al. (2019) confirmed, from a large community sample of British children, that adolescents exposed to victimization were more likely to possess suicidal thoughts and behaviors than those without exposure, and the odds were doubled for each additional type of victimization. Heerde and Hemphill (2019), too, confirmed in their meta-analysis that self-harm was associated with both traditional and cyber-bullying among 156,284 adolescents in the general population. These findings are applicable to detained youth, as suicidal behaviors, including self-harm, are strongly related to victimization exposure (Shepherd et al., 2018).

A recent study examined this relationship between drug use, adverse child experiences, and recidivism and found that drug use partially mediated the relationship between the latter two factors in an American sample (Craig et al., 2018). Whether substance use and self-harm can individually and fully explain the relationship between victimization and recidivism has important implications for how correctional institutions best approach supporting young people who are involved in the system.

### **The present study**

Youth crime was already comparatively low in Japan and it continues to decline (Bui & Farrington, 2019). These trends are reflected in the gradual decrease of new entries to the juvenile classification home (JCH): from about 23,000 in 2003 to 8,000 in 2016 (Ministry of Justice Japan, 2017). Findings on young people detained in correctional institutions in Japan show that detainees have a high prevalence of trauma exposure (Ariga et al., 2008; Yoshinaga et al., 2004); females who have offended experience neglect as well as physical and emotional abuse considerably more than females who do not offend (Matsuura et al., 2013); and the incidence of self-harm among the incarcerated was attributed to victimization (Matsumoto et al., 2004). The findings from these studies are similar to previous results of victimization among justice-involved young people in other countries, but do not address recidivism.

This paper will examine the influence of maladaptive coping on correctional recidivism. First, we investigate the extent to which forms of maladaptive coping can predict persistence in correctional institutions in light of other well-replicated factors. Second, we consider the role of maladaptive coping factors in explaining the impact of victimization on correctional recidivism.

Both frequency and incidence of correctional recidivism are studied to better understand the circumstances in which young people return and in which they continue to do so. Frequency is included because many youth recidivism studies use a one-time binary outcome of recidivism, often measuring conviction or arrest. Our measure is broader, including those who have committed offenses or exhibited antisocial behavior, and assessing number of returns enables more certainty that the measure may tap into an enduring need for help. This study hypothesizes that:

- (1) Maladaptive coping, specifically substance use and self-harm, will be more relevant to predicting correctional returns than victimization and other previous well-replicated factors of recidivism. We posit that well-replicated factors in the same statistical model as factors of maladaptive coping will have lower rates and be non-significant; and
- (2) Both forms of maladaptive coping will mediate the relationship between victimization and recidivism, whereby the indirect effect is significantly different from 0.

### **METHOD**



## Sample

Data are from 348 young people held at a JCH in Japan while awaiting sentencing for committing an offense. Information was first gathered in 2011 during initial JCH entry on which this study is based. Originally a sample of 353, five cases had been dropped as they were never “at-risk” – immediately after spending time in a JCH, they were transferred to another correctional institution, the Juvenile Training School (JTS)<sup>3</sup>, and were not subsequently followed-up. Table 1 shows that, after release, the sample was followed-up for an average of 1,222 days, or 3.35 years.

The sample is 80% male, ranging between ages 12 to 19 years (see Table 1). About a little over a quarter (26.5%) are in early adolescence (ages 12 to 14 years); a little over half (54%) are in late adolescence (ages 15 to 17 years); and 19% are in emerging adulthood (ages 18 to 19 years). Two types of family households are prominent among the sample: 42% live with both biological parents and 37% live only with their biological mother. In the Nationwide Survey on Fatherless Families, there were 5.6 times more single-mother households than there were single-father households in 2011 (1,238,000 vs. 220,000), and although 80% of these mothers were employed, their average annual income was half of the national average annual income (Ministry of Health Labour and Welfare, 2012; Raymo et al., 2014). The most prevalent types of employment reported for the sample’s primary family provider are roles in the service industry (23%) or in the mining, manufacturing, or construction industries (13%), followed by unemployment (10%).

Most of these young people were confined at a JCH because they committed theft (40%) or assault (22%); when disaggregated, the majority of males committed the same offenses, but among females, the majority of them committed a property offence (36%) – mainly theft – or other offense (36%). Among these other offenses committed by females, most of them were actually not offenses, but rather “likelihood to offend” or pre-delinquency. This is similar elsewhere, as young females are often arrested for behavior that are not considered crimes such as running away from home or being considered unmanageable by parents or guardians (Chesney-Lind & Sheldon, 2014). Comparable national data show that, in the same year that these young people in the sample initially entered the JCH, nearly 69% of young people who

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<sup>3</sup>Government documentation refers to the Juvenile Classification Home as the Home, whereas the School refers to the Juvenile Training School (Public Relations Office, 2019). This paper uses acronyms (JCH and JTS) instead, to avoid confusion with some concepts and variables. For example, to use “the Home” while discussing the variable physical abuse, whose context of home is the child’s residence, and not the correctional institution.

were taken into custody were taken in because of theft/ larceny, followed by 21% for other (Statistics Bureau Japan, 2016).

## Measures

**Outcome.** Recidivism pertains to the JCH. Two measures are used: a count measure that captures the number of times a young person returned to the JCH, and a dichotomous measure for whether a young person did or did not return to the JCH after release. Information for these measures was collected during the observation period when the young person was released and followed-up in the community.

Of the sample, 83 returned to the JCH a total of 128 times. The number of possible times an individual returned range from 0 to 5 times. If a young person is detained at the JCH or JTS during follow-up, the observation period excludes time spent there. Entry and recidivism information were collected from official records that were first created in the JCH.

**Explanatory factors.** All information on the explanatory factors was collected from JCH assessments. JCH psychologists used a variety of sources to make their assessments such as interviews with the young person and the court investigator, as well as from the young person's reflection workbook that were kept while detained in the JCH. The explanatory factors are the following:

### *Maladaptive coping.*

- (1) *Substance use.* Noted if the records indicated the young person had used either one or more of the following: narcotics (e.g., opium), cannabis, amphetamines, organic solvents, or any other substances such as sleeping pills or gas. It is a binary variable with a score of "1" indicating yes and "0" for no.
- (2) *Self-harm.* a binary variable is used, and a score of 1 is given if, in the past, the individual has exhibited behavior, regardless of motive and extent of suicidal intent, of self-poisoning or self-injury such as suicide attempts, or repeated wrist-cutting, banging of head, or pulling of hair (Hawton et al., 2012).

### *Victimization.*

- (3) *Physical abuse.* A dichotomous variable, whereby a score of "1" indicated yes and a score of "0" indicated no. JCH psychologists identified signs of intentional use of force against the young person by parents or guardians that resulted in, or had the potential for, physical injury. For example, this could be having a history of being referred to

the child guidance center, whose main concern is child welfare, and has dealt with a large number of child maltreatment cases in recent times (Konishi, 2014). JCH psychologists would use this evidence as well as other documentation gathered from their assessment to make their conclusion.

- (4) *Neglect*. A score of “1” indicated yes, emotional or physical neglect was experienced and a score of “0” meant no, such neglect was not experienced. Physical neglect was deemed present if the basic physical needs of the young person were not met in their home such as food, shelter, personal hygiene, or medical care; emotional neglect was deemed present if the young person experienced insufficient nurturance or affection by parents or guardians.
- (5) *Bullied*. Cases of bully victimization were from self-reports or from documentation sent from the young person’s school to the court investigator. A score of “1” indicated the young person experienced being bullied and a score of “0” indicated no such experience.

#### ***Other explanatory contenders.***

- (6) *History of probationary supervision*. A binary variable that is a proxy for offending history. This measures whether the young person was ever referred to the probation office after attending a family court hearing for sentencing prior to this initial JCH entry. The purpose of probationary supervision is to receive guidance and assistance in reintegrating into the community from probation officers (Public Relations Office, 2019).
- (7) *Late adolescence*. The dichotomous variable is labeled as “1” if the young person was between ages 15 to 17 when he initially entered the JCH, whereas early adolescence and emerging adulthood are labeled as “0”, as late adolescence is a time when offending peaks (Farrington, 1986). Emerging adulthood, according to the literature, is approximately ages 18 to 29 (Arnett et al., 2014).
- (8) *Aggression*. Young people who showed a history of violence either at school or at home are categorized as “1” for aggressive behavior and “0” if they had no history.
- (9) *Risk-seeking and experimentation motive*. A dichotomous variable, this refers to the young person’s primary motive for their offense that resulted in her initial JCH entry (versus other motives). Risk-seeking refers to motivations that entailed eagerness to drive a motorcycle or car, boredom, seeing the offence as a kind of game or play, or desire for thrills; experimentation refers to motivations that include curiosity, or to satisfy sexual interest or to have sex.

- (10) *Parenting styles*. This contains four categories whereby three represent those proposed by Baumrind (1966, 1978) and refined by Maccoby and Martin (1983). The three categories are authoritarian, permissive, and neglectful parenting styles,<sup>4</sup> and the fourth category, as there was not enough information to create one for the authoritative parenting style, is for parenting that was considered “normal”, “unclear”, or not applicable.
- (11) *Single-mother household*. Another binary variable designating 1 as “yes” if the young person lived only with their biological mother and “no” if they lived in another family arrangement; this variable is also a proxy for low-income.
- (12) *Gang membership*. If there was evidence a young person was a member of an organized, motorcycle, or community (street) gang, “1” indicated “yes” while “0” meant “no.” Despite in considerable decline since 2000 (Fujino, 2018), motorcycle gangs still exist, but in small numbers; they were a grave problem whereby young people, usually ages 17 to 20, gathered on motorcycles or in customized cars, frequently chased by the police, and their activities were usually linked to more serious crimes such as sexual assault and robbery (Kersten, 1993; Yamamiya, 2003).
- (13) *Truancy*. A dichotomous variable that measured whether a young person was repeatedly and intentionally absent from school.

### Analytic strategy

Negative binomial models are used because counts of the JCH returns were non-negative and discrete, but over-dispersed (Gardner et al., 1995). Poisson models were considered but, when modeled against the outcome data, their probability curves did not fit as closely as did that of the negative binomial, whereby the difference between over-dispersion and the mean for JCH recidivism was 1.61. Three regression models will be presented: first, with only maladaptive coping factors; second, with victimization factors added; and third, with all other explanatory contenders.

Often, these regressions require an exposure variable to account for variations in observation period during which the counts may occur (Hilbe, 2011). The exposure variable is a covariate for time that has a coefficient fixed at 1, in order to account for unequal observation times among the sample (Agresti, 2013). This is appropriate for this study and total number of

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<sup>4</sup> Authoritarian parenting style comprised evidence of withdrawal of love (refusing), overexpectation, strict, and excessive interference; permissive parenting style included doting and spoiling; and neglectful parenting style comprised evidence of indifference and the tendency to not intervene in a child’s life.

days in the community is used as said variable. An incidence rate ratio (IRR) is reported instead of the exponentiated coefficient. These are effect measures comparing the rate of JCH returns under one condition relative to the rate of said returns under another condition. An IRR greater than 1 signifies an increase in the rate of JCH recidivism compared to the reference condition, and IRRs less than 1 indicate a decrease in these rates comparatively.

Subsequently, a dichotomous outcome measure is used to investigate mediation of factors for JCH recidivism. This analysis uses logistic regression and the STATA command `PARAMED` (Emsley & Liu, 2013). The maladaptive coping mediators, substance abuse and self-harm, were separately analysed. First, the effect of victimization (measuring the presence of having been either physically abused, neglected, or bullied) on recidivism was estimated; second, the effect of victimization on maladaptive coping; and third, the effect of both victimization and maladaptive coping on recidivism. Direct and indirect effects were assessed using a counterfactual framework proposed by Valeri and Vanderweele (2013). The use of this mediation analysis provides examination of these effects using counterfactuals, which allows for binary mediation.

In addition, bootstrapped 95% confidence intervals are produced by extracting 5,000 bootstrap samples from the full dataset in order to approximate the sampling distribution. The intervals are interpreted to mean that 95% of the time when these intervals are constructed, the true estimate will be between the lower and upper interval limits. If 0 is absent in the confidence interval, this suggests that the effect is statistically significant.

## RESULTS

### Negative binomial models

Table 2 shows that both forms of maladaptive coping, substance abuse (IRR = 4.56, 95% CI [2.34, 8.87],  $p < .001$ ) and self-harm (IRR = 2.46, 95% CI [1.25, 4.81],  $p = .009$ ), predict a higher number of JCH returns, and continues to do so even when victimization factors are included. Among the victimization factors, only physical abuse is significant, increasing the rate of JCH returns by 2.69 (95% CI [1.62, 4.45],  $p < .001$ ). In model 3, substance abuse (IRR = 2.97, 95% CI [1.55, 5.66],  $p = .001$ ), self-harm (IRR = 1.89, 95% CI [1.02, 3.49],  $p = .042$ ), and physical abuse (IRR = 1.85, 95% CI [1.12, 3.04],  $p = .016$ ) continue to influence the number of returns when adjusted for other explanations. Gang membership (IRR = 2.26, 95% CI [1.41, 3.61],  $p = .001$ ) and history of probationary supervision (IRR = 4.77, 95% CI [2.67, 8.52],  $p < .001$ ), however, also increase the rate of JCH returns; late adolescence

decreases the rate of recidivism by 0.61 (95% CI [0.38, 0.98],  $p = .042$ ) compared to early adolescence and early adulthood.

### **Mediation**

Table 3 shows a direct effect between victimization and recidivism, but with no clear indirect effect from either type of maladaptive coping. Bootstrap estimates, however, show that, were we to resample 5,000 times, 95% of the time, the estimates for both direct and indirect effects in both mediation models would range between approximately 1 to 4 for direct effects, and 1 to 2 for indirect effects, suggesting that these estimates would be statistically significant as 0 is not found in the interval range. The direct effect of victimization on recidivism in both models are stronger – double the odds to that of the indirect effects.

### **DISCUSSION**

Maladaptive coping and returns to youth correctional institutions were the focus of this study. It was hypothesized that maladaptive coping as evidenced in substance use and self-harm would show more relevance to persistence in the system than other known explanations for recidivism, but this was not exactly the case. Unlike previous studies, however, self-harm was significantly related to juvenile recidivism. The emphasis on prevention and detection in the welfare model may be why self-harm is relevant, whereas in the justice model, those who self-harm do not go onto recidivate, but, rather, the behavior may escalate into more serious outcomes like attempted or death by suicide. This suggests that systems that adhere less to a welfare model may lack adequate prevention supports for detained young people, especially after release.

The salience of history, as measured by number of probationary supervisions, suggests that even in a more welfare-oriented youth correctional system, this continuation of system involvement is not exclusive to more justice-oriented approaches. Whether this produces negative future life outcomes is not entirely clear, as this study has only examined young people up to the age of 19, as once young people reach age 20, they are considered adults in Japan (Farrington et al., 2015). Returning to the JCH may not necessarily be a completely negative phenomenon, but this depends on what about past involvement leads to persistent returns. The separation between juvenile and adult offense records may, however, diffuse undesirable impacts from labeling and stigma, although these records have recently been linked for research purposes only (Bui & Farrington, 2019). Persisting in the system, as evidenced in this study context, might suggest a different role for the JCH: in a welfare-based

system, its emphasis on informal procedures and needs of the young person may produce dependency. Dogged issues of maladaptive coping may not simply evaporate after having been processed through the system, and perhaps the young person may turn to these institutions for continued support.

What supports are in place once a young person leaves the correctional institution, and how supportive they are, may shed light on the link between, not only maladaptive coping and recidivism, but gang membership and repeated entries. Findings showed that, followed by history of probationary supervisions and substance use, gang membership had the next highest rate for recidivism. It would be difficult to completely eradicate connections to gangs, especially the organized kind, and involvement with them may continue after release into the community, whether reluctantly or not. Previous research in the US found that gang membership and drug dependence were necessary targets to improve social and emotional capital and prevent youth recidivism, and that the conduct of institutions greatly affected the chances of continued gang involvement (Huebner et al., 2007). Although youth crime generally is low in Japan, there have been rises in organized crime, particularly identity fraud (Yoshinaka, 2006). The most prevalent of these is young people calling an elderly individual and impersonating a loved one (or police officer or lawyer) who is in dire need of money (“It’s me!”). The aim of this is to trick the caller into sending money.

Once a young person leaves the youth correctional institution, not much is known about continued support after release compared to the support received during detention. Many of the programs offered in institutions are preventative, and deal with many issues that may thwart young people from successful reintegration such as unemployment, antisocial peers, and poor social relationships (Public Relations Office, 2019). For example, the Ministry of Justice works with what they refer to as “cooperative employers,” which are business owners that employ releasees, and it provides job offers in correctional institutions through “Hello Work.” Reoffending has been a foremost priority in recent national justice agendas, and initiatives that promote securing employment and housing, in addition to the participation of social institutions such as schools and local governments to provide support to tailored individual needs, have been emphasized. These are similar to initiatives in England and Wales proposed by the UK government in recent years (Youth Justice Board, 2019), but evaluating the effectiveness of these, as well as the mechanisms that encourage that effectiveness, are needed to assess whether these implementations reduce recidivism.

One issue is what outcome is measured for effectiveness. Often it is reduced recidivism (Lipsey, 2009), but this may not be a complete understanding of what goes on in that young

person's life. Decreasing rates of youth crime have led to few young people detained in correctional institutions in Japan. Outcomes to be measured may need not be exclusive to only recidivism, and, instead, might include measures of vulnerability in terms of health, lifestyle, and social relationships. In fact, as there are fewer young people entering correctional institutions, the JCH, for example, has shifted more attention to community participation and engagement.

For those who persist, there is evidence that the problems are less about family, and more about maladaptive coping and victimization – in some sense, gang membership is a form of victimization as young people may be coerced into staying and committing offenses. In the UK, for example, a growing problem that has led to a recent increase of serious youth violence is county lines drugs dealing, whereby organized criminal networks and gangs export drugs into towns and rural areas by exploiting young people, many of whom are considered the most vulnerable (Kincaid et al., 2019). Results from the mediation and bootstrapping analysis show that victimization does not impact on recidivism solely through maladaptive coping but has a direct impact as well. The study could not find evidence that substance use or self-harm fully explained the relationship between victimization and recidivism, but perhaps other forms of maladaptive coping can. As demonstrated by bootstrapping, however, an indirect effect seemed present, but this was not as strong as a direct effect. Exposure to victimization itself, it seems, was enough to not only return to correctional institutions but also persist in them, particularly having experienced physical abuse.

Of course, the study is not without limitations: the sample came from one juvenile classification home. Although this JCH is one of the largest, with some of the highest numbers of detainees, and the profile of the sample was similar to that of the population of interest, the results may not be so generalizable. In addition, many of the study variables were binary, which limited the amount of information gained. The number of females was lower than that of males, but it was not possible to control for sex because it was collinear to another one of the variables, self-harm. The gender imbalance in criminological research has produced more knowledge about males than about females, and unfortunately, our study does not contribute to redressing this. The study, however, is one of few that examines frequency of recidivism, and engages with contemporary youth trends as well as analyzing this within a unique context, that is Japan and in a relatively welfare-oriented setting.

We focus on this specialized sample because research on health outcomes of detained young people have implications for the treatment and supports needed for effective reentry. The present study shows evidence that a justice system that is less about punishment and more



about understanding a young person's circumstances may be able to detect and better address the "real" reasons for offending. Punitive approaches in dealing with "seriously delinquent" young people may be outdated in current times: a high prevalence of mental health problems are found among the youth offending population compared to the general youth population (McCormick et al., 2015; Townsend et al., 2010). This requires specialist support. Future research could extend and elaborate on our findings by confirming whether young people return to the JCH to seek help and continued support. Articulating what aspects are supportive of desistance among young people released from the JCH is another avenue for study. In addition, examining the long-term consequences, if any, of having been detained at the JCH would provide insight into whether the notions of labelling and stigma are relevant.

The Japanese government recently announced that it would lower its age of adulthood to 18 years from 20 years, which has been so since 1878, reasoning that it would promote more active participation in public life (Public Relations Office, 2019). Whether this will extend to criminal and youth justice has yet to be seen, although this announcement has been made specifically by the Ministry of Justice, under its agenda of establishing Japan as the "safest country in the world." If the lowering of the age of adulthood extends to corrections, the government will have to contend with the rises of poor mental health and persistence in the adult justice system.

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**Table 1.** Descriptive statistics of sample and study variables

	<u>N (%)</u>	<u>M (SD)</u>	<u>Range (min- max)</u>
<i>Observation period (in days)</i>		1222.13 (587.41)	5 – 2522
<i>JCH recidivism (binary and count)</i>	83 (23.85)	0.37 (0.77)	0 – 5
<i>Total sample</i>	348 (100)		
<i>Sex</i>			
Male	279 (80.17)		
Female	69 (19.83)		
<i>Maladaptive coping</i>			
Substance use	34 (9.77)		
Self-harm	36 (10.34)		
<i>Victimization</i>			
Physical abuse	62 (17.82)		
Neglect	16 (4.60)		
Bullied	69 (19.83)		
<i>Other factors</i>			
Late adolescence (ages 15 – 17)	189 (54.31)		
Experimentation / risk-seeking	73 (20.98)		
Aggression	89 (25.57)		
<i>Parenting style</i>			
Authoritarian	41 (11.78)		
Permissive	47 (13.51)		
Neglectful	152 (43.68)		
Normal/ unknown	108 (31.03)		
Single-mother household	128 (36.78)		
Gang membership	126 (36.21)		
Truancy	108 (31.03)		
History of probationary supervision	27 (7.76)		

**Table 2.** Negative binomial regression predicting JCH recidivism from maladaptive coping, victimization, and other factors (N = 348)

Variables	<u>Model 1</u>		<u>Model 2</u>		<u>Model 3</u>	
	<u>IRR (SE)</u>	<u>95% CI</u>	<u>IRR (SE)</u>	<u>95% CI</u>	<u>IRR</u>	<u>95% CI</u>
Substance use	4.560 (1.548)***	2.34, 8.87	4.334 (1.370)***	2.33, 8.05	2.968 (0.979)**	1.55, 5.66
Self-harm	2.461 (0.843)**	1.25, 4.81	1.914 (0.624)*	1.01, 3.63	1.891 (0.591)*	1.02, 3.49
Physical abuse			2.688 (0.692)***	1.62, 4.45	1.845 (0.471)*	1.12, 3.04
Neglect			2.093 (0.841)	0.95, 4.60	1.133 (0.440)	0.53, 2.43
Bullied			1.136 (0.332)	0.64, 2.02	1.387 (0.386)	0.81, 2.39
Probationary supervision					4.770 (1.411)***	2.67, 8.52
Late adolescence					0.612 (0.148)*	0.38, 0.98
Aggression					0.733 (0.195)	0.44, 1.24
Experimentation/ risk-seeking					0.763 (0.221)	0.43, 1.35
<i>Parenting style</i>						
Authoritarian					1.113 (0.462)	0.49, 2.51
Permissive					1.458 (0.516)	0.73, 2.91
Neglectful					0.989 (0.300)	0.55, 1.79
Single-mother household					0.910 (0.215)	0.57, 1.45
Gang membership					2.257 (0.541)**	1.41, 3.61
Truancy					1.441 (0.339)	0.91, 2.28

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001; reference group for parenting style is normal/unclear.

**Table 3.** Mediation of the relationship between victimization (X), maladaptive coping (M), and JCH recidivism (Y)

	<u>Mediation pathways</u>							
	<u>Path a</u>		<u>Path b</u>		<u>Path c</u>		<u>Path c'</u>	
	OR	SE	OR	SE	OR	SE	OR	SE
<b>By mediator</b>								
<i>Substance use</i>	1.886	0.771	4.965**	2.402	2.237*	0.705	2.046*	0.659
<i>Self-harm</i>	3.474**	1.373	1.800	0.812	-	-	2.075*	0.666
	<u>Estimate</u>	<u>SE</u>	<u>Bootstrapped 95% CI</u>					
			Lower	Upper				
<i>Substance use</i>								
Direct effect	2.046	0.846	0.986	3.899				
Indirect effect	1.133	0.146	0.991	1.623				
<i>Self-harm</i>								
Direct effect	2.075	0.791	1.046	3.888				
Indirect effect	1.080	0.123	0.974	1.474				

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001; X = victimization factors; M = maladaptive coping factors; Y = JCH recidivism; path a= X → M; path b= M → Y, controlling for X; path c = X → Y, excluding M; path c is the same as shown for victimization; path c' = X → Y, controlling for M; all pathways are adjusted for other factors and observation period; B = 5,000 ; bias-corrected bootstrapped 95% confidence intervals (lower and upper CI)