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Chapter

Long Term Effects of Juvenile Correctional Confinement

Gina Erickson and Shelly Schaefer

Abstract

Justice-involved adolescents face significant roadblocks in the transition to adulthood when they navigate this period while simultaneously re-entering the community after a period of confinement. This study investigates how confinement disrupts psychosocial development across the transition to adulthood using data from the National Longitudinal Study of Adolescent Health to compare psychological well-being and psychosocial development for youth confined before age 18, those arrested before age 18 but not confined, and those with no criminal justice involvement in adolescence. Findings show significantly lower levels of psychological well-being for confined youth compared to all other youth. Females who were confined during adolescence were especially low levels of psychological well-being in young adulthood. Subsequently, confined youth have lower levels of educational and employment attainment in young adulthood. Results suggest the need for juvenile facilities to incorporate programming that builds psychosocial skills and well-being.

Keywords: transition to adulthood, adolescence, correctional confinement, juvenile delinquency, psychosocial development

1. Introduction

Being released from a correctional facility and transitioning to the community is difficult regardless of age. Justice-involved adults face numerous challenges upon release from prison including lack of access to employment and housing, barriers to civic reintegration, lack of social and family support, and the stigma of a felony conviction, all of which are risk factors for future criminal justice involvement [1–6]. Juveniles in confinement not only face the above reentry challenges but they also reenter the community with delayed or foregone development of key skills related to the successful transition to adulthood (e.g., finding and securing afterschool and summer jobs, establishing romantic relationships, selecting and registering for high school and post-secondary coursework, etc.) due to the restrictive environment in juvenile correction facilities [7, 8].

Time spent in correctional facilities affects youths’ developmental trajectories, specifically their psychosocial development [9, 10]. The concept of psychosocial development encompasses three aspects of psychosocial maturity generally referred to as temperance (control impulses), responsibility (resist peer influences and take responsibility for own behavior, and perspective (consider the implications of one’s actions on others and other points of view). In particular, placement in a secure setting is associated with short-term declines in adolescents’ temperance, ability to function autonomously (responsibility), and may further dampen youths’ hopes
for the future (perspective) [9]. Although prior work suggests confinement impacts psychosocial development and increases subsequent recidivism, it raises the question of how delayed development of psychosocial maturity caused by adolescent correctional confinement subsequently affects youths’ ability to capitalize on opportunities for success in adulthood that are ultimately connected with successful desistance from crime. Concisely, this study is guided by the question: how does adolescent correctional confinement disrupt the development of psychosocial maturity and what are the long-term effects of this disruption on attainment in young adulthood?

2. Psychosocial development in context

Psychosocial development stems from Greenberger and Sorenson’s concept of psychosocial maturity (PSM) to address how the educational environment impacts personal and social growth beyond the traditional markers of achievement of cognitive skills measured by standardized test scores [11]. Most broadly, psychosocial maturity is defined as the capacity for an individual to integrate the skills necessary for both socialization and individual development to meet the demands society requires of a mature adult. Embedded in this concept are three universal aspects of individual development central to the overall development of psychosocial maturity; a mature individual will: 1) display an ability to operate autonomously (e.g., sense of control, initiative, internalized values); 2) display attributes that represent one’s ability to interact with others (e.g. empathy, rational dependent, management of role conflict); and 3) encourage society to function smoothly (e.g. willingness to work for social goals, tolerance of individual and cultural differences). Further, and of great importance to this chapter, [12] argues that PSM does not simply occur due to biological maturation, but rather the development of PSM is more contingent upon the opportunities for development. Specifically, reciprocal interactions between individuals within social environments create the “opportunity structures” necessary for PSM development (Steinberg et al., 2004).

Scholars have explored how Greenberger’s original concept of PSM could be applied to decision-making in other arenas, particularly one’s “maturity of judgment” [13]. In [14], Steinberg and colleagues argue that three specific dispositions associated with PSM (responsibility, temperance, and perspective), along with cognitive competence, impact an adolescent’s ability to make mature decisions. As individuals mature along these three dimensions, they are less likely to engage in antisocial or criminal behavior [15, 16]. The current study uses the following three dispositions to operationalize the broad construct of psychosocial development (see [13–15] for validation of these dispositions).

- **Responsibility.** Responsibility relies on two characteristics: autonomy and identity. Common attributes associated with responsibility include one’s ability to make decisions in the absence of others (i.e. knowing when to accept advice from others and resisting peer influence). Responsibility also captures dispositions that are related to one’s identity including clarity of one’s self, confidence, awareness of personal strengths and weaknesses, and consideration of life goals [14].

- **Temperance.** Temperance, or emotional functioning, relates to adolescents’ ability to moderate their emotions for cognitive processes. Specifically, [14] define temperance as an adolescent’s ability to control impulses and use self-restraint when faced with risk-taking opportunities. The concept takes into account adolescent mood as an important factor impacting youths’ judgment, particularly for mature decision-making.

- **Perspective.** Perspective refers to a collection of dispositions that “permit the adolescent to frame a decision within a ‘bigger picture’” ([14]; p. 262) (Figure 1).
Dispositions related to perspective support mature judgment, including one’s ability to understand both short-term and long-term consequences, to understand how decisions impact society, and to appreciate diverse perspectives.

Taken together, the above three dispositions contribute to the development of psychosocial development. Research shows that individuals with lower responsibility, temperance, and perspective are more at risk for antisocial behavior and continued developmental delays of psychosocial maturity relate to chronic offending into young adulthood [15–17]. Because [12] suggests that psychosocial development is contingent upon the opportunity structures for reciprocal relationships, we turn to context of this development, in particular how the correctional context may affect psychosocial development.

2.1 Attainment of psychosocial maturity

Cauffman’s and Steinberg’s findings suggest that the development of psychosocial maturity relates to antisocial decision-making, but their findings beg the question of “how do adolescents develop psychosocial maturity”? Maturation alone (or aging), does not guarantee that an individual will develop adequate levels of psychosocial maturity during adolescence and into early adulthood, but rather [18] argue that achieving psychosocial “capacities” is influenced by one’s context, and ability to practice developmental tasks at both the individual and social level (p. 75). As stated above, the psychosocial development, measured by responsibility, temperance, and perspective, is achieved through opportunity structures and reciprocal interactions during adolescence. For the general population of adolescents, daily tasks and interactions within social environments (e.g. family, school, and with peers) allow adolescents to develop psychosocial maturity and achieve the necessary skills to successfully transition to young adulthood [9, 17, 19]. The “typical” opportunity structures that create “well-rounded” young adults consist of school and work activities, extracurricular activities and social relationships. Specifically, research shows that work (both paid and unpaid) during adolescence can inhibit antisocial behavior while also increasing independence (responsibility) and increasing future employment prospects (perspective) [20–23]. Further, extracurricular activities during adolescence are associated with higher grades in high school and higher rates of college enrollment and graduation (perspective), while the peer context of activities shapes adolescents’ identities (responsibility) [24]. The formation of social relationships during adolescence, from friendships to romantic relationships, provides a supportive environment for adolescents who are experimenting with new (adult) roles and identities [25].

However, correctional disruptions such as out-of-home placement during adolescence create challenges to a youth’s psychological development and matura-

Figure 1. Key concepts in psychosocial development. Adapted from [14].
development changes; confined youth are not able to practice skills associated with developing perspective (e.g., consideration for others and future orientation), responsibility (autonomous decision-making and resistance to peer influence) and temperance (e.g., self-control and suppression of anger) that in turn promote the successful transition to adulthood [18].

Juvenile correctional facilities are highly structured and often emphasize strict control (evidenced by locked day and sleeping areas, razor wire fencing, and limited access to family and friends) more than rehabilitation [26]. As such, the context of confinement differs significantly from the “typical” juvenile social context that includes the freedom to choose one’s own friendships and extracurricular activities, the support of family and friends, and the experience and skills gained in educational and vocational pursuits. Of particular relevance to this study, correctional confinement during adolescence takes away the reciprocal interactions and opportunities psychosocial development that may in turn delay or foreclose attainment of successful markers of transition for adulthood.

2.2 The context of correctional confinement

To understand the context of adolescent confinement, we offer descriptive analyses of the 2003 Survey of Youth in Residential Placement (SYRP). The SYRP contains information on both physical facilities and demographic, background, and criminal justice involvement from a representative sample of 7073 youth in confinement across the United States [27]. The survey also includes additional information on individual offense histories, service needs and use during confinement, perceptions

<table>
<thead>
<tr>
<th>Physical Conditions of Confinement</th>
<th>Weighted Sample %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility has locked sleeping rooms</td>
<td>80.50%</td>
</tr>
<tr>
<td>Facility has locked day room doors</td>
<td>78.70%</td>
</tr>
<tr>
<td>Facility has locked buildings</td>
<td>86.60%</td>
</tr>
<tr>
<td>Facility has external fence/wall with razor wire</td>
<td>58.80%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Restrictive Control within Facility</th>
<th>Weighted Sample %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth reports confinement or locked up alone</td>
<td>33.60%</td>
</tr>
<tr>
<td>Locked in room</td>
<td>34.40%</td>
</tr>
<tr>
<td>Locked in room more than 1 day but less than 1 month</td>
<td>53.70%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Victimization in Facility</th>
<th>Weighted Sample %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth experienced some form of victimization in facility</td>
<td>45%</td>
</tr>
<tr>
<td>Youth experienced property victimization</td>
<td>44%</td>
</tr>
<tr>
<td>Youth was physically or verbally assaulted in facility</td>
<td>31.10%</td>
</tr>
<tr>
<td>Youth received injury as result of physical victimization</td>
<td>9.60%</td>
</tr>
<tr>
<td>Staff use excessive force</td>
<td>8.80%</td>
</tr>
<tr>
<td>Youth states fear makes it difficult to sleep</td>
<td>15.10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal Relationships</th>
<th>Weighted Sample %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief that staff generally care about them</td>
<td>31.90%</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>22.90%</td>
</tr>
</tbody>
</table>

Table 1. Context of confinement for youth in detention and training schools.
about safety and security, and future expectations. Table 1 provides a descriptive snapshot of the context of confinement for youth in detention or training schools.\(^1\)

Corrections administrators report that a majority of the detention and training school facilities employ the use of locks to restrict movement within the facility, including locked sleeping rooms (80.5%), locked day room doors (78.7%), locked buildings (86.6%), and an external wall with razor wire (58.5%). Responses from youth show that approximately one-third of confined youth report being disciplined by placement in solitary confinement (i.e., locked up alone), 34.4% report being confined to their room, and 53.7% report the longest time being locked into their room exceeded one day but was less than one month.

Compared to the general public, youth confined in detention or training schools have higher rates of victimization. Even with restrictions on movement within a juvenile facility, youth state that they fear for their safety and that victimizations are prevalent within the facility. As seen in Tables 1, 45% of confined youth report some form of victimization while confined; 43.8% state they were a victim of stolen property; 31.1% of youth were physically or verbally assaulted in the facility, and 9.6% of those incidents resulted in injury. In addition to physical, verbal, and property victimizations, 40.1% of youth state they believe staff uses force when it is not necessary. Thus, it is not surprising that youth report fear, with 15.1% stating fear makes it difficult to sleep. Coupled with the lack of sense of care from staff (only 31.9% of youth report that staff generally care) and limited contact with family (22.9% report having contact with family less than once a week), the conditions of confinement are less likely to provide the opportunity structures and reciprocal relationships to psychosocial development among confined adolescence. We hypothesize that this in turn, will limit justice-involved youths’ successful transitions to adulthood.

2.3 The transition to adulthood

Research on the transition to adulthood is a significant subfield in the larger life course paradigm. Elder’s work is seminal to understanding the life course framework and established the four major principles that are the hallmark of the life course paradigm: 1) individual lives are situated in and shaped by historical time and events, 2) the developmental significance of transitions and events in a person’s life is contingent on the social timing in which they occur, 3) individual lives are linked or interdependent with the lives of others, and 4) individual decision-making and human agency shape one’s opportunities and constraints in later social circumstances ([28–30]; see [31, 32] for slight variations). Embedded within this life course framework is the study of the transition to adulthood.

While focusing on childhood–adulthood links in behavior is thus broadly important for life course researchers [33–35], understanding the transition to adulthood offers insight into the way institutional structures, particularly the criminal justice institution, shape individual lives (see too [36]). In general, the transition from adolescence to adulthood is marked by leaving school, starting a full-time, year-round job, leaving the parental home, entering marriage (or establishing cohabitating

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\(^1\) The subsample is restricted to detention or training school facilities to best capture the most likely types of facilities represented in our Add Health sample. SYRP data suggests that in 2003, 83.2% of youth placed in any type of confinement reside in detention, training schools, or long-term secure. Thus, restricting our analysis of SYRP data to this subsample most likely captures the type of placement the confined youth in our Add Health subsample, who report an average placement of six months, would have been confined to.
unions), and becoming a parent [42]. It is principally relevant to study criminal and delinquent behavior in the transition to adulthood as criminal justice disruptions, particularly juvenile incarceration, may necessarily change youths’ pathways into adulthood [43–45] and ability to make successful transition.

Life course researchers note that the life course in general and the transition to adulthood in particular is marked by ever greater variability. First, [46] shows that the transition to adulthood “takes longer” to complete. Many adolescents in the past few decades meet the transition to adulthood with financial and educational credentials unknown to previous generations, affording them more opportunity to explore roles and identities well into their twenties [47]. Second, the transition to adulthood has become increasingly complex and variable. Normative timetables surrounding the timing of events in the life course have changed, reflected in disorder, variability and reversibility of the transition to adulthood ([41, 42, 51, 52]; see too [46]). Thus, if the transition to adulthood is difficult in general, there is even greater concern for groups who enter into adulthood with additional vulnerabilities such as youth raised in criminogenic families and contexts, youth in poverty, and youth in the juvenile justice system, all of which factor in to the long term cumulative disadvantage faced by justice-involved youth [1, 41, 53].

2.4 Psychosocial development and adolescent confinement

Recent work by [9] finds that time spent in juvenile correctional facilities affects developmental trajectories, specifically psychosocial maturity development. In particular, placement in a secure setting is associated with short-term declines in the youth’s ability to curb impulsive and aggressive behavior and the ability for the youth to function autonomously, while longer periods of confinement in residential treatment settings also negatively impact youths’ development of psychosocial maturity. We build on recent work [9, 10] that examined the effect of incarceration on psychosocial development. Using the Pathways to Desistance data, [9] to examined how both facility quality and age moderate the impact of incarceration on psychosocial development (see too [44]). While this data undoubtedly contains a wealth of information about antisocial youth over a seven year time period, their findings use data that censored before many youth have completed the transition to adulthood (21–25 years old). Further, as [9] noted, although they found both short and long-term impacts from confinement on developmental trajectories of psychosocial maturity, their research findings are limited to only antisocial youth, suggesting that non-delinquent youth could observe similar trajectory changes over time. Therefore, we cannot deduce how their findings compare to non-delinquent youth and how their findings translate to obtaining traditional markers of success in adulthood.

We recognize for some youth, incarceration during adolescence may offer prosocial opportunities not available in their communities, as well as removal from delinquent peers and other negative influences. However, incarceration may also impede or foreclose psychosocial maturity development [10], early work

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2 A discussion on the nature of differences between cohabitation and marriage in the family formation process is beyond the scope of this paper. See [37] for early estimates and [38, 39] and [40] for a review of some of this literature.

3 In work in [41] presents data from the 2002 General Social Survey that suggests these markers may no longer be adequate. Of note, 97% of respondents noted financial independence as at least somewhat important to be considered an adult while 55% believe getting married is at least somewhat important and only 52% think having a child is at least somewhat important in marking adulthood.

4 Both [48, 49] carry this idea one step further by asking if adolescents today are perhaps too ambitious, with aspirations that are misaligned with subsequent achievement.
experiences [21], healthy romantic relationship development [54], and school success [43], while creating structural and institutional barriers associated with a criminal record [55]. Further, as desistance literature shows, marriage, family, and employment promote desistance from crime over time. Thus, understanding how confinement delays psychosocial development that in turn supports the transition to adulthood is an important step in fully understanding the relationship between juvenile incarceration and psychosocial development in the transition to adulthood and subsequent success in early adulthood.

2.5 Current study

The purpose of the current study is twofold: 1) to understand how confinement interrupts the psychosocial development, and 2) to examine whether and how this development predicts attainment of traditional adult markers of success such as education, employment, positive interpersonal relationships [7, 42, 56, 57]. Guided by prior research, we hypothesize that adolescents who are confined before age eighteen will experience delays in psychosocial development and subsequently have diminished educational and work attainment in young adulthood. Findings from the current study advance knowledge in two important ways.

First, by utilizing the National Longitudinal Study of Adolescent Health (Add Health) to assess how confinement influences psychosocial development, we can construct three groups: non-delinquent youth, youth who were arrested but not confined before age 18 (delinquent non-confined), and delinquent youth serving at least six months in placement (delinquent confined) to age eighteen to compare development and changes in psychosocial development over time. Second, the study examines how changes in psychosocial development pre- and post-confinement (roughly ages 15 and 21) impact attainment or nonattainment of traditional markers of a successful transition to adulthood measured by educational attainment, employment, and union formation (e.g. marriage or cohabitation) in the late 20s.

3. Data, measures, and method

The National Longitudinal Study of Adolescent Health (Add Health) provides a longitudinal, nationally representative sample of adolescents in grades 7–12 during the 1994–1995 school year. From school rosters, 20,745 students completed in-home Wave 1 interviews, which were augmented with audio computer assisted self-interviews. Follow up interviews were conducted in 1996 (Wave 2, N = 14,738) and 2001–2002 (Wave 3, N = 15,197). The most recent wave of data (Wave 4, collected in 2008) includes 15,701 respondents ranging in age from 25 to 32.

Add Health data provide many advantages for the goals of the current research. First, Add Health offers data points throughout adolescence and the transition to adulthood, across 15 years from the mid-teens to the early 30s. Specifically, Wave 1 captures adolescents before the onset of serious delinquency and by Wave 4, most have desisted from crime [58]. Second, Add Health is drawn from a nationally representative sample from school rosters and thus includes adolescents missed by many in-school samples (that might exclude adolescents in alternative school settings, drop-outs, and truants). Third, the variety of social, psychological, developmental, educational, employment, and behavioral variables make Add Health ideal for examining the transition to adulthood in the current study.

The current research uses retrospective reports from Wave 4 to measure adolescent confinement. Respondents report on any arrests and periods of detention, jail, or prison before or after age 18. The analytic sample consists of 162 respondents.
who report any correctional confinement before age eighteen, 396 respondents who report an arrest before age 18 but who did not experience juvenile correctional confinement, and 11,606 non-delinquent youth yielding a total sample size of 12,164. Adolescents placed in correctional facilities report an average of just under one year in detention (10 months). Full descriptive information is found in Table 2.

<table>
<thead>
<tr>
<th>Weighted Mean or %</th>
<th>Standard Error or Sample N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Juvenile Confinement</strong></td>
<td></td>
</tr>
<tr>
<td>No Serious Delinquency Confinement</td>
<td>94.48%</td>
</tr>
<tr>
<td>Juvenile Arrest, no Confinement</td>
<td>1.71%</td>
</tr>
<tr>
<td>3.81%</td>
<td>396</td>
</tr>
<tr>
<td><strong>Psychosocial Development (Wave 3)</strong></td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.96</td>
</tr>
<tr>
<td>Temperance</td>
<td>3.55</td>
</tr>
<tr>
<td>Perspective - Future Orientation</td>
<td>3.93</td>
</tr>
<tr>
<td>Perspective - Live to 35</td>
<td>4.65</td>
</tr>
<tr>
<td>Perspective - Social-Temporal</td>
<td>2.35</td>
</tr>
<tr>
<td><strong>Psychosocial Development (Wave 1)</strong></td>
<td></td>
</tr>
<tr>
<td>Temperance - Self-Control</td>
<td>2.63</td>
</tr>
<tr>
<td>Temperance - Impulsivity</td>
<td>2.23</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4.11</td>
</tr>
<tr>
<td>Perspective - Future Orientation</td>
<td>4.42</td>
</tr>
<tr>
<td>Perspective - Social-Temporal</td>
<td>1.99</td>
</tr>
<tr>
<td><strong>Young Adult Outcomes</strong></td>
<td></td>
</tr>
<tr>
<td>Full-time Work</td>
<td>55.30%</td>
</tr>
<tr>
<td>Career-type Work</td>
<td>70.64%</td>
</tr>
<tr>
<td>No High School</td>
<td>9.61%</td>
</tr>
<tr>
<td>College Completion</td>
<td>33.48%</td>
</tr>
<tr>
<td>Ever Married</td>
<td>49.79%</td>
</tr>
<tr>
<td>Ever Cohabited</td>
<td>48.35%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>55.84%</td>
</tr>
<tr>
<td>Black</td>
<td>20.75%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15.71%</td>
</tr>
<tr>
<td>Other Race</td>
<td>7.70%</td>
</tr>
<tr>
<td>Female</td>
<td>50.57%</td>
</tr>
<tr>
<td>Age (Wave 1)</td>
<td>15.44</td>
</tr>
<tr>
<td>Age (Wave 4)</td>
<td>28.31</td>
</tr>
<tr>
<td>Adolescent Delinquency</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>Family Status</strong></td>
<td></td>
</tr>
<tr>
<td>Two-Parent Intact</td>
<td>57.08%</td>
</tr>
<tr>
<td>Step Family</td>
<td>15.34%</td>
</tr>
<tr>
<td>Single-Parent Family</td>
<td>22.25%</td>
</tr>
</tbody>
</table>
3.1 Measures

To assess psychosocial development prior to confinement and post-confinement, we use questions from Add Health Wave I (pre-confinement) and Wave III (post-confinement) to develop measures for the dispositions of responsibility, temperance, and responsibility.

Responsibility. We operationalized the disposition of responsibility in both Wave 1 and Wave 3 through the creation of global responsibility scale at each wave. The responsibility scale focuses on questions that ask respondents to rank their agreement with statements about their personal qualities, general self-esteem, and connectedness to others. The Wave 1 measure follows the work of [10, 59] and uses six questions asking if adolescents agree or disagree with the following: 1) they have a lot of good qualities, 2) they have a lot to be proud of, 3) they like themselves just the way they are, 4) they feel they are doing everything just about right, 5) they feel socially accepted, and 6) they feel loved and wanted. Scores on individual items range from 1 (strongly disagree) to 5 (strongly agree). Together, an averaged scale of these items ranges from 1 to 5, with a weighted mean of 4.11 and a Cronbach’s alpha value of 0.85.

To measure change in responsibility post-confinement, we also create a responsibility scale at Wave 3. Five questions are used to measure responsibility in young adulthood, including having good qualities and feeling you are doing everything just about right. The final (item average) scale ranges from 1 to 5 with a weighted mean of 3.96 and an alpha of 0.75.

Temperance. Temperance refers to one’s emotional functioning, ability to control impulses and use self-restraint in making judgments and decisions. We operationalize temperance in Wave 1 using two scales. One scale assesses the impulsivity dimension of temperance, while the other scale assesses the self-control dimension of temperance. The impulsivity dimension focuses on questions that ask respondents how much they agree or disagree with several items asking about problem-solving behaviors and work ethic (e.g. thinking of as many different ways to approach the problem as possible, getting what you want because you worked hard for it). This scale has an average of 2.23 and an alpha of 0.71. The second temperance scale assesses self-control. These items include responses about trouble getting along with others, paying attention and getting work done (on a scale of 1 to 4). This scale has Cronbach’s alpha of 0.68 and an average of 2.63.

Again, to measure change in psychosocial development post-confinement, we create a six-item temperance scale at Wave 3 that asks respondents about things
such as following their instincts, getting so excited they lose control, and going out of their way to avoid problems. The Wave 3 scale has a Cronbach's alpha 0.74 and a mean of 3.55 (on a scale of 1 to 5).

**Perspective.** To assess perspective (mature judgment and ability to see the “bigger picture”) at Wave 1, we create two subscales; the first captures the social-temporal dimension of perspective, and the second captures future orientation. The social-temporal scale follows the measurement in [59] and includes questions that ask respondents how true each of the following has been for them in the past week: 1) enjoyed life, 2) felt just as good as other people, and 3) felt hopefully about the future. The scale ranges from 0 to 3, with an average of 1.99 and an alpha value of 0.63. The second scale for perspective, future orientation, incorporates respondents’ answers to questions about how likely they think three events are: 1) living to age 35, 2) being killed by age 21, and 3) getting HIV/AIDS (the latter two reverse coded). The scale has an alpha of 0.57 and a mean of 4.42.

Similar replication of the above perspective subscales occurs at Wave 3, using an average of two items (enjoying life and feeling just as good as other people) in order to capture the social-temporal dimension of perspective. Here, scores range from 0 to 3 with a mean of 1.99. Two additional single items capture future orientation: living to age 35 and whether or not respondents live their lives without consideration for the future. Each item ranges from 1 to 5, with higher scores indicating greater levels of future orientation.

**Outcome measures.** Outcome measures are derived from Wave 4. Transition to adulthood is measured along three dimensions: education, employment, and relationship formation. Education is measured via highest degree attainment, including a dichotomous measure to assess lack of high school completion (25% of respondents) and attainment of a four-year college degree (roughly one-third of respondents). Employment is measured via full time employment status (30+ hrs per week) based on the combination of all jobs. Over half of respondents work full-time. Of those who are employed, a follow-up measure asks if respondents’ jobs are part of their long-term career goals, either as a career itself or as preparation for career work. Seventy percent of workers are in career-type work by the late 20s. Finally, union formation is measured by marriage and cohabitation. Here, the outcome measure captures ever reporting a residential union. Roughly half of respondents are married and half report ever cohabiting. The measures of marriage and cohabitation are not mutually exclusive; while roughly half report either measures, together, 84% have either married or cohabited by their late twenties and early thirties (results not shown).

**Control measures.** The following demographic variables are controlled for in all models: age, race/ethnicity (black, Hispanic, other, compared to white), family structure (step family, single-parent, or other, compared to the omitted category two-parent intact family), highest educational attainment by either parent, gender (captured at the Wave 4 survey), and residential location in adolescence (suburban, urban, or rural). Table 2 shows descriptive information for all measures. Roughly one-third of the sample is non-white, with an average age of about 15 and a half at Wave 1 and just over 28 at Wave 4. Just over half of all adolescents lived with both parents at Wave 1, with over one-third of adolescents having at least one parent that completed college. Respondents are fairly evenly split between rural, urban, and suburban residence.

General delinquency is controlled for in Wave 1 using a summative measure of eleven adolescent behaviors (graffiti and property damage, theft, and fighting), each of which is scored as a 4-level ordinal measure (0–3); the general delinquency scale thus ranges from 0 to 33. This summative measure accounts for any remaining differences in delinquency not captured by the key measure of confinement in adolescence. The average delinquency level for all youth is 2.33, while those in the two delinquent groups report significantly higher (and statistically similar) levels of
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delinquency at Wave 1–6.92 for those who will be confined and 6.04 for those who will be arrested but not confined ($t = 1.23$, ns).

3.2 Method

Analyses begin with significance tests to assess group-level differences in means for each measure of psychosocial development at Wave 1 and Wave 3. Next, the effects of confinement on psychosocial development in young adulthood are measured using standard regression models. Here, a lagged dependent variable is included to account for any differences in the baseline (Wave 1) measure of psychosocial development. The lagged variable model takes the following form:

$$ Y_t = \beta_0 + \beta_1 X_t + \beta_2 Y_{t-1} + \epsilon_t, $$

a standard regression equation with the inclusion of the $\beta_2 Y_{t-1}$ term representing the baseline measure of the dependent variables (in this case, the Wave 1 measure of psychosocial development). The model isolates the effect of confinement on development by minimizing any stable within-person or unmeasured elements psychosocial development.

Finally, to assess juvenile confinement effects and psychosocial development affect attainment in early adulthood, we use logistic regression models for each outcome measures first assess the effect of confinement on our attainment measures (net of controls) and second include Wave 3 psychosocial development (the more proximal measure) to determine whether and how psychosocial development diminishes any direct effect of juvenile confinement on young adult attainment.

4. Results

4.1 Differences in psychosocial development by criminal justice involvement

Results in Figure 2 show differences in levels of psychosocial development across groups in adolescence (Wave 1). Subscripts indicate significant differences between groups at $p < .05$ level. Non-delinquent adolescents report significantly higher levels of temperance self-control than delinquent youth (non-confined or confined) (2.65 vs. 2.25 and 2.12, respectively) and future-orientation perspective (4.43 vs. 4.27 and 4.26, respectively). Non-delinquent youth have significantly higher baseline levels of responsibility and social-temporal perspective than delinquent confined youth (4.11 vs. 3.99 and 1.99 vs. 1.86, respectively). Delinquent non-confined and delinquent confined groups are statistically similar on all measures of psychosocial development except responsibility. Thus, prior to subsequent detention, delinquent youth are fairly similar in their levels of psychosocial development.

Figure 3 shows differences in psychosocial development as youth enter early adulthood (Wave 3). Here all delinquent youth (non-confined and confined) report lower levels of perspective – believing they will live to age 35 than non-delinquent youth (4.56 and 4.32 vs. 4.66, respectively). Youth who were incarcerated during adolescence report significantly lower levels than either non-delinquent or delinquent non-confined youth, or both on all dimensions except social-temporal perspective. Confined youth report significantly lower levels of responsibility (3.38 vs. 3.96 for both other groups), temperance (3.18 vs. 3.57 for non-delinquent youth), and perspective – future orientation (3.40 vs. 3.94 for non-delinquent youth). It appears juvenile correctional confinement depresses delinquent youths’ levels of responsibility and outlook for their future.

We assess the robustness of these descriptive results in a multivariate model regressing psychosocial development in young adulthood on our sociodemographic
controls, controlling for our lagged dependent variable (the baseline measures of psychosocial development). Results (not shown) indicate that youth who are incarcerated exhibit decreased responsibility and future-orientation relative to non-delinquent youth, and confined youth report significantly lower hopes of living to age 35 than both non-delinquent you and non-confined delinquent youth, controlling for any baseline differences in psychosocial development.

4.2 Confinement and adult transitions

Figure 4 presents odds ratios for two full regression models for each of six adult transitions by criminal justice involvement. Net of demographic controls for age, gender, race, parental education, family structure, and residential location,
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and psychosocial development, adolescent criminal justice involvement (arrest or confinement) reduces the odds of attainment in young adulthood. Young adults who were confined as youth report significantly lower odds of full-time employment in their late 20s than youth who were arrested before age 18 but did not serve time in a juvenile correctional facility. Among those who work, delinquency is associated with reduced (though not significantly) odds of being in career-type work. Criminal justice involvement in adolescence increases the risk of high school non-completion and reduces the odds of college completion; for those who were confined as adolescents, odds of on-time college completion (by the late 20s) are reduced almost to zero (OR = 0.04). Finally, juvenile delinquency (arrest but not confinement) reduces the odds of marriage by the late 20s and any criminal justice involvement (arrest or confinement) increase the odds of cohabitation relative non-delinquent youth. We discuss the implications of these findings below.

5. Discussion, implications, and future direction

This research explored the effects of the impact of juvenile confinement on the development of psychosocial maturity and the transition to adulthood. Qualitative research suggests that individuals reentering society from a period of confinement struggle in many facets of their life related to relationships, friendships, education, employment and chemical and mental health issues [60–62]. However, it is wrong to assume that juveniles recidivate simply as a product of what [60] terms “poor choices.” Fader’s work uncovered the complexity between incarceration and psychosocial maturity that ultimately made it difficult for young offenders to meet the demands and expectations of adulthood upon release. Our quantitative findings suggest that not only confinement, but also formal criminal justice involvement (arrest) negatively impact outcomes for youth compared to youth who never experience confinement.

Importantly, prior to confinement, youth with similar levels of delinquency had roughly equal levels of psychosocial development. However, post-criminal justice...
involvement (confinement or arrest), delinquent youth lag behind their non-delinquent peers on the psychosocial development measures of temperance (impulsivity and control) and perspective (believing they will live to 35). But, confined youth have significantly lower development of responsibility and perspective compared to delinquent youth who are not confined. Therefore, as youth exit correctional facilities and struggle to transition to the community, they are lagging further behind other youth in their self-clarity, self-esteem, decision-making, and future orientation. This results in reduced likelihood of working full-time and dismal college completion rates by their late 20s. Despite hopes that a period of confinement can be the turning point leading youth out of future offending behavior, the barriers produced by the context of confinement have real consequences for psychosocial development and attainment in adulthood. Comparing these findings with the adult desistance literature, confined youth struggle to achieve success in the exact areas shown to promote desistance from crime in adulthood—employment and education (see [1, 63]).

The most robust finding in our analysis relates to educational outcomes for individuals in their late twenties and early thirties. Confined youth are four times more likely to not complete high school even when we control for psychosocial development. Thus, the combination of confinement with the decreased development of perspective leads to significantly lower levels of educational attainment. The decrease in the likelihood of high school completion also leads to a shocking reduction (96% reduction) in the likelihood of college completion for confined youth, net of all controls including parents’ educational attainment and psychosocial development. This finding is particularly interesting considering that 92.8% of confined youth in the SYRP data report that they attend school in the facility [26]. Thus, it appears the increased risk of not completing high school and the decreased odds of college completion are not from lack of educational access in juvenile correctional facilities but rather it appears the conditions of confinement, along with the decreased development of perspective and future orientation during this time, have long-term impacts post-confinement. Overall, as shown in Figure 5, the effects of criminal justice interventions in adolescence have far-reaching effects across multiple domains in the transition to adulthood. These are magnified when youth are placed in out-of-home settings.

This study is not without limitations. First, Add Health does not include information on the type or security of placement for confined youth; however it is likely that confined youth in the Add Health data were in detention or training facilities because on average, 65.1% of youth confined during 1997 (two years post Wave 1 collection and around the time many Add Health respondents would have been confined) resided in one of these two types of facilities [58]. We have attempted to mitigate some of this limitation by using the SYRP to provide a picture of adolescent confinement in general terms. Second, Add Health survey items and questions change slightly across waves and thus the measures of psychosocial development in Waves 1 and 3 are not consistent, though we have attempted to replicate measures across waves. Third, because the Add Health data does not allow researchers to directly match each offense reported to a specific outcome, the study does not include measures of offense severity for youth arrested and confined. However, prior research by [64, 65] suggests that this might not matter.

Findings in this chapter point to a few interventions for practitioners and juvenile correction administrators. First, formal criminal justice interventions, particularly confinement of youth, should be used as a last resort. It is important to point out here that our study uncovered that not only confined youth, but also arrestees (our delinquent non-confined sample) have poorer outcomes in the transition to adulthood. This suggests that it is not just delinquency (as we controlled for general
self-reported delinquency) but rather formal juvenile justice intervention that leads to negative outcomes, an outcome surprising given this is the very system intervening on the “best interests of the child” ([66]; p. 971). Therefore, even short-term stays in confinement can affect psychosocial development and success in adulthood. Although the United States national Juvenile Detention Alternatives Initiative (JDAI) has decreased the use of detention and increased the use of community-based alternatives, there continues to be just over 107,000 youth admitted to detention annually in the United States [67]. We must continue to divert youth not only from confinement but from any formal justice involvement.

Second, our findings suggest that practitioners and juvenile correction administrators change the conditions of confinement to promote greater psychosocial development, particularly related to the development of perspective. Research shows that delinquent youths’ fears about their future exceed their hopes and long-term expectations for success [37]. Thus, even though a correctional facility may offer programs related to “events” that promote positive change, the context and ability for young adults to exercise developmental skills necessary to mature and subsequently translate these skills into successful outcomes in young adulthood is imperative for capitalizing on positive turning points [7, 18]. At the facility level, this could mean implementing a step-down process in the level of control over juveniles, particularly through transitional housing for confined youth. In the transitional housing structure, youth could investigate educational or vocational career paths in the community, while also allowing room for youth to fail and use this failure as an opportunity for development rather than a technical violation that sends them deeper into the justice system. For the “typical” adolescent, the transition to adulthood is marked with trial and error (e.g., loss of a job, romantic

Figure 5.
The far-reaching effects of criminal justice interventions in adolescence.
breakups, oversleeping for school) yet youth in highly regulated confinement environments experience few opportunities for developmental failure. This begs the question: how can one expect that confined youth understand failure as a developmental process rather than a projection of future outcomes? Programming in juvenile correctional facilities should allow room for autonomy and failure and subsequent teach youth to build on failure as a natural part of development.

We are not suggesting there is not a place for juvenile correctional facilities in society, but if and when the juvenile court deems confinement is required, it is necessary to revise the physical and programmatic structure of juvenile correctional facilities. For example, the Missouri Model replaces secure confinement facilities with smaller facilities with a group-home-like structure. This emphasizes the ability to integrate community-based interventions, closer proximity to family, independent decision-making, and wrap-around services for youth. Although preliminary findings examining the Missouri Model's outcomes do not explicitly test the development of psychosocial maturity over time, the reduced recidivism and increased attainment of education and employment for youth in Missouri suggests that the restructured conditions of confinement may allow more room for development, and in turn have positive outcomes as youth transition to the community and adulthood [68].

Future work in this area should explicitly consider the developmental process for confined youth. First, research should explore of the effects of psychosocial development and criminal justice involvement on attainment in young adulthood across demographic groups. While we have controlled for many demographic factors, this research does not break down outcomes by race, gender, or socioeconomic status; as with other developmental processes, the mechanisms at work here may very well differ across demographic lines. Second, qualitative research should seek to understand how the correctional context leads to lower levels of responsibility and perspective for confined youth. Third, given the important role of future orientation in attainment in adulthood, future research might explore the relationship between expectations for the future and actual outcomes in a longitudinal context. Finally, understanding the relationship between confinement, psychosocial development, and desistance from crime is an important next step for research in this area.

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References


[31] Elder GH. Age differentiation and the life course. Annual Review of Sociology. 1975:165-190


[37] The Annie E. Casey Foundation. The Missouri Model. Reinventing the
Practice of Rehabilitating Youthful Offenders. Baltimore, MD: The Annie E. Casey Foundation; 2010


[56] Finlay A, Wray-Lake L, Flanagan CA. Civic engagement during


[59] Keeler, HJ. Mother-Child Connectedness, Parental Behavioral Control, Psychosocial Maturity and Adolescent Sexual Health Risk Behavior University of Nebraska Medical Center. 2010.


[65] Altschuler DM, Brash R. Adolescent and teenage offenders confronting the