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ANALYSIS OF THE MASSACHUSETTS DEPARTMENT OF YOUTH SERVICES' YES INITIATIVE

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Department of Youth Services



Wheelock College of Education & Human Development

About the CERES Institute for Children & Youth

The CERES Institute for Children & Youth at Boston University Wheelock College of Education & Human Development is dedicated to community-engaged research and evaluation. Our work is premised on the belief that the best solutions for strengthening programs for children, youth, and families emerge by authentically partnering the expertise in communities with the expertise of community-engaged researchers and evaluators. Through a co-constructive process, communities and community-engaged researchers can identify the core problems that young people are facing, design solutions that capitalize on the inherent assets of young people and their communities, and continually learn and improve on these solutions until positive education and life outcomes are realized for all. Importantly, these partnerships should result in community-based organizations building their internal capacity to learn and improve.

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EXECUTIVE SUMMARY

Overview

CERES Institute for Children & Youth at Boston University (CERES) has been examining the Massachusetts Department of Youth Services' (DYS) Youth Engaged in Services Initiative (YES). This study provides initial qualitative and quantitative insights into the YES Initiative's implementation and impact on recidivism. The CERES team has also developed a set of implications for ways to strengthen the initiative and supporting data.

Study Design

The evaluation was guided by three primary questions:

1. What are the characteristics of the young people who engage with YES?
2. What role do relationships with caseworkers play in a young person's decisions to engage with YES?
3. What are the outcomes of young people who engage with YES and why do they attain those outcomes?

This mixed-methods study used the following strategies for the project:

- Quantitative data analysis of data from JJEMS for 1,627 youth discharged from DYS between 2015 and 2019.
- Qualitative interviews with 17 DYS caseworkers.
- Supplementary machine learning analysis of approximately 200,000 case notes from caseworkers who work with those 1,627 youth.

Summary of Findings

YES engagement appears to reach a broad array of youth. Our analysis of JJEMS of a large number of characteristics of youth showed only a few meaningful relationships between background characteristics and the probability that the youth would sign up for YES. We interpret this finding to mean that all youth, regardless of demographics or risk level, are equally likely to sign up for YES. However, we do find it notable that females and Black youth were significantly more likely to sign-up for YES and youth from the Southeast region were significantly less likely to sign up for YES.

Relationships with caseworkers appear to matter. From the interviews, case notes, and analysis of quantitative data, we see the potential for a change in the relationship dynamic for the caseworker from “referee” to “coach” as a way to engage youth in YES. Caseworkers described a shift in power from being a youth’s supervisor to being a youth’s supporter, with the youth appreciating this shift. In addition, these relationships did not start at the time of youth transitioning out of DYS; rather, caseworkers built relationships with youth throughout the youth’s engagement with DYS.

YES engagement relates to lower recidivism rates. When looking at the recidivism rates for 2015-2018 discharge year, we find that rates for YES youth are marginally significantly lower than non-YES youth when we account for a multitude of other factors. Importantly, we note that recidivism rates for YES youth in the 2017 discharge year are markedly higher than previous years and 2018; 2017 rates are the reason why the estimated impact of YES is not more robust.

Educational attainment of YES youth may increase the benefits on recidivism. We find that attaining a high school credential while engaged with YES is a particularly robust predictor of lower recidivism and that youth who terminate YES at an older age were also less likely to recidivate.

Recommendations Based on Findings

Based on the current set of results from this project, we suggest:

- Keep doing YES. Initial data suggest it is “working,” especially when combined with strong educational experiences.
- Make resources for YES youth more aligned and obvious across regions so that youth throughout the state are receiving an equal opportunity to engage with YES.
- Analyze longer term impacts on educational and workforce outcomes through partnership with DESE.
- Dive deeper into caseworker-youth relationships prior to and during YES and into youth’s YES experiences (e.g., supports youth are receiving while with YES).
- Collect and analyze youth perspectives to understand more fully the richness of their experiences in order to strengthen supports for them.
- Develop a PYD mindset survey for caseworkers and other adults within DYS as a way to understand the current status of how DYS adults are oriented toward youth and enable a more precise professional development strategy.

INTRODUCTION

Since 2013, an average of 370 youth have transitioned out of the Massachusetts Department of Youth Services (DYS) each year, because they have reached the age of mandatory discharge (Massachusetts Department of Youth Services, 2016, 2019, 2020). However, there is limited research nationally on promoting positive transitions back in the community among juvenile justice-involved (JJ-involved) youth. A growing body of research suggests that a variety of informal and formal supports play an important role in facilitating youths' positive reentry (Abrams, 2006, 2012; Dierkhising et al., 2019; Inderbitzin, 2009; Mathur & Clark, 2014; Sulimani-Aidan & Melkman, 2018), but that JJ-involved youth have a dearth of encouraging, supportive, navigational relationships (Zwecker, Harrison, Welty, Teplin & Abram, 2018). Without adequate supports during this transition, JJ-involved youth are at heightened risk to recidivate, not complete high school, and have unresolved mental health issues (e.g., Abram Azores-Gococo, Emanuel, et al., 2017; Fine, Simmons, Miltimore, Steinberg, Frick, & Cauffman, 2018).

Within the context of DYS, youth are assigned and work directly with a caseworker from their first commitment, during their court mandated treatment plan, and through their discharge back into the community. During commitment, caseworkers monitor and check-in on youth and their families, assist youth in meeting their treatment plan, and intervene with youth who do not meet the terms of treatment. During check-ins, caseworkers get to know youth to identify concrete, attainable goals and provide community-based support towards achieving those goals (e.g., information about how to apply to an education program, a ride to the DMV to get a driver's license).

To support youth during the transition back to their community, DYS developed the Youth Engaged in Services initiative (YES). Through YES, youth have the option to remain connected to the same caseworker after their mandatory commitment has ended, with an engagement that goes beyond treatment and recidivism to include a variety of goals related to educational attainment, employment, and health outcomes. Youth who say, "yes," sign an agreement (which they revisit every 90 days) that includes the specific goals they've agreed to work on with the caseworker across their engagement in YES. The resources and support to achieve these goals are coordinated by the caseworker who has been working with the youth (and building a relationship with the youth) throughout the youth's time with DYS. Therefore, relationships with caseworkers intersect with other key relationships and resources in DYS-involved youth's lives during commitment and across their transition back into the community, and has the potential to strengthen the webs of support surrounding youth, compelling them towards a more positive trajectory during the reentry process (Varga & Zaff, 2018). Yet the promise of this relationship and impact of the YES program on promoting positive transitions back to the community for DYS-involved youth have not been fully studied.

DYS contracted with the CERES Institute for Children & Youth at Boston University Wheelock College of Education & Human Development (CERES) to understand why youth choose to engage with YES and the relationship between YES participation and recidivism. This project was designed to provide qualitative and quantitative insights into YES's implementation and impact on recidivism. The CERES team has also developed a set of implications for ways to strengthen the initiative.

The study was guided by three primary research questions:

- **Research Question 1 (RQ1):** What are the characteristics of the young people who engage with YES?
- **Research Question 2 (RQ2):** What role do relationships with caseworkers play in a young person's decisions to engage with YES?
- **Research Question 3 (RQ3):** What are the outcomes of young people who engage with YES and why do they attain those outcomes?

THEORETICAL FOUNDATION

Research suggests that JJ-involved youth who have sufficient guidance on how to navigate barriers in life and capitalize on supportive opportunities are less likely to recidivate (Blomberg et al., 2011; Kubek et al., 2020; Sharkey et al., 2011). If youth do recidivate, they are less likely to achieve academic success and economic self-sufficiency, more likely to need public assistance, and less likely to vote in local and national elections (Belfield, Levin & Rosen, 2012; Sum, Khatiwada, McLaughlin & Palma, 2009). Thus, providing a robust set of resources and social supports for JJ-involved youth matters both for the individual youth as well as society at large.

Our proposed study's orientation is in line with reentry scholars who have made growing calls to move beyond deficit-based constructions of youth used to explain youth's reoffending and rearrest patterns and look more closely at the assets in their lives (see Leverentz, Chen & Christian, 2020 for a review). As Steinberg and colleagues (e.g., Monahan, Steinberg & Piquero, 2015; Steinberg, Chung, & Little, 2004) and the National Research Council Committee on Assessing Juvenile Justice Reform (National Research Council, 2013) have noted in synthesizing the neuroscience and behavioral science of adolescence, adolescence is a developmental period marked by increasing responsibility, negotiating multiple life roles, and coordinating the skills, relationships, and self-management that facilitate the transition to becoming an adult that contributes to society. A recommended strategy for JJ systems is to provide relational supports that help youth navigate this developmental period, recognize the inherent strengths in youth, and encourage youth's ability to effect change over their own lives. These positive relationships 1) function as assets for youth, 2) strengthen the core competencies that youth need to make healthy, productive transitions into adulthood, 3) help youth navigate adversities, and 4) facilitate more productive life trajectories (e.g., educational and vocational progress and attainment).

A Positive Youth Development (PYD) orientation provides a helpful framework for understanding youths' potential to thrive, challenging deficit-oriented models (Lerner et al., 2019). PYD conceptualizes adolescence as a period of tremendous opportunity and growth, not one of turbulence. Importantly, PYD frameworks underscore the notion that all youth should have access to internal and external developmental assets that can facilitate long term positive youth outcomes (Scales, Benson & Roehlkepartain, 2011; Lerner et al., 2019), and the primacy of relationships as an external asset that guides youth toward their goals (Scales et al., 2011). Butts et al. (2010) proposed a Positive Youth Justice framework, a derivative of PYD that focuses on youth in JJ systems. This framework moves away from risk-based language portraying youth as either helpless or disposed to engage in dangerous behavior; instead promoting youth's capacity for prosocial behaviors, growth, and educational attainment, especially when provided with adequate supports and enriching diversions (Butts et al., 2010).

Relationships are the foundation for all development and we posit that they can provide transformative guidance for JJ-involved youth as they transition out of the system. This is especially important given that JJ-involved youth have a constrained reserve of social capital compared to their non-system involved peers that may compromise youths' ability to navigate adversity and to pursue educational and vocational goals (Bottrell, 2009; Hook & Courtney, 2011). The focus of youth development programming is often on the contexts within which youth live, learn, and grow (e.g., home, school, afterschool programs) and not the people who connect with youth, provide guidance to youth, and help youth to build their identities, goals, and competencies. Any relationship between a youth and an adult (e.g., a caseworker) is embedded within a system of relationships and fully understanding the dynamics of a dyad is premised on understanding the relational contexts with which young people interact. Alignment between the youth's skills and goals and the resources and affordances in the relational context and across contexts, is more likely to result in positive youth development (Varga & Zaff, 2018; Zaff et al., 2015). For youth involved with the JJ system, their relationship with their caseworker is potentially pivotal in navigating the system's challenges and barriers, including those most salient during reentry.

METHOD

Data

The data for the current study came from DYS's Juvenile Justice Enterprise Management System (JJEMS). JJEMS is DYS's primary tool for tracking critical data on DYS youth, including demographics, court history, family information, physical and mental health records, educational achievements, placement history, previous contacts with other public agencies, and other pertinent information. The CERES team did not have direct access to JJEMS; rather, DYS provided all variables of interest to the present study in the form of Microsoft Excel spreadsheets.

In addition to the JJEMS data provided by DYS, CERES was also provided with a complete catalogue of caseworker case notes (in text format), which contained the caseworkers' typed

notes that were entered following each encounter with the youth, the youth's family, or the youth's care providers. This dataset contained about 200,000 case note records. To expand on this secondary quantitative data and further explore RQ2, interviews were also conducted with 17 caseworkers who volunteered in response to an internal email invitation. Interviews covered caseworker history (e.g., training, motivation for joining DYS), their definition and understanding of the YES initiative, their perspective on why youth might agree or disagree to participate in YES, and how they describe the initiative to their cases. Interviews averaged 30 minutes and were conducted over Zoom.

Measures

DYS provided approximately 250 variables from JJEMS. Our decision-making process for choosing which variables were considered for inclusion in our analytic models is described in the Results section. Below, we describe the final set of variables that were analyzed in our analytic models.

Outcomes

The current analyses considered two dichotomous outcomes: YES engagement and recidivism. Models of YES engagement used data from youth who were discharged between January 1, 2015 and December 31, 2019; models of recidivism used data from youth who were discharged between January 1, 2015 and December 31, 2018.

YES Engagement. Youth were given a score of "1" if they EVER engaged in YES (regardless of whether they engaged immediately at discharge or at a later date) and a score of "0" if they did not engage in YES.

Recidivism. DYS defines recidivism as being convicted in the adult criminal justice system within three years of discharge from DYS for an offense committed within one year of discharge from DYS. Due to this definition of recidivism, recidivism data for the current analysis were only available for youth discharged between January 1, 2015 and December 31, 2018. Recidivism was coded dichotomously with a score of "1" indicating that a youth had recidivated and a score of "0" indicating the youth did not recidivate.¹

Youth Measures

Gender. Gender was coded dichotomously (1=Female, 0=Male).

Race/ethnicity. Four categories were used to classify youths' race/ethnicity: Black, Hispanic, White or Other. To avoid drawing conclusions about racial/ethnic groups that were under-represented (and therefore under-powered) in these data, the "Other" category was used to anonymize groups with fewer than 50 youth.

¹ Among youth discharged in 2018, 31 had unresolved court cases as of the date of these analyses (May 1, 2021). Data management in regard to these 31 missing values is described in the following sections.

Region. To account for geographic differences in youth behavior, we used a five category region variable, based on the youth's home address: Central, Metro, Northeast, Southeast, or Western Massachusetts.

Department of Children & Families (DCF) involvement. If youth had any type of DCF involvement at the time they entered into DYS custody, they were given a score of "1." Youth with no DCF involvement had a score of "0" on this variable.

DYS commitment less than or equal to six months. Commitment length was dichotomized such that youth who were in DYS custody six months or less were given a score of "1" and youth who were committed more than six months were given a score of "0." The six month mark was chosen as a cut-off point given observations by DYS staff that youth needed at least six months of services to reap any benefits.

Age 21 at discharge. Youth were given a score of "1" if they were 21 at discharge. All other youth were given a score of "0."

Discharge year. Year of discharge was treated as a five-category nominal variable (2015, 2016, 2017, 2018, 2019).

Offense severity. Offense severity is measured by DYS grid level, which ranges from 1 to 6 and corresponds to the severity of the most serious offense a youth was convicted of. It is used by DYS to help determine the initial recommended commitment length for youth in residential treatment or community-based programs. In the current study, grid 1 to grid 2 were combined as "lower grid," grid 3 to grid 4 were combined as "middle grid," and grid 5 to grid 6 were combined as "higher grid."

Risk assessment. The YLS/CMI 2.0 (Youth Level of Service/Case Management Inventory 2.0) is used to assess youth's individual risks and needs. Its eight subscales assess:

1. Prior and current offenses/dispositions (e.g., "Three or more prior convictions")
2. Family circumstances/parenting (e.g., "Inadequate supervision")
3. Education/employment (e.g., "Disruptive classroom behavior")
4. Peer relations (e.g., "Some delinquent acquaintances")
5. Substance abuse (e.g., "Occasional drug use")
6. Leisure/recreation (e.g., "Limited organized activities")
7. Personality/behavior (e.g., "Inflated self-esteem")
8. Attitudes/orientation (e.g., "Antisocial/procriminal attitudes")

A higher YLS score indicates more risk and may suggest a higher level of services needed to address that area. Given that different DYS regions have different standards regarding whether and when to administer the YLS/CMI 2.0, only scores from the last administration prior to discharge were used in the current study.

Offense type. Offense type corresponded to the most serious offense of which a youth was convicted. Offenses were categorized into six types:

1. Person
2. Property
3. Drugs
4. Motor vehicle
5. Weapons
6. Public order

English as primary home language. If English was the primary language spoken at home for youth, they were given a score of "1." Otherwise, youth were given a score of "0."

Age at YES termination. This variable was treated as a continuous variable with a range of 18 to 22 ($M=18.7$, $SD=1.1$). Data for this variable were only available for youth who had terminated their YES by the time the current study was conducted (about 87.7% of the YES youth in our sample). Most youth terminated YES at age 18 (65.4%) or 19 (18.7%).

Educational attainment during YES. If youth had acquired any type of educational attainment during their YES engagement, they were given a score of "1." Otherwise, youth were given a score of "0." If the youth had an educational attainment, but it occurred during DYS custody, they were given a value of "0" on this variable.

YES duration greater than six months. YES duration was dichotomized such that youth who were in YES for more than six months were given a score of "1." All other youth were given a score of "0." The six month mark was chosen as a cut-off point given observations by DYS staff that youth needed at least six months of services to reap the benefits of YES.

Caseworker Measures

The following measures pertain to the 629 youth (approximately 40% of the total sample) who were committed to DYS in the year 2015 or later and had at least 40 case notes recorded electronically before their discharge from DYS.

Sentiment scores. Our Machine Learning (ML) team used a process known as Sentiment Analysis to generate sentiment scores for each case note recorded in the caseworker notes file. Sentiment analysis is a natural language processing technique whereby the analyst attempts to identify the underlying tone (e.g., positive, neutral, negative) of the text. We utilized the VADAR model (Valence Aware Dictionary for Sentiment Reasoning), which is able to detect not just the sentiment of basic words (e.g., love, hate, happy, sad), but is also able to understand the context of the words. Each case note was given a score ranging from 1-5 with "5" indicating an extremely positive sentiment and "1" indicating an extremely negative sentiment in the text. For each youth, sentiment scores were averaged across all case notes to create a single sentiment score.

Number of caseworkers by discharge. This variable represents the total number of caseworkers youth had (regardless of the length of the relationship) by the time they were discharged from DYS. This continuous variable ranged from 1 to 8 (M=2.1, SD=1.2).

Average number of case notes per month by discharge. This continuous variable represented the average number of case notes youth have had per month throughout their commitment in DYS by the time they were discharged (M=9.2, SD=7.3).

Caseworker/Youth race match. The race/ethnicity of caseworkers was coded under the same four categories described above: Black, Hispanic, White, and Other. If the race/ethnicity of the caseworker was the same as the youth, this variable was given a score of "1." Otherwise, it was given a score of "0."

Caseworker/Youth gender match. Caseworker gender was coded as "female" or "male." If the gender of the caseworker was the same as that of the youth, this variable was given a score of "1." Otherwise, it was given a score of "0."

Length of employment. This continuous variable represents how many years caseworkers have been in service to DYS, including other prior positions if applicable.

Sample Selection

Research Question 1

Under guidance from DYS, we identified 2015 as the first year of full YES implementation. Accordingly, only youth who were discharged from DYS between January 1, 2015 and December 31, 2019 were included in the current analyses. For the 88 youth who had more than one DYS commitment and discharge record, we kept only the first commitment record to remove any potential influence of a prior DYS experience on the youth's decision for YES engagement. In addition, although youth from outside of Massachusetts can be committed to DYS custody, the 37 youth with home addresses outside of Massachusetts were not included in the current analysis due to the geographical sensitivity of YES services. After removing duplicate observations and out-of-state youth, our final sample for RQ1 consisted of 1,627 youth.

Research Question 2

Of the 17 caseworkers who volunteered for interviews, 9 reported their gender as female. Caseworkers reported a range of experience in the caseworker role from six months to 27 years (average 13 years). All participants reported holding some role within DYS prior to becoming a caseworker, such as a vendor or caseload assistant. Caseworkers reported working in the following regions: Western, Southeast, Central, Northeast, and Metro.

Research Question 3

Our RQ3 sample consisted of 1,360 youth who had complete recidivism data available as of May 1, 2021 - the date the current analysis began. These youth were discharged from DYS

between January 1, 2015 and December 31, 2018. Among youth who were discharged in 2018, there were 31 youth with unresolved cases who were not able to be properly classified in regard to recidivism.²

Sample Description

The sample of 1,627 youth who were discharged from DYS between January 1, 2015 and December 31, 2019, were 86.8% male, 27.7% Black, 39.1% Hispanic, and 25.8% White. An additional 7.4% of youth identified as other races or multiracial. According to their home address on file, youth were roughly evenly distributed across the five DYS designated regions: Central, Metro, Northeast, Southeast, and Western. English was the primary language spoken at home for most youth (81.1%). More than half the youth had some type of disability (52.1%) and were under grade level academically (62.1%). Among youth (45.6% of the total sample) who had a score for Adverse Childhood experiences (ACEs) scale, 96.9% of them had at least one ACE and 72.6% had three or more.

The commitment date for youth ranged from July, 2008 to December, 2019. Although the average age of youth at their first DYS commitment was 16, the average age of first arrest was 14. For this first commitment, most youth were committed for person-related offenses (50.4%), followed by property offenses (20.5%) and weapons offenses (13.3%). Most youth were assigned a lower (50.1%) or middle (43.1%) offense grid level upon commitment. 14.3% of the youth were committed as youthful offenders.

In general, youth are discharged from DYS between age 17 and age 21. In our sample, most youth were discharged before age 21 (86.3%), with the majority discharged at age 18 (74.2%). The average commitment time was 22 months, with youth spending, on average, approximately 8 months in residential facilities. 20.4% of youth were committed for no more than six months. During commitment, 35.2% of youth were dually involved with DCF. By the time of discharge, 25.5% of youth received some type of education attainment (mostly at the high school level).

Regarding YES participation, 57.7% (n=938) of youth enrolled in YES following their discharge from DYS. Descriptive information of relevant variables by YES participation can be found in [Descriptive Table 1](#), which displays variables that were included in the final models, and [Descriptive Table 2](#), which displays other selective variables that were not included in the final model but were tested at the univariate level.

Analysis Plan

A series of multilevel logistic regression models with propensity score covariate adjustment were implemented to address RQ1 and RQ3. Missing data were minimal

² Sensitivity analyses (described below) were used to ensure that the missing recidivism data for the 31 youth with unresolved cases did not bias the results of the current analyses.

(1.4% of youth were missing data related to the main model of RQ1 (Model 1), 2.7% of youth were missing data related to the main model of RQ3 (Model 4)). All missing data were managed with listwise deletion, which naturally led to small variations in the overall sample size for each model. All analyses were conducted in Stata 17.0 (StataCorp, 2021).

Power Analysis

Prior to pursuing analyses to directly address RQ1 and RQ3, we conducted power analysis in G*Power 3.1.9.4 to determine whether we would have sufficient power to identify statistically meaningful differences in YES engagement and recidivism (power = .80, α = .05, expected covariate R^2 = .10). Results suggested that, for RQ1, with a sample size of 1604, we had the power to detect very small effects (OR = 1.34) of dichotomous independent variables. For RQ3, with a sample size of 1323, we had the power to detect small effects (OR = 1.51) of dichotomous predictors.

Propensity Score Analysis

Propensity scores are a statistical technique developed to account for non-random selection into treatment groups (Rubin, 1980; Rosenbaum & Rubin, 1984). In this technique, we use a predictive model to generate a score for each youth that represents their “propensity” to engage in YES. Propensity scores are preferred to traditional covariate adjustment as they provide more specific estimates and reduce the risk of overfitting the model, which occurs when the sample size is not sufficient to support the number of covariates included in the model.

In the case of YES, we know from observation and theory that certain youth are more likely to engage in YES than others. Because selection into YES is not completely random, when looking at the effects of YES engagement on recidivism, we face the risk of biased results if youth who select into YES are also less likely to recidivate. To reduce the risk that our findings are a result of differential YES uptake and not “effects” of YES, we used propensity scores to help remove the effects of non-random selection. However, propensity scores are only as strong as the data they are created with – they are not a “fix all” and they cannot account for biases related to unmeasured data.

In the current analyses, propensity scores were generated based on our RQ1 model (N=1,627), which was used to identify youth characteristics associated with YES engagement. Prior to generating the propensity scores, we ensured the confounders were well-balanced. A non-significant Hosmer-Lemeshow test suggested our model was a good fit for the data.

Propensity scores are generally used through one of four methods – covariate adjustment, stratification, weighting, or matching. Given the limitations of the Stata software, which does not accommodate weighting with multilevel logistic regression models, our desire to preserve power in our RQ3 model, and research suggesting the efficacy of covariate adjustment approach (Elze et al., 2017), we elected to use the covariate adjustment approach in all models reported. To further ensure the validity and consistency of

results, we re-tested all models using stratification and matching. Although we observed small changes in coefficients under these alternative methods, there were no changes in the patterns of significant findings.

Multilevel Logistic Regression Models

All models were tested within a multilevel logistic regression framework. Logistic regression models are implemented when observing differences on dichotomous outcomes such as YES engagement and recidivism. Multilevel models are a method of accounting for clustering of observations (e.g., youth clustered within district offices) that may cause youth within clusters to look more similar to one another than youth between clusters and therefore violates the regression assumption of independence of observations.

At the descriptive level, we observed differences in YES uptake by district office as well as caseworker; with these initial observations being corroborated by the DYS Director of Community Operations. As such, we considered whether differences in YES engagement and recidivism may be due to 1) district office location or 2) caseworker at discharge. Using a null multilevel logistic regression model, we tested whether there was a statistically meaningful clustering effect associated with district office or caseworker at discharge. While there was no effect of district office, there was significant evidence to suggest that there were meaningful differences in YES uptake in relation to the youth's caseworker at discharge ($X^2=49.08$, $p < .001$, $ICC=.11$). Therefore, all models were modeled within a multilevel logistic regression framework with youth (level 1) nested within caseworkers (level 2). The caseworker (including characteristics of the caseworker) used at level 2 varied in relation to the outcome being tested. For models predicting YES engagement, the caseworker at discharge was used at level 2. For models predicting recidivism, the caseworker at YES start was used as the level 2 nesting variable for YES youth while we continued to use the caseworker at discharge for non-YES youth. This choice of caseworker allowed us to group youth within the caseworker who was most proximal to the window in which recidivism may have occurred and the last caseworker the youth would have had contact with through DYS.

Exploration of Moderators

When testing models related to RQ1 and RQ3, we tested all possible bivariate interaction terms to examine whether the link between covariates and our outcomes of interest differed based on other variables in the model. Results suggested there were no significant moderation terms in either the RQ1 or RQ3 models.

Sensitivity Analysis

As previously noted, there were 31 youth discharged in 2018 who had an arraignment within one year of discharge, but the case was not resolved as of the date the current analyses began (May 1, 2021). To examine the effect that excluding the 31 unresolved cases had on our results we conducted three sensitivity tests on our primary model predicting recidivism (Model 4; described below). In the first test, we gave all 31 youth a recidivism score of "1." In the second

test, we gave all 31 youth a recidivism score of "0." In the third sensitivity test, we used propensity scores to predict the probability of recidivism in the 31 youth. If their propensity to recidivate was higher than the mean propensity score of the entire sample, they were given a score of "1" on the recidivism variable. If their propensity to recidivate was less than or equal to the mean propensity score, they were given a score of "0."

Thematic Analysis of Qualitative Interviews

Interviews with caseworkers were transcribed and uploaded to Dedoose. The 17 interviews were deductively coded and thematically analyzed for caseworkers' mentions of relationships, relational supports, navigational supports, caseworker characteristics and youth characteristics that caseworkers believe might be related to whether a youth says yes to YES (Braun & Clarke, 2006). We also allowed codes to emerge from the data, such as external conditions caseworkers identified that might affect youth decision making.

RESULTS

Research Question 1 (RQ1): Characteristics of Participating Youth

More than 45 variables were considered for inclusion in our models assessing the relationship of youth and DYS characteristics with YES engagement. Each variable was first reviewed descriptively within the total sample, YES sample, and non-YES sample for accuracy and validity. Initial descriptive differences between YES and non-YES youth were noted. Following our review of descriptive statistics, a list of variables was generated that included 1) variables descriptively and theoretically associated with YES engagement and 2) any additional variables that were highlighted in our descriptive review, but did not necessarily demonstrate an immediate theoretical link with YES participation.

It is important to highlight that for two sets of variables of interest - YLS scores and variables related to caseworker notes - approximately half the RQ1 sample had data available. Therefore, we did not include YLS scores or variables related to caseworker notes in the RQ1 model that was used to generate the propensity scores. We did, however, generate separate models to consider the role of YLS scores and caseworker characteristics in YES engagement.

What are the characteristics of youth who engage with YES?

In the first RQ1 model, based on the complete sample, 15.8% of the variance in YES engagement was accounted for by individual characteristics and 5.1% of the variance accounted for by caseworker characteristics. Together, these characteristics included:

1. Gender
2. Race/ethnicity
3. Region
4. Offense grid

5. Commitment length (≤ 6 months vs. > 6 months)
6. DCF involvement
7. Age at discharge ($= 21$ years old vs. < 21 years old)
8. Discharge year
9. Caseworker upon discharge from DYS

Results suggested differences in YES engagement in relation to gender, race/ethnicity, region, commitment length, and the age and timing of discharge. The probabilities below are reported based on the average Marginal Effects at the Means (MEMs), which holds all other variables at the mean when producing the predicted probability for a variable. Importantly, although there are some significant differences in predicting YES engagement, the overall picture is that YES is an opportunity being equitably offered to youth throughout DYS. Complete model results are available in [Regression Table 1](#).

- Being female was by far the strongest predictor of YES engagement (OR = 3.14, $p < .001$, probability $> .99$)
- Black youth were more likely than White youth to engage in YES (OR = 1.57, $p < .01$, probability = .67)
- Geographic differences in YES engagement suggested that, when compared with youth in the Southeast, which had the lowest rate of YES participation, youth in the Northeast region were most likely to engage in YES (OR = 3.36, $p < .001$, probability = .98), followed by Metro (OR = 2.31, $p < .001$, probability = .60) and Western (OR = 2.18, $p < .001$, probability = .55).
- Youth who were discharged at age 21 were less likely to engage in YES than youth discharged before age 21 (OR = .25, $p < .001$, probability = -.83)
- Youth who were committed six months or less are more likely to engage in YES than those committed for more than six months (OR = 1.33, $p < .05$, probability = .61)
- The probability of YES engagement increased in 2018 (OR = 2.02, $p < .001$, probability = .80) and 2019 (OR = 1.88, $p < .01$, probability = .73) when compared to prior years

The results of this model were used to generate a propensity score methodology that was used throughout the models that follow. [Descriptive Table 3](#) presents the RQ1 variables for youth with the highest propensity to engage in YES (propensity score $\geq .80$) and the youth least likely to engage in YES (propensity score $\leq .20$). From this table, we observe that the youth most likely to engage in YES tend to be female, Black or Hispanic, from the Northeast region and are discharged before age 21.

Are youth risk profiles related to YES engagement?

At the time of this report, the YLS was administered at several predetermined timepoints throughout the youth's commitment with DYS. While the YLS became a standard assessment in 2015, it was not widely and consistently used until 2017. In addition, youth who were committed for a shorter period of time also may not have an opportunity for YLS administration. Due to these limitations, among our sample of 1,627 youth, 815 had YLS

scores available. In the current model, we considered the links between YLS scores and YES engagement. We accounted for the effects of differential YES uptake and, to preserve power, propensity scores generated from the RQ1 model were entered as a covariate in the current model. Complete model results are available in [Regression Table 2, Model 2](#). In all, for this model, youth characteristics and youth risk profile together accounted for 18.4% of the variance in YES engagement. Caseworker characteristics accounted for an additional 1.3% of the variance.

- Results suggested that higher Substance Abuse (OR = 1.18, $p < .05$) and Personality (OR = 1.15, $p < .05$) scores at intake were associated with an increased likelihood of engaging in YES.
- Antisocial Attitudes were linked with a lower probability of YES engagement (OR = .70, $p < .001$)

Research Question 2 (RQ2): Relationship of Youth with Caseworkers

Are caseworker characteristics related to YES participation?

Given that the current analyses relied heavily on caseworkers' electronic case notes, and electronic recording of case notes began in 2015, only youth who were committed to DYS in 2015 or later were included in the current analysis of the relationship between caseworker characteristics and YES participation. For this analysis, we focused on youth who were committed in 2015 or later and who had at least 40 recorded case notes. These criteria resulted in a final sample of 629 youth. To account for the effects of differential YES uptake and to preserve power, propensity scores generated from the RQ1 model were entered as a covariate in the current model.

- Results suggested that caseworker sentiment scores were positively related to YES engagement (OR = 3.57, $p < .01$). Complete model results are available in [Regression Table 3, Model 3](#).

Among the caseworker characteristics we were able to test, sentiment scores were the only significant predictor of YES engagement. For youth with sentiment scores one standard deviation above the mean, the probability of YES engagement was .93; for youth with sentiment scores one standard deviation below the mean, the probability of YES engagement was only .05. In all, 15.9% of the variance in YES engagement was accounted for by individual characteristics and 16.0% of the variance accounted for by caseworker characteristics. This sentiment score analysis provides a novel way to examine the case notes from the caseworkers. However, because this is novel, we would recommend using these results as a conversation starter about relationships between caseworkers and youth, not as insights from which to directly make changes to the way caseworkers write their case notes.

How do caseworkers talk about YES?

All interviewed caseworkers describe their role in DYS as being charged with caring for and monitoring offending youth from the time of their commitment through their transition back into the community:

"We're in charge of working with youth from the date of commitment, when they're in custody, throughout treatment, and then after treatment through the community." - *Mia*³, F, 10+ years with DYS

"We are the ones that have direct contact with our kids and with our families, with providers, throughout their entire time with the department, so from the day they get committed until the day they age out, or you know, whenever they're done their YES agreement, we do assist with just ensuring they're doing their treatment properly, we are kind of the hard line when we need to be as well...But we also get to be first hand witness to their growth and their progress as individuals, which is by far the best part of the job." - *Emilio*, M, 5+ years with DYS

They see the YES initiative as the necessary end portion of the DYS treatment continuum and the time where they feel youth tend to go through the greatest amount of growth (e.g., achieving their own goals) in their eyes. All interviewed caseworkers feel strong relationships do result most often in youth agreeing to staying on with the YES initiative.

However, themes arose from interviews:

1. Caseworkers start laying the foundation for YES long before youth are eligible for YES,
2. there are key points about the YES initiative caseworkers tend to highlight, and
3. there are several factors external to youth, the caseworkers, and their relationship that affect youth decision making about participating in YES.

Relationship Building: The Foundation for YES

All interviewed caseworkers describe spending their time with youth during commitment, building a relationship based on consistency and support. Caseworkers utilize check-ins and downtime with youth (e.g., car rides) to get to know youth's goals, backgrounds, relationships that are external to DYS, and life interests while ensuring youth meet their treatment requirements. The majority of interviewed caseworkers spoke about how: relationship building with youth takes time; they approach youth with the understanding that youth have agency to engage in or ignore the relationship; that youth have other important relationships and contexts that affect their behavior and decision making in their relationship with their caseworker; and that youth's needs often change over time. Caseworkers describe how the relationship they build with youth and how well they understand youth's goals, background, other relationships, and interests is foundational to youth saying yes to YES. Therefore, the

³ All caseworker names have been replaced with pseudonyms to protect their individual identity. Their gender and reported years of experience (in increments of 5 years) is also listed after each quote.

process of introducing youth to YES, from the perspective of caseworkers, begins at the time of commitment and persists throughout commitment.

"So what I tried to tell them is if you sign on as a YES, we have a relationship, I have always been honest with you....this moving forward is on a volunteer basis, you can terminate at any time... we're just here to provide you with the support that we feel that you are aware that you need. And many times they sign on for at least three months to see how it goes." - *Lilian, F, 15+ years with DYS*

"So for me...it's a part of when I meet a kid for the first time. I'm kind of running down, explaining the whole DYS process, I explain right down to the YES and everything like that. So... it usually starts the day I meet the kid... but when they start getting closer and closer to aging out, a lot of times they bring it up, they say, "Oh, I wanna... I still am interested in that program." - *Leon, M, 15+ years with DYS*

Essential Elements of Pitching YES

All caseworkers described the following elements when asked about how they describe YES to youth:

- **Centering youth goals and interests.** Caseworkers feel the strength and quality of relationships they are able to build with youth across commitment provides them with the information on youth's goals and strengths as well as the understanding of youths' experiences in and outside of DYS they need to make an effective YES pitch.
- **Describing shifts in power and role for youth.** Caseworkers emphasize to youth that the script is really flipped for youth in developmentally appropriate ways when they move from being mandatorily to voluntarily involved with DYS. For example, caseworkers describe how during YES, youth are in charge of their own treatment plan and goal setting as opposed to caseworkers or others driving those decisions and that they can terminate at any time - which makes sense for someone over 18.
- **Emphasizing non-punitive, community-based support.** Caseworkers describe the feeling that no matter how they present themselves while youth are committed, youth see them as an extension of a system that they have experienced as punitive. In pitching YES, caseworkers let youth know that they are no longer going to be checking in on them in a way that might feel punitive, instead they are taking somewhat of a step back to let youth exercise all the agency they want in their lives, but offer to still stay as on as a community support.

"When we're pitching it, the first thing that we're essentially telling our clients is that 'look this is a voluntary service. This is a lot different than you're being committed to the department. We're now your friendly human service agency out in the community that's willing to continue working with you up until the age of 22 in regard to all these different end goal areas...' when they hear that there's no more treatment time, that already automatically gets them to buy in, and the fact that they're empowered, because it's basically based on choice. It's all voluntary. And they have the choice, the empowerment, in their position to be able to eliminate services at any time or to continue.... I believe the ability to have that control is really huge... But I think the biggest

part is the relationship that they built with the worker that really solidifies the foundation on whether they're planning on signing on or if they don't plan on signing on. If they have a good relationship, the chances are, they're most likely going to sign up."

- Xavier, M, 1+ years with DYS

"As soon as the youth gets committed, we can discuss the services that they would have while they're committed. And then the continuation of once they age out of the system that we can still be a resource for them, whether it be through education, supportive services, independent living... that it just doesn't end when they turn 18 or 21... we're not just gonna fade away and that we're always...there for support, and they can end it...if they feel like they're done. 'I can't lock you up, you can't come in for revocation. I'm going to treat you as an adult. We review it every three months' ...whatever the goal is that the youth wants, that's what we'll be working on. And then three months, if they've met the goal...say if they wanted to get their permit, and they got that permit...then in three months if they want to look into Driver's Ed, we can do that on the next as we renew the YES. So it's just kind of a revolving or evolving goal system for them that's geared [towards] their goals, it's geared for what they want to get out of it...instead of us making the service plan, it's them making the service plan."

- Violet, F, 10+ years with DYS

Additional Conditions for Saying 'Yes' to YES

In addition to the relationship building skills of caseworkers and their general approaches to pitching YES, caseworkers identified a few factors that they report also affect youth decisions to say yes to YES.

- **Length of commitment.** Caseworkers felt youth who are committed within a year or less to aging out are less likely to have enough relationship building time to build the foundation for saying yes to YES.
- **Availability of resources in the community that align with goals, needs, and interests.** Caseworkers describe how some youth have goals and needs that extend beyond the available resources DYS can provide. In those cases it's unlikely a youth will say yes to YES. Additionally, availability of resources varies from region to region, which changes what goals caseworkers work with youth on from region to region and relies heavily on individual caseworker navigational abilities.
- **Previous system involvement (i.e., DCF).** Caseworkers felt a significant factor in youths' decision making is having a previous negative system experience. Caseworkers feel if youth are eager to "get away" from systems, they are more likely to decline YES regardless of their current relationship with their caseworker or if DYS can provide resources they are interested in or might need.
- **Existence of additional contexts that are misaligned with DYS goals and values.** Caseworkers felt if a familial, work, friend, school or other context youth frequently engage in has values, goals, and activities that are at odds with DYS or discourage youth from engaging with DYS, that would encourage youth to decline YES.

Importantly, these factors emerged independent of quantitative analyses. Two of the factors identified by caseworkers in interviews that impact YES engagement, length of commitment

and previous system involvement, were also found to significantly predict YES engagement with JJEMS data.

"...The ones [youth] that get committed that only have like six months total in DYS and then that's it, and then they age out- those are the harder ones to try to sell the signing on for because they're just like, 'I'm going back to what I was doing. No one's going to tell me what to do.' And that's when you have to pitch it to them like, well, we can't bring you back into custody. You know, we're gonna sit here and we'll be able to help you even if it's just one month, why don't we see what one month has to offer you?" - Jasper, M, 10+ years with DYS

"... I've seen that kids that are committed right before the age of 18- So they haven't really built up good rapport with a caseworker just because there hasn't been a time involved. Those kids tend to not want anything to do with the YES program in my experience. So I think their reactions tend to depend on their prior experience with DYS. But I think a lot of kids that have had a caseworker...and have been able to build a rapport with that person, they're definitely more likely to say like, 'Hey...I still want to have you in my life' and like, give that a shot." - Ava, F, 15+ years with DYS

Research Question 3 (RQ3): Outcomes of Participating Youth

To address RQ3, we used the model developed under RQ1 to generate propensity scores for the youth with recidivism data (N=1,360). To preserve power and account for differential YES uptake, we used the propensity scores as a covariate in all models. Missing values were handled with listwise deletion. The probabilities below are reported based on the average Marginal Effects at the Means (MEMs), which holds all other variables at the mean when producing the predicted probability for a variable.

Is YES engagement related to recidivism?

Prior to testing our analytic model, we observed that, from a descriptive standpoint (see [Descriptive Table 4](#)), YES participation is consistently related with lower recidivism between 2012-2018 with the notable exception of 2017. In our first analytic model addressing RQ3, which looked at the relationship between YES engagement and recidivism, YES engagement was associated with a significant decrease in the probability of recidivating (OR = .76, $p < .05$, probability = -1.30).⁴ For youth who engaged in YES, the odds of recidivating decreased by 24%. This model, however, accounted for less than 1% of the variance in recidivism at the youth level and 3.8% of the variance in recidivism at the caseworker level. The complete model results are reported in [Regression Table 4, Model 4](#).

⁴ Results of sensitivity analyses used to examine the effects of excluding the 31 youth discharged in 2018 with unresolved court cases suggested that, under our first sensitivity test, in which we assumed that all 31 youth recidivated, the relationship between YES participation would be marginally significantly related to lower recidivism (OR = .79, $p = .08$). Under our second sensitivity test, in which all youth were assumed to have NOT recidivated, YES participation was associated with lower recidivism (OR = .76, $p = .045$). Under our final sensitivity test, in which we used propensity scores to assign recidivism, the YES participation was, again, associated with lower recidivism (OR = .74, $p = .02$).

In our second model considering the link between YES engagement and recidivism, we wanted to account for additional variables that were associated with recidivism, but not YES engagement. To determine this list of variables, we used the same approach described under RQ1. Through this process we identified a list of variables that 1) demonstrated a statistically significant univariate relationship with recidivism and 2) were NOT included in the propensity scores generated from the RQ1 model. As such, in our second model of recidivism, we also included the following variables: offense type and English as primary home language.

In adding these additional covariates to the model predicting recidivism, the relationship between YES engagement and recidivism was no longer significant (OR = .80, $p = .11$)⁵. The complete results of this model are reported in [Regression Table 4, Model 5](#).

Are youth's experiences in YES related to recidivism?

There were a limited number of variables that provided insights into youth's experiences while enrolled in YES. We did, however, have data related to:

- 1) age at YES termination,
- 2) youth educational attainments while enrolled in YES,
- 3) race match with YES caseworker,
- 4) gender match with YES caseworker, and
- 5) YES caseworkers' years of service.

A total of 596 youth had sufficient data to be included in this model, which accounted for 10.8% of the variance in recidivism at the youth level and 7.6% of the variance in recidivism at the caseworker level. The complete results are reported in [Regression Table 5, Model 6](#).

- Youth who terminated YES at older ages were less likely to recidivate (OR = .74, $p < .05$). For youth who terminated YES at age 18, the probability of recidivating was .25. Youth who terminated YES after age 20, however, had a .12 probability of recidivating.
- Youth who had an education attainment while enrolled in YES were also significantly less likely to recidivate (OR = .35, $p < .05$, probability = .09). Youth who made an educational attainment during YES had a .10 probability of recidivating compared with a .23 probability of recidivating among youth without an educational attainment during YES.
- There was a small, marginally significant negative effect of the caseworkers' years of service, suggesting that youth with more experienced caseworkers during YES were less likely to recidivate (OR = .97, $p < .10$).

⁵ Results of sensitivity analyses used to examine the effects of excluding the 31 youth discharged in 2018 with unresolved court cases suggested that, under our first sensitivity test, in which we assumed that all 31 youth recidivated, the relationship between YES participation and recidivism was not significant (OR = .82, $p = .15$). Under our second sensitivity test, in which all youth were assumed to have NOT recidivated, YES participation was marginally significant (OR = .79, $p = .10$). Under our final sensitivity test, in which we used propensity scores to assign recidivism, the negative relationship between YES participation and recidivism was marginally significant (OR = .77, $p = .06$).

- Race and gender match between the youth and caseworkers was not significantly related to recidivism

Consistent with how we examined the relationship between YES participation and recidivism rates, in Model 7, we accounted for additional variables that were associated with recidivism, but not YES enrollment (offense type and English as a primary home language). The significant effect of age at YES termination (OR = .74, $p < .05$) and marginally significant effect of caseworkers years of service (OR = .97, $p < .10$) remained. However, the previous significant effect of a YES educational attainment became only marginally significant (OR = .41, $p < .10$). Complete model results are reported in [Regression Table 5, Model 7](#).

RECOMMENDATIONS BASED ON FINDINGS

This mixed-methods study adds to the growing body of research on promoting positive transitions upon reentry for JJ-involved youth (Abrams, 2006, 2012; Dierkhising et al., 2019; Inderbitzin, 2009; Mathur & Clark, 2014; Sulimani-Aidan & Melkman, 2018). Specifically, this study conducted a preliminary examination of the Massachusetts Department of Youth Services YES Initiative, from a positive youth development frame, exploring relationships with caseworkers as key to participation. Using existing longitudinal data, this study's findings suggest that YES is offered equitably throughout DYS but there are significant differences in youth characteristics associated with YES participation, related to gender, race, age at discharge, geography, and length of commitment. YES participation was found to be consistently related to lower recidivism rates for every year except 2017. Additional analyses revealed that YES youth were less likely to recidivate if they terminated YES at an older age and had educational attainment across YES. Youth paired with more experienced caseworkers were marginally less likely to recidivate and case note sentiment scores could be tied to YES engagement. In interviews, caseworkers suggested that YES was the necessary end portion of their role in supporting youth; relationship building is foundational to getting youth to say yes to YES; and they identified external barriers, such as lack of resources available for helping youth achieve their goals, to youth engagement in YES. Taken together these findings point to the promising impact of the YES initiative on recidivism for some youth and that young people's relationships with their caseworkers are key to participating and gaining benefits from YES. However, this important first step in analyzing this transitional program from a positive youth development perspective shed light on several opportunities for improvements in data collected, future research, and policy implications for the YES Initiative.

Implications for Policy and Practice

- **Continue offering the YES Initiative.** The YES Initiative shows promise and should continue to be offered to all young people as they prepare to transition out of DYS commitment.
- **Create a consistent set of resources.** To increase consistency in how caseworkers offer the YES opportunity to youth and identify available resources and supports, there

is a need to create consistent, sharable resources and tools for case workers to use and distribute that describe services, resources, and community-based organizations that may help the young people achieve their stated education, employment, housing, health, clinical, case management, family management, and “other” goals.

- **Consider the power of peer influence.** Engaging youth who have been previously involved with the YES Initiative to provide testimonials (written or recorded), or to serve as program “ambassadors” may help additional young people “take a YES.”
- **Harness a young person’s web of support.** Parents, extended family, community members, and other key people in youth networks can be important partners in convincing youth to engage with YES; especially youth who are committed with less than six months to aging out or are eager to be independent from systems. Improving structures of support for, and encouraging caseworker interaction with, other adults in youth webs of support may help more youth say yes to YES and provide a more cohesive set of supports once the youth are back in their communities.
- **Build awareness and political will at the state and regional levels.** Share information about the YES Initiative at state-level leadership meetings (e.g., Governor’s Cabinet Meeting, staff-level meeting of state agency representatives). Inform mayors and town managers of the goals of the YES Initiative, encouraging them to share contacts and information about available resources with caseworkers in their regions.
- **Designate agency-level “navigators”.** Oftentimes, caseworkers connect young people with services based on who they know. Having each state agency, and/or their regional offices designate a person who is part of the YES Initiative network and will respond to inquiries from case workers in a timely manner may increase utilization and awareness of services and supports.

Implications for Research

- **Analyze new YES indicators.** This study was conducted with a limited number of variables capturing each youth’s unique experience in YES. Adding additional indicators describing the YES experience in greater detail would allow for a better understanding of the differential efficacy of the various components of YES.
- **Dive deeper into relationships prior to YES.** Since caseworkers reported in interviews that relationship building is a priority across engagement with youth, more research should be conducted on understanding the relational development between caseworkers and youth from the time of commitment and throughout treatment. This research could be conducted from both the youth and caseworkers’ perspectives to gain a fuller picture than the one that could be obtained from focusing on only one perspective.
- **Develop and implement a PYD mindset survey.** Some caseworkers commented on deficit mindsets being a barrier to YES engagement. Caseworkers’ mindsets and orientation towards youth, in general, may be important for understanding variation across caseworkers with YES cases.
- **Analyze longer-term impacts on educational and workforce outcomes.** This study contributes to the limited existing research on transitional programs for JJ-involved

youth. Connecting this program to longer-term educational and workforce outcomes would provide a more comprehensive picture of the full impact of DYS' approach to working with offending youth.

- **Collect and analyze data from youth and regional managers.** This study was conducted with existing secondary data and original interview data with caseworkers. However, the perspective of youth is necessary to understand how to better leverage peer support across JJ-involvement. Given how resources vary from region to region, interviews with regional managers are essential for understanding the approach to gaining and the reality of providing resources for YES youth.

Implications for Data

- **Modify case notes to include more relationship data.** Caseworkers tend to fill out case notes in a decontextualized tone, making it difficult to use case notes to understand relationship building and progress and setbacks across youth. Slight modifications to the case notes template could lead to a more robust understanding of the caseworkers and youth relationships. For example, instructing caseworkers to include the relationship to youth for each person named in case notes (for example, instead of saying client talked about Mark and Sarah, say client talked about uncle and therapist) would allow for pulling out types of relational interactions youth are having in their network. As another example, adding net promoter scales for satisfaction or perception of progress (e.g., scale of 1-10 satisfied with how this check-in went, or 1-10 if any progress was made) can provide ongoing indicators of how each check-in is going and a long-term view of the trajectory of youth relationships with caseworkers.
- **Add additional data elements for YES goals.** Currently, caseworkers are required to report the "reason" why youth sign onto YES to understand the impact of YES on goal pursuit and attainment, caseworkers could provide more specific information about the actual goals youth are setting, if youth reach those goals, and how caseworkers support youth to reach those goals.
- **Link resources to individual youth in YES.** Along with more robust goal setting data, data that captures which specific resources to which YES youth are connected (e.g., which clinical psychologist or housing community,) and for how long would allow for the inclusion of dosage and duration variables in examinations of YES.
- **Integrate more outcome data that go beyond recidivism.** Given the indication from this study that educational attainment plays some role in recidivism, and to align with more recent calls in the field of youth development to move beyond recidivism as the sole outcome for justice involved youth, integrating education and workforce data with JJEMS data would allow for fuller examinations of the effects of the YES initiative.
- Look at redundancies in data elements. Due to the length and history of improvements to this program, the research team found some data elements that overlap or repeat. Auditing and reducing redundancies would allow for more streamlined analyses of JJEMS data, especially of third party researchers.

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The CERES Institute for Children & Youth at Boston University Wheelock College of Education & Human Development is dedicated to community-engaged research and evaluation. Our work is premised on the belief that the best solutions for strengthening programs for children, youth, and families emerge by authentically partnering the expertise in communities with the expertise of community-engaged researchers and evaluators. Through a co-constructive process, communities and community-engaged researchers can identify the core problems that young people are facing, design solutions that capitalize on the inherent assets of young people and their communities, and continually learn and improve on these solutions until positive education and life outcomes are realized for all. Importantly, these partnerships should result in community-based organizations building their internal capacity to learn and improve.