

A Cross-Comparison Study of Reentry Intervention and Support for Engagement: Findings on Youth With Disabilities

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Sarup R. Mathur, PhD¹, Heather Griller Clark, PhD¹, and Jeff M. Gau, MS²

Abstract

This article presents the findings of a 2-year-long quasi-experimental study of post-release engagement and recidivism for youth with disabilities. The effects of specialized Reentry Intervention and Support for Engagement (RISE) for youth with disabilities were compared with two other groups: (a) youth with disabilities who received traditional special education services, and (b) youth without disabilities who received traditional general education services in a juvenile correctional facility. Regardless of group, participants who were engaged in the community 30 days post-release were more likely to be engaged at 120 days and less likely to recidivate than nonengaged participants. However, compared with the two other groups, participants who received RISE services were more likely to be engaged in the community at 120 days post-release and have significantly lower rates of recidivism. We conclude our study by examining limitations, suggestions, implications for practice and policy, and future research.

Keywords

transition, person-centered planning, individualized, interventions, disorders/disabilities, continuum of care, adolescent, age group

To improve post-incarceration outcomes for youth with and without disabilities, juvenile justice (JJ) settings need to focus on providing personalized reentry support within and outside the JJ facility. Youth in the JJ system have complex needs: The prevalence rate of youth in the JJ system with a mental health disorder is 65% to 70%, which is 3 to 4 times higher than the general youth population (Development Services Group, 2017), and 35% to 50% have special education (SPED) needs calling for individualized interventions (Quinn, Rutherford, Leone, Osher, & Poirier, 2005). Youth with disabilities come into contact with the JJ system at an earlier age, stay for a longer period than youth without disabilities (National Disability Rights Network, 2015; Zhang, Barrett, Katsiyannis, & Yoon, 2011), and experience additional challenges as they reintegrate back into the community. To counteract this trend, facilities need to provide youth-focused programming, systematic planning for release, and personalized supports to bolster reentry success (Gagnon, Barber, Van Loan, & Leone, 2009; Griller Clark, 2018; Schubert & Mulvey, 2014) for youth with disabilities (Bullis, Yovanoff, & Havel, 2004; Griller Clark, Mathur, & Holding, 2011; Zhang et al., 2011).

Personalized reentry support includes pre-release planning in facilities, ongoing post-release community services, housing, mental health and substance abuse treatment, and

structured workforce preparation (Nellis & Hooks Wayman, 2009). When reentry programming concentrates on youth needs throughout, starting from their arrival at the facility and continuing until their stabilization back in the community, it tends to be more successful (Griller Clark, 2018; Kohler, Gothberg, Fowler, & Coyle, 2016; Test et al., 2009). Youth-focused programming is a strength-based approach where youth actively participate as partners in the planning, delivery, and evaluation of reentry services. Their voices are incorporated in setting goals and developing personalized plans for employment, education, and other treatment options (Gonsoulin, Darwin, & Read, 2012; Mathur, Griller Clark, Hartzell, Lacroix, & McTier, 2019). They receive personalized support from their transition specialist (TS) in self-determination of their reentry goals and coordination of the continuum of care (Griller Clark, 2018). This kind of programming requires time, commitment, and resources. Due to the lack of resources, JJ facilities usually rely on

¹Arizona State University, Tempe, USA

²University of Oregon, Eugene, USA

Corresponding Author:

Sarup R. Mathur, Arizona State University, Farmer 408C, Tempe, AZ 85287-1811, USA.

Email: sarup.mathur@asu.edu

providing traditional reentry supports using parole services that are not personalized and youth-focused and mostly depend on deterrence and surveillance and a one-size-fits-all approach.

TSs play a critical role in providing youth-focused programming to facilitate reentry for youth involved in JJ. Effective TSs are well versed in establishing interagency linkages and are knowledgeable about local resources. They know that many youth become apprehensive and anxious of their release date as it brings the realities of the past, poor family dynamics, negative peer influences, and job insecurity (Zajac, Sheidow, & Davis, 2015). Using their trust building and relationship skills, they serve as an intermediary between the JJ setting, home, schools, and the employment agency (Johnson, Mathur, Unruh, Griller Clark, & Xueqin, 2017). They also communicate and work with agencies to ensure the youth's success in school, work, and other treatment options after release. However, the quality and effectiveness of TS programming depend on a reasonable caseload. Zajac et al. (2015) highlighted that caseworkers and TSs in the JJ and mental health systems were unable to deliver their individualized intensive services when their caseloads were too high. As a solution, they recommended reduced caseloads for providers who were working with youth with complex needs but did not provide guidance for measuring a caseload threshold. The lack of research-based guidelines serves as an obfuscating factor in determining a reasonable caseload for TSs.

System-involved youth face numerous challenges in education and employment that may lead them toward further delinquency and adoption of reoffending trajectories. These challenges (e.g., homelessness, foster care, and gang involvement) can be more frequent and more intense for youth with disabilities (Johnson et al., 2017). Therefore, youth with disabilities need additional supervision and intensive pre-release and post-release supports, from the time they arrive at the facility through their reintegration in the community. Because youth in JJ are not a homogeneous group, their offending trajectories vary considerably by individual factors (e.g., criminal history, mental health needs, life events, and social and environmental factors, such as poverty and unemployment) (The Council for State Governments [CSG], 2017; Johnson et al., 2017; Piquero, 2008). It is therefore critical that reentry programming is youth-focused and considers an individual's specific risks and needs. The purpose of this programming is to increase the chances and opportunities for youth engagement and productivity and decrease recidivism. Although reentry programming has the potential to thwart some delinquent behavior, several young adults continue to offend despite receiving the programming. More research is desirable to explore the effectiveness of reentry programming that promotes engagement and reduces recidivism in youth with disabilities. JJ facilities can benefit from this research and

develop a thorough understanding of intervention components associated with desistance, engagement, and other positive outcomes for specific youth groups (e.g., youth with disabilities and youth without disabilities).

Predictors of Recidivism

Recidivism refers to reoffending or relapsing into criminal behavior measured by return to custody. It usually occurs within a few days of release due to gaps in aftercare services. Although the juvenile arrest rates have declined significantly in the past decade, the recidivism rate is as high as 80% in some states 3 years after release from incarceration (CSG, 2019). Studies have shown that students who exhibit behavioral issues and low academic performance are more likely to recidivate (Katsiyannis, Ryan, Zhang, & Spann, 2008). Blomberg, Bales, and Piquero (2012) found that youth in secure care who had above average academic achievement were more likely to return to school after release. Research on disproportionality has also indicated that minority status and race are predictors of rearrest (Stanz & Tewksbury, 2000). Poverty, mental health diagnoses, educational failure, family stress (e.g., single parent home, substance or physical abuse, and coercive styles of family interaction), deviant peer affiliations, a lack of moral guidance, and limited recreational or vocational opportunities have been identified as risk factors for youth disengagement that can negatively influence reentry success (Shader, 2003). Pathways to Desistance—the largest longitudinal recidivism study of serious juvenile offenders—found that these criminogenic risk factors were higher for youth in JJ with certain mental health problems (affective disorders, substance use disorders, and anxiety disorders). Of all these risk factors, substance use disorder has been found to be associated with higher rates of rearrest, more self-reported antisocial activity, and less time spent engaged (Schubert & Mulvey, 2014). Although these kinds of studies explore how certain risk factors may affect recidivism, no single risk factor, whether internal (within the individual, such as difficult temperament) or external (in the family, school, and community) can accurately predict which individuals will engage in delinquent behavior. Many youth, despite exposure to risk factors, have enough protective factors to interrupt the development of antisocial or delinquent behaviors and assist them in adopting healthy lifestyles (Barton & Butts, 2008; Fergus & Zimmerman, 2005).

Protective Factors

While most studies on youth reentry and recidivism have focused on risk factors (Borum & Verhaagen, 2006), protective factors are equally important to consider when predicting recidivism and designing and implementing reentry programs that enhance engagement (Lodewijks, de Ruiter,

& Doreleijers, 2010). Protective factors are characteristics or attributes that foster healthy development and positive choices (Duke & Borowsky, 2015; Sameroff, 2009). They counterbalance risk factors by lowering the likelihood of an undesirable outcome and minimizing the impact of risk (Vincent, Guy, & Grisso, 2012). Factors that lower the probability of delinquency include optimism, social supports, self-confidence, and motivation to succeed (Mowder, Cummings, & McKinney, 2010). Researchers have noticed buffering effects of these protective factors over risk factors and have suggested that reentry programming that combines youth strengths with needs is likely to produce better youth outcomes (Soderstrom, Childs, & Frick, 2019).

Resilience. *Resilience* refers to how well individuals adapt to or overcome obstacles (Masten, 2014). Regardless of difficulties, individuals with an innate drive to succeed are likely to be persistent in their goals (Festinger, 1984) and persevere through challenges (Ungar, 2012). Resilience is bolstered through conflict resolution, social skills training, cognitive restructuring (Sahler et al., 2013; Songprakun & McCann, 2012), and youth involvement in self-determination and self-regulation (McCarty & Atkinson, 2012). As a strength-based framework, reentry programming focuses on how risk factors influence youth development while highlighting resources that help youth overcome these risks (Fergus & Zimmerman, 2005; Zolkoski & Bullock, 2012). Reentry programming that fosters engagement can help young adults cope with and overcome risk factors, avoid the JJ system, and enhance their likelihood of becoming productive citizens.

Engagement as a protective factor. Youth engagement—a protective factor—is used to measure reentry success (Bullis et al., 2004; Griller Clark et al., 2011; Zaff, Ginsberg, Boyd, & Kakli, 2014) and has been associated with positive youth outcomes such as employment or school enrollment upon release from a JJ facility. Engagement is not static, but rather multidimensional and fluid over time (Fredricks, Blumenfeld, & Paris, 2004; Sinclair, Christenson, Lehr, & Anderson, 2003). Based on an ecological framework, engagement evolves through transactions between personal and community-related factors. These transactions occur between various social contexts—such as family, school, and community—and social processes, such as social interactions, communication, and relationships (Bronfenbrenner & Morris, 1998).

Positive and prosocial engagement is the goal of reentry programming. Productive engagement is “a global construct of the motivation to engage in a variety of actions that have a positive valence and the behavioral expression of that motivation” (Zaff et al., 2014, p. 527). As a protective factor, engagement enables youth to overcome obstacles and leads them to pathways fostering resilience and positive outcomes. The role of the TS is to communicate and build

relationships with agencies to ensure the youth’s engagement in school, work, and other treatment options after release. Positive individual strengths and attributes (e.g., positive attitude and self-determination), positive social environmental influences (e.g., sense of community and school belonging), and positive social interactions foster engagement and improve youth development and well-being (Aisenberg & Herrenkohl, 2008). While youth involved in JJ encounter risk factors, they can develop resilience by getting productively engaged through youth-focused reentry programming.

Despite receiving reentry programming in JJ facilities, many young adults continue to engage in delinquent behavior. Thus, it is necessary to understand the critical intervention components that promote desistance and engagement. To conceptualize the resilience process, Reentry Intervention and Support for Engagement, or *Project RISE*, created a protective framework for youth with disabilities, which focused on providing enhanced supports for reentry and transition planning, a case management approach to reentry (ensuring early engagement in employment or education within 30 days of release), and extended long-term aftercare supports. This framework was based on national research and evidence-based practices from a previously funded project, the Arizona Detention Transition Project (ADTP) that served youth in a short-term facility. Results from ADTP suggested that youth with disabilities who received personalized and enhanced transition services in a short-term detention facility had lower recidivism rates. More specifically, if at 30 days participants were productively engaged in education or employment, they were 64% less likely to recidivate, had improved prosocial behaviors, and greater overall social engagement (Griller Clark et al., 2011). So the focus of *Project RISE* was to keep youth engaged through the 30-day mark. In addition, the *Project RISE* framework established systemic supports for effective interagency linkages and efficient transfer of records to promote youth engagement. These practices have been shown to be essential for reducing the impact of risk on negative outcomes. (See Mathur & Griller Clark, 2014, for additional details on *Project RISE*.)

Purpose

The first purpose of this study was to explore the effects of *Project RISE* on youth with disabilities aged 8 to 18 years in a secure care system in a Southwestern state. The second purpose was to compare the outcomes of engagement and recidivism for RISE participants with two groups of non-RISE participants. Specific research questions included the following:

Research Question 1 (RQ 1): Were youth in the RISE group more likely to be engaged longer after release than other groups?

Table 1. Demographic Characteristics by Study Group.

	Project RISE (<i>n</i> = 34)		SPED comparison (<i>n</i> = 38)		Non-SPED comparison (<i>n</i> = 40)	
Male (<i>n</i> , %)	31	91.2	36	94.7	36	90.0
Race/ethnicity (<i>n</i> , %)						
White	11	32.4	17	44.7	7	17.5
Hispanic	9	26.5	17	44.7	22	55.0
American Indian	0	0.0	0	0.0	3	7.5
African American	14	41.2	4	10.5	8	20.0
Age at entry (<i>M</i> , <i>SD</i>)	16.9	1.0	16.4	1.2	16.2	1.4
Risk score (<i>M</i> , <i>SD</i>)	29.21	15.89	27.61	16.80	30.99	13.86
Disability type (<i>n</i> , %)						
Learning disability	14	41.2	15	39.5	NA	NA
Emotional disability	20	58.0	20	52.6	NA	NA
Other health impairment	0	0.0	3	7.9	NA	NA

Note. RISE = Reentry Intervention and Support for Engagement; SPED = special education.

Research Question 2 (RQ 2): Were youth in the RISE group less likely to return to incarceration (recidivate) 2 years after release than other groups?

Research Question 3 (RQ 3): Were any other variables related to long-term engagement or recidivism? Did these relationships vary by group?

Method

Setting

This study took place at a state juvenile correctional facility located in a Southwestern state. The correctional facility operates and maintains the functions of custody, treatment, and education for adjudicated youth. The facility consists of 14 units: seven core treatment units and seven specialized treatment units. Of the specialized units, three are for substance abuse, two for mental health, and two for sexualized behavior.

The juvenile correctional facility operates as an independent school district. There were 200 instructional days per year organized into 6-week blocks. Each school day consisted of two class periods, each nearly 3 hr long. The facility had two fully functional classroom buildings and 15 teachers, including three SPED teachers and eight career and technical education teachers. Approximately 30% of the youth had SPED needs and 18% were English language learners. The average length of stay was 7 months.

Participants

At the beginning of 2017, 112 youth participants were selected for the study. The 112 participants (34 RISE, 38 SPED and non-RISE, and 40 non-SPED and non-RISE) were predominantly male (92%), minority (69%), and on average 16.5 years (*SD* = 1.2) at baseline. The most

common SPED category was an emotional disability (56%) followed by a learning disability (40%), and other health impairment (4%). Due to ethical constraints, youth were not randomly assigned to either the treatment or the comparison group prior to the inception of the study. Quasi-experimental comparisons were conducted across the following three study groups. Table 1 shows demographic characteristics by study group.

RISE group. *Project RISE* was conducted from 2013 to 2017. During the course of the project, approximately 1,500 youth were admitted to the facility. All 1,500 youth were screened for project eligibility. To be eligible for *Project RISE* youth had to (a) be newly committed, (b) have an Individualized Education Program (IEP), and (c) reside in the county where *Project RISE* is located after release. A report was created to automatically query the facility's database to identify youth who fit *Project RISE*'s eligibility criteria. Periodic manual checks verified that the report identified all eligible youth. Through this process, 45 youth with disabilities were deemed eligible. Parent/guardian consent and youth assent were obtained for all 45 RISE participants. However, only the RISE participants who had been released from the facility at the time of analysis were considered for comparison (*n* = 34).

A designated TS was hired and assigned to work specifically with *Project RISE* youth. The average caseload for the designated TS was 14 youth. The TS provided personalized services to all RISE participants during the project period. A project team—two university faculty, project director, and the superintendent of the JJ school—oversaw program development, implementation, and evaluation activities. *Project RISE* was implemented on multiple levels to effectively meet the academic and behavioral needs of these youth with disabilities. Collaborative processes were established both within and outside the facility with local schools,

Table 2. Differences in Availability of Services Across Study Groups.

Components	RISE	Non-RISE SPED	Non-RISE and non-SPED
Focus and emphasis	Education, employment, social, and emotional	Only education	Only education
	Case management and personalized coaching	N/A	N/A
Individualized goal setting	Individualized and intensive educational and vocational programming that follows IEPs and ITPs	N/A	N/A
	Planning starts at entry and continues after release	Planning starts at exit	Planning starts at exit
Systemic goal setting	Established seamless transfer of records and interagency linkages	N/A	N/A
	Portfolio development	N/A	N/A
Contact with transition specialist	Pre-release to post-release	Only pre-release	Only pre-release
Service delivery model	Until 22 years	Until 18 years	Until 18 years
	Small caseload, I = 14	Medium caseload, I = 30	Large caseload, I = 80
	Proactive	Reactive	Reactive
	Continuous review of ITPs and parole plan	Parole plan	Parole plan
	Individualized prosocial skill building	NA	NA
Responsible person	M2W transition curriculum	M2W transition curriculum	M2W transition curriculum
	Juvenile and adult	Juvenile	Juvenile
	Transition specialist and parole officer	Parole officer	Parole officer

Note. RISE = Reentry Intervention and Support for Engagement; SPED = special education; N/A = not available; IEP = individualized education program; ITP = individualized transition plan; M2W = Merging Two Worlds.

community colleges, and other treatment providers to facilitate outcomes. Specific components of *Project RISE* included (a) personalized case management approach, (b) individualized and systemic goal setting, (c) proactive service delivery, and (d) a long-term aftercare support. The TS contacted each youth at least once a week while in the facility to monitor progress toward transition goals, discuss and address any barriers, and provide necessary supports (coordination and communication with family, child welfare, and schools). In addition, post-release contacts were maintained at an average frequency of once every 15 days.

SPED comparison. SPED participants were newly committed youth who received traditional SPED services mandated by law. It was neither realistic nor ethical in this study to deny services to youth to obtain a true control group. Instead, project staff used systematic random sampling to select students from the pool of SPED students who were not RISE participants and who had received basic transition services during the same time period as the RISE youth. An Excel spreadsheet of individual identification numbers was generated, a random starting point was determined, and then every fourth identification number was chosen for participation. This group served as one of the comparison groups.

Non-SPED comparison. Non-SPED youth who were newly committed were also systematically randomly selected

from the pool of non-SPED students who received traditional general education and transition services during the same time period as the other two groups of students. See Table 2 for a summary of differences in services and intervention supports for the three study groups.

Measures

Outcomes. Two outcomes were selected for the study: (a) participant engagement status in the community at 120 days post-release, referred to as long-term engagement, and (b) recidivism. As facilities struggle with keeping long-term administrative data on engagement due to challenges involved in maintaining school and employment data, *Project RISE* decided to use engagement data for all participants for 120 days. Engagement data were obtained by the TS from the youth, family, parole officer, school, employer, and/or related service provider. Recidivism was computed as the number of days after the initial release date that a return to custody occurred (due to a parole violation or new charge), rather than just a dichotomous yes/no. This measure was collected during the 2-year follow-up using administrative data. As recommended by national JJ policy experts (Dempsey, Godfrey, Faulkner, Penkoff, & Gonsoulin, this issue), long-term engagement was emphasized as a positive youth outcome rather than focusing solely on recidivism as a negative outcome.

Predictors. Seven pre-release variables and one post-release variable were identified as study predictors (see Table 4). Pre-release variables consisted of grade point average (GPA), Age, Minority Status, Risk, Mental Health Diagnosis, Separation Referrals, and Merging Two Worlds. One post-release predictor was early engagement. Each is described as follows.

Academic achievement was identified as an influencing factor for reentry success (Katsiyannis et al., 2008). Thus, GPA was selected as a predictor and was defined as the GPA of credits earned while in the secure care facility.

Age of participant was the age of youth at the time of data collection.

Minority status was identified as a predictor based on research that has highlighted disparity in reentry outcomes and higher recidivism rates for youth from minorities (Rovner, 2016). It was defined as “yes” for youth identified as Hispanic, African American, Native American, or Asian and “no” for Caucasian.

Risk was measured by the Recidivism Risk Instrument (RRI), which ranges from 1 to 100. A score of 0 to 24.99 is considered low risk, a score of 25 to 44.99 is considered moderate risk, and a score of 45 to 100 is considered high risk (Williams, Lecroy, & Vivian, 2014). This measure is used as a standard practice in the facility to identify the risk levels of youth upon arrival. Psychometric information on this measure was not available.

Mental health diagnosis was defined as “yes” if the youth had a documented mental health diagnosis in his or her institutional data system and “no” if he or she did not. If needed, mental health services were provided in the amount and type specified in the youth’s facility treatment plan by clinical staff, contracted on-site health providers, and off-site health providers. RISE staff did not provide these services. In addition, the amount and type of service provided was not part of this analysis.

Separation referrals were the number of times a youth self-referred or was referred by staff to a Temporary Stabilization Unit. This unit is used to de-escalate and stabilize the behavior of youth who are at an imminent risk of substantial injury to themselves or others. Appropriate services were provided to youth according to the youth’s needs and the facility’s policies and procedures.

Targeted cognitive behavioral approaches addressing antisocial and delinquent behavior have been found to be beneficial in reducing recidivism (Clark, 2010). *Merging Two Worlds* (M2W) is a cognitive restructuring curriculum developed specifically to help students in JJ prepare for transition back to school, work, and the community (see Griller Clark & Mathur, 2015). Youth who took this class while in the facility were coded as “yes” and youth who did not take this class were coded as “no.”

The one post-release variable, *early engagement*, was defined as “yes” if the youth was engaged at 30 days

post-release and “no” if the youth was not engaged at 30 days post-release.

Data Analysis

Logistic regression was estimated with Mplus 7.4 reporting odds ratios (ORs) and 95% confidence intervals (CIs) were used to test whether study condition, pre-release to community predictors, and early engagement were associated with greater log odds of being engaged at 120 days. The ORs associated with dichotomous predictors were interpreted with the following convention: 1.48, small; 2.48, medium; and 4.28, large (Lipsey & Wilson, 2001). Cox proportional hazard models reporting hazard ratios (HRs) estimated with STATA tested whether the time to recidivate differed by study condition, pre-release to community predictors, and early engagement. The Breslow (1974) method was used to handle tied event times in the hazard models. Schoenfeld residuals were used to evaluate the proportional hazards assumption. Missing time to recidivate data were accounted for with right-censoring in the hazard models and 50 imputed data sets were used to account for missing 30- and 120-day engagement data.

Two sets of predictive models were estimated for evaluating engagement at 120 days and time to recidivate. The first set of predictive models tested difference due to study condition and included two a priori contrasts, RISE group (coded 1) versus the SPED comparison group (coded 0) and RISE group (coded 1) versus the non-SPED comparison group (coded 0). The second set of predictive models examined the unique effect of each pre-release to community predictors and early engagement while also adjusting for study condition assignment. Simultaneous entry of variables was used for all multivariate models.

Results

Preliminary Analyses

Groups were compared by demographic characteristics. Nongroup equivalency was found for age, $F(2, 111) = 3.30$, $p = .045$, and minority status, $\chi^2(2, 120) = 7.06$, $p = .029$; thus, these two variables were included as covariates in predictive models for the a priori study condition contrasts. Groups did not differ for risk score, $F(2, 111) = 0.46$, $p = .633$. Rates of missing data were 18% and 24% for 30- and 120-day engagement, respectively, and the missing completely at random (MCAR) assumption was tenable—Little’s MCAR test $\chi^2(1) = 0.16$, $p = .609$. Pre-release predictor data were available for all participants. Table 3 presents the correlations and descriptive statistics for all predictors.

Table 3. Correlations and Descriptive Statistics for Study Predictors.

Predictors	1	2	3	4	5	6	7	8
1. GPA	1.00							
2. Separation referrals	-.15	1.00						
3. Merging Two Worlds	-.10	.10	1.00					
4. Mental health diagnosis	.22	.20	-.20	1.00				
5. Early engagement	.01	.01	.07	.17	1.00			
6. Age	-.11	-.16	.01	-.05	.11	1.00		
7. Minority status	.04	-.05	.08	-.18	-.03	.02	1.00	
8. Risk score	-.05	-.01	-.03	.04	-.01	-.17	.22	1.00
Mean	2.38	15.76	0.49	0.33	0.64	16.46	0.69	29.29
SD	0.77	26.57	0.50	0.47	0.48	1.22	0.47	15.45

Note. Correlations greater than |.18| statistically significant at $p < .05$. Merging Two Worlds, mental health diagnosis, early engagement, and minority status are scored 1 for “yes” and 0 for “no”; thus, means reflect proportion “yes.” GPA = grade point average.

Table 4. Results From Logistic Regression Models Predicting Engagement at 120 Days.

Predictors	Estimate	SE	p value	OR	95% CI
GPA	-0.126	0.308	.683	0.88	[0.53, 1.46]
Separation referrals	-0.011	0.009	.246	0.99	[0.98, 1.01]
Merging Two Worlds	-0.956	0.498	.055	0.38	[0.17, 1.00]
Mental health diagnosis	0.007	0.502	.992	1.01	[0.44, 2.29]
Early engagement	1.299	0.509	.011	3.67	[1.59, 8.45]
Age	0.248	0.202	.218	1.28	[0.92, 1.79]
Minority status	0.220	0.528	.676	1.25	[0.52, 2.96]
Risk score	-0.019	0.015	.201	0.98	[0.96, 1.01]

Note. OR = odds ratio; CI = confidence interval; GPA = grade point average.

Engagement Models

At 120 days, 30 RISE youth (88.2%), 20 SPED comparison youth (52.6%), and 18 non-SPED comparison youth (45.0%) were engaged. Compared with the SPED comparison group, the RISE group had 385% greater log odds of being engaged ($OR = 4.85, 95\% CI = [1.57, 14.97]$) at 120 days, a statistically significant effect (estimate = 1.578, $SE = 0.688, p = .022$). Similarly, compared with the non-SPED comparison group, the RISE group had 598% greater log odds of being engaged ($OR = 6.98, 95\% CI = [2.29, 21.25]$) at 120 days, a statistically significant effect (estimate = 1.943, $SE = 0.679, p = .004$). The one post-release predictor, early engagement (see Table 4), significantly predicted engagement at 120 days post-release (estimate = 1.299, $SE = 0.509, p = .011$). Participants who were engaged early had 267% greater log odds of being engaged ($OR = 3.67, 95\% CI = [1.59, 8.44]$) at 120 days, a medium to large effect.

Recidivism Models

At the conclusion of the study, only four RISE participants (11.8%) recidivated compared with 20 SPED participants (52.6%) and 27 non-SPED participants (67.5%). Figure 1

shows the probability of recidivism at each month of the study for each study group. When compared across youth who recidivated, RISE youth took a longer time to recidivate (median = 50.5 days) compared with youth in the SPED (median = 13 days) and non-SPED groups (32 = days). Compared with the SPED group, the RISE group recidivism rate was approximately one tenth, a significant effect ($HR = 0.11, SE = 0.06, z = -3.89, p < .001, 95\% CI = [0.03, 0.32]$). Compared with the non-SPED group, the RISE group recidivism rate was approximately one eighth, a significant effect ($HR = 0.08, SE = 0.04, z = -4.33, p < .001, 95\% CI = [0.02, 0.24]$).

Early engagement was the only predictor that significantly predicted time to recidivate (see Table 5). Participants who were engaged at 30 days had a recidivism rate approximately one quarter of those who were not engaged ($HR = 0.25, SE = 0.07, z = -4.66, p < .001, 95\% CI = [0.13, 0.49]$). The proportional hazard assumption was met for all models.

Thirty-Day Engagement

Thirty-day engagement was significantly associated with long-term engagement and reduction of recidivism. Rate of

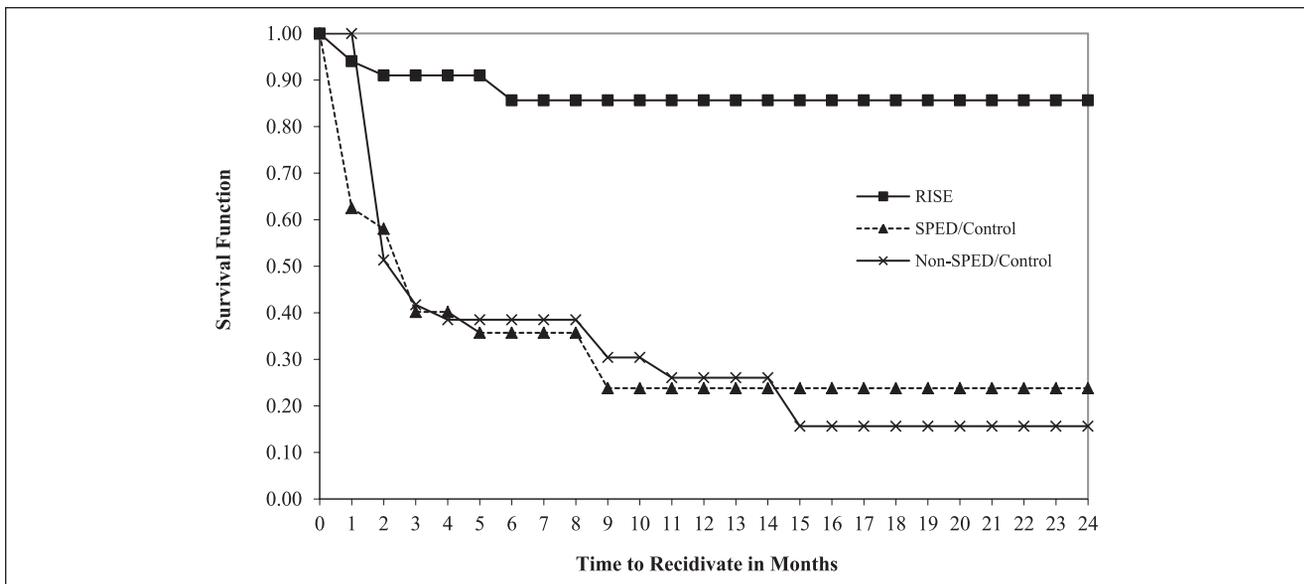


Figure 1. Survival functions for the three study groups.

Note. RISE = Reentry Intervention and Support for Engagement; SPED = special education.

Table 5. Results From Cox Proportional Hazard Models Predicting Time to Recidivate.

Predictors	Hazard ratio	SE	z value	p value	95% CI
GPA	1.02	0.21	0.12	.906	[0.69, 1.52]
Separation referrals	0.99	0.01	-0.97	.334	[0.98, 1.01]
Merging Two Worlds	1.31	0.36	0.95	.343	[0.75, 2.27]
Mental health diagnosis	0.67	0.22	-1.25	.212	[0.35, 1.26]
Early engagement	0.25	0.07	-4.66	<.001	[0.13, 0.44]
Age	1.15	0.14	1.16	.246	[0.91, 1.45]
Minority status	0.71	0.24	-1.00	.319	[0.36, 1.39]
Risk score	1.01	0.01	1.35	.176	[0.99, 1.03]

Note. CI = confidence interval; GPA = grade point average.

engagement at 30 days significantly differed by group, $\chi^2(2, 92) = 20.10, p < .001$, with 94% of RISE participants engaged at 30 days, compared with 44% of SPED comparison and 50% of the non-SPED comparison participants.

Discussion

This study compared the effects of RISE with two other groups: (a) youth with disabilities who received traditional SPED services, and (b) youth without disabilities who received traditional general education services in a juvenile correctional facility. The findings indicate that youth who were engaged in the community 30 days post-release were more likely to be engaged at 120 days and less likely to recidivate than nonengaged participants. Compared with the two other groups, RISE participants were more likely to be engaged in the community at 120 days post-release and had significantly lower rates of recidivism.

Difference in Long-Term Engagement Across Study Groups

RQ 1 addressed the differences across groups with regard to long-term engagement (120 days). Youth in the RISE group were significantly more likely to be engaged at 120 days compared with both the SPED and non-SPED comparison groups. In fact, the effect size was large for the RISE group compared with the SPED group ($OR = 4.85$) and even larger for the RISE group compared with the non-SPED group ($OR = 6.98$). The implications of this for youth with disabilities are astounding; when provided with individualized services and supports such as those offered in *Project RISE*, youth with disabilities fared better than their peers without disabilities. In addition, the services and supports provided by *Project RISE* showed a higher rate of engagement for youth with disabilities at 120 days than the predictor variable, early engagement ($OR = 3.67$). In other words,

the services and supports that *Project RISE* offered to assist youth with disabilities prepare for reentry and engage in school, work, and community activities were more effective at promoting long-term engagement than simply engaging youth immediately after release.

Difference in Recidivism Across Groups

For RQ 2, the results indicate that *Project RISE* participants were less likely to recidivate compared with the other two groups at 2 years after release. *Project RISE* participants were not only less likely to recidivate, but they also stayed out of the system longer. Youth who received *Project RISE* services showed desistance for a longer period, without reoffending through the 2-year follow-up, indicating maintenance of effects compared with the two comparison groups. This finding suggests that the transition services and the continuity of contact with the TS that youth in the treatment group received had a carryover effect after release (Griller Clark et al., 2011). These findings support our earlier research with students with disabilities in detention, which showed that early engagement reduced the likelihood of future recidivism by 64% (Griller Clark et al., 2011).

Early Engagement a Significant Predictor

With regard to RQ3, a 30-day engagement was the only significant predictor related to long-term engagement and recidivism. The relationship with 30-day engagement did significantly vary by group membership, indicating RISE participants engaged earlier when compared with the participants in the other two groups. The only predictor of recidivism, 30-day engagement, was checked at the 2-year mark irrespective of the study groups. This finding indicates that youth who are engaged at 30 days are approximately 75% less likely to recidivate than those who were not engaged. Participants who were engaged at 30 days had a greater likelihood to be engaged at 120 days. Youth receiving *Project RISE* services were even less likely to recidivate compared with youth in the other two groups. As mentioned earlier, in our previous study we found that youth in the treatment group who had received individualized services had a 64% lower chance of recidivating at 30-day post-release than their comparison group counterparts (Griller Clark et al., 2011). In addition to receiving individualized support in the facility, the availability of strong post-release support with a trustworthy prosocial adult, in this study the RISE TS, may have contributed to the lower rate of recidivism for the RISE group of participants.

This study adds to our understanding that given a seamless continuum of pre-release and post-release services and supports, youth in JJ can increase their chances of early

engagement with employment and education. As early engagement is a significant predictor of long-term reentry success, further investigation is needed in aftercare programming that includes supervised intervention and long-term contact to increase reentry success. Direct support for early engagement is critical (Schubert & Mulvey, 2014). Our predictive analysis has the potential to help develop conditions for maintaining contact after release to foster reentry success and forecast future success for youth reentry.

Extended Case Management

A case management approach that combines supervision with reentry strategies and supports that include extended follow-up and contact after release may create greater success for youth. A youth may view his or her release date as a disruptive and unpredictable event that brings the realities of the past, poor family dynamics, negative peer influences, job insecurity, anxiety, and isolation (Zajac et al., 2015). To prevent this, the JJ facilities need to consider providing a continuum of transition support that initiates at the time of entry and continues until the first 30 days after youth are released. This would also require facilities to increase awareness among school personnel and employment agencies of the importance of immediately engaging JJ youth in education and employment after they are released. As well, a reasonable caseload for the TS, that can be managed effectively, will increase the likelihood of success for reentry programs. In this study, the caseload for the RISE TS was approximately 14 youth at a given time, whereas for the other two groups it varied from 30 to 80 youth. It is encouraging to know that *Project RISE* worked for many young adults with disabilities, and the success can be attributed to continuity of individualized care beyond 30 days by a designated TS with a smaller caseload. However, the extent to which the specific program components and features can be adapted without jeopardizing outcomes is still unclear. This may need more research and further exploration to identify the components that are integral to the reentry success of youth and the ones that can be adapted.

Reentry success is determined by a complex interplay between youth, families, peer networks, neighborhoods, and available opportunities for education and employment (Bronfenbrenner & Morris, 1998; Zajac et al., 2015). Navigating systems of care and interacting with multiple service providers can be incredibly overwhelming. A designated, trustworthy TS can assist the youth with extended supports in navigating through these systems and getting reintegrated back into the community. Policies that support post-release implementation of services with oversight may foster youth reentry success.

Implications

This study provides the groundwork for future studies to support the implementation of RISE over time. Although this describes the implementation of a very specific programming and supports (RISE) that rely on low caseloads for TSs for success, it will be important for researchers and practitioners to further explore the adapted components that maybe more realistic for JJ settings.

While only focused on one setting, this study has implications for the design of reentry programs that maximize youth success in all JJ facilities. Our findings also indicate that program delivery should focus on 30-day engagement to have the largest, most direct effect on youth success and long-term engagement. Facilities can use this study to design more effective reentry programs to maximize youth's long-term engagement.

This finding has direct policy implications for reentry programming to promote early engagement and reduce recidivism. JJ facilities need to focus on intensive, individualized reentry supports that continue post-release for at least 30 days. More research is needed to gather a better understanding of the role the TS plays during the early engagement phase and in promoting long-term engagement and reducing recidivism.

Limitations

A weakness of the study is that participants were not randomly selected prior to the inception of the study, limiting generalizability. Study replication is needed to provide greater understanding for reentry of youth with disabilities. Due to the small sample size, the findings of this study cannot be generalized, as the academic focus, procedural guidelines, and programming implementation may differ in other JJ settings. Therefore, challenges in measuring program effectiveness and how to best deliver a reentry program to specific groups of youth still exist. As well, better understanding of which youth with disabilities may most benefit in the short and long term from reentry programming is still needed. Fidelity data and dosage information were not systematically measured other than having the TS report on a weekly basis on the progress or barriers in providing reentry supports. This may serve as a limitation of the study as we cannot distinguish between the actual times spent with youth across conditions.

Conclusion

Examining protective factors in the lives of youth in JJ represents a positive shift away from the deficit model that focuses on risk factors and their relationship with recidivism. This study adds to the literature by focusing on early engagement as a predictor for long-term reentry success. It

also highlights the importance of person-centered reentry programming that continues for more than 30 days after release (Griller Clark et al., 2011). To meet this need, rather than relying solely on parole officers, JJ facilities must be intentional in providing continuous reentry supports via a TS to youth with or without disabilities (Johnson et al., 2017). To navigate the systems and barriers necessary to productively engage in school and employment, youth need continuous support from their TS. Additional research is needed to examine the duration of engagement that prevents escalation of offending behavior. Finally, research is needed to clarify the definition of a reasonable caseload for a TS for continuous support of youth for at least 30 days post-release.

By thoroughly understanding predictors and their differential effects on various groups of youth in JJ (e.g., youth with and without disabilities, youth with and without substance abuse histories, and youth aged <18 or 18+ years), JJ facilities can further refine programming to increase each youth's reentry success. With a youth-focused continuum of care delivered by a designated TS, JJ facilities can improve their reentry outcomes (Johnson et al., 2017; Kohler et al., 2016). This predictive analysis has highlighted the importance of early engagement as a predictor with potential for forecasting future success of youth reentry.

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