

The Efficacy of the RENEW Model: Individualized School-to-Career Services for Youth At Risk of School Dropout

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Abstract: This article describes the results of a research project designed to assess the efficacy of a secondary transition model, RENEW (Rehabilitation, Empowerment, Natural supports, Education and Work), on the social and emotional functioning of 20 youth at risk of dropping out of high school using the Child and Adolescent Functional Assessment Scale (CAFAS) supplemented by a case study to illustrate one student's experience. The study indicates that youth who engaged in the RENEW process had significant improvements in functioning in school and at home, and overall positive gains in several behavioral health domains.

Introduction

There is evidence to indicate that the national high school dropout rate is increasing. A report on high school dropouts sponsored by the Gates Foundation (Bridgeland, DiIulio, & Morison, 2006) indicates that the high school completion rate in the United States is between 68-71 %, and that the dropout rate may be as high as 30%. This same study shows that the dropout rate approaches 50% for students who are African American, Hispanic, or Native American. The individual and social costs associated with dropping out are significant, including chronic unemployment and underemployment, higher rates of criminal involvement, greater health problems, and greater dependence on welfare and other public benefit programs (Rumberger, 2001).

In addition to significantly higher dropout rates among students from particular ethnic/minority groups, students are far more likely to drop out of high school if they are poor or if English is their second language (Lan & Lanthier, 2003; Rumberger, 1987). Further, students with disabilities drop out of school at rates twice as high as typically-developing students, and students with emotional disabilities drop out at rates between 35%-60% (Scanlon & Mellard, 2002).

Certain individual characteristics are also associated with a high risk of dropping out of high school, including poor functioning in certain behavioral health domains. Students who are having difficulty at home reflected by poor relationships with parents or frequent changes in residence are at high risk of dropping out of school (Suh, Suh, & Houston, 2007). Students who have academic or behavioral problems in school such as poor relationships with peers, truancy (absenteeism), learning challenges, grade retention, social and behavioral problems,

or negative school experiences are far more likely to drop out (Croninger & Lee, 2001; Cullinan & Sanbornie, 2004; Lane, Carter, Pierson, & Glaeser, 2006; Lehr, Hansen, Sinclair, & Christenson, 2003; Nelson, Benner, Lane, & Smith, 2004; Suh et al, 2007). Substance abuse among adolescents is also associated with higher rates of school dropout, as are mental health problems such as depression, suicide attempts or suicidal thoughts, and poor self-concept manifest in disordered thinking about oneself and others (Daniel et al., 2006; Nair, Paul, & Ramany, 2007; Townsend, Flisher, & King, 2007).

Without the proper supports and services, at-risk youth with emotional and behavioral challenges, substance abuse problems, and family challenges may feel detached from the social and academic aspects of the school. Students with emotional and behavioral disorders often misinterpret social cues and possess disordered thinking about their own abilities and social interactions, and thus have difficulties with the social and behavioral demands of school (Lane & Carter, 2006). Many students who drop out believe in external locus of control and may therefore see no utility to persist in their education (Suh & Suh, 2006). Most researchers agree that the act of dropping out of high school is the culmination of a long-term process of student disengagement (Lehr et al., 2003; Suh & Suh, 2006). As Christenson, Sinclair, Lehr, and Hurley (2000) indicate, "Increasing students' engagement and enthusiasm for school is much more than staying in school, and, thus, much more than the dropout problem—it involves supporting students to meet the defined academic standards of the school, as well as, underlying social and behavioral standards" (p. 211).

Interventions that include a strong school-tocareer transition framework that links schooling to longer term career goals (Benz, Yovanoff, & Doren,

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1997; Bullis & Cheney, 1999; Zigmond, 2006), and bring together multiple agencies, systems, resources, and plans so that the youth and the family can gain access to supportive services appear to have positive outcomes for youth who are at risk of dropping out of high school (Bullis & Cheney, 1999; Malloy, Cheney, Hagner, Cormier, & Bernstein, 1998). Dropout prevention or recovery interventions should also include supports that address the young person's need for control over the planning, development, and implementation of services that will lead to his or her expressed postsecondary goals, along with opportunities for successful academic and social experiences in order to build self-efficacy and the persistence to work towards graduation. There are few such individualized models, however, of services and supports that target both the academic and social needs of students with emotional and behavioral challenges (Carter, Lane, Pierson, & Glaeser, 2006; Wagner & Davis, 2006).

The RENEW (Rehabilitation for Empowerment, Natural supports, Education and Work) model was developed specifically to address the needs of high-risk youth for engagement with others, self-determination skill development, school-to-career planning and intervention, and individualized resource development. The model responds to the need for greater self-determination skill-building and student engagement. RENEW was originally developed and implemented as a transition to employment project for adolescents with serious emotional disturbance (Bullis & Cheney, 1999; Malloy & Cormier, 2004). Program evaluation data indicated that of the participants in this initial demonstration, 83% found employment, 67% completed high school, and 50% participated in postsecondary education or training activities. Involvement with law enforcement and corrections was substantially lower at the end of their participation than at the start of the project (Hagner, Cheney, & Malloy, 1999). Promising results were also reported from a demonstration of youth with disabilities transitioning from the juvenile justice system to the community (Hagner, Malloy, Mazzone & Cormier, 2008).

There is little empirical research of individualized, supportive dropout prevention and recovery interventions that build self-determination skills and positive experiences for high-risk youth (Lane & Carter, 2006; Lehr et al., 2003). The Check and Connect model appears to have the strongest evidence as a successful in-school strategy to build self-efficacy and engagement among students identified as at risk of dropping out of high school (Lehr, Sinclair, & Christenson, 2004). The literature, however, includes little research of the effects of school-to-career interventions with a self-determination component on the behavioral and community functioning of high-risk youth. The purpose of this study was to determine the effect of the RENEW model on how youth at risk of dropping out of high school function in school, home, and community, and on their behavioral health.

Method Participants

The project served a total of 46 students in the two high school communities between April 2003 and December 2005. Students were enrolled in the project based on the following eligibility criteria: (a) significantly below grade level in credits earned; (b) exhibiting significant behavioral problems; or (c) reentering school from an alternative school, juvenile justice placement, or residential treat-

ment program. Participation was not restricted to students eligible for special education services.

Given the open enrollment period of the project and the variety of circumstances of students (a portion of enrollees moved away, dropped out of school, or chose not to participate for varying periods of time), 20 youth were included in the study and completed 3 periods of data collection. The 46 youth who completed the personal futures plan were considered exposed to the intervention.

Table 1 describes the demographic characteristics of the 46 individuals who completed the futures plan, the 20 individuals who were included in the study who completed 3 full sets of data collection, and the 26 students who were exposed to the intervention but who were not enrolled in the study. Independent sample t-test and Chi-square tests were conducted to determine if there were any significant differences between students in the study and those who were not in the study. There were no significant differences in the demographic and academic characteristics of the youth from the two groups (see Table 1). There were 10 females and 10 males in the research cohort and the average age at enrollment of the 20 students was similar to that of the 26 who were not in the study. Four students (20%) of the 20 study participants were not of European-American descent, consistent with the percentages of all enrollees and a slightly higher rate for dropouts. Two of the 20 students (10%) were high school dropouts at the time of enrollment. The demographic characteristics of the cohort of 20 students were, in general, consistent with all enrollees and subgroups.

Setting

The RENEW data described here are drawn from a dropout prevention project entitled APEX (Achievement in Dropout Prevention and Excellence). The APEX project applied the three-tiered Positive Behavior Interventions and Supports (PBIS) behavioral support model (Carr et al., 2002; Sugai & Horner, 1999) as the dropout prevention strategy, with RENEW as the intensive (tier 3) strategy for students who were failing, who could not attend the regular high school program, who had dropped out, or who were otherwise at great risk of failing. The APEX project was implemented in two New Hampshire high schools with the highest dropout rates. One of the high schools is in a mill town in central New Hampshire, which had experienced significant job loss and a declining property tax base during the previous two decades. The high school is in a poor community and had an annual dropout rate of 16.8% the year prior to the start of the project, compared to the state average annual dropout rate of 5.8%.

The second high school was in one of the largest cities in New Hampshire, which had experienced significant growth in its immigrant and minority populations. The high school is located in the only New Hampshire region that was designated as an empowerment zone in the late 1990s due to a high concentration of poor families. This high school experienced an annual dropout rate of 10.8% when the APEX project was begun. The grant-funded study was embraced in both high schools as it provided a resource for reducing the number of school dropouts.

Procedures

Two full-time RENEW facilitators were assigned to each high school. Each facilitator received over 40 hours of training in the

Table 1

Demographic Characteristics of Participants

	All Freq (%) or Mean (SD)	Study Participants Completed One Year Follow-Up Freq (%) or Mean (SD)	Nonstudy Participants Freq (%) or Mean (SD)
n	46 (100%)	20 (43.5%)	26 (56.5%)
Gender			
Female	22 (47.8%)	10 (50%)	12 (46.2%)
Male	24 (52.2%)	10 (50%)	14 (53.8%)
Race/Ethnicity			
White	42 (91.3%)	16 (80%)	26 (100%)
Minority	4 (8.7%)	4 (20%)	0
Language			
English	45 (97.8%)	19 (95%)	26 (100%)
Spanish/Other	1 (2.2%)	1 (5%)	0
Age	14.8 (.67)	14.8 (.79)	14.9 (.58)
GPA	1.2 (.81)	1.3 (.64)	1.2 (.94)
Credits Earned	3.3 (2.13)	3.5 (1.05)	3.2 (2.21)
Attendance	173.5 (24.74)	175.4 (20.80)	172.0 (27.71)
Absence	34.1 (34.50)	40.2 (40.3)	29.4 (29.27)

RENEW process. Students were referred for RENEW services by the school's administrators, guidance counselors, special education staff members, and teachers. Eligible students were those who (a) were behind grade level in terms of credits (due to truancy or academic failure); (b) exhibited significant behavioral problems; (c) were returning to the community from an alternative school, juvenile justice, or residential treatment; (d) were, for behavioral, social, or academic reasons, unable to attend classes or a traditional school day (i.e., in need of an alternative method to attain graduation); or (e) were recent (within the past year) dropouts. The RENEW intervention was not restricted to students with specific documented behavioral or emotional diagnoses. RENEW services were available to any student with significant impairment in school or community functioning.

Students were referred to the RENEW facilitators, who then met with the students and their parents or guardians to engage in the orientation and consent process. Students and parents/guardians who agreed to participate signed a consent form and were then provided personal futures planning and individualized service development over the course of 12 months.

The RENEW model is designed to create a context within which trusting and reciprocal relationships, self-determined behaviors, and career-related plans and activities can be developed using eight strategies: (a) personal futures planning, (b) individualized team development and wraparound services, (c) individualized resource development, (d) flexible education programming, (e) individualized school-to-career planning, (f) employment, (g) mentoring, and (h) connections to community-based resources and networks. Personal futures planning is the lynchpin of the process, helping to elicit the youth's perspective on his or her history, current network of people and supports, strengths, dislikes, dreams, and concerns. The facilitator then helped each youth to develop a detailed plan in the context of the young person's desired educational, employment, and adult life goals. The facilitators worked with each young person for approximately 12 months to develop the plan, organize the support team, gain acceptance and support for the plan among key agencies and individuals, and assist the participants to act on their goals.

Individualized education programming is a critical element of the RENEW service and support process. To address the challenge of how to help students gain credits in nontraditional ways, the RENEW

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facilitators worked with students to develop a pathway for graduation that was unique to each student's futures plan. This process often included an assessment of credits needed and barriers to be addressed, with careful consideration of choice of class or teacher, support needs such as tutoring or guided study, and work-based learning experiences such as internships, paid work experiences that can include coursework, or volunteer experiences. The facilitators also helped the youth address their goals for employment by linking students with the resources in their formal or informal networks to obtain jobs. Finally, the facilitator was a primary conduit for communication between the youth, family members, school staff and key providers such as mental health counselors or juvenile probation and parole officers. A detailed description of the process is provided elsewhere (Malloy & Cormier, 2004).

Measures

This study was conducted in two phases: a quantitative analysis of outcomes related to functioning using a standardized functional assessment instrument and a case study to illustrate how functional improvement led to the student's ability to achieve her goals, complementing the findings from the first phase. The dependent measures included total and subscale scores on the Child and Adolescent Functional Assessment Scale, or CAFAS (Hodges & Wong, 1996; Hodges, Wong, & Latessa, 1998). CAFAS data were collected at three points, a baseline assessment at intake, a second data point at approximately six months, and a third data point at approximately 12 months. The CAFAS is designed to assess "impairment in day-to-day functioning secondary to emotional, behavioral, psychological, psychiatric, or substance use problems" (Hodges, Xue, & Wotring, 2004, p. 327) and has been used to measure intervention outcomes with at-risk youth. The CAFAS is completed in about 10 minutes by a trained interviewer. Test-retest reliability of .78 and inter-rater reliability of .92 have been reported (Hodges & Wong, 1996). Moderately high correlations validity of .42 - .62 have been reported with other measures of youth problem behavior, and significant positive relationships between CAFAS scores and other concurrent measures, including parents' problem ratings and juvenile justice involvement, have been reported (Hodges & Wong, 1996). We did not perform our own reliability study on our sample; however, the project's research associate was trained and certified to administer the CAFAS by certified CAFAS trainers and maintained CAFAS certification throughout the project. The research associate was required to demonstrate inter-rater reliability of .9 on the sample case. In addition, the sensitivity of the CAFAS to assess the impact of interventions and change over time has been reported (Hodges et al., 2004).

The CAFAS instrument reports scores on eight subscales: School/Work, Home, Community, Behaviors Toward Others, Moods/Emotions, Self-Harmful Behavior, Substance Use, and Thinking. Each subscale contains behavioral descriptors that are rated according to level of impairment, resulting in a numerical score for each item. The items are grouped by four levels of severity: severe (severe disruption or incapacitation), moderate (persistent disruption or major occasional disruption of functioning), mild (significant problems or distress), and minimal or no impairment (no disruption of functioning). The scores associated with the levels are 30, 20, 10, and 0, respectively. No intermediate scores are assigned. Higher scores indicate greater

impairment. Semi-structured interviews were performed with RENEW participants and their parents/guardians at six-month intervals to collect information and score the CAFAS. Data collection consisted of a 30-minute parent interview and a 15-minute student interview. The interviews were conducted at the time of enrollment and again after six months and one year of involvement with RENEW services.

For the case study phase, a purposeful sampling procedure was used to select a project participant who illustrated the implementation of RENEW components and made substantial functional progress as measured by the CAFAS. The case study consisted of examination of written case notes, school records, and in-depth interviews with the participant and the RENEW facilitator (Yin, 2009). These data were used to construct a profile of the young person's experience pre, during, and post-intervention.

Results CAFAS Data

Table 2 shows the CAFAS subscale scores, and total CAFAS scores of the 20 study participants who were administered the CAFAS on three occasions. On average, three months elapsed between these students' enrollment in the project and their first CAFAS assessment, four months between the first and second CAFAS administrations, and five months between the second and third CAFAS administrations.

To test the average change in total CAFAS scores observed over time, a repeated measures analysis of variance with simple contrast was used (Portney & Watkins, 2000). Partial eta squared (hp2) was used to compute effect size for the CAFAS total score, since a single within subjects design was used. Partial eta squared is defined as the proportion of the total variability that is attributable to the effect. Contrast tests were also conducted to identify differences between specific pairs of scores. In cases where the sphericity assumption for the repeated measures ANOVA was not met, Greenhouse-Geisser correction was applied.

There was a significant main effect of RENEW participation on behavioral functioning between waves 1 and 3, F(2, 18) = 14.84. A moderate effect size of .44 was observed for the CAFAS total score. Behavioral subscale contrasts revealed that functional impairments in school/work behavior, F(2, 18) = 12.06; home behavior, F(2, 18) = 5.64; moods and emotions, F(2, 18) = 8.45; and self-harmful behavior, F(2, 18) = 3.91 were significantly lower between waves 1 and 3. Figure 1 shows the trend in the marginal means for all eight subscales and the CAFAS total scale across waves 1-3.

Case Study

The second phase of the study involved an illustrative case study of a single participant. Project staff selected an illustrative case example of a participant who illustrated the implementation of key features of RENEW, such as alternative education planning and the importance of linking school to career interests, and who was particularly disengaged from school upon enrollment and had attained significant benchmarks such as graduation or promotion to the next grade through the course of the project. An in-depth case study analysis method was used (Yin, 2009).

A young woman we will call Chrissy was 17 years old when her guidance counselor referred her for RENEW services. She had very

Table 2

Repeated Measures ANOVA for CAFAS Scores of Participants Who Completed Futures Plans and Had Three Waves of Data

N = 20	Wave 1 Mean (SD)	Wave 2 Mean (SD)	Wave 3 Mean (SD)	F Value
School/Work	27.5 (5.50)	22.5 (8.51)	14.0 (11.88)	12.06**
Home	11.5 (10.89)	7.0 (8.01)	4.5 (6.9)	5.64*
Community	5.0 (6.88)	7.0 (8.01)	3.0 (6.57)	2.32
Behavior Toward Others	7.5 (5.50)	7.0 (5.71)	7.0 (5.71)	.11
Moods/Emotions	16.0 (10.46)	14.5 (9.99)	10.0 (9.73)	8.45**
Self-Harmful Behavior	8.5 (10.89)	6.5 (9.33)	2.0 (5.2)	3.91*
Substance Use	13.5 (12.26)	14.5 (13.95)	11.0 (12.52)	1.23
Thinking	.50 (2.24)	0 (0)	0 (0)	1.00
CAFAS Total Score	90.0 (6.77)	79.0 (8.88)	51.5 (6.70)	14.84**

^{*}p-value < .05.

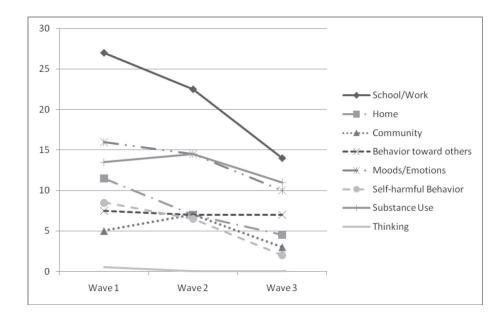


Figure 1. Marginal means of CAFAS scores by subscale.

few credits toward graduation, had missed a significant number of school days, and had few friends. Her guidance counselor described Chrissy as a very bright girl with "a lot of behavior issues... she's from a dysfunctional home." Teachers and administrators described her as confrontational. Chrissy presented with a rough exterior showcased with multiple piercings, tattoos, and an all black wardrobe.

After the RENEW facilitator spent some time with Chrissy to get to know her and to explain the RENEW process, the first step was the development of Chrissy's personal futures plan. During her personal futures planning meetings, Chrissy described her history, including her parents' separation when she was four years old, how her family moved frequently, how she had an abusive boyfriend in 9th grade, how she lost a friend to suicide, how she was molested as a child, and her involvement with drugs. She described herself as having low self-esteem, that she was shy with people she didn't know, not good at setting goals, and having poor time

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^{**}p-value < .01.

management skills. Her dreams were to be skinny, go to college, become either a psychologist or dental hygienist, have a family and live on a nonworking farm where she can enjoy the peace and space. Chrissy perceived her obstacles to be her poor choice of friends, her drug use, and her low self-esteem. She set four goals: to be successful in high school, get a job, go to college, and increase her self-esteem.

The RENEW facilitator developed a detailed plan based on Chrissy's goals and support needs which included attaining the credits she needed to graduate. Chrissy accomplished each of her goals in the subsequent two years. Throughout Chrissy's high school career she had to go back to the drawing board numerous times to tweak what wasn't working. Individualized resource development and flexible educational programming utilized included the Jobs for America's Graduates (JAGS) program (a U.S. Department of labor program to help low-income youth with employment and career development), Nova Net credit recovery (a computer-based program that allows students to gain credit in a variety of subject areas), Peer Mediation, the school's Student Assistance Program, home tutoring, and an alternative placement in order to stay engaged in her high school program and complete the requirements for a diploma. Flexible educational programming also included a correspondence course, and employment assistance included arranging multiple job shadowing experiences and informational interviews in order to explore and define her career interests.

During her senior year Chrissy attended the high school's winter carnival and went on the senior field trip with friends. She became less and less isolated from her fellow students and she gained more confidence. In June, Chrissy graduated from high school and enrolled in college for the fall. During the interview, Chrissy reflected on why she had quit school, noting that "I didn't fit in...the other kids were into things that didn't interest me and I had no friends here. No one seemed to care if I came to school so I just stopped going. When I sat down to plan with Kate (the RENEW facilitator), I realized that I could do it, but I had to put my mind to it."

The CAFAS scores for Chrissy reflect her improvements in home and school functioning across the three data collection points. Her CAFAS School/Work domain scores were 20, 30, and 10 respectively for each data point, showing an initial deterioration but then significant improvement. Her Home subscale score improved from a 10 to 0. There was no change in her Moods/Emotions score (20/20/20), Behavior towards others score (10/10/10), or Substance Abuse score (20/10/20). The Self-harmful Behavior score went from 0 to a high of 20 at the second data point, but went back down to 0 at the third data point. She had scores of 0 throughout in the Community and Thinking subscales. Clearly, Chrissy's CAFAS interviews and the surveys with teachers showed improvement in her functioning at school and in her home.

Discussion

Adolescents who experience high risk of failure in school and in their communities are often not engaged in activities that are designed to foster self-determination and individualized, positive development. These youth may be on the receiving end of school- and community-based punishments and experience social isolation. It appears that this cohort of youth who received RENEW services and for whom

we have comprehensive CAFAS data experienced significant improvement in their functioning in school, which is a primary area of functioning that the model is designed to impact. The conversation and supports that take place with students around school and career during the RENEW personal futures planning process may act as a catalyst for positive action and increased positive perceptions of the future. The improvements seen in the Home subscale indicate that family relationships benefit as the student develops a plan and begins to experience greater success in school.

In addition to the practical, career-related benefits that the youth receive, it appears that the RENEW intervention produces therapeutic benefits as well. The provision of personal futures planning and services that support self-determination appear to have a positive effect on the agency and functioning of young people with emotional challenges, including in some of their personal, psychological, and relational domains. For example, the CAFAS results indicate improvements in the Moods and Emotions and the Self-harm sub-scales, areas of personal functioning that are painful for the young person and tend to require substantial community resources to address. The positive results in these subscales indicate that the RENEW model may improve the young person's self-views and perception of his or her prospects and capabilities, benefits that will improve the youth's ability to successfully transition to adult life and to participate in the community. The results indicate that interventions that stress self-determination strategies based upon the participant's goals, dreams, and perceived needs can positively impact the trajectory and emotional health of youth at high risk of school and community failure. The CAFAS scales that showed less improvement, including the Behavior Towards Others, Substance Use, and Community Subscales, may indicate that these youth could benefit from greater behavioral support, substance abuse treatment, and "coaching" around social interactions.

This study suggests that adolescents who are at high risk of dropping out may function better at home and at school when they have experiences that lead to greater self-determination and success, and they begin to have more positive views of themselves and of their prospects. These improvements in functioning may indicate an enhanced attachment to the people in school and to the educational process. Further, relationships with and perceptions of parents improve when the youth used the RENEW process, indicating that successful experiences may result in fewer disruptions at home.

The RENEW approach to individualized education planning (or alternative education planning) embraces the importance of a challenging learning experience that is linked to the individual's interests, skills, talents, and needs. The resources and time required to develop alternative coursework and educational supports appears to be beneficial in terms of positive educational and personal outcomes. The individualized alternative programs developed in the RENEW model make use of programs and services already available in most schools, and may typically require a revision of stringent eligibility criteria (to enter a vocational or adult education program, for example) and carefully planned supports (such as a system for "checking in" and identifying problems before there is a crisis). It appears that many participants have responded positively to these types of supports.

Although RENEW service provision requires an investment of resources for the one-on-one time required to engage students and

provide the supports and services, it appears that this investment is likely to reap benefits for the young person in about a year or less. As such, the RENEW intervention is less costly than incarceration, residential care, or many alternative day school programs, making the most of resources that already exist in the community and using the young person's social network. Further, the RENEW facilitator develops new and repairs existing relationships so that the participant will have a support network after RENEW services are faded. A person-centered, outcome-based transition approach such as RENEW identifies paid support services (mental health services, vocational rehabilitation, one-stop services) and entitlement programs (Social Security benefits, Medicaid, among others) as means toward the end results of a career, continued education, employment, and independent living.

Study Limitations

There are several limitations of this study that should be noted. First, the RENEW intervention in the high school was provided as part of a three-tiered PBIS system of social and behavioral supports and services, and, as such, the positive effects for many of the youth may have been a result of the RENEW intervention in combination with Tier 2 supports. Second, the study group was a self-selecting sample of students. The study participants included only those youth who were engaged in services long enough for collection of three waves of CAFAS data, and the sample was not drawn in a way that we can assume that it is representative of all high-risk youth in each high school. For example, youth participation was voluntary. Those who participated in this study were ready to and interested in engaging with the RENEW facilitators.

We did not measure level of participation, mix of services, or quantity of RENEW services received. Given these limitations in sampling and service measures, it cannot be concluded that the RENEW intervention caused the positive outcomes reflected here. Finally, the small sample size does not allow for widespread generalization of the findings. What can be claimed, however, is that the intervention appears to have promise as a secondary transition and therapeutic model for this population of youth.

Recommendations for Future Research

Youth who are at high risk of dropping out of school have multiple and complex support needs. They are difficult to engage, and any intervention must intentionally conduct outreach and engage the youth, "where they're at" in order to be effective. The RENEW model should undergo a more rigorous controlled study, including randomized controlled trials that will give greater depth to the findings produced here and to determine if the model has an impact on youth who may not initially be motivated to participate.

The RENEW model is a comprehensive planning process that includes a set of eight interventions geared to and adjusted by each young person's individual needs, goals, and support network. This study does not show which and to what extent the interventions were used by the participants and it is possible that some components of the model may be more effective than others. Additional studies that assess dosage and mix of interventions may provide knowledge about which components of the RENEW model are most effective.

In addition, case studies of RENEW participants indicate that self-determination skills and motivation are increased for youth who experience RENEW supports and services. A study of these "mediating factors" could help to explain why and how the RENEW model impacts growth and positive self-perceptions. Further, the therapeutic (clinical) benefits, as well as the processes by which youth begin to act on their own behalf in a more positive way given the RENEW intervention should be studied.

More documentation of the impact and application of individualized alternative educational programs can help educators and other supporters to design plans for their students that will keep them engaged and help them to graduate on time. It is clear that there is a need to provide more individualized, yet challenging interventions based upon the terms set forth by the youth. Additional study can help contribute to our knowledge of how at-risk youth can be more successful, and can contribute to more effective in-school and mental health community-based services. As such, we could begin to recover the numerous students who drop out of high school and develop early intervention services so that fewer students choose to drop out.

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