EVALUATING “NEW HORIZONS:” A MIXED-METHOD INQUIRY

By

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ABSTRACT

Evaluation “New Horizons:” A Mixed-Method Analysis

Andrew P. Adamus

The purpose of this study is to examine reoffending behavior of juveniles during a six month period following completion of the New Horizons Program, a secure residential treatment program. Successful completion of secure residential treatment programs assumes that juveniles have received the necessary intervention and rehabilitation, thus decreasing recidivism. This study utilizes an exploratory research framework consisting of a qualitative process evaluation and a quantitative program outcomes evaluation. The process evaluation is based on a sample of six program stakeholders who were interviewed using semi-structured interview methods and the principles of grounded theory. The outcome evaluation relies on a univariate analysis to report recidivism rates among participants. Additionally, this study employs comparison of means testing and logistic regression analysis to investigate predictors of recidivism within six months following program exit. Findings from these analyses suggest that the New Horizons Program currently faces issues with interagency collaboration and participant recidivism. Overall, this study adds to research on the New Horizons Program and other potentially effective treatment programs for youth with serious mental health and juvenile delinquency issues.

Keywords: Program Evaluation, Residential Treatment Facilities, Juvenile Recidivism, Wraparound, Aggression Replacement Training, High-Risk Juveniles, Dual-Diagnosis
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INTRODUCTION

High-risk juvenile offenders have long occupied a relatively precarious position within the juvenile justice system. Currently, “the juvenile justice system relies heavily on residential treatment services” (Orlando et al. 2003: 337) to treat these youth as evident by the fact that “numerous public and private residential correctional programs across the country have been established to treat youth offenders whose severity of offense or number of prior convictions warrants an out-of-home placement” (Abrams, 61: 2006). Recent statistics from The Office of Juvenile Justice and Delinquency Prevention’s (OJJDP) 2010 Juvenile Residential Facility Census (JRFC) indicate that as of 2010, there were a total of 57,701 juvenile offenders residing in locked residential facilities (Sickmund, 2011). Typically, programs in these facilities “range from therapeutic interventions to punitive correctional systems and often use a blend of behavior change strategies” (Abrams, 61: 2006). With this in mind, it is clear that as “juvenile detention facilities come under increasing legal pressure to provide mental health services to detainees,” (Desai et al. 2006: 204) more research will be needed to determine the long-term effectiveness of secure residential treatment programs.

Undoubtedly, part of the allure of the use of residential treatment facilities comes from the fact that “a disproportionate number of youth in correctional facilities suffer from mental health problems that often go undetected or untreated” (Rogers et al. 2001: 485). While this may be the case, even when detected, “juvenile justice systems are
typically inadequately equipped to meet the treatment needs of these juveniles” (Stout & Holleran, 2011:447). Furthermore, research has shown that the practice of incarcerating juvenile offenders “often results in negative behavioral and mental health consequences” (Lambie & Randall, 2013: 448). As such, it may be true that confining youth who have severe mental health issues without providing mental health treatment has detrimental impacts. As a treatment-oriented alternative, secure residential treatment facilities are commonly perceived as providing practical benefits by helping to provide treatment for a portion of severely emotionally disturbed youth. Despite extensive advocacy for the use of secure confinement settings, “there is little evidence that the increased practice of placing juveniles in secure confinement has translated into lower recidivism rates once these same youth reenter their communities” (Meisel, 2001: 206). In fact, “evaluation research consistently demonstrates that these costly residential programs are largely ineffective, as indicated by high re-offense and re-conviction rates” (Abrams, 2006: 61). The benefits of secure residential treatment facilities have also largely been contested on the political grounds that “removing youth from the community and placing them in locked facilities serves to appease the public short-term but does not appear more effective than community-based treatment” (Siegel & Senna 1994).

Given ongoing debates over the costs, benefits, and overall effectiveness of placing high-risk juveniles in secure residential treatment facilities, juvenile treatment facilities could benefit from becoming subject to more rigorous and periodic evaluations. Such practices can help ensure that these programs have clearly defined goals and are operating based on evidence-based practice (EBP) models instead of merely appealing to

“The authority of science is undermined on a daily basis by those who refuse to distinguish the difference between fact and opinion. Every year of delay in implementing evidence-based reforms consigns another cohort of juvenile offenders to a 50 percent higher than necessary recidivism rate.”

As such, an increase in evaluation practices would likely be welcome to the various communities and agencies that are responsible for funding these juvenile correctional programs. This would likely be the case since such communities and agencies are frequently resorting to “punitive responses to juvenile crime which are far more expensive and often less effective than less harsh, rehabilitative-oriented alternatives” (Piquero & Steinberg, 2010). This argument is further supported by the finding that many communities are “choosing incarceration as the preferred means for controlling young offenders, despite contradictory research findings regarding the usefulness of this approach” (Carney, 2003: 551). In fact, “many state legislatures have lowered the age for transferring juveniles to adult court” (Scott, 1999: 71). What all of these issues point toward are the great social, fiscal, and institutional benefits that can be attained through the systematic monitoring and evaluation of secure residential treatment programs for juveniles.

The New Horizons Program exemplifies one such program that implements an evaluation framework designed to monitor the long-term outcomes of participants with
the overall goal of reducing offending behavior. As a means of contributing to ongoing evaluation research on the effectiveness of this program, the present study uses a mixed-method evaluation framework to analyze program processes and investigate risk-factors for recidivism. In order to fully understand the implications of this research, this study begins with an overview of the New Horizons Program as well as characteristics of its target population. A literature review is then conducted to document recent research on popular forms of juvenile treatment and rehabilitation as well as predictors of juvenile recidivism. This overview is followed by a summary of qualitative and quantitative research methods. A portion of chapter four focuses on displaying the results from the qualitative process evaluation. Additionally, chapter four reports on the results from a mandated univariate analysis, a logistic regression analysis, and a comparison of means test that were employed as a means of further investigating theoretical linkages. The final chapter of this study concludes with a summary of key findings and a discussion of limitations, and then provides a series of recommendations intended to help inform the New Horizons Program and its ongoing evaluation practices.

Program Overview

Originally founded in 1999, the New Horizons Program in Eureka California is an “intensive in-custody mental health treatment program” (Humboldt County Probation Department, 2005) designed to meet the unique needs of Humboldt County’s high-risk youth (ages 12-18) as well as their families. Currently, the facility houses youth for four and a half to six months, and is able to accommodate up to 18 youth at a time. With the exception of youth charged with murder or predatory sexual offenses, youth participating
in the New Horizons Program are determined to be the most severe and chronic offenders that come before the juvenile court as a result of delinquent behavior. As wards of the court, youth who are ordered to participate in the New Horizons program have demonstrated: “Aggressive behaviors or risk of aggressive behavior, history of difficulty in out-of-home placements, history of traumatic events in their lives, school related problems, and co-occurring disorders” (Humboldt County Department of Health and Human Services, Research and Evaluation Unit, 2012: 5).

Providing impactful intervention for this target population is unique in a couple of ways. First, while Humboldt County certainly faces many of the same issues as surrounding counties, as described by staff in a promotional DVD, this community also suffers from much higher rates of alcohol and substance abuse in comparison to other California counties (Martin & Elferdink, 2005). To this end it is commonly recognized by program staff and stakeholders that many of the participants in the New Horizons Program likely come from families and or peer groups that have issues with addiction. In addition, the New Horizons Program specifically focuses on the treatment of juveniles who have dual diagnosis’ (aka co-occurring disorders - CODs). Co-occurring disorders in juveniles often takes the form of combined mental illness and substance abuse disorders. While a typical juvenile residing in a juvenile hall setting may not receive mental health services, the New Horizons Program attempts to operate with an integrated treatment framework that provides the skills and knowledge necessary to promote positive cognitive thinking and behavioral change to these severely emotionally disturbed youth. This approach is best described by former Humboldt County Chief Probation...
Officer, Bill Burke who explained that “this collaborative intervention model stems from the long-standing recognition that individual disciplines working in isolation are less likely to be successful at meeting the needs of the youth and families in our community” (Martin & Elferdink, 2005).

Program Design

Located within the secure Northern California Regional Facility in Eureka, CA, the New Horizons Program was designed around a mutually reinforcing, interdisciplinary approach which aims at providing a balanced variety of services that attempt to assist residents in achieving the three following central program goals:

1. “Teach participants how to develop and maintain a non-delinquent and drug/alcohol free lifestyle in order to prevent further intrusion into the juvenile justice system.”
2. “Improve participant’s compliance with court ordered conditions of probation.”
3. “Maintain public safety through high standards of accountability and intensive supervision, which will in turn, reduce participant’s arrest, incarceration and probation violation rate while increasing the rate for successful completion of the probation restitution, and community service responsibilities” (Humboldt County Probation Department, 2005).

The services New Horizons provides to attain these goals includes, but is not limited to the following: “Medication support, individual, group, and family counseling, alcohol/drug assessment and counseling, skill development training focused on anger management, moral judgment, the correction of thinking errors, social skills, and victim awareness.” Since these services are considerably influenced by the principles of interagency collaboration, collaborative services, and comprehensive rehabilitation, New
Horizons also makes an effort to implement a “wraparound” services model. Finally, the New Horizons Program’s integrated treatment approach is intended to be fostered by the support of a collaborative climate. In an effort to achieve this collaborative climate, staff and associates from the various agencies responsible for providing care to New Horizons participants come together at weekly meetings and occasionally reach out to youth services agencies in other California counties.

Program Operations

There are four principle agencies that consistently collaborate together to administer the New Horizons Program. These agencies are as follows: The Humboldt County Probation Department, the Humboldt County Department of Health and Human Services – Mental Health Branch, the Humboldt County Office of Education, and the Humboldt County Department of Health and Human Services – Social Services Branch.

The Humboldt County Probation Department runs the program as well as makes decisions regarding how program funds are allocated on an annual basis. Probation staff is additionally in charge of the “correctional care staff, custodial care of the facility, court reporting, and maintaining community aftercare supervision” (Humboldt County Probation Department, 2005). Probation also assists the New Horizons Program by running the Independent Living Skills Program. This program is operated with the assistance of the Humboldt County Probation Department and is designed to help improve the independent living skills of select residents once they have completed standard treatment provided by the New Horizons Program. Expectations for this program consist of “maintaining an appropriate appearance, healthy attitude, and meeting
pre-defined behavior requirements” (Martin & Elferdink, 2005). Through expected positive interactions with probation staff, the residents at the New Horizons facility are supposed to learn important life skills through practical experiences. Specifically, residents are thought to typically receive practical experiences in “time management, conducting job searches, practicing interviews, and creating, managing, and planning a budget” (Martin & Elferdink, 2005).

The Humboldt County Health and Human Services - Mental Health Branch is responsible for providing residents of the New Horizons Program with intensive treatment services five days per week. Intensive treatment services “traditionally includes the treatment of severely ill psychiatric patients with suicidal or violent behavior. These patients require close observation, monitoring of vital functions, critical care nursing and medical treatment” (Winkler, 2011: 260). Since “the need to increase offenders’ access to intensive treatment services was a major conclusion drawn from the National Criminal Justice Treatment Practices (NCJTP) survey” (Young et al. 2009: 33), the intensive treatment services model has received substantial support. In the context of the New Horizons Program, these intensive services include: “Mental health assessment, rehabilitation activities, alcohol and other drug counseling, individual, group, and family therapy, and medication support services” (Martin & Elferdink, 2005). Specifically, the mental health team at New Horizons – consisting of 4 mental health clinicians, 1 case manager, and 1 substance abuse rehabilitation specialist – provide “skill development groups” and “peer support groups” that focus on teaching problem solving skills, anger-management strategies, social skills, and mature moral judgment. Residents at the New
Horizons Program attend substance abuse counseling groups and work closely with mental health staff to develop individualized rehabilitation plans. These services exemplify “the mental health team’s goal orientated, best-practices model of intervention which attempts to bring together reinforcing concepts of mediation, conflict resolution, and supportive confrontation” (Martin & Elferdink, 2005). In support of this methodological orientation are recent findings which suggest that “treatment programs with multiple foci and modules are more successful than those that are directed on only one aspect of the problems and that those that focus on antisocial behavior and antisocial cognitive patterns are more effective than those that deal with peripheral aspects of the problems” (Homqvist et al. 164: 2007). Director of mental health, Lance Morton describes it this way: “In summary, the current best-practice evidence is that the minors we treat at the Regional Facility are best served in a committed setting with enhanced collaborative staff from probation, mental health, and education using a consistent cognitive behavioral approach with a strong family connection” (Martin & Elferdink, 2005).

The role of the Humboldt County Department of Education is to provide a specialized educational program for participants residing in the New Horizons Program. The educational services that these high-risk youth receive consist of a two hundred and fifty day, year-round in-facility school with instruction from a full-time certified teacher and instructional aide. In order to have adequate preparation for dealing with high-risk juveniles, teachers at the New Horizons Program facility often have additional educational backgrounds that prepare them for working with special-needs children.
Besides traditional instructional methods, the educational staff at the New Horizons Program facility emphasize the use of project-based learning assignments. Recent findings indicate that this can be a particularly important instructional technique for this population because “through prosocial activities, at-risk youth get natural lessons about self-regulation” (Blechman et al. 2001: 273). As an example of this pedagogy, collaborative projects have involved “group gardening activities, collaborative artwork, and working together to cook and prepare meals” (Martin & Elferdink, 2005). These activities are intended to provide youth with a prosocial environment that facilitates an opportunity for modeling good behavior and increasing personal responsibility. Teachers at the New Horizons Program are instructed to emphasize the good qualities of their students while still being strict on behaviors that are self-destructive or are determined to pose a threat to others. Overall, the focus of the New Horizon Program’s educational staff is to “promote teamwork, taking on new challenges, and being able to make and reflect on mistakes” (Martin & Elferdink, 2005). In order to enhance the effectiveness of multiple treatment methods, all of these areas of emphasis are intended to coincide with the goals of the New Horizons Program’s mental health team.

The Humboldt County Department of Health and Human Services (DHHS) - Social Services Branch plays a prominent role in the development of the New Horizons Independent Living Skills program, “the recruitment and retention of foster care families, and especially in helping provide casework activities that promote wraparound services to these most severely at-risk youth and their families” (Humboldt County Probation
Department, 2005). Furthermore, the research and evaluation unit plays an important role in compiling reports on mental health outcome measures.

In addition to these agencies, the New Horizons Program relies on the use of correctional services to maintain a safe and secure environment. Unlike many secure regional facilities without a treatment component, “correctional officers are encouraged to build relationships with youth residents and to act as role models” (Martin & Elferdink, 2005). To this end, the behavior of correctional staff is intended to “facilitate trust, establish a sense of safety, and teach routine and order” (Martin & Elferdink, 2005). As an example, each morning residents are routinely required to undergo graded room inspections. Drawing on informal interviews conducted by staff as part of a promotional DVD, through such daily interactions correctional officers are described as “shifting fluidly between multiple roles depending on the needs, stability, and maturity of the youth and the officer” (Martin & Elferdink, 2005). Though not based on coercive participation, these roles may share similar features of the roles of “a parent, a counselor, a limit setter, a teacher, a leader, etc.” (Martin & Elferdink, 2005). This approach is designed to teach appropriate communication and respect for even those who are perceived as authority figures who are attempting to set boundaries that limit behavior.

In sum, the correctional officers at the New Horizons Program facility attempt to reinforce treatment objectives by “integrating them with safety and behavior management concerns” (Martin & Elferdink, 2005).

Finally, the New Horizons Program aims to ensure that their program model reflects the diversity of the community members they serve. This is an important
consideration as 2011-2012 participant demographics indicate that approximately 30% of all participants defined themselves as being Native American. The New Horizons Program has historically worked with a diverse range of community agencies in an attempt to better ensure youth reintegration. One of the ways this has occurred is through various agency representatives attending program meetings to help appropriately inform decisions about what is best for the youth and or the community. To this end the New Horizons Program has collaborated with such organizations as: United Indian Health Services - to provide mental health services, Two Feathers Native American Family Services – to provide pro-social and other cultural experiences, Redwood Community Action Agency – to provide case management services, Homes of Refuge – to help orient clients to foster care/group homes, Court Appointed Special Advocated (CASA) – to advocate for juvenile clients and provide mentoring and plan development, and members of the Hoopa Valley Tribe – to assist with clinical services such as long-term alcohol and substance abuse treatment. It is sometimes the case that youth from other counties will be sent to the New Horizons Program. In these situations individualized relapse prevention plans and reintegration techniques are used in an effort to best suit the needs of that particular juvenile and the community he or she is from. All of these efforts seem to confirm the New Horizons Program’s commitment to interagency collaboration and serving diverse populations.

Program Theory

The New Horizons Program is very firmly rooted in the principles of juvenile behavior and decision-making modification. Behavior modification is:
“Often implemented in residential treatment and correctional institutions through such mechanisms as point systems, token economies, and behavioral contracting. All of these techniques are based on the principle that behavior is related to the consequences it produces. That is, if the consequences can be managed by punishment for delinquent behaviors and rewards for pro-social behaviors, the behavior can be modified” (Abrams et al. 2005: 9)

As such, New Horizons uses the “Aggression Replacement Training Program®” developed by Arnold P. Goldstein, Barry Glick, and John C. Gibbs. Aggression Replacement Training® (ART) is rooted in social learning theories and functions as “a psychoeducational approach to working with young people who experience difficulties with interpersonal relationships and prosocial behavior” (Calame et al. 2011: 47). This method of intervention includes a behavioral component, an emotional component, and a values component. The behavioral component emphasizes a technique termed “skill streaming” which targets skills and behaviors, the emotional component utilizes anger management tools, and the values component promotes moral reasoning. Youth participating in the New Horizons program attend weekly ART lessons that cover at least one lesson from each component. These weekly ART sessions serve as an example of the New Horizons Program’s psychoeducational emphasis which aims to help program residents “locate thinking errors, recognize “triggers” for destructive behavior, and transcend internal barriers to their personal, professional, and social growth” (Martin & Elferdink, 2005). The fundamental conviction that underlies the New Horizons Program’s integrated treatment model is “the belief that given supportive individualized
services, and a mutual help approach, these juveniles will be able to make a shift in thinking and moral development levels which will support appropriate choices and behavior” (Martin & Elferdink, 2005).

The Aggression Replacement Training Program® has developed according to a social learning theory framework which starts from the theoretical standpoint that “aggression stems from an interaction between the individual and their environment” (Hollin, 2003: 132). Essentially, social learning theory “seeks to understand the complex interactions between an individual's thoughts, emotions, and actions within a given social context” (Amendola & Oliver, 2010: 50). As further elaborated on by ART developer Arnold P. Goldstein, “aggression is primarily learned behavior, learned by observation, imitation, direct experience, and rehearsal” (Goldstein et al., 1998: 3). Thus, “with its theoretical roots in social learning theory, ART is clearly associated with cognitive-behavioural therapeutic methods of practice, such as skills training and anger management” (Hollin, 2003: 133). This theoretical underpinning helps to validate and add support for New Horizons’ emphasis on juvenile behavior and decision-making modification.

Currently, it is commonly acknowledged amongst behavioral modification specialists that “both theory and practice underpinnings of Aggression Replacement Training are sound and meet a variety of criteria for evidence-based practice (EBP)” (Amendola & Oliver, 2010: 50). As an evidence-based strategy for behavior modification, ART utilizes a collection of instruments designed to comprehensively measure the behaviors and thinking processes targeted by ART in order to assist in
evaluating program outcomes. In general, since ART’s integration into detention facilities starting in 1987, results have indicated that “ART is a viable intervention for aggressive, assaultive youths who are incarcerated” (Goldstein, 1999: 40). Other research has similarly indicated that “Aggression Replacement Training® has stood the test of time in terms of its scientific underpinning and effectiveness of outcomes” (Amendola & Oliver, 2010: 47). Due to these positive indicators and substantial approval from behavior modification experts, ART was adopted as a central behavior modification method by the New Horizons Program in February 2005. Since ART’s integration into the New Horizons Program, results have indicated that “the majority of youth participants have experienced positive changes in the following areas: Improved social skills, development and or improvement of moral reasoning skills, decreased aggressive behaviors, and reduction in recidivism” (Humboldt County Department of Health and Human Services Research and Evaluation Unit, 2012). In sum, the use of Aggression Replacement Training with individual, group, and family therapy sessions are designed to function in a mutually reinforcing manner in order to provide comprehensive intervention for program participants receiving intensive mental health/substance abuse services.

Treatment Needs of Program Participants

The New Horizons Program serves boys and girls age 12 to 18 that have a dual diagnosis. “Dual diagnosis in psychiatry and addiction refers to the presence of a substance use disorder coexisting with another major psychiatric disorder” (Sheehan, 1993: 107). In the context of this program, generally, these are youth who have been diagnosed with co-occurring mental illness and substance abuse disorders (SUDs). It is
widely recognized that “youths with co-occurring disorders often have more complex needs than those with a single disability” (Nordness, 2002: 47). Providing treatment and rehabilitation for this population poses unique challenges for successful rehabilitation and treatment in a variety of different ways. Primarily, youth in the New Horizons Program have been diagnosed with disorders such as conduct disorder, oppositional defiant disorder, or alcohol and other drug disorders (AODs). Many of these types of disorders that New Horizons youth are diagnosed with are considered by many experts to “pose a clear risk of reoffending” (McReynolds, 2010:214). Additionally, a significant portion of these behavior disorders contribute to increased levels of aggression, poor social skills, and an inability to effectively cope. In this way New Horizons youth pose a potential risk to the safety, security, and wellbeing of staff as well as fellow program participants. In addition, the vast majority of youth participants in the New Horizons Program simultaneously face issues with substance abuse disorders which may problematize their treatment.

In order to qualify to be entered into the New Horizons Program the youth must be court-ordered and pre-screened to meet the entry requirements. These requirements consist of being diagnosed with co-occurring disorders and not being convicted of a sexual offense. Commonly, probation will make a recommendation to the regional facility to have their client entered into the program. Once this request is made the individual is pre-screened by mental health clinicians who determine whether or not the individual has met the criteria for entry. Currently, the typical path to program entry consists of repeated convictions for violent and or person-offenses followed by a
succession of failures in less severe juvenile crime diversion programs for youth offenders. For instance, before being enrolled in the New Horizons Program, youth frequently are first ordered to participate in local, less intensive, non-residential treatment and rehabilitation programs for youth who suffer from destructive behaviors and are in need of professional help. This typical path to entry indicates that New Horizons youth are not unfamiliar with various forms of counseling and behavior modification techniques. The path to program entry for many of the participants in the New Horizons program also illustrates the incremental advances in severity of punishment that are considered appropriate for severe and chronic juvenile offenders. To this end, this pattern draws attention to the way in which the New Horizons Program symbolically functions as a last resort for this particular juvenile population.

This target population is also considered to be disproportionately afflicted by a number of dynamic background factors that potentially problematize their treatment and rehabilitation. Dysfunctional or unsupportive families, prior traumas, and poverty are some of the many problematic circumstances with which a major portion of New Horizons participants have likely had first-hand experience with. As noted in meetings with staff and stakeholders of the New Horizons program, it is not uncommon for New Horizons youth to come from parents that are unsupportive of the treatment provided to their child, families that are dealing with their own issues with substance-abuse, and families that are living in poverty. These common characteristics of program participants’ families provide a window into the often counterproductive social environments from which New Horizons youth come. In addition, a portion of New
Horizons youth also suffers from past traumas that may contribute to their mental illnesses and potentially complicate their ability to be successful upon exiting the New Horizons program.

**Demographic Profile of Program Participants**

As shown in Table 1 the demographic profile of New Horizons participants during the 2011-2012 fiscal year illustrate that 77% were male and 23% were female (N = 30). The breakdown of ethnicities for data that fell within the 2011-2012 fiscal year is as follows: 53% White, 30% American Indian, 13% Hispanic, and 3% Black (N = 30). Over the course of this fiscal year, no Asian Pacific Islanders were admitted into the program. In reference to previous years of data, this overview of participant demographics indicates the trend that there has been a slight rise in the number of female program participants as well as an overall decrease in the number of youth that New Horizons serves on an annual basis. Additionally, ethnic demographics of program participants during the 2011-2012 fiscal year shows the presence of a considerable American Indian population (30%). As a percentage of Humboldt County’s total population of youth ages 12 to 20 (N = 16,422) (Puzzanchera et al. 2012) Native Americans represent approximately 10.2% of the Humboldt County youth population. The fact that 37% of participants in the 2011-2012 year were Native American illustrates the relatively substantial overrepresentation of Native American youth in the New Horizons Program. These demographics also show that the majority of New Horizons program participants are White (47%). Hispanics (13%) represent the third most prevalent ethnic group to participate in the New Horizons program followed by a small
portion of Black participants (3%). In sum, this profile of New Horizons program participants serves to establish an understanding of youth participants’ individual and background characteristics. In doing so, this profile provides a starting point to begin to understand program characteristics, to analyze factors that contribute to recidivism, and ultimately to formally assess the effectiveness of the New Horizons Program’s rehabilitation and treatment model.

Table 1: Demographic Profile of New Horizons Participants: FY 2011-2012

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage of Population</th>
<th>Mean Age (years) at Entry</th>
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<tbody>
<tr>
<td>Male</td>
<td>23</td>
<td>77%</td>
<td>17.5</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>23</td>
<td>16.2</td>
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<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
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<table>
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<th>Ethnicity</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age (years)</th>
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<tbody>
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<td>White</td>
<td>14</td>
<td>47%</td>
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<td>American Indian</td>
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<td>16.7</td>
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<tr>
<td>Latino</td>
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<td>13</td>
<td>16.3</td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>3</td>
<td>17.2</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>16.6</td>
</tr>
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Program Funding

Upon its founding in 1999, the New Horizons Program began receiving a considerable amount of its funding directly from the California Board of Corrections Challenge II grant. In order to meet requirements for this grant, the program was evaluated by the Center for Applied Social Analysis and Education (CASAE) at Humboldt State University. The program evaluation was carried out according to
mandated guidelines established by the California Board of Corrections (CBOC). This grant was a major source of funding for the New Horizons Program until the Challenge II grant closed on September 15, 2003. At this time an administrative decision was made to include the New Horizons Program under the Juvenile Justice Crime Prevention Act (JJCPA). Since July 1, 2003, the New Horizons Program has been one of the two juvenile crime diversion programs in Humboldt County that receives funding as part of the JJCPA program. This funding not only provides youth with services while incarcerated/residing/housed in the New Horizons Program, but wraparound funds are also used to cover aftercare expenses and the salaries of employees and clinicians. Due in part to recent budgetary constraints and the termination of Challenge II grant funding, the New Horizons Program has been operating at a reduced level. As shown in Table 2, the annual cost per participant has seen a substantial increase in the past few years while the number of participants has declined.
Table 2: Annual New Horizons Population and Expenses

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<tbody>
<tr>
<td>Total Number of Participants</td>
<td>39</td>
<td>44</td>
<td>41</td>
<td>45</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Average Length in Program</td>
<td>88</td>
<td>87</td>
<td>100</td>
<td>100</td>
<td>102</td>
<td>126</td>
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<tr>
<td>Cost Per Participant</td>
<td>$19,328</td>
<td>$19,646</td>
<td>$22,014</td>
<td>$20,840</td>
<td>$24,272</td>
<td>$50,068</td>
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</table>

*New Horizons Program Evaluation Research*

While the New Horizons Program initially established an evaluation plan through the Center for Applied Social Analysis and Education (CASAE), in order to satisfy guidelines established by the California Board of Corrections (CBOC) this evaluation plan was modified to meet new requirements when the New Horizons Program became included under the Juvenile Justice Crime Prevention Act (JJCPA). The JJCPA evaluation plan consists of collecting and comparing pre-program entry and post-program exit (if applicable) outcome measures on each participant in the New Horizons Program. The first set of data collected by CASAE research assistants looks at juvenile records
(referral sheets) six months prior to program entry, and the second set of data collected covers juvenile records six month post program exit. Currently CASAE researchers are responsible for collecting and analyzing data pertaining to the following outcome measures:

1. Arrest rate for program participants
2. Rate of successful completion of probation for program participants
3. Incarceration rate for program participants
4. Rate of completion of restitution for program participants
5. Rate of completion of court-ordered community service for participants
6. Rate of probation violation for program participants
7. Daily per capita program costs
8. Percentage of participants to complete program

In addition to the above mentioned program outcome measures, a mental health status assessment of program participants is completed once at program entry, and once at program exit. The two instruments used to conduct this mental health assessment are known as the Child and Adolescent Functional Assessment Scale” (CAFAS) and the Achenbach Youth Self-Report (YSR). The Child and Adolescent Functional Assessment Scale (CAFAS) “assesses the degree of impairment in functioning in children and adolescents secondary to emotional, behavioral, or substance use problems” (Hodges & Wong, 1996: 446). More specifically, CAFAS has been described as:

“A multidimensional measure in which the child is rated on five scales and the caregiver on two scales. The rater reviews a list of descriptions of behavior, and chooses the items which capture the child's functioning. Many anchor descriptions
are provided, and the score for each scale is based on the items selected. Also, since the total score is derived from adding up the individual scale scores, the total score is potentially less vulnerable to rater bias or demand characteristics” (Hodges & Wong, 1996: 446).

In general, research has indicated that “youth with higher CAFAS total scores were much more likely to have poor social relationships, difficulties in school and problems with the law” (Hodges & Wong, 1996: 446). The second mental health assessment tool used to evaluate New Horizons Program outcomes is the Achenbach Youth Self Report questionnaire. This tool is “accepted worldwide for the assessment of adolescent competencies and behavior problems” and is designed to “yield continuous empirical syndrome scales, allowing comparisons of an individual adolescent’s scores with those of normative groups of the same sex and age” (Roussos et al., 2001: 47). Since these instruments have both demonstrated the predictive validity and reliability needed to accurately assess a wide range of juvenile personality and behavioral characteristics, they were adopted by the Department of Health and Human Services – Mental Health branch which oversees the mental health assessment process at New Horizons.

Through the use of these two instruments the following measures are evaluated:

1. Delinquency as measured by YSR
2. Aggression as measured by YSR
3. Substance Use as measured by CAFAS
4. Role Performance-Community as measured by CAFAS
5. Role Performance-School as measured by CAFAS
In order to help facilitate periodic dialogue between CASAE researchers and probation about the progress of the New Horizons Program, quarterly meetings consisting of internal program stakeholders and CASAE researchers are held at the Humboldt County Probation Department. During these meetings the results from quarterly evaluation reports are typically discussed and comparisons are made to previous reports as a means of tracking program progress. Furthermore, CASAE is responsible for annually compiling end-of-fiscal-year data and entering the results into the California Board of Corrections’ (CBOC) online data reporting system. Data involved in this analysis consists of statistics on program completion, average number of fiscal year days participants remained in the program, fiscal expense per program participant, and daily per capita costs. Prior to submission, any official department comments are discussed and included with the final fiscal year report to be reviewed by the California Board of Corrections (CBOC).

Although there have been minor inconsistencies in data collection and reporting methods throughout CASAE’s partnership with the Humboldt County Probation Department, evaluation research using a follow-up period of six months has consistently produced the following empirical findings:

1. “In comparison with a control group, New Horizons youth showed lower rates of arrests and institutional commitment and continued this throughout the program. New Horizons youth also successfully completed the program at a higher rate.”

2. “Looking at pre and post program tests (using the Child Adolescent Functional Assessment Scale) conducted at program entry and program exit, New Horizons
youth showed improvement in understanding appropriate behavior for school, home, and community. They also showed improvement in behavior towards others and a decrease in anxiety.”

3. “On the Child Behavior Checklist, parents reported improved attitudes overall and specifically in attitudes regarding delinquency and aggression.”

4. “Youth Self Report (YSR) showed a significant decrease in attitudes towards delinquency and aggression.”

5. “Risk factors decreased and resiliency factors increased” (Martin & Elferdink, 2005).

All of these findings serve as positive indicators of the overall success of the New Horizons Program and the collaborative, interagency framework and integrated treatment methodology they utilize to help better serve their client base. Collectively these findings tend to suggest that youth participants in the New Horizons Program are having successful (non-reoffending) outcomes during a 6 months period after program completion, and the program is meeting its pre-defined objectives. However, quarterly and annual reports prepared by CASAE researchers indicate that there are still a substantial number of program participants who commit any new offense within six months of program completion (83.3% in 2009-2010 and 63.3% in 2011-2012). To this end, what is clear is that there remains a need to undertake a comprehensive investigation of reoffending behavior following program exit. The present study addresses this gap in research on the New Horizons Program.

Research Questions
Although previous evaluations have reported on participants during their time in the New Horizons Program, there is little information on risk factors that may predict juvenile recidivism following program participation. This study proposes that the current evaluation framework for the New Horizons Program – while sufficient for JJCPA reporting purposes – could be enhanced by an inquiry into the following areas:

1. What do New Horizons Program staff and stakeholders perceive of as program strengths and weaknesses? Do they vary?

2. What do staff and stakeholders perceive as potentially problematizing the treatment and rehabilitation of participants?

3. Annually, what percentage of New Horizons participants reoffend within 180 days after exiting the program?

4. Do any of the following risk factors significantly predict participant recidivism within a six month period following exit from New Horizons: Type of admitting offense, age at program entry, number of prior documented offenses, and length of participation?

This study hypothesizes that such a mixed-method evaluation framework will allow for a far more comprehensive view of the program and how it may or may not be successful in addressing the needs of participants. In addition, the qualitative portion of this study provides a means of collecting and bringing together feedback on different aspects of the New Horizons Program from various staff and stakeholders. In sum, these questions seek to document and assess program outcomes, uncover program processes, and potentially locate areas for modification.
REVIEW OF RELEVANT LITERATURE

This literature review is intended to provide a broad overview of recent research on treatment and rehabilitation methods for high-risk juvenile offenders. Much of this literature centers on the debate over the effectiveness of rehabilitative oriented methods of treatment for preventing recidivism and further intrusion into the juvenile justice system. Additionally, this chapter undertakes a review of literature on risk-factors for juvenile recidivism as a secondary means of identifying some of the most pertinent risk-factors for recidivism amongst New Horizons participants. This chapter concludes with a summary of key arguments and findings from this review of literature and finally places these within the context of current research on the New Horizons Program.

Popular Treatment Approaches for High-Risk Juvenile Offenders

The issue of identifying the costs, benefits, and effectiveness of using secure residential treatment facilities to rehabilitate juvenile offenders has long been a “vital issue, with little agreement regarding the most effective course of action to follow” (Pullman, 2006: 376). While a vast amount of literature exists detailing the decision making processes that go into placing juveniles in these facilities (Schwalbe et al., 2009; Herz et al., 2010; Harris, 2009), there is a neglected need to investigate recent research on the effectiveness of various approaches to providing services for juveniles offenders residing in secure residential facilities. The proceeding section intends to shed light on this complex issue by providing a general overview of current research findings from multiple disciplines.
As a means of grasping the complexity of issues surrounding commonly used treatment methods for high-risk juveniles, Mark Lipsey (1999) provides a comprehensive meta-analysis on the effectiveness of juvenile rehabilitative programs in regards to reducing reoffending behavior. Through a calculation of effect sizes of various types of interventions on recidivism, Lipsey finds that “with the most effective interventions, recidivism would drop from 50 percent to about 30 percent” (Lipsey, 1999: 163). Furthermore, Lipsey concluded by acknowledging “well designed rehabilitative strategies do reduce recidivism for such offenders and cannot be dismissed on the grounds that they are ineffective” (Lipsey, 1999: 142). Such a finding lends support to two key schools of thought concerning how to address the needs of high-risk juvenile offenders. First, it provides support for advocates of rehabilitative orientated strategies, and secondly it affirms that the quality of the rehabilitative strategy plays a role in reducing recidivism. Additionally the findings from this article contextualized the issue of what interventions work by acknowledging the limitations of even the most effective intervention strategies. Overall, Lipsey’s (1999) article provides an important foundational overview and analysis that supports the effectiveness of rehabilitative models for juvenile treatment.

Other researchers have not been so convinced of the effectiveness of such rehabilitative oriented strategies for treating high-risk juvenile offenders. While Tate and his colleagues (1995) similarly provide a helpful overview of rehabilitative based models designed for the treatment of chronic and serious juvenile offenders, they come to drastically different conclusions about the effectiveness of these types of interventions to successfully rehabilitate violent juvenile delinquents. Their analysis focused on
providing an explanation and evaluation of the relative effects of interventions that either attempt to target the individual, the group, or the family. In contrast to Lipsey’s (1999) article, Tate and colleagues found that “individual therapeutic approaches have not been demonstrated to be effective with violent adolescents,” “no studies of family therapy per se have demonstrated success with violent delinquents,” and “outcome research also has given little reason for faith in group therapy” (Tate et al. 1995: 778). With this in mind they turned to exploring the following conceptual approaches of intervention: Biological, cognitive-behavioral, social skills training, problem solving skills training, and multisystemic therapy (MST). Through an extensive review of the research literature, their findings suggested that multisystemic therapy “is the only treatment program to demonstrate short- and long-term efficacy with chronic, serious, and violent juvenile offenders.” (Tate et al. 1995: 779). This is a finding that is similarly supported by other researchers who looked at the results from a 4-year follow-up of re-arrest data and concluded that “MST was more effective than IT (Individual Therapy) in preventing future criminal behavior, including violent offending” (Borduin, 1995: 569).

Collectively, these findings help contextualize the New Horizons Program model within other integrated treatment frameworks that share many similarities. In particular support of New Horizons’ comprehensive model of treatment is Tate and colleagues’ (1995) claim that the debate over rehabilitative versus punitive models doesn’t need to be reduced to an “either-or” because it is likely that “the best approach is one that utilizes both punitive measures and rehabilitative services” (Tate et al. 1995: 778).
Borum (2003) further examined the effectiveness of intervention strategies for preventing high-risk juvenile offenders from reoffending. Borum (2003) reviewed and interpreted the central findings from hundreds of empirical research articles and meta-analyses. One of his key findings was that “in general, interventions that aggregate high-risk youth—even in therapeutic or treatment oriented settings—tend to be ineffective” (Borum, 2003: 126). This finding seems to potentially problematize Tate and colleagues’ (1995) conclusion as to the ineffectiveness of therapeutic approaches to treating high-risk juvenile offenders in that it illustrates how failing to account for programmatic variables may have distorted their results. It is also worth noting that Borum (2003) goes further and shows that not only is it the case that programs with larger portions of high-risk offenders are likely to not produce desired results, but that “there is good evidence to suggest that these programs may even increase a youth’s risk for recidivism and that this effect may be particularly pronounced for youth with initially low levels of delinquency. That is, the least serious kids suffer the most” (Borum, 2003: 126). This is to say that low-risk youths’ involvement in secure programs for high-risk juvenile offenders may actually be considered as a predictive factor of future re-offense. What all of these findings suggest are the detrimental effects of intervention programs that have a substantial population of high-risk youth, regardless of methodological orientation. Furthermore, the findings from this article form a strong foundation for future investigations into the relative effects of intervention strategies on the likelihood of re-offense for various delinquent sub-populations.
Although much of the previously described findings on the effectiveness of various intervention strategies for high-risk youth are based on meta-analyses, there have also been a number of recent case studies and direct program evaluations that offer important insight into program effects. As an example, Pullman (2006) conducted an outcomes evaluation of “Connections” – a juvenile justice program that similarly utilizes the wraparound services model. The wraparound services model “is a structured, team-based planning process that is used to provide comprehensive, community based care for children and youth with complex mental health and related challenges” (Walker, 2010: 748). Additionally, Pullman (2006) detailed other “ecological” approaches to treating juvenile delinquency and their potential implications for policy makers and practitioners. “Ecological” approaches are distinct in that they tend to “approach juvenile delinquency by focusing on the multiple domains of a youth’s life (education, peers, family, etc.)” and “for youth with complex problems, this involves collaboration and coordination among agencies, service providers, and nonsystem stakeholders such as families and friends” (Pullman, 2006: 391). Using a Cox regression survival analysis to compare the wraparound model with other “ecological” approaches to effectively prevent high-risk juvenile offenders from reoffending such as Multisystemic treatment (MST) and Functional Family Therapy (FFT), Pullman (2006) concluded that “youth in Connections were significantly less likely to recidivate at all, less likely to recidivate with a felony offense, and served less detention time.” The findings from this case study seem to be able to inform previous research conducted by Borum (2003) and Tate and colleagues (1993) in a couple of key ways. First, findings from this case study challenges Borum’s
claims about the ineffectiveness of interventions that aggregate high-risk youth and serves as a positive indicator for the overall effectiveness of such comprehensive, “wraparound” approaches to rehabilitate high-risk youth. Second, this case study seems to indirectly provide support for Tate’s finding that individual therapeutic models of intervention are ineffective and that an effective approach needs to be a comprehensive approach. As such, Pullman’s case study of youth in the “Connections” program helps to further contextualize issues and limitations commonly associate with various strategies for treating high-risk juvenile populations.

Others (Walter et al., 2011; Carney & Buttell, 2003; Bruns, 2010) have examined whether or not a “wraparound” services model is more or less effective in preventing juveniles from reoffending relative to other more conventional models of treatment and rehabilitation for this population. As described by many juvenile researchers, “the use of wraparound services with juvenile delinquent youth is a new phenomenon designed to prevent fragmentation and “gaps” in services often encountered by youth and families and to provide more extensive and proactive contact between the youth, his or her family, and other involved parties (e.g., court counselor, social worker, etc.)” (Carney & Buttell, 2003: 566). Seemingly, this method would imply a more comprehensive approach to intervention that would hypothetically benefit juveniles by providing the resources needed to simultaneously treat multiple sources of delinquency. In an attempt to address this long-standing discussion with empirical data, Michelle Carney and Frederick Buttell (2003) employed a logistic regression analysis to analyze outcomes for juvenile reoffenders (N = 147) and non-reoffenders at six months following exit from the
program. While they acknowledge their findings were somewhat inconclusive as to what method of intervention should be used to prevent juvenile recidivism, their findings do “empirically support the hypothesis that youth who received wraparound services were less likely to engage in subsequent at-risk and delinquent behavior” (Carney & Buttell, 2003: 564).

Risk Factors That Predict Post-Confinement Juvenile Recidivism

Attaining a general understanding of common treatment approaches for high-risk juvenile offenders is only one of the needed steps towards establishing a consensus on how to effectively treat these individuals. In order to foster a comprehensive understanding of juvenile recidivism, the focus must not solely be on the nature of juvenile correctional institutions, but also on common characteristics of reoffending juvenile populations. Much of this research illuminates the complex nature of treating high-risk juvenile populations by pointing towards the influential role of certain background variables. Although the previously outlined studies have focused on investigating the effectiveness of different approaches to providing treatment for high-risk juveniles, there is also a considerable amount of social scientific research that examines factors that may predict the likelihood of juvenile recidivism. Many of these articles provide empirical support for theories which argue for the existence of specific static background variables that can help predict juvenile criminal recidivism. Looking at the full body of this literature, some of the most commonly cited background variables that researchers find as predictors of juvenile recidivism include: Age, extent of criminal history, length of confinement, and type of offense.
Age.

Looking at potential predictors of juvenile recidivism, Katsiyannis and colleagues (2004) examined “demographic, psychoeducational, and psychosocial variables as possible predictors of recidivism.” (Katsiyannis et al. 2004:26). Using a hierarchical regression analysis method for the prediction of recidivism, it was determined that their findings were “consistent with those from earlier studies regarding background variables such as age of commitment and parole violation” (Katsiyannis et al. 2004: 26). In fact, while their results suggest that looking at certain psychosocial variables may be helpful in predicting juvenile recidivism, it is important to note they found that “age of first commitment was the single most important predictor of recidivism.” (Katsiyannis et al. 2004: 28). This particular finding helps to justify the inclusion of age at program entry in evaluating participant recidivism from the New Horizons Program.

Adding additional support for the link between age and increased recidivism is Mulder and colleagues who conducted an investigation into risk factors that predict both overall recidivism as well as the severity of recidivism in serious juvenile offenders. Using a logistic regression analyses to look at seventy “dynamic and static risk factors” in a sample of juvenile offenders (N = 728) in relation to official reconviction data spanning two years, the authors conclude that “several risk factors for recidivism were found: past criminal behavior (number of past offenses, young age at first offense, unknown victim of past offenses), conduct disorder, family risk factors (poor parenting skills, criminal behavior in the family, a history of physical and emotional abuse), involvement with criminal peers, and lack of treatment adherence (aggression during treatment, lack of
coping strategies)” (Mulder, 2010: 118). Specifically, the fact that these researchers, like Katsiyannis and others, “found young age of onset of delinquency as a significant risk factor” (Mulder, 2010: 130) helps indicate that age should be further investigated in other settings to determine if it holds up as a predictor of juvenile recidivism or if an intervening variable may be present. To this end, this present study picks up where this study left off in an effort to examine the reliability and generalizability of their findings.

**Criminal History.**

Recent research has also looked at the role criminal history (operationalized as the number of prior offenses) plays in predicting juvenile recidivism. This area of inquiry is frequently rooted in an interactional theory perspective which argues that “delinquent behavior and many of its causes become involved in mutually reinforcing causal loops as delinquent careers unfold” (Thornberry & Krohn, 2005:188). Multiple studies (Frederick, 1999; Castillo & Alarid, 2011; Carach and Levette, 1999; Cottle et al. 2001) show that “prior involvement in the justice system has generally been considered a reliable predictor of further involvement in the system” (Mcintosh, 1976: 13). In Frederick’s (1999) study examining recidivism factors among juvenile offenders, juvenile delinquents, and other youth in need of supervision who were discharged from the custody of the Division for Youth (DFY) between 1991 and 1995, “different factors were associated with the risk of recidivism depending on gender, adjudication, geographic region, and type of recidivism (e.g., violent vs. nonviolent). Across conditions, the three factors that were most consistently associated with the risk of recidivism were criminal history, age at discharge, and community characteristics” (Frederick, 1999: 98).
Similarly, Castillo and Alarid (2011) recently conducted research on factors that predict recidivism of juvenile offenders after participating in various types of correctional interventions. Their study focused on offenders in a residential treatment program and specialized probation group, specialized probation alone, and mentally ill offenders who had served time in jail. Findings from their research indicated that “in comparison to the other two groups, the residential treatment offenders had a more extensive criminal history and were thus more likely to fail on supervision as well as to recidivate after supervision ended” (Castillo & Alarid, 2011:98). Consistent with these findings are multiple studies examining juvenile recidivism which have gone as far as to claim that “the history of contacts with the justice system is perhaps the best predictor for recidivism” (Carach & Levette, 1999: 3). In fact, a meta-analysis (Cottle et al. 2001) of twenty-three published studies on risk factors that predict juvenile recidivism (representing 15,265 juvenile cases) found that contrary to Katsiyannis’ finding that age of first commitment is the strongest predictor of recidivism, this study found that “the domain of offense history was the strongest predictor of reoffending” (Cottle et al. 2001: 367). It is important to note that while these findings may appear to conflict with each other, there is reason to believe that these predictors are closely related. This is to say that there is a natural correlation between age and criminal history. This is because older youth have had a greater opportunity to establish a more extensive criminal history than youth who are younger in age. This inference may also be supported by studies on juvenile recidivism that have found that “the strongest predictor of recidivism is prior incarcerations, followed by age people started committing crime” (Benda et al. 2001:
Taken as a cohesive body of literature, these articles tend to suggest that juvenile recidivism may be at least partially predicted by extent of criminal history. The present study is heavily informed by the results and findings from these studies to the extent that a variable indicative of extent of criminal history is included in this study’s quantitative analysis.

**Length of Confinement.**

Another extensively studied risk factor thought to predict juvenile recidivism is the length of time that juvenile offenders spend in secure residential treatment programs. Interestingly, the potential influence of length of confinement on risk of recidivism from these facilities has been both supported and contested on theoretical grounds. Primarily, there is a fundamental distinction between proponents of rational choice theory which suggest that “longer durations of confinement will reduce the probability of reoffending” since increased punishment is thought to deter further criminal behavior. Followers of rational choice theory are contrasted with those who are aligned with a more humanistic oriented theory which tends to support the notion that longer stays in correctional placement may increase the probability of reoffending. This theoretical position is supported by Loughran et al. (2009: 705-706) on the following grounds:

“First, longer exposure to noxious environments may be criminogenic (Agnew, 1992), undermining any potential positive effects of treatment. Second, psychological and developmental factors, which are important factors related to the risk or amenability of an adolescent offender (Fagan and Piquero, 2007; Mulvey and Iselin, 2008), may change over an extended period of institutional
care, reducing the impact of any intervention efforts. Third, the longer the length of stay, the more tenuous the link between the crime committed and the punishment in the mind of the offender. If the offender loses this important connection, then the moral component of confinement is ultimately lost, which could potentially lead to perverse effects, such as defiance and resistance (Piquero, Langton, and Gomez-Smith, 2004).”

The incredible prevalence of these fundamentally different theoretical orientations warrants further investigation into the nature of the relationship between length of confinement and juvenile recidivism.

Much of the literature on length of confinement as a risk factor for juvenile recidivism has indicated that “for lengths of stay between 3 and 13 months, there is no marginal benefit for retaining an offender in institutional care for longer periods of time” (Loughran et al. 2009: 726) and that “after controlling for significant risk factors, most analyses found no consistent differences in recidivism by residential length of stay” (Frederick, 1999: 98). In contrast to Frederick’s finding, a recent report prepared for the National Center for Juvenile Justice (Winokur et al. 2008: 136) showed that:

“the impact of months served for high-risk offenders is varied. The shortest lengths of stay within this security level result in a decreased likelihood for recidivism. Intermediate periods of confinement, in comparison to the longest lengths of stay for high-risk youths (13 months or more), increase the odds a youth will be readjudicated/convicted.”
The present study also takes into consideration this report’s argument that “the impact of length of stay is dependent on program characteristics. Programs employing ineffective treatment modalities would not be expected to decrease recidivism through longer lengths of stay. Rather, increasing the length of confinement under these circumstances may lead to increased recidivism. Studying high quality programs employing treatment methods shown to be effective (e.g., cognitive behavioral approaches) may enable researchers to identify the point at which further treatment produces diminishing returns” (Winokur et al. 2008: 136).

*Type of Offense.*

While much of the literature on risk factors that predict juvenile recidivism has focused on factors such as age, length of stay, and extent of criminal history, there is also a substantial body of research that investigates the relationship between juvenile recidivism and offense characteristics. A meta-analysis (Cottle et al. 2001) of twenty-three published studies on risk factors that predict juvenile recidivism (representing 15,265 juvenile cases) found that “static risk factors for recidivism include an earlier age of onset of offending, more arrests and commitments, longer incarcerations, and more serious types of offenses” (p. 387). Essentially, this indicates that the more serious the offense a youth commits, the higher the risk is that he or she will recidivate. Likewise, other research on the relationship between offense characteristics and juvenile recidivism found that “when the 1st crime was a serious overt crime, the risk of recidivism within 1 year increased” (Nijhof et al. 2008: 345). Some research has even gone as far as to conclude that “offender type was the only factor found to have a significant impact on
recidivism” (Calley, 2012: 257). Clearly, this is in direct contrast to the multitude of other studies (Carach and Levette, 1999; Cottle et al. 2001, Castillo & Alarid, 2011) that have posited various different factors unrelated to offense characteristics as having the most significant impact on reoffending behavior.

In sum, a review of the extensive body of research on predictors of juvenile recidivism has indicated that many researchers are currently at odds over which factors most significantly predict reoffending behavior amongst high-risk juvenile offenders. Although there is considerable disagreement over which factors should be considered as the most reliable predictors of future juvenile offenses, these studies seem to collectively suggest that the following factors are all popular candidates for this title: Age at entry, criminal history, length of confinement, and type of offense committed. It is precisely because of these competing research findings, as well as data from qualitative interviews with New Horizons staff/stakeholders, that the present study has chosen to conduct an analysis including variables that represent each of these popularly cited predictors of juvenile recidivism. In order to further explore these predictors of recidivism within the context of the New Horizons Program, the present study proceeds with a description of each of the research methodologies that were drawn upon to conduct this mixed-method analysis.
RESEARCH METHODS

This chapter is intended to document the methods that were used to conduct this study’s qualitative process evaluation, quantitative outcomes evaluation, and analysis of recidivism predictors. The purpose of this overview is to provide an account of the research process while detailing and justifying the use of specific methodologies. As such, this chapter starts with a description of the qualitative research methods that were employed as part of this study. This chapter then turns to a description of the quantitative research methods that were employed to analyze participant outcomes and investigate potential predictors of participant recidivism. Finally, this chapter concludes with a brief review of key methodological considerations pertaining to this study.

Qualitative Research Methods

A qualitative process evaluation was employed to capture New Horizons staff and stakeholders’ understanding of program processes as well as perception of risk factors for participants’ recidivism. Some of the themes that emerged from this data were then used to inform the quantitative analysis that follows. This methodological overview provides a descriptive account of the study’s design, the participant acquisition process, and the theoretical underpinnings of the qualitative methods selected for this analysis. To this end this chapter intends to document stages of the qualitative research process and the logic behind various steps as a means of potentially informing future research.

Although outcome measures for juvenile participants in this program are regularly monitored with quantitative measures, in this study qualitative methods were used by the
researcher to explore staff insights about this program. Staff interviews were used to gather information on processes involved in the program, program strengths, and program challenges. To this end, this study investigated how staff and stakeholders (probation staff, mental health clinicians, and administrators, among others) of the New Horizon program understand the processes involved in the program. Additionally, findings from this analysis offer potential to inform program decisions around policies, operation, types of services provided, and allocation of funding. Furthermore, findings from the present study may potentially help inform the design of future grant studies.

Participants

The study was based on a purposive convenience sampling methodology. In part, this sampling strategy was utilized as a means of quickly and inexpensively gathering preliminary information about the New Horizons program. Additionally, this method was selected as a means of reducing travel costs associated with conducting face-to-face interviews with program stakeholders that reside out of the area. Upon receiving IRB approval and reviewing my research materials, Bill Damiano, Chief Probation Officer at Humboldt County Probation Department, agreed to provide the contact information of potential interviewees. This list consisted of a total of 10 program staff and or stakeholders who all attended weekly interdisciplinary meetings on the New Horizons Program. Before I started conducting research, an informed consent form was either e-mailed or sent through the mail to participants explaining the purpose of the study and requesting participation. Of this population of 10 staff/stakeholders of the New Horizons Program, a total of 6 program staff/stakeholders agreed to participate in this study. These
individuals were selected based on their availability for interviews and ability to provide information about the New Horizons program. Interviews were then scheduled and a paper copy of the required consent form was provided to participants for them to sign prior to beginning audio-recorded interviews. All interviews were conducted at interviewees’ place of work (the Humboldt County Probation Department, the New Horizons regional facility, and the Humboldt County Department of Health and Human Services) and usually took place in the middle of the afternoon.

Study Design

The design of this study was heavily informed by contemporary qualitative research advocates and the principles of grounded theory which were used to guide semi-structured interviews and code for themes and patterns. A qualitative approach was adopted for the study because it provided a unique means of “capturing the individual’s point of view,” “examining the constraints of everyday life,” and “securing rich descriptions” (Denzin & Lincoln, 2008: 16). Fundamentally, the design of this study was informed by such literature detailing the benefits of using a semi-structured interview method to collect data from participants. The semi-structured interview method was adopted as the central method of data collection for this study since it provided a means of consistently asking a set of essential questions “geared toward eliciting specific desired information,” while also making use of probing questions designed to help “draw out more complete stories from subjects” (Berg, 2007: 121). Additionally, this interviewing method was used because according to Berg and colleagues, “this is an optimal method for dynamic and unpredictable situations and situations in which the variety of
respondents suggests a wide variety of types of responses” (Berg, 2007: 111). As such, the semi-structured interview method was determined to be the most logical choice for the present study given interviewees occupied a variety of different institutional positions in relation to program participants.

The purpose of using a semi-structured framework for face-to-face interviews was to create a brief set of pre-established questions that would be able to fluidly guide the interview process while still consistently touching on key areas of inquiry. Essentially, the framework consisted of having two questions that assessed differences in understanding of program goals, two key questions that attempted to get at specific challenges to youth success after the program and potential areas for reform, and a final question that was designed to capture changes that staff and stakeholders have noticed in juvenile program participants.

Grounded theory informed the analytical strategy of this research design in a variety of ways. Primarily, the principles of grounded theory informed the above outlined style, content, and ordering of the semi-structured interview questions. In keeping with the flexible nature of grounded theory methods, the interview itself was treated as an “emergent technique” in which “ideas and issues emerge during the interview and interviewers can immediately pursue these leads” (Charmaz, 2006: 29). This was accomplished by the use of probing questions that allowed for spontaneous ideas and questions to emerge during the course of conducting interviews. The principles of grounded theory also informed the content and ordering of the semi-structured interview guide by modifying questions based on responses received from interview
subjects. For instance, frequently interviewees would figuratively “jump the gun.” This is to say that their answers to a particular question would start to drift into areas that were going to be asked about later in the interview. In these cases participants were encouraged to share their feelings at length with minimal interjections. In some ways this interview technique reflects my sincere consideration of “researchers need to acknowledge their participation and attempt to develop a participatory consciousness” (Bishop, 2008: 173) This is to say that developing an understanding of New Horizons program processes was a dynamic activity that respected the personal investments of everyone involved.

Another way in which grounded theory informed this study was through the integration of the logic of grounded theory coding into qualitative research methods. Grounded theory coding is an active, not a passive process. According to Charmaz, “you act upon your data rather than passively read them. Through your actions, new threads for analysis become apparent. Events, interactions, and perspective come into analytic purview that you had not thought of before.” (Charmaz, 2006: 59). This fluid and emergent coding process was achieved by creating initial line-by-line codes and then making analytical decisions about which initial codes made the most conceptual sense to keep during the focused coding stage. This cyclical process allowed unexpected ideas to emerge which in turn helped to “make fundamental processes explicit, render hidden assumptions visible, and give participants new insights” (Charmaz, 2006:46). One manifestation of this occurrence played out through frequently redefining initial coding
schemas in order to try to better more accurately represent what was being said from a variety of situational perspectives.

Keeping with the logic of the grounded theory method, I also utilized “partial, preliminary, and provisional” (Charmaz, 2006: 84) memos as a means of reflective inquiry. These memos were frequently written directly after conducting interviews. Besides providing the benefit of clearly documenting events and processes, the grounded theory approach to memo-writing gave additional insight by focusing attention on the analytical logic behind focused codes and helping to identify potential gaps in the analysis. As a form of personal narrative, these memos played a role in locating my particular biographical experiences in larger historical and sociological processes. By doing so, this form of writing served as a method of inquiry that aided in developing a more fully contextualized understanding of program processes.

It is also important to note that a central rationale for adopting the use of grounded theory methods in this qualitative analysis was also directly linked to the small sample of program staff/stakeholders that were available to participate in this study. This is to say that this particular methodological orientation was further justified on the grounds that “small samples and limited data do not pose problems because grounded theory methods aim to develop conceptual categories and thus data collection is directed to illuminate properties of a category and relation between categories.” (Charmaz, 2006: 18). While many more traditional qualitative frameworks tend to emphasize the need to recruit a large sample in order to effectively conduct analyses, it is clear that grounded theory methods are able to find a way to work in a way that sidesteps issues of limited
data and small samples. In this way grounded theory methods provided the current study with an important set of tools and techniques designed to avoid many of the problematic aspects commonly associated with the use of small samples in qualitative research.

In sum, the qualitative portion of this study began by obtaining permission from Humboldt County’s chief probation officer as well as approval from Humboldt State University’s Institutional Review Board (IRB). Once permission was granted and access was provided, this study reviewed recent literature on qualitative methods and made the analytical decision to rely on the semi-structure interview method to conduct interviews with six different staff/stakeholders of the New Horizons Program. The interview design, the interview itself, and the data analysis process were all heavily influenced by the principles of grounded theory methods. The use of Atlas.ti qualitative data analysis software to analyze data and code for themes and patterns allowed for a comprehensive evaluation of program processes, and served to capture feelings pertaining to program strengths and weaknesses, understanding of program objectives, and perceptions of individual factors that problematize treatment. Overall, the methods used in this portion of the analysis can be seen as mutually reinforcing and unified in their perspective of qualitative research as an emergent and fluid process, rather than a static process of inquiry.

Quantitative Research Methods

The quantitative portion of this study is divided into two distinct sections. The first section reports descriptive statistics for outcome measures that are annually documented for state reporting purposes. The remaining portion of this quantitative
analysis turns to an analysis of several risk factors that may predict juvenile recidivism within a six-month period following participation in the New Horizons Program. All data included in these analyses come from participants’ referral files provided by the Humboldt County Probation Department. This data was made available as part of ongoing evaluation practices conducted by the Center for Applied Social Analysis and Education (CASAE). The overarching intent of these analyses are to help provide staff and stakeholders of the New Horizons Program with an evidence-based understanding of recent participant outcomes and an awareness of risk factors that may predict the likelihood of juvenile recidivism following program discharge. To this end, findings from this analysis offer the potential to inform program decisions around policies, operations, types of services provided, and allocation of funding. Additionally, this analysis may make a small contribution to a large body of research on risk factors for juvenile recidivism as well as potentially effective treatment programs for youth who have serious mental health and juvenile delinquency problems.

Sample

During the 2011-2012 year, the New Horizons Program had a total of 30 youth participants. The California Board of Corrections (CBOC) mandates an annual report of outcomes for all program receiving Juvenile Justice Crime Prevention Act (JJCPA) funds. In documenting annual program outcomes, the entire annual population of New Horizons participants was included in the present analysis.

Study Design
The quantitative outcomes evaluation follows the pre-established evaluation framework developed by the Humboldt County Department of Probation and is presented in the format constructed by the California Board of Corrections reporting system for programs that are funded by the Juvenile Justice Crime Prevention Act (JJCPA). The implementation of a logistic regression analysis follows in the footsteps of similar studies that have employed this statistical procedure to investigate risk factors that may predict juvenile recidivism (Carney & Buttell, 2003; Trulson, 2005; Benda et al. 2001). It was decided that this study would employ the use of a logistic regression analysis as opposed to a discriminant analysis for the following reasons: First, logistic regression does not require the assumptions of multivariate normality and equal variance-covariance matrices across groups which are requisites in discriminant analyses (Hair, Anderson, Tatham, & Black, 1992; Hosmer & Lemeshow, 1989). Second, since of this analysis included categorical variables, logistic regression was determined to be an appropriate statistical test to determine predictive efficacy of the model and to identify which of the variables in the model were significantly associated with juvenile recidivism (Field, 2009: 273). In the present study, this analytic strategy is able to provide a prediction of juvenile reoffending within a six-month period following a youth’s exit from the New Horizons Program. In the context of the proceeding analysis, logistic regression serves to model the logged odds that a youth will reoffend as a function of a set of predictors (Age at entry, length of stay, number of prior offenses) that are both continuous and categorical (dummy coded) and where the response is binary (reoffend or not reoffend) (Hosmer & Lemeshow, 1989).
This study also utilizes Chi square tests and independent samples t-test in order to further investigate the association between selected variables. The Fisher’s exact test was selected because it provided a method for “computing the exact probability of the chi-square statistic that is accurate when sample sizes are small” (Field, 2009: 690). This form of chi square test allows this study to analyze the strength of the association between types of offenses at program entry and recidivism 180 days after program exit. The independent samples t-test statistic was chosen to “test whether two group means are different” (Field, 2009: 324). In the context of this study, this statistical test was used to examine the relationship between recidivism 180 days after program exit and participants’ age at entry into the program, number of days in the program, and number of prior charges. This section of the quantitative analysis utilized the same 2011-2012 New Horizons data set which consists of all youth who participated in the program at any point during this time period. Similarly, both analyses use recidivism as the dependent variable and adopt the pre-established six-month follow up period to contribute to ongoing efforts to document recidivism from this program. For the purposes of this study, recidivism is defined as the existence of a documented arrest at any point during this six-month post-release window.

**Outcome Measures**

Recidivism during a six-month period following participation in the New Horizons Program was examined using data (referral files) on juvenile participants provided by the Humboldt County Probation Department and prepared by CASAE
researchers. The fifteen outcome measures included in the quantitative outcomes evaluation are the following:

- Arrest rate
- Incarceration rate
- Completion of probation rate
- Rate of completion of restitution
- Rate of completion of court-ordered community service
- Probation violation rate
- Percent of program participants who successfully complete or no fault exit
- Daily per capita program costs
- Social problems as measured by the Y-OQ-SR
- Substance use as measured by the Child & Adolescent Functional Assessment Scale (CAFAS)
- Role performance-community as measured by the Child & Adolescent Functional Assessment Scale (CAFAS)
- Role performance-school as measured by the Child & Adolescent Functional Assessment Scale (CAFAS)
- Behavior toward others as measured by the Child & Adolescent Functional Assessment Scale (CAFAS)

These measures were determined by the Humboldt County Probation Department to most accurately and thoroughly explain juvenile outcomes from the New Horizons Program.
Variables

Two considerations were taken into account in the selection of variables for the quantitative analyses. First, data from semi-structured interviews with New Horizons staff/stakeholders was used as a preliminary means of identifying predictors of recidivism. Second, once factors were identified through an analysis of qualitative themes, additional literature was used to situate interview findings within a well-established body of research that has investigated risk factors that predict juvenile recidivism (Cottle et al. 2001; Benda et al. 2001; Castillo & Alarid, 2011; Frederick, 1999). This body of research was also used to determine which additional predictors of recidivism should be included in the present analysis. These two sources of data combined to comprehensively inform the selection of variables in this study. As a result, the following scale level variables were ultimately determined to be included: Age at entry, number of prior charges, and number of days in program. The variable “Age at Entry” represents the participants’ age when they entered the New Horizons Program. The variable “Number of Prior Charges” refers to the number of documented charges that was found in the participants’ referral file. The variable “Days in Program” represents the number of days the participant was physically residing in the program. Additionally, a variable representing the type of offense that brought the participant into the program was selected. With the consultation of staff from the Humboldt County Probation Department, it was decided that the admitting offense variable would consist of the six following offense classifications: Violent offense, property offense, drug offense, all
other felony offenses, all other misdemeanor offenses, and violation of probation or court order.

Data Analysis

The analysis of participant outcomes is based on a sample of 30 youth who participated in the New Horizons Program at any point during the 2011-2012 year. The logistic regression analysis and comparisons of means test are based on a sample of 28 youth who participated in the New Horizons Program at any point in the 2011-2012 year. The reason for this discrepancy in sample size is that additional data on two out-of-county youth was unavailable within the timeframe of this study. The quantitative analysis was completed using descriptive statistics to measure program outcomes and recidivism risk factors were analyzed using SPSS 20.0 to run a binary logistic regression test, an independent samples t-test, and a chi-square test. While the former analysis involved little more than tallying data and calculating results, the latter involved a variety of steps and analytical decisions.

Summary of Methods

As this overview has indicated, this study used an exploratory research framework and consisted of a qualitative process evaluation, a quantitative outcomes evaluation, and an analysis of recidivism predictors. The process evaluation was based on a sample of 6 program staff and or stakeholders who were interviewed using semi-structured interview methods and the principles of grounded theory, and the outcome evaluation relied on a univariate analysis that measured recidivism among participants in 2011 (N = 30).
Finally, this study utilized a logistic regression analysis and a comparison of means test to investigate identified predictors of participant recidivism.
FINDINGS

This chapter is intended to provide an overview of key findings from this study’s qualitative process evaluation, quantitative outcomes evaluation, and analysis of identified predictors of participant recidivism. Findings from these analyses are explained and then situated within a well-established body of literature on predictors of juvenile recidivism with the overall goal of expanding understandings and drawing parallels to other work. In doing so, this chapter seeks to document results and explain important findings as a means of contributing to ongoing evaluation research on the New Horizons Program. Finally, this chapter concludes with a short review of findings from both analyses.

Qualitative Findings

This section presents on a variety of themes and sub-themes that emerged during the qualitative data analysis process. This overview of findings aims to illustrate the often complex yet often similar perspectives that staff/stakeholders of the New Horizons Program share. Essentially, this section shares findings and explores how perceptions held by program staff and stakeholders may be unknowingly grounded in well-established theoretical perspectives and a substantial body of research. The following analysis is intended to document interviewee responses while illustrating this linkage to recent research when applicable.

The results of this data analysis indicated the presence of a few central themes pertaining to perceptions stakeholders have of New Horizons regarding program
operation and challenges to participant success. One central theme that emerged during
the analysis of semi-structured interviews with various stakeholders of the New Horizons
Program is the common perception amongst stakeholders that certain participant
characteristics provide challenges to effective treatment and rehabilitation. This theme is
further divided into two sub-themes that express particular background factors that
problematize treatment and rehabilitation, and which contribute to the likelihood of youth
reoffending after exiting the New Horizons program. The first background factor that
stakeholders commonly perceived as complicating the effective treatment and
rehabilitation of program participants is youth being first brought into the program at a
transitional age (16-18).

These interview responses reveal that there is a general consensus amongst
program stakeholders that these youth in the New Horizons program are frequently more
difficult as a result of their prolonged experience with criminal activity. This perception
is most accurately represented by one interviewee who made the following point:

“Our mean population is probably around 16 or 17 which is also a problem
because if you don’t get somebody in here until they are 16 or 17 or 18, of course
their behaviors are going to be that much more set.”

This acknowledgment of the problematic nature of working with transitional-age youth is
also reinforced by another interviewee who similarly recognized that:

“Some of the 18 year olds, they have a very well established criminal mindset.”

In addition, this sentiment was further expressed by another interviewee who reported
that:
“The youth that are older, they can be more entrenched in kind of a criminal lifestyle” and that one of the factors that contribute to recidivism after exiting New Horizons is that “they might have come in late (in terms of age) to the program.”

All of these responses are indicative of the following pattern: New Horizons stakeholders perceive that the program has unique difficulty with effectively treating and rehabilitating transitional-age youth.

Additionally, these responses illustrate that stakeholders of the New Horizons program perceive the reason for this difficulty as being closely related to transitional-age youth’s repeated exposure and experience with criminal activity. As observed in these interview excerpts, whether referring to these individuals as “more entrenched in kind of a criminal lifestyle,” having a “very well established criminal mindset,” or “having behaviors that are much more set,” the central pattern in this context appears to be that stakeholders find that transitional-age youth pose unique challenges because of their prolonged experience with activities and behaviors that are perceived as representative of criminality. It is important to note that this shared sentiment amongst New Horizons staff is strongly affirmed by a well-established body of literature documenting the relationship between age and recidivism (Katsiyannis et al. 2004; Mulder, 2010). As such, this pattern of responses in combination with support from research literature points towards the need for a more powerful analysis to determine whether or not transitional-age youth are significantly more likely to reoffend relative to New Horizons program participants under 16 years of age.
The other background factor that New Horizons stakeholders commonly perceive as complicating the effective treatment and rehabilitation of program participants is youth being placed with the same dysfunctional and or unsupportive family environment they came from. This notion was primarily articulated by an interviewee who indirectly works with the New Horizons Program. When asked about factors that contribute to program participants’ likelihood of reoffending, this interviewee answered:

“The family factors. That it's a really unstable family. That one or two of the parents have been in jail or are in jail at the time…” “I don't know how many right now, but during the time the program has been open we've had youth with one, sometimes both members of their family in jail. So they have that as part of their normal family life. That's what life is. So they have to go uphill from all of that and then it is a struggle.”

This stakeholder also went on to clearly acknowledge that “the success of the youth is really, really, really, dependent on the success of the family.” This perception of family and its role on program participant’s ability to remain free of criminal activity is also supported by another interviewee who is in closer contact with participants of the New Horizons Program. In response to being posed a similar question, this staff member replied:

“Well a lot of it has to do with family. Family that is not stable, family that is using drugs, family that are homeless. You know? I mean that's a huge detriment.”

This line of thinking is similarly illustrated by the words of another interviewee who firmly stated:

“So kids finally start opening up to the clinician and then they are back living with the family who was part of the problem in the first place.”
This collection of responses adds support for the interpretation that stakeholders of the New Horizons program share a common perception of program participants being more likely to reoffend if they are placed back with unsupportive and or dysfunctional families. This pattern of responses highlights the need to analyze the extent to which participant recidivism is related to the family situation in which these youth are placed proceeding program exit.

While this theme adds a great deal to explaining what program staff/stakeholders perceive as problematizing participant success, other themes that emerged during the qualitative data analysis process provided deeper insights into these perceptions. As an example, another theme relating to staff/stakeholders’ perception of factors that problematize participant success was found in a cohesive set of responses that brought up the length of stay of program participants. The types of responses that constituted this theme are most accurately portrayed in the response of one interviewee who is a current stakeholder of the New Horizons Program:

“I think that at six months if they don't get it, keeping them longer isn't going to help them get it more. They are just not going to buy into what's going on here whatever the structure we have, which is earn points and get passes and all that. It didn't click for them, it didn't matter, it wasn't a big enough care, whatever it was to get them to buy into us.”

Another interviewee seemed to share the perception that there may be a curvilinear relationship between length of stay and successful program outcomes. Within the context of answering a question about changes in New Horizons’ program model, this interviewee stated:
“We could keep the youth there eighteen months, and some kids did stay that long which was bad because you have diminishing results. It just got really bad. At that time when youth left they were passed off to another clinician in the clinic here and they would either bond or not bond. We did shorten the program to six months with the possibility of getting out in four and a half months, and that has worked a lot better.”

Interestingly, these perspectives were in stark contrast to the perspective of another program stakeholder who stated:

“I think one of the things that I wish is that the program could be longer, the locked part of the program. I think that it would give them more time to develop habits and patterns.”

Taken together, this pattern of responses seems to form a distinct theme. This theme can be interpreted as representing the various ways program staff/stakeholders understand the relationship between participant length of stay and successful outcomes. As seen in this theme there exists a split between staff/stakeholders who feel that participants need to stay in the program longer because “it would give them more time to develop habits and patterns,” and those who either feel that “keeping them longer isn't going to help them get it more” or perceive there to even be “diminishing results.” Such a result points to the need for a further investigation into the nature of the relationship between participant length of stay and recidivism. Such an analysis will help provide clarity in an area where contrasting perceptions amongst program staff/stakeholders exists.

Another theme that emerged from the data analysis process was that program staff and stakeholders consistently reported feeling that interagency collaboration is a central challenge to their work. Although this sentiment was overwhelmingly expressed by
interviewees, it often seemed to be somewhat reluctantly articulated. This theme of interagency collaboration posing a challenge to program staff and stakeholders was perhaps most vehemently expressed by a staff member who told me:

“The collaboration is difficult. It’s really difficult to get, you know, forty or fifty people on the same page. So I would say that’s the most challenging because all the different disciplines come from a different mindset, and so trying to get us all to come to some kind of collaborative agreement sometimes is very difficult.”

This perception of interagency collaboration as a challenge because of clashing perspectives was similarly shared by a program stakeholder. In response to a question asking what challenges the program faces, this particular program stakeholder replied:

“Well it's a big program. There's lots of people involved, and there's lots of different corrections shifts, and some of the shifts in the past had different approaches.”

In a similar vein, one interviewee in a joking manner acknowledged that:

“Yeah, we have weekly meetings. They are drawn out, reasonable, logical, organized, chaotic, they run the whole gamut of the way meetings can go but we're changing the paradigm here. As far as I know we're the only ones in Northern California that does this. We're a full program and it's a paradigm shift, and no paradigm shift occurs without conflict.”

Furthermore this theme was expressed by a staff member who stated:

“The biggest thing is just that if they communicate with us and we communicate with them it will work out, but if we don't and they all start turning around and are like, "oh I can't believe what those guys are doing" or whatever, and that happens. That's when we have had problems.”

Clearly, this theme captures the way in which staff and stakeholders tend to perceive interagency collaboration as being one of the most challenging components of their work. In particular, this theme draws attention to the challenges associated with the process of multiple disciplines, each coming from their own perspective, working together to
provide treatment and rehabilitation services for youth in New Horizons. It is also interesting to recognize that many staff and stakeholders went out of their way to try frame their difficulties with interagency collaboration within a larger context of juvenile programs that are perceived to experience even greater issues collaborating across agencies. This was most memorably apparent in one interviewee who interjected and mentioned:

“We're way ahead of the ball game. I mean like we’re light years ahead of most counties as far as getting along with and working with mental health. Because I mean people send mental health into their juvenile halls all the time, but I talk to people that say, "we don't even talk to those guys." For us, we have a very close relationship with them and if we have any issues we deal with them and try to work them out.”

Similarly, one staff member articulated this positive perception of interagency collaboration within the context of other juvenile programs when he stated:

“It just blows me away. I talk to people from all over the county. I've been at training and met people and they tell me what we have up here is unique. That we are small enough to sit down at tables with each other but big enough to have the resources that we have.”

In this way it is important to notice how the theme of interagency collaboration as a challenge to program staff/stakeholders is subsequently rationalized by deliberately placing their perceived challenge in the context of other juvenile programs that suffer from even worse collaborative environments. This serves to illustrate how the perceived challenge of collaborating with multiple agencies to provide services was minimalized by interviewees. As such, it is important to contextualize this theme and whatever importance and possible implications it may have within the context of these remarks that were frequently added by interviewees.
There was also a fourth theme that emerged in the data analysis process. This theme represents program staff/stakeholders’ shared perception that the program’s strength resides in the type of services it provides. As seen in the following responses, this represents a distinct theme apparent across a wide range of responses from interviewees. One interviewee candidly expressed:

“One of the overall things is that if we can help stabilize the family situation, the living situation, then the youth has a better chance of success, and Functional Family Therapy is geared towards that. It's focus is on acting out youth within a family system so it's very non-judgmental and kind of balancing the family so that works pretty well.”

This line of thinking was further expressed by a program stakeholder who, when asked for their perspective on what works well with the program, responded:

“From what I've heard, and what I can see, the kids do actually really respond to the aggression replacement training.”

In further support of the theme of services as a program strength was one interviewee who declared:

“We're trying to get them to think about what they are doing and to use the tools that they have. I think the structure works for kids even though a lot of them don't like it. I think it does work for them, it's kinda what they are wanting, and they would never tell you that, but I do think that it is something that works for most of the kids well and I think that even though a lot of the kids don't necessarily like the groups. I do think they work, the ART groups do work.”

Taken together this collection of responses affirms the presence of the following general theme: Program staff/stakeholders perceive New Horizons’ services as a main strength of the program. It is interesting to note that in contrast to the relative uniformity in responses pertaining to questions relating to program challenges, this set of responses
displayed much more diversity as far as identifying specific services that were considered to be strengths of the New Horizons Program.

In conclusion, this analysis has indicated the presence of a variety of general themes. First, Staff/stakeholders of the New Horizons Program perceive that transitional-age youth are harder to provide treatment for than youth who are younger. Within this theme was the sub-theme that increased age was equated to having an increasingly ingrained criminal mindset, thus making successful behavioral modification a more daunting task. This was found to be logically supported by the fact that older youth naturally have had a greater opportunity to engage in criminal behaviors. Second, the extent to which program participants have a subsequent placement with a supportive family was repeatedly expressed by staff/stakeholders as being crucial for participant success following their exit from the program. This perception is supported by a significant body of literature detailing the importance of family support and supervision for effectively treating juvenile offenders (Özabacı, 2011; Catalano, 1989; Brisco & Doyle, 1996). Third, a theme emerged that represented different understandings of the relationship between participant length of stay in the program and subsequent recidivism. While the majority of interviewees reported that they felt that there was a curvilinear relationship between length of stay and participant success, this was contested by others who felt that participants aren’t staying in the program long enough. This clash in perspectives is consistent with the vast body of literature on length of confinement as a predictor of recidivism (Loughran et al. 2009, Frederick, 1999, Winokur et al. 2008).
Fourth, this analysis of qualitative data has shown that program staff/stakeholders generally share the sentiment that collaborating with multiple agencies is a challenge to them personally, and to the work they do. As such, interagency collaboration as a challenge to program staff/stakeholders is the third main theme that emerged during the data analysis process. As previously described, this theme essentially represents the perception that due to the multiple competing perspectives and theoretical backgrounds belonging to staff from the various agencies that collaborate together to run New Horizons, the work of staff/stakeholders is made more difficult. The final theme that was found as part of this qualitative analysis represents staff/stakeholders’ shared perception that the strength of the program is the services they provide. Although different staff/stakeholders often described different services and why they strengthen the New Horizons Program, all interviewees mentioned some positive aspect about the services they provide. Overall, this research provided a unique window into how program staff/stakeholders currently understanding challenges to serving program participants, and factors that inhibit participants’ ability to be successful after exiting the New Horizons program. Additionally, the findings from this research uncovered a wide range of program processes and captured program staff/stakeholders’ perception of program strengths and weaknesses. In sum, this analysis has yielded the following results:

1. Transitional-age participants are perceived as being harder to provide treatment for because of their prolonged involvement with criminal behavior.

2. Placements with dysfunctional or unsupportive families are seen as complicating participant success.
3. There is substantial disagreement amongst staff/stakeholders over the direction of the relationship between length of stay and participant success.

4. Interagency collaboration is understood as a program challenge.

5. New Horizons’ services are perceived as a program strength.

It is with these findings in mind that this study turns to an analysis of participant outcomes and an investigation into predictors of participant recidivism.

Quantitative Findings

This overview of quantitative findings seeks to document participant outcomes for the 2011-2012 year and display results from an analysis of identified predictors of participant recidivism. In addition, this section analyzes quantitative results and situates them within a well-established body of literature on predictors of juvenile recidivism. Finally, the findings presented in this section are used to arrive a series of conclusions about the effect identified predictors have on participant recidivism. With this intent in mind, this section will now turn to an overview of key findings.

An analysis of quantitative program outcomes indicated that in the 2011-2012 year, 63% of juvenile participants (N = 30) committed a re-offense within a six-month timeframe after exiting the program. Similarly, 63% (19/30) of juvenile participants were incarcerated within a six-month timeframe after exiting the program. Such findings further illustrate the need to examine risk factors that may explain the reoffending behavior of the majority of program participants. A more complete overview of results for outcome measures included for mandatory JJCPA reporting purposes can be found in Table 3. Of most relevance to this study are outcome measures pertaining to arrests,
completion of probation, and incarceration rate. The outcome measure “arrest rate” represents the percentage of participants that received a new law violation or a violation of probation arrest/citation within 180 days after exiting the program. The outcome measure “completion of probation rate” represents the percentage of participants that had a “terminated” status under the disposition section in their referral file within 180 days after exiting the program. Finally, the outcome measure “incarceration rate” refers to the percentage or participants who were in the custody of the juvenile hall or in custody at the regional facility within 180 days after exiting the program. Additional information on outcome measures included as part of JJCPA’s mandated evaluation framework is available in recent research on the New Horizons Program conducted by Humboldt County’s Department of Health and Human Services’ research and evaluation unit.
Table 3: Program Outcomes FY 2011-2012

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>N</th>
<th>Mean or Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest Rate</td>
<td>30</td>
<td>63.3%</td>
</tr>
<tr>
<td>Completion of Probation Rate</td>
<td>30</td>
<td>33.3%</td>
</tr>
<tr>
<td>Incarceration Rate</td>
<td>30</td>
<td>63.3%</td>
</tr>
<tr>
<td>Rate of Completion of Restitution</td>
<td>5</td>
<td>20%</td>
</tr>
<tr>
<td>Rate of Completion of CSW</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Probation Violation Rate</td>
<td>30</td>
<td>63.3%</td>
</tr>
<tr>
<td>Percent of Program Participants who Complete or No</td>
<td>21</td>
<td>90.28%</td>
</tr>
<tr>
<td>Fault Exit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Daily Per Capita Program Costs</td>
<td>26</td>
<td>$397.36</td>
</tr>
<tr>
<td>Social Problems as Measured by the Y-OQ-SR</td>
<td>12</td>
<td>10.3</td>
</tr>
<tr>
<td>Interpersonal Relationships as Measured by the Y-OQ-SR</td>
<td>12</td>
<td>4.9</td>
</tr>
<tr>
<td>Overall Score on Y-OQ-SR</td>
<td>12</td>
<td>42.8</td>
</tr>
<tr>
<td>Substance Use as Measured by CAFAS</td>
<td>14</td>
<td>22.1</td>
</tr>
<tr>
<td>Role Performance-Community as Measured by CAFAS</td>
<td>14</td>
<td>10.7</td>
</tr>
<tr>
<td>Behavior Toward Others as Measured by CAFAS</td>
<td>14</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Finally, I examined whether age at participants’ entry to the program, number of prior charges, and lengths of stay were predictive of recidivism from the New Horizons Program. This was addressed by means of a binary logistic regression analysis and comparison of means testing. In this analysis, the dependent variable is participant recidivism (coded: 0 = not arrested, 1 = rearrested). Results of these analyses are displayed in Table 4 and Table 5.
Table 4: Summary Statistics for Variables in the Multivariate Analysis by Recidivism

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean or Percent</th>
<th>Chi-Square or t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearrested</td>
<td>18</td>
<td>16.57</td>
<td></td>
</tr>
<tr>
<td>Not Rearrested</td>
<td>10</td>
<td>17.05</td>
<td></td>
</tr>
<tr>
<td>Number of Prior Charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearrested</td>
<td>18</td>
<td>21.06</td>
<td>1.69</td>
</tr>
<tr>
<td>Not Rearrested</td>
<td>10</td>
<td>13.50</td>
<td></td>
</tr>
<tr>
<td>Days in Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearrested</td>
<td>18</td>
<td>141.94</td>
<td>1.49</td>
</tr>
<tr>
<td>Not Rearrested</td>
<td>10</td>
<td>127.40</td>
<td></td>
</tr>
<tr>
<td>Type of Offense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violation of Probation or Court Order</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearrested</td>
<td>12</td>
<td>75%</td>
<td>1.87</td>
</tr>
<tr>
<td>Not Rearrested</td>
<td>4</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>All Other Offenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rearrested</td>
<td>6</td>
<td>50%</td>
<td>1.87</td>
</tr>
<tr>
<td>Not Rearrested</td>
<td>6</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < .05 ** p < .01

Results displayed in Table 4 illustrate that on average, program participants who were rearrested within 180 days following exit were younger ($M = 16.57$, $SE = .204$) than participants who were not rearrested ($M = 17.05$, $SE = .284$). Though this difference was not significant ($t(26) = -1.40, p > .05$ (two-tailed)), the calculation of the effect size indicated the presence of a small to medium-sized effect ($r = .26, \sqrt{\frac{-1.391^2}{-1.391^2 + 26}}$). The effect size is “an objective and (usually) standardized measure of the magnitude of an observed effect” (Field, 2009: 785). In this case, the standardized measure is Pearson’s
correlation coefficient ($r$). The value of this correlation coefficient always lies between
-1 and +1 with “a coefficient of +1 representing a perfect positive relationship, a
coefficient of -1 representing a perfect negative relationship, and a coefficient of 0
indicating no linear relationship at all” (Field, 173: 2009). As such, this is a reliable
interpretation of the effect size for the variable “age at entry” since it is close to .3 which
is the threshold for a medium-sized effect. Thus, it can be inferred that although there
was no significant different between the mean ages of youth who were rearrested and
those who did not, it still represents a fairly substantial effect within the context of this
small sample (N = 28). It is also apparent program participants who were rearrested
within 180 days following exit had more prior charges on average ($M = 21.06, SE = 2.82$)
than participants who were not rearrested ($M = 13.50, SE = 3.15$). This difference was
not significant ($t(26) = 1.69, p > .05$ (two-tailed)); however, it did represent a medium-
sized effect ($r = .31, \sqrt{\frac{1.69^2}{1.69^2+26}}$). As such, it can be concluded that while participants’
number of prior charges did not have a statistically significant effect on participant
recidivism, it still represents a substantial effect within the context of small samples.
Additionally, Table 5 shows that program participants who were rearrested within 180
days following exit had spent more days in the regional facility on average ($M = 141.94,$
SE = 5.34) than participants who were not rearrested ($M = 127.40, SE = 8.98$). This
difference was not significant ($t(26) = 1.49, p > .05$ (two-tailed)); however, it did
represent a medium-sized effect ($r = .28, \sqrt{\frac{1.487^2}{1.487^2+26}}$). This indicates that although
participants’ length of stay in the program did not have a statistically significant effect on
participant recidivism, this variable still can be interpreted as having a substantial effect within the context of this small sample.

Finally, Chi square testing was used to investigate the relationship between the type of admitting offenses and participant recidivism within 180 days following exit from the New Horizons Program. In particular Fisher’s exact test was employed due to the assumption of cell size was violated for traditional Chi square testing. Results displayed in Table 5 indicate that there was not a significant association between participants’ type of admitting offense (violation of probation/court order or all other offense types) and whether or not they would be rearrested within 180 days exit ($\chi^2 (1) = 1.87, p > .05$ (two-tailed)). A calculation of the odds ratio ($3/1$) revealed that the odds of program participants recidivating was three times higher if they were admitted to the program for a probation violation or court order than if they were admitted to the program for any other type of offense. It is important to keep in mind that although none of the selected predictor variables were able to achieve statistical significance, this may be attributed to working with such a small sample size ($N = 28$).

### Table 5: Binary Logistic Regression Analysis of Recidivism Predictors

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Beta</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval of Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Entry</td>
<td>1.12</td>
<td>3.05</td>
<td>(.844, 11.04)</td>
</tr>
<tr>
<td>Number of Prior Charges</td>
<td>-.117</td>
<td>.890</td>
<td>(.783, 1.01)</td>
</tr>
<tr>
<td>Days in Program</td>
<td>-.030</td>
<td>.971</td>
<td>(.933, 1.01)</td>
</tr>
</tbody>
</table>

*Note:* $R^2 = .28$ (Cox & Snell), .39 (Nagelkerke). Model $\chi^2 (1) = 9.33, \ p < .05$. *$p < .01$

Logistic regression analysis revealed a moderately strong relationship between prediction and grouping. In other words, there is a moderately strong relationship of 39% between
predictors and the prediction. Predicted values indicated that prediction success overall was 71.4% (88.9% for rearrested and 40% for not rearrested). These predicted values of the dependent variable provide a measure of how many cases are correctly predicted based on the entire regression model. In this model, 16 cases are observed to belong to the category “rearrested” and, based on the entire model, are predicted to be rearrested 88.9% of the time; 4 cases are observed to belong to the category “not rearrested” and, based on the entire model, are correctly predicted to not be rearrested 40% of the time. Conversely, 2 cases are observed to belong to the category “rearrested” and are incorrectly predicted to be not rearrested; 6 cases are observed to belong to the category “not rearrested” but are incorrectly predicted to be rearrested. The overall percent of cases that are correctly predicted by the full model is 71.4% which is a slight increase from the null model (64.3%).

The Wald test statistics demonstrated that no variables in this analysis had a significant contribution to prediction of recidivism. Of the included variables, age at entry yielded the greatest ability to predict participant recidivism. The odds ratio can be interpreted “in terms of the change in odds. If the value is greater than 1, then it indicates that as the predictor increases, the odds of the outcome occurring increase. Conversely, a value less than 1 indicates that as the predictor increases, the odds of the outcome occurring decrease” (Field, 2009: 288). The odds ratio for age at entry indicates that for every one unit (one day) increase in participants’ age, the odds of recidivism is approximately 3% greater. Despite the lack of a significant relationship between these predictors and recidivism in bivariate analyses, age at entry and number of prior charges
were considered due to their level of significance being relatively near 0.05 (.089 and .073) and also because of their common association with juvenile recidivism (Carach & Levette, 1999; Frederick, 1999; Castillo & Alarid, 2011; Katsiyannis et al. 2004).

In sum, findings from this quantitative analysis have indicated that while none of the selected predictors achieved statistical significance, several variables held a substantively significant effect on recidivism. Of these selected predictors, number of prior charges provided the largest effect ($r = .31$) followed by length of stay ($r = .28$) and age at entry ($r = .26$). These findings are consistent with a substantial body of research that has found that criminal history is generally a reliable predictor of recidivism amongst juvenile populations (Carach & Levette, 1999; Thornberry & Krohn, 2005; Mcintosh, 1976). These findings also add moderate support to findings that have investigated the relationship between length of stay and juvenile recidivism (Loughran et al. 2009; Winokur et al. 2008; Frederick, 1999). Furthermore, findings from this analysis may add a small degree of support for studies that have concluded that age is a predictor of recidivism (Katsiyannis et al. 2004; Mulder, 2010). Additionally, Chi square testing revealed that recidivism was three times more likely to occur if the participant had been admitted to the program for a probation violation or court order in comparison to all other types of offenses.

**Summary of Findings**

In sum, this chapter has focused on displaying results and situating findings within a well-established body of literature on juvenile recidivism. While the process evaluation indicated a variety of themes pertaining to program processes and staff and
stakeholders’ perceptions of risk-factors for participant recidivism, the outcomes
evaluation found a considerable rate of participant recidivism for the 2011 year.
Additionally, the quantitative analysis of recidivism predictors found that although none
of the identified predictors were significantly related to participant recidivism within 180
days after exiting the program, effect size calculations indicated that results were
consistent with research on juvenile offenders that has found that criminal history, length
of stay, and age are reliable predictors of recidivism (Loughran et al. 2009; Mulder, 2010;
Carach & Levette, 1999). Though it may be tempting to draw direct conclusions from
these findings, a consideration of limitations and other research constraints is necessary
to fully grasp the implications of this research.
DISCUSSION

The discussion chapter that follows is intended to highlight key findings from this study’s qualitative and quantitative analyses while situating salient conclusions within a well-established body of research on juvenile recidivism. Additionally, this section will detail the multiple limitations that plagued this study’s design and methods as a means of identifying areas for improvement and cautioning readers about the interpretation of results. Finally, this section concludes with a brief set of recommendations designed to enhance New Horizons’ program model as well as its current evaluation framework. In doing so, this section arrives at the conclusion that more research on the New Horizons Program is needed to understand static and dynamic risk factors for participants’ recidivism.

This mixed-method evaluation of the New Horizons Program was designed to comprehensively analyze program processes, calculate participant outcomes, and investigate predictors of recidivism as a means of contributing to ongoing evaluation practices. Results from a qualitative process evaluation indicated substantial uniformity in perceptions of the strengths and weaknesses of program processes, as well as understandings of challenges to participants’ success. By using this data as a preliminary means of identifying predictors of recidivism and subsequently locating predictors through a review of relevant literature, this study constructed a quantitative analysis of program outcomes. During the 2011-2012 fiscal year, the overall rate of recidivism was
63% (19/30). Comparison of means tests and a binary logistic regression analysis yielded no statistically significant results.

Despite these results, it is crucial to acknowledge that this study suffered from a variety of limitations that shaped its design and results. These limitations can be categorized as data limitations, methodological limitations, and limitations associated with the interpretation of results. First, this study was limited by missing data for two participants whose referral files were not immediately available to the Humboldt County Probation Department. Other data limitations included having limited access to complete information on participants from previous years and limited access to previous program staff/stakeholders. While these limitations narrowed the scope and magnitude of the sample used for analysis, another data limitation was the nondiscrimination between participants who completed the program and participants who failed the program. In other words, this study did not make the decision to exclude participants who were expelled from the program or did not successfully complete their mandated length of stay. This data limitation may have led to skewed results as individuals who did not complete the program cannot be expected to be reliable indicators of the effectiveness or ineffectiveness of New Horizons’ program model and services.

There are also several methodological limitations to this study. One primary limitation was the researcher’s inability to receive approval from the Humboldt County Probation Department to conduct face-to-face interviews with participants. While interviews with staff and stakeholders served as an alternative means of evaluating program processes and determining risk factors for participant recidivism, interviews
with current participants or their family members would have provided a window into an often neglected perspective of juvenile treatment and rehabilitation. It is also worth considering that although staff/stakeholders had no precise knowledge of the intent of my interview, their position as direct or indirect beneficiaries of the program could be interpreted as a conflict of interest which may have had an effect on their responses. Additionally, this study was limited by its inability to investigate the validity of staff/stakeholders perception of predictors of recidivism. While qualitative interviews led to the preliminary identification of variables selected for the quantitative analysis, some predictors of recidivism identified by staff and stakeholders were not able to be included do to constraints relating to time, costs, and access. For instance, the theme that subsequent placement with a dysfunctional or unsupportive family was one area that was not able to be investigated within the confines of this research. An additional methodological limitation stems from the decision to adopt the preexisting evaluation framework’s follow-up window of six months to investigate recidivism. It is quite possible that if this study had followed in the footsteps of other studies of juvenile recidivism (Mulder, 1999; Benda et al. 2010; Heilbrun et al. 2000) and similarly employed a longer follow-up window to measure recidivism, the rate of recidivism may have increased. Similarly, the decision to adopt the preexisting evaluation framework’s definition of recidivism as any re-arrest during a six month period following program participation may have also led to a limited ability to effectively analyze participant recidivism. Operationalizing recidivism as the occurrence of any documented re-arrest following participation in the New Horizons Program fails to identify if the participant
was subsequently convicted of the crime he or she was arrested for. In this way, while the current operationalization of recidivism may indicate recidivism, it should not be seen as a strict measure as some participants who are arrested may have their charges dropped. Measuring new adjudications/convictions would have added to the explanatory power of this analysis. Furthermore, it is widely recognized by staff/stakeholders that a majority of participants who recidivate do so by committing a relatively minor violation instead of a major criminal offense. Thus, the current recidivism measure may generally capture the quantity of recidivists but fail to determine if this was for any form of reoffending behavior or for a documented new arrest. This current operationalization of recidivism can be seen as limited in its ability to address these issues.

Finally, results from the quantitative analysis of recidivism should be interpreted with caution as these results suffer from many of the limitations associated with small sample size. As such, statistical significance was much harder to achieve within the context of this small sample (N = 28) and differences may be due to variability between groups. Also, this sample size fell just short of the criterion needed for the central limit theorem and as such results are not generalizable.

Given the considerable limitations of the present study, the most important finding may be that despite program staff and stakeholders’ perception that transitional age youth are harder to treat, and thus more likely to recidivate, comparison of means testing indicated that participants’ age at entry into the program actually had the least substantive effect on recidivism. In other words, in contrast to the perceptions of staff and stakeholders, the age of program participants was not significantly associated with
higher rates of recidivism. Interestingly, this finding is in contrast to a wide body of recent research which has found this variable to be a reliable predictor of recidivism (Katsiyannis et al. 2004; Mulder, 2010). As such, this conclusion may be cautiously interpreted until further research working with larger sample sizes establishes a more accurate analysis of the relationship between age at entry and recidivism from the New Horizons Program. Due to participants’ number of prior charges having the largest effect on recidivism, the present study may be seen as providing support for the well-established notion of criminal history as a reliable predictor of recidivism (Carach & Levette, 1999; Thornberry & Krohn, 2005; McIntosh, 1976). If these conclusions become validated by more thorough research in the future, they may help to inform the New Horizons Program in a variety of ways. For instance, if number of prior charges continues to be found as having the highest effect on recidivism, it may provide empirical support in favor of altering the criteria for program admission. Alternatively, if future research determines that age at entry into the New Horizons Program is a significant predictor of reoffending behavior, it may be used to modify the current target population to ensure the program is tailored towards more criminogenic populations.

The most immediate implication of this research is informing current New Horizons staff and stakeholders of the types of challenges that are commonly perceived as problematizing treatment. To this end, it will be important for New Horizons staff and associates to collectively find ways to address issues with the process of interagency collaboration and with meeting the needs of at-risk participants. While weekly meetings provide an opportunity for interagency collaboration, an analysis of qualitative themes
indicated that this process of interagency collaboration was perceived by staff and
stakeholders to be a central challenge to effectively providing rehabilitation and treatment
services. A plausible implication of this finding may be to schedule team building
exercises or to hold semi-structured mediation sessions. Additionally, while staff and
stakeholders generally shared similar perceptions of recidivism risk factors, there was a
notable split between those who thought that longer lengths of stay would produce more
successful outcomes than shorter lengths of stay, and those who thought that shorter
lengths of stay would produce more successful outcomes than longer lengths of stay.
This finding may provide a justification for taking measures to build consensus over
effective approaches to treatment such as engaging in administrative actions designed to
reaffirm the New Horizons Program’s guiding philosophy.

Looking forward, it is clear that a great deal of research still needs to be
conducted into the New Horizons Program. This study recommends that future studies
would be wise to consider the variables included in the present analysis and to possibly
employ them as part of a larger study that examines recidivism within a larger period of
time after exiting the program. Additionally, since this study was unable to further assess
the validity of program staff/stakeholders’ perception that subsequent placement with a
dysfunctional or unsupportive family is a crucial factor for participant success, it is
recommended that future research analyze the relationship between this identified
variable and reoffending behavior following participation in the New Horizons Program.

Overall, this study can be seen as providing a useful starting point for future
research on the New Horizons Program. By gathering feedback from a variety of
program staff and stakeholders instead of solely relying on participant outcome measures, this study contributed to a more comprehensive understanding of program processes and potential risk factors for recidivism. Although findings did not confirm that any of the identified predictors were able to significantly predict recidivism, within the context of this small sample, number of prior charges and age at program entry had a medium-sized effect. Given the multiple limitations of this study, these findings should be interpreted cautiously and with consideration of the distorting effect caused by the small sample that was used. What is clear is that while the New Horizons Program seems to be meeting its predefined goals, the qualitative process evaluation and quantitative outcomes evaluation have indicated issues with interagency collaboration and participant recidivism. In conclusion, it is proposed that New Horizons’ current evaluation framework can be greatly enhanced by additional inquiry into the validity of the recidivism predictors identified by this study’s qualitative process evaluation and review of relevant literature. In contrast to the current evaluation framework which is designed to report recidivism, this addition could provide a way of understanding the static and dynamic risk factors that are salient to participant recidivism. By following this recommendation, New Horizons staff and stakeholders will likely be in a much better position to make informed decisions about how to improve participant outcomes.
References


