

# Troubled Youth and the Mental Health Care Crisis

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A Capstone project presented in partial fulfillment of the  
requirements for the degree of  
Master of Arts in Policy Studies  
Interdisciplinary Arts & Sciences  
University of Washington Bothell

2011

## Troubled Youth and the US Mental Health Care Crisis

### *Abstract*

Youth in the United States are not receiving sufficient mental health care. The US government is not providing adequate mental health care to today's youth. Although \$12 billion is being spent on behaviorally troubled adolescents, nearly seventy-five percent of adolescents who need mental health care do not have access. 1 in 10 American youth suffer from an emotional disorder, but less than 25 percent of these youth are receiving the psychological attention they need. Of the youth being treated for behavioral disorders, less than 50 percent are covered by Medicaid. Overall lack of coverage in every type of insurance has added to the problem. Most private insurance and Medicaid programs will not cover mental health evaluations or treatments. Youth that are not covered by Medicaid seek care through private insurance or an out-of-pocket expense. Currently, the expense of treating this 25 percent is estimated at \$12 billion. If this policy problem is not addressed and adolescents do not gain access to much needed care, the crisis will continue and American youth will continue to go untreated. For at least 75 percent of troubled youth, the development into a self sufficient adult will be unfeasible. The mental health issue involving youth can be addressed within the public school system specifically, first because that is where a child spends most of his/her time, but also because issues that are not addressed at home or in a medical facility are exposed in the school. Problems happen in the classroom because the youth are not receiving adequate healthcare elsewhere. The responsibility then becomes that of other students, the teachers, other school staff and likely unequipped parents. This Capstone Project identifies and evaluates evidence-based mental health treatment programs in public schools.

## *Chapter 1 Purpose of Study*

### Research Question

How can the American public school system implement a mental health care program that will allow a greater number of youth to receive mental health care?

### Policy Problem

The United States (US) government is not providing sufficient mental health care to today's youth. Although \$12 billion is being spent on behaviorally troubled adolescents, nearly seventy-five percent of adolescents who need mental health care do not have access. In the *National Action Agenda for Children's Mental Health*, the Surgeon General (DSHS, 1999) states that the US is on the verge of a public crisis regarding the needs of youth with behavioral, emotional and psychological problems. This report states that 1 in 10 American youth suffer from an emotional disorder, but less than 25 percent of these youth are receiving the psychiatric attention they need. Of the youth being treated for behavioral disorders, less than 50 percent are covered by Medicaid. The rest are covered by private insurance or an out-of-pocket expense. Currently, the expense of treating the 25 percent is estimated at \$12 billion. If this policy problem is not addressed and more adolescents do not gain access to much needed care, the crisis will continue and American youth will continue to go untreated. For at least 75 percent of troubled youth, the development into a self sufficient adult will be unfeasible (DSHS, 2000).

Adolescent mental health care is not a widely researched topic, but the implications for the future society are essential. The goals of this Capstone are to provide policymakers with more research on the technical feasibility of providing mental health

care to adolescents and to provide better access to care for the largest number of youth clientele at the lowest cost per capita. The objective of the policy alternative is to create a mentally sound, self-sustaining future society that includes the individuals that had mental health disorders during their youth. The objective is to provide youth with the possibility of becoming stable, self sufficient adults through regular access to mental health evaluations and treatments.

### Approach

In order to address the policy problem involving limited access to mental health care by troubled youth in the US, I will analyze 26 programs that can be implemented in a public school setting that address mental health issues and treatment. These programs are all currently in effect and have been rigorously reviewed by The US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMSHA) created the National Registry of Evidence-based Programs and Practice (NREPP). I will analyze these alternatives from a technical feasibility perspective: the Status quo (not acting) and 26 different school-based reform models as outlined by NREPP. This approach will formulate a mixed qualitative and quantitative study on which alternative is most likely to be implemented based on the technical feasibility of the alternative. This approach is in no way complete, but it is persuasive with the idea that a change in policy is possible on the technical level and can create greater access to mental health care for youth. The technical feasibility of each alternative will demonstrate if the alternative policy can be implemented and with deliberation of the goals and objectives, have the intended outcome.

## Literature

A review of existing literature on the subject of underserved youth and the mental health care crisis is necessary in evaluating the possible policy alternatives. This literature is limited, but details the problem, as well as the necessity for policy change. The status quo is examined through literature provided by the Rand Corporation, and the US Department of Health and Human Services. These organizations provide reports that detail existing statistics on the number of youth suffering from a mental health disorder and the current federal expenditures allocated toward the problem. The School-Based Reform Model is presented by the Department of Education and several smaller nonprofit organizations that have implemented plans that have effectively reduced the number of mental health disorders amongst youth. The 26 unique programs that are currently implemented in schools are researched and evaluated by NREPP.

The Rand Corporation (2005) has released statistics based on data from the National Health Interview Study of 1998 which states that one in ten youth suffer from a mental health disorder. Of the ten percent, three-quarters do not have access to mental health care evaluations or treatment. The estimated annual expenditures for mental health care are \$12 billion. Data from the Department of Health and Human Services and the State Mental Health Agency concurs with these findings. I will use this data to represent the Status Quo alternative.

The US Department of Education (Adelman, 2006) examined school-based mental health care and of the 1500 schools that used mental health professionals on staff, 60 percent were effective in treating mental health disorders amongst the youth. The programs implemented in Washington DC had the most promising result because 80

percent of youth were evaluated and treated within the school system. There are smaller school-based models such as the SOS program of the state of Washington, which is no longer in existence but while in effect, was also effective in reducing the unmet need of troubled youth. There is limited data on the smaller programs such as SOS and the implications will need further research.

### Method

In order to analyze the technical feasibility of each policy alternative I will first refer back to my goals and objectives. The first goal of the policy alternative is to provide more research on the subject of troubled youth and the need for better access to mental health care to policy makers. The second goal is to provide mental health care access to the greatest number of youth at the lowest cost per capita. The objective is to allow for a future generation to have the greatest possible number of stable working adults caused by troubled youth being treated for mental health disorders during adolescence. Technical feasibility will be scored based on whether each policy alternative can be implemented or has been implemented in the past and whether the program was effective in reducing the rate of unmet mental health need amongst youth.

In the initial review, the Status Quo alternative is not technically feasible. The current policy provides limited data and research on the subject of mental health disorders of youth, but the available data is disappointing at most. The Federal Government is spending approximately \$12 billion per year on treatment and evaluation of mental health disorders for youth but this leaves three-quarters of youth with unmet need. This alternative is feasible in the mere fact that the policy is currently implemented,

but it does not meet the goals of providing research to policy makers or mental health care accessibility to the greatest number of youth at the lowest cost per capita.

In reviewing the school-based reform model, this study will evaluate the technical effectiveness by asking: does this program provide the greatest number of youth with mental health care at the lowest cost? Has this program reported statistically significant improvements through youth surveys? Was the program successful in reducing unmet need? In the initial review of the programs available, the school-based model is the most viable policy alternative. The model is technically feasible in comparison to other alternatives. The school system currently takes on mental health care problems of youth with limited resources. According to the US Department of Education, with proper resources and extra educational funding at least 60 percent more youth could be evaluated and treated for mental health disorders through a school-based program. The programs that have been implemented such as the SOS program of Washington State and the smaller-scale programs in the Washington D.C. public school system were effective in reducing unmet need. The technical feasibility of these particular programs are difficult to determine at this point because some programs are no longer in effect due to limited funding in the education system. However, while in effect, the programs proved to work in reducing untreated mental health disorders. Further analysis is needed to determine the cost of implementing and sustaining school-based programs.

After the initial review, I have chosen the school-based reform model as the most technically feasible. In order to support this, I will need to further evaluate each program on a cost effectiveness level and find further research on the school-based programs that have been successful and are still in effect. I do not expect a school program to solve the

mental health care problem completely, but at this point the evaluation suggests that this alternative will meet the goals and objectives on a level that the Status Quo alternative could not reach.



## *Chapter 2 Literature Review*

Youth in the US are not receiving adequate mental health care. Most private insurance coverage and Medicaid programs do not cover mental health evaluations or treatments. Consequently, 93-95 percent of American youth are not evaluated or treated by a mental health professional each year, (Rand, 2005.) I work in an alternative high school and therefore I see the consequences of the seemingly apathetic mental healthcare system every day. Due to the low-income population in the suburban area where I work, my students are often sent to school without proper physical healthcare. This causes more annual physical sicknesses in comparison to other areas. However, the physical sicknesses that the students have are not as disheartening as the mental illnesses. Most of the students that participate in after school programming at my school have some form of mental illness, the majority relating to depression. Some students are medicated and have regular appointments with professional psychologists to discuss problems. Unfortunately, most of the students do not have access to mental health due to a lack of insurance coverage and parent involvement and they must rely on the teachers and staff as well as community programs, like my own for support.

The mental health care problem and its indifference toward youth is a crisis in the African American and Hispanic communities, (DSHS, 2000). A significant number of the youth who are suffering from mental health disorders are part of these groups. The African American and Hispanic communities are currently the most impoverished groups in the US. The youth that are part of these communities are suffering more than any other group because not only are the mental health disorders more prominent in this population, but the families do not have the finances or the mental healthcare coverage to properly

care for the youth. Estimates by the National Health Interview Study indicate that more than 9 percent of youth need help with emotional problems, but three-quarters of them are not being treated. 86 percent of Hispanic youth and 78 percent of African American have an unmet need for mental healthcare treatment. These statistics suggest a serious problem for youth in the US, (Bureau of Labor Statistics, 2011.)

Currently, the problem in the health care system and its disengagement with American youth has made psychotropic medication very popular. Because families cannot afford to bring their youth to a mental health professional, they rely on a family physician. Rather than seeking continuous medical attention from a mental health professional, which many families cannot afford and are not insured for, families have chosen to provide their troubled youth with psychotropic medication. Another alternative to youth seeking proper mental health care has been outpatient or community programs. These programs work well for mentally sound youth, but emotionally troubled youth usually need medical attention. The need for mental health and proper medical attention amongst adolescents not only affects the youth and family but the psychotropic drug companies.

The health care system must be reformed and adequate health care must be made available to everyone, including youth. In a universal health care plan, mental health must be considered equally important to physical health. If a national health care plan were to include mental health as part the agenda all American youth, regardless of race would be able to seek proper mental health through a mental health care professional. If youth are treated early, the economic benefits are endless. A mentally sound person functions in society in a way that a troubled person cannot. That being said, if the youth of the US are

evaluated and treated for mental illnesses they are more likely to be contributors to the economy in adulthood.

A review of existing literature on the subject of underserved youth and the mental health care crisis is necessary in evaluating the possible policy alternatives. This literature explains the problem in some detail as well as the necessity for policy change. The Status Quo is examined through literature provided by the Rand Corporation and the US Department of Health and Human Services. These detail existing statistics on the number of youth suffering from a mental health disorder and the current federal expenditures allocated toward the problem. The School-Based Reform Model is presented by the Department of Education and The US Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMSHA) created National Registry of Evidence-based of Programs and Practice (NREPP) which includes smaller nonprofit organizations that have implemented plans that have effectively reduced the number of mental health disorders amongst youth. There is also the possibility of a universal health care reform model, which would reform the current health care system. Ideally, a health care reform would improve accessibility to mental health care for every citizen.

Rand Corporation and the Department of Health and Human Services

The Rand Corporation (2005) has released statistics based on data from the National Health Interview Study of 1998 which states that one in ten youth suffer from a mental health disorder. Of the ten percent, three-quarters do not have access to mental health care evaluations or treatment. The estimated annual expenditures for mental health

care are \$12 billion, which is data from the Department of Health and Human Services (1999.) I will use this data to represent the Status Quo alternative.

#### US Department of Education

The US Department of Education (Adelman, 2006) examined school-based mental health care and of the 1500 schools that used mental health professionals on staff, 60 percent were effective in treating mental health disorders amongst the youth. The programs implemented in Washington DC had the most promising result because 80 percent of youth were evaluated and treated within the school system. There are smaller school-based models such as the SOS program of the state of Washington, which is no longer in existence but while in effect, was also effective in reducing the unmet need of troubled youth. There is limited data on the smaller programs such as SOS and the implications will need further research. Equipping schools with mental health professionals would be far less costly in the short-term than reforming the health care system. The school system is already responsible for reporting a wide variety of mental disorders affecting the students. If teachers and school administrators are provided with better tools to assess mental health disorders among the students (including certified mental health professionals in the schools), youth have a better chance of receiving care. However, diagnosing mental health trouble does not necessarily lead to mental health treatment. Therefore, the schools would be able to diagnose a problem with the youth but it would be the parent's responsibility to access treatment. This limits the opportunity for all youth with disorders to be treated and will not allow students of low-income families to receive professional treatment.

Alternatively, rather than reforming the health care system a policy that implemented mental health care evaluation on a larger scale into the education system would also decrease the number of youth that do not receive mental health care. Equipping schools with mental health professionals would be far less costly in the short-term than reforming the health care system. The school system is already responsible for reporting a wide variety of mental disorders affecting the students. If teachers and school administrators are provided with better tools to assess mental health disorders among the students (including certified mental health professionals in the schools), youth have a better chance of receiving care. However, diagnosing mental health trouble does not necessarily lead to mental health treatment. Therefore, the schools would be able to diagnose a problem with the youth but it would be the parent's responsibility to access treatment. This limits the opportunity for all youth with disorders to be treated and will not allow students of low-income families to receive professional treatment.

Another policy alternative to the current mental health care crisis is to implement a universal health care plan that covers every US citizen. The health care plan must encompass mental health disorders as well as physical. According to a US Census Bureau Press Release, (DSHS 2000), a universal health plan is in order. If mental health care were available to every citizen, the 10 percent of youth that are diagnosed with psychological problems can be treated by professional mental health care providers. This would drastically reduce the large number (almost 75 percent) of youth who are diagnosed with mental health problems but are left untreated. It would take several years to reform the current health care system and it would cause taxpayers an upfront cost of approximately \$13 billion. However, a universal health care plan would be less expensive

in the long run in comparison to other alternatives and the benefits would be greater because both physical and mental disorders would be addressed for the duration of the citizens' life.

#### Conduct Problems Prevention Research Group

A study involving 4 different poor communities in the United States was conducted by the Conduct Problems Prevention Research Group (Greenberg, Domitrovich, Bumbarger, 2001). The objective was to discover the economic implications of conduct disorder (CD) amongst adolescents of poor communities. Conduct disorders are the result of mental health disorders amongst youth that have not been treated. This meaning that youth diagnosed with CD is in the late stages of mental health disorders that could have been prevented. Expenditures caused by the disorder were examined on a large scale involving multiple public sectors correlated to adolescents with conduct disorders. This includes: mental health facilities, public health facilities, public schools and the juvenile justice system.

The method for collecting this data involved self and parental reports collected over a 7-year period during the adolescence of the subjects. The expenditures for youths with CD were contrasted with public expenditures for youths with less drastic mental health disorders. The diagnosis for each group was determined through structured assessment. The results of this study indicated that additional public costs per child with CD exceed \$70,000 during the 7 year study. In conclusion, public expenditures for youths with conduct disorders are significantly greater than expenditures for youths with other mental health disorders. The study concluded that these findings reflect the importance of early intervention and treatment of mental health disorders amongst youth in poverty.

## Prevention Institute

The Prevention Institute, which is a national nonprofit organization dedicated to the health of youth of ethnic and racial minorities created a program to assess and improve the health needs of youths in urban, suburban and rural settings. The program is centered on a “toolkit” that is “a community assessment tool, to help communities bolster factors that will improve health outcomes and reduce disparities experienced by racial and ethnic minorities,” (Sequist, 2005.) The toolkit for health and resilience in vulnerable environments (THRIVE) helps communities in poverty assess problems and create goals. According to the study, within months of piloting the THRIVE program the communities had significantly better overall mental health. Several communities had created youth programs and community projects through the THRIVE program. By creating a framework for community members THRIVE provides, coalitions, public health practitioners, and local decision makers the ability “to identify factors associated with poor health outcomes in communities of color; engage the range of partners needed to improve community health outcomes, such as planners, elected officials, businesses, housing, and transportation; and take action to remedy disparities.” Nonprofit projects like THRIVE have been particularly successful in reaching at risk youth in need of mental health care.

## Tarrant County Texas, A Case Study

In 2000, more than 60 nonprofit agencies, health care providers, government officials, and community advocates in Tarrant County, Texas, came together to work for systemic change in the mental health care system. The coalition, known as the Mental

Health Connection, began working toward a "No Wrong Door to the Right Mental Health Services" approach to mental health services, which required aggressive coordination between federal, private, and nonprofit resources. The result is a five- to six-year plan for implementation of a new system of care model for children with severe emotional disturbances and their families. The Mental Health Connection also focuses on legislative advocacy to bring about necessary policy changes at the local, state, and federal levels.

#### Program Goals

The first-and perhaps most important-goal is to be forward thinking enough to secure private and public funds to ensure that the demand in the community for the services offered will be sufficiently met. This not only includes subsidy of the services currently provided, but also a realistic estimate of the demand in the future, as well as related costs.

It is also important to have a comprehensive understanding of the current resources available, to be prepared to close any gaps in the service model, and to implement a system of accountability at all levels of the new overall model. In a larger system of services and care, accountability can become diluted unless consistent, measurable ways exist to assess whether the services being provided, as well as those providing them, are the best they can possibly be.

Internal communications and relationships within this greater system of care are essential to program success. Agencies maintain them through regular, interpersonal connections of representatives from different organizations, as well as development of a



comprehensive, interactive, Web-based database system for all mental health services in the area-in this case, Tarrant County, Texas.

Finally, services must be made accessible to all individuals in the area, regardless of income and other personal limitations. This not only includes reaching those directly who are in need of such services, but it also includes education of the community as a whole so that the stigma associated with mental health services is diminished, and people in need are more comfortable accessing these resources.

#### Journal of Abnormal Child Psychology

Researchers performed a case study of the Journal of Abnormal Child Psychology, (Raywid, 1994) on the implications of peer influence for at-risk youth. The study involved a description of several facets of mental health treatment programs created for troubled youth with the notion that grouping at-risk youth in a treatment program inevitably leads to failure. The study suggests that peer-to-peer contact for at-risk youth is detrimental to recovery of mental health disorders because the youth influence each others' decision making and as a group have proven to be less successful in recovery.

The study looks at intervention programs in the public school system, the health care system and community programs. Three different alternative school philosophies are addressed and evaluated in terms of educational success.

1. Type I: Schools utilizing innovative strategies in administration and instruction to meet the needs of diverse students. Students apply to get in.

2. Type II: Schools focusing on behavior modification

and discipline. Students are typically referred to these programs as a “last chance” before expulsion.

3. Type III: Schools focused on rehabilitation or remediation

of either academic or behavioral difficulties or both. Focus is on treatment rather than discipline, (Raywid 1994).

According to the study, Type 1 programs have yielded the most beneficial results, primarily on educational outcomes, but also on behavioral programs (Raywid 1994).

Both Type 2 and 3 alternative schooling methods create limited beneficial results because these methods strive to seclude all behaviorally troubled youth and group them together. According to the study, at-risk youth must be intermixed with average students in order to improve. Seclusion causes further self esteem issues and peer contact solely with other at-risk youths causes escalated behavior problems.

In regards to mental health programs, researchers experimented with 3 types of mental health treatment. (Dishion, 2005) randomly assigned 119 high-risk boys and girls to one of four treatment conditions: (a) parent focus only; (b) peer focus only; (c) combined parent and peer focus; and (d) control. According to the results of the study, youth that participated in the peer focus only group were more likely to have mental health disorders later in life and more likely to use drugs and alcohol.

The study also criticized community programs that offered little supervision or direction of the youth. These programs had games and activities that the youth would

participate in on their own. Community programs overall were proven to have little success in reforming deviant youth. The study suggests that this is due to high numbers of at-risk youth participating in community programs and little adult leadership. Once again, grouping at-risk youth and inadvertently secluding them from average youth leads to unsuccessful recovery.

#### Community Mental Health Journal

This research focused on the “Unmet Need For Community-Based Mental Health and Substance Use Treatment Among Rural Adolescents.”(Anderson, Gittler 2005). The research study was performed on all at-risk youth living in a three-county region of Iowa that had been discharged from a mental health or substance use treatment facility. The study focused on the success of the treatments in assisting the youth with recovery from mental health disorders or substance use. According to the study, 64% of adolescents with both disorders did not receive treatment consistent with widely supported guidelines. These guidelines claim that individuals must be treated for both mental health and substance use problems. “Higher severity of depression, more supports, prior mental health service utilization and lower prevalence of prior abuse predicted the receipt of dual services,” (Anderson, Gittler 2005). When an adolescent with both problems was only treated for one, he/she would show improvement for that disorder, but not the other. The researchers claim that there is a considerable unmet need among rural adolescents with co-occurring disorders. The results of the study suggest that “efforts to improve care must focus on adolescent, familial, program, funding and policy factors that act as barriers to unifying philosophies and practices needed to advance appropriate care,” (Anderson, Gittler 2005).

## Social and Economic Determinants for Child Mental Health Problems

This study is based on the National Longitudinal Survey of Youth and the Child/Young Adult (Bureau of Labor Statistics, 2011). The objective of the study was to test the role of social determinants of child mental health services use. The determinants include: race, education, income and demographic factors of at-risk youth with mental health disorders. The data collection started in 1979 and represents youth ages 7-14 years old born to women who were 14-22 years old at the start of research.

The study was designed to test what types of determinants allowed or disallowed an adolescent to seek mental health care. These include economic, family structure and insurance.

The results of the study indicated that social and demographic determinants were most statistically significant variables. For this study, the economic and insurance variables had little effect on the reasoning for limited mental health care access. Girls were much less likely to obtain needed mental health care treatment than boys, especially for externalizing behavior disorders, but also for depression. African American and Latinos were far less likely to receive treatment than white children. Children of single-mother households were also far less likely to receive treatment, especially for depression.

In order to address the policy problem involving limited access to mental health care by troubled youth in the US, I will use technical feasibility perspective: the Status quo (not acting), School-based reform model which includes analyzing of 26 programs addressing mental health illness and treatment in the public school system for adolescents age 13-17. This approach will formulate a qualitative study on which alternative is most

likely to be implemented based on the technical feasibility of the alternative. This approach is in no way complete, but it is persuasive with the idea that a change in policy is possible on the technical level and can create greater access to mental health care for youth. The technical feasibility of each alternative will demonstrate if the alternative policy can be implemented and with deliberation of the goals and objectives, have the intended outcome.

In order to analyze the technical feasibility of each policy alternative I will first refer back to my goals and objectives. The first goal of the policy alternative is to provide more research on the subject of troubled youth and the need for better access to mental health care to policy makers. The second goal is to provide mental health care access to the greatest number of youth at the lowest cost per capita. The objective is to allow for a future generation to have the greatest possible number of stable working adults caused by troubled youth being treated for mental health disorders during adolescence. Technical feasibility will be scored based on whether each policy alternative can be implemented or has been implemented in the past and whether the program was effective in reducing the rate of unmet mental health need amongst youth.

In the initial review, the Status Quo alternative is not technically feasible. The current policy provides limited data and research on the subject of mental health disorders of youth, but the available data is disappointing at most. The Federal Government is spending approximately \$12 billion per year (DSHS, 1999) on treatment and evaluation of mental health disorders for youth but this leaves three-quarters of youth with unmet need. This alternative is feasible in the mere fact that the policy is currently implemented, but it does not meet the goals of providing research to policy makers or

mental health care accessibility to the greatest number of youth at the lowest cost per capita.

In reviewing the school-based reform model and evaluate the technical effectiveness by asking: does this program provide the greatest number of youth with mental health care at the lowest cost? Has this program been done before? Was the program successful in reducing unmet need? In the initial review of the programs available, the school-based program is the most viable policy alternative. The program is technically feasible in comparison to other alternatives. The school system currently takes on mental health care problems of youth with limited resources. According to the US Department of Education, (Adelman, 2006), with proper resources and extra educational funding at least 60 percent more youth could be evaluated and treated for mental health disorders through a school-based program. The programs that have been implemented such as the SOS program of Washington State and the smaller-scale programs in the Washington DC public school system were effective in reducing unmet need. The technical feasibility of these particular programs are difficult to determine at this point because some programs are no longer in effect due to limited funding in the education system. However, while in effect, the programs proved to work in reducing untreated mental health disorders. Further analysis is needed to determine the cost of implementing and sustaining school-based programs.

### *Chapter 3 Methodology*

#### SAMSHA Evidence-based Program Dataset:

The US Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMSHA) created National Registry of Evidence-based of Programs and Practice (NREPP), a searchable online registry of mental health and substance abuse intervention programs throughout the US. The registry is designed to allow the user access to information on specific programs and how to implement the programs. According the NREPP site, “The system is designed to identify, review, and disseminate information about interventions.” Program administrators are allowed to submit their program for inclusion of the registry, once per year.

Currently, there are more than 180 programs included in the registry.

#### How and Why NREPP was Established

NREPP in SAMHSA’s Center for Substance Abuse Prevention, at inception was called the National Registry of Effective Prevention Programs and was established in 1997 as a way to provide information on promising substance abuse intervention programs to mental health and education providers. The purpose was to improve organizations and individuals as the consumers of substance abuse prevention programs. At first, the programs were designated Model, Effective or Promising Programs. The registry involved 150 reviews of programs. As of 2004, the designations were eliminated and all 150 reviews of those specific programs are available on the website and searchable using a variety of criteria. The registry has expanded to include mental health promotion and mental health treatment, which is the focus of this Capstone Project.

According to the website, NREPP publishes a report on intervention programs called an intervention summary. Each summary includes: general information about the intervention, a description of the research outcomes, quality of research and readiness for dissemination ratings, a list of studies and materials reviewed, and contact information to obtain more information about implementation or research.

#### How Programs are Selected for Inclusion

Programs are included in the NREPP registry that meet the specific requirements for the application year. Each program will always be evaluated based on the quality of research and readiness for dissemination and cost. The programs are evaluated through comparative effectiveness research.

#### How I Identified Programs Specific to my Analysis

For the purpose of this Capstone Project, I identified 26 programs throughout the U.S. that serve youth in need of mental health care in the a public school setting. For the purpose of this research project, I chose programs that according to the NREPP website that were specific to mental health promotion and mental health treatment as areas of interest. The ages of participants are adolescent, 13-17 years old. The race/ethnicities of the youth are self described as American Indian, Asian, Black/African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, White and unspecified.

The outcomes I chose to research are directly related to mental health issues in youth. I chose programs to evaluate that addressed these issues as a way to treat mental health disorders in the public school setting. The outcome categories that were researched for this project include: 1) Positive attachment to family, school, peers, 2) Participation in counseling, 3) Social problem solving skills, 4) Beliefs about the use of violence, 5),



Behavioral intentions as aggressor/bystander, 6) Addresses alcohol/drugs, 7) School bonding, 8) Mental health symptoms, 9) Addresses depression/hopelessness, 10) Diet pill/body shaping substances, 11) Behaviors related to nutrition, 12) Risk and protective factors, 13) Academic achievement, 14) Bullying, 15) Suicide risk and prevention skills, 16) Self esteem, 17) Anxiety, 18) Anger management, 19) Stress management, 20) Self control, 21) Positive peers, 22) Problem solving/coping skills, 23) Sexual behaviors, 24) School attendance, 25) Criminal activity/incarceration, and 26) Parenting.

#### Type of Data Available for Each Program

In order for a program to be selected for inclusion in the NREPP database, the program application undergoes a preliminary assessment to determine whether the intervention meets the minimum requirements for submission. The minimum requirements vary every year and are available to the applicant the summer before applications are due. For program applicants that meet the minimum requirements, SAMHSA accepts interventions for review based on current funding available. SAMHSA may choose to give special consideration to interventions that meet one or more conditions, as outlined in the Federal Register notice published the summer before each submission period.

The programs selected for review and inclusion in the registry undergo a rigorous analysis. The program reviews begin with descriptive information about each program. Next the outcomes of the program are formatted and detailed and each outcome is outlined to include a description of measures (i.e. self-report survey), key findings, studies measuring outcome, study designs and quality of research rating.

Quality of research is then further dissected and the researcher can review the numerical scores (4.0 scale) for each outcome in the categories of: 1) Reliability of Measures, 2) Validity of Measures, 3) Fidelity, 4) Missing Data/Attrition, and 5) Confounding Variables.

Data Analysis

Overall Rating

The Quality of Research section ends with Study Strengths and Weaknesses. For the purpose of this research project, the analysis will include the “overall rating” on each program meeting the criteria specific to adolescent mental health care access in public schools.

Next, the study populations are examined, i.e. age, gender, race/ethnicity.

The, the review outlines the Readiness for Dissemination, which is first numerically scored on a 4.0 scale. The allows the researcher to determine if the program is ready to be implemented in the public school setting based on the registry’s reviews. Dissemination Strengths and Weaknesses are also covered in this section.

The cost of the program is next reviewed. The costs vary by program. The costs are listed as the monetary cost of each item need to implement the program in a school. Each item is described including those that are required for implementation and additional items that are not required.

Lastly, program replications are cited by the applicant and reviewed. Not all programs include citations or information on replications.

I have utilized NREPP’s Quality of Research design. The rating criteria is available in the Appendix.

### How I Plan to Attain "Missing Data"

In order to attain “missing data”, I will contact the programs individually. The first contact will be made through email and second through calling the program administrators. Currently, I have found that much of the data missing from the NREPP website is available on the individual program websites. I will fill in the missing data based on the information provided from the program administrators and program websites. For instance, some programs do not have a definitive program length. I will contact those specific programs and ask how long the program runs (in hours) on average.

I have also contacted NREPP and have set up a phone meeting, as they have stated that some information is difficult to convey through writing and I can obtain the information I need through a brief question/answer session over the phone.

### Plan for Analysis

In order to qualify for an NREPP review, the program must meet criteria to be researchable in a comparative effectiveness research format. I will use the same format to evaluate the programs that meet the criteria of this research project. Using the comparative effectiveness research format, I will compare 26 programs that meet the criteria for this Capstone Research Project. Each program must include mental health treatment for adolescents in a public school setting.

The Federal Coordinating Council on Comparative Effectiveness Research defines comparative effectiveness research as follows:

Comparative effectiveness research is the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat, and monitor health conditions in "real world" settings. The purpose of this research is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, responding to their expressed needs, about which interventions are most effective for which patients under specific circumstances.

To provide this information, comparative effectiveness research must assess a comprehensive array of health-related outcomes for diverse patient populations and subgroups. Defined interventions compared may include medications, procedures, medical and assistive devices and technologies, diagnostic testing, behavioral change, and delivery system strategies. This research necessitates the development, expansion, and use of a variety of data sources and methods to assess comparative effectiveness and actively disseminate the results.

### Feasibility of the Programs

The feasibility of the program is in direct correlation with the implementation readiness evaluation provided in the NREPP review for each program. I will be able to determine feasibility largely based on the program review by NREPP, particularly the implementation readiness factor. Feasibility and implementation readiness are similar outcomes, however feasibility must also include the financial obligation of the public school involved and the parent involvement. The feasibility will also consider high quality of research, number of outcomes and readiness for implementation.

## Natasha Hundley Program Evaluation

The Natasha Hundley Program Evaluation program results are relative to the actual services and outcomes of the programs evaluated in the NREPP registry. Programs will be determined technically feasible or otherwise, and labeled as “feasible” or “unfeasible” based on cost, length of program, number of outcomes and number of youth served. I will also take into heavy consideration the scores given by NREPP, as a way to determine the effectiveness of the programs for the actual participants that were surveyed on the on the intended outcomes.

The participant survey for this project is particularly important, but unfortunately not always available or accurate. In truth, I believe the participant’s opinion of the program and whether the program “helped” the individual is the most important factor in determining feasibility and weighs heavier than the other criteria; however data determining effectiveness as stated by the participant is often flawed and inaccurate. However, unintended consequences often arise, especially when working with youth with mental illness. For example, perhaps a youth may state they have not benefited from a specific mental health program, but improvement in grades and family participation state otherwise. Or, perhaps a youth has participated in a program that focuses on drug abuse treatment, but does the participant does not have a true “substance abuse problem”. The result is an insignificant change for that outcome, but if the youth suffers from a different mental health disorder such as depression and saw significant improvement in his/her because he/she participating in a small group therapy sessions intended for substance abuse treatment, the youth has improved outcomes with unintended consequences. Such instances will be further discussed in the Discussions chapter.

Finally, the program results will be a determining factor of the effectiveness of the program, in regards to my program evaluation. I will use the program data provided by the implementing agency to determine the outcomes. I will not be contacting the participants. This section would be ideal if it were possible to rate the outcomes in order of importance. For example, addressing depression is more significant than addressing academic grades. It is difficult to decide which outcome is more important than another, therefore I have chosen not to attempt to do so. Mental health treatment is personal and relative to the individual's needs.

## *Chapter 4 Results and Discussion*

The following chapter details the results of the 26 evidence-based school programs practicing mental health treatment and promotion and have each been evaluated by The US Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMSHA) created National Registry of Evidence-based of Programs and Practice (NREPP. ) The discussion section of each program considers alternate explanations for the data, as well as limitations and offsetting strengths.

Quality of Research for each program is evaluated by the following variables: 1) Reliability of Measures, 2) Validity of Measures, 3) Fidelity, 4) Missing Data/Attrition, 5) Confounding Variables, and 6) Data Analysis.

### Results

#### Program Summaries and Results

A summary of program outcomes and feasibility ratings is provided in Table 1.

#### **Active Parenting of Teens: Families in Action**

According to the NREPP website, Active Parenting of Teens: Families in Action scored 2.5 average based on outcome evaluation and quality of research. The program is family-centered and focuses on parent-child communication. Parent involvement is necessary and a requirement. The program includes 5 to 12 families and lasts 6 weeks. The group sessions include time with family members together and apart. This program was evaluated on the following outcomes: 1. Positive attachment to family, school and peers, 2. Participation in counseling, 3. Attitudes toward alcohol use and 4. Self-esteem.

Active Parenting of Teens: Families in Action is a 10 week program and costs approximately \$516. This particular program requires 12 hours of parent participation.

#### Outcome 1- Positive attachment to family

At the one year follow-up, students that received intervention reported greater family cohesion than students in the control group. Male participants scored significantly higher than the control group in the area of school attachment. There was no significant change for female students. Parents reported more involvement in school activities; there was no significant change in participation for students.

#### Outcome 2- Participation in counseling

Students reported more participation in counseling at the one-year follow-up.

#### Outcome 3- Attitudes toward alcohol use

At the one-year follow-up, male student participants reported stronger opposition to alcohol use. However, there was no significant difference for female students.

#### Natasha Hundley Program Evaluation

Active Parenting of Teens: Families in Action is an affordable program in comparison to many of the others, at an average of \$516. The program addresses 4 outcomes and involves the parents, which are very important to the outcomes established for this program. However, the program lasts only 6 weeks and involves 2 hour sessions. I believe that is why there was no significant change in some of the outcomes, particularly with female students. The students were not participating in the program for a significant amount of time and therefore the results of the outcomes were not significant.

Also, one of the discrepancies found in the study of this program was the income gap between the participants and nonparticipants surveyed. According to the NREPP



website, participants of the program were at a lower socioeconomic status than that of nonparticipants surveyed. According to research, youth of different socioeconomic backgrounds already respond to the survey differently and note different levels of change in behavior. Also, I believe this makes a significant difference, because families with higher income have more resources for mental health treatment available.

For the purpose of this research, not feasible.

### **Aggressors, Victims, and Bystanders: Thinking and Acting to Prevent Violence**

Aggressors, Victims and Bystanders received an average score of 2.2, according to NREPP. This program focuses on violence and aggression and teaches youth to respond to others using problem-solving skills. The program requires 5 and half hours of classroom time, provided by teachers. The program is 12 45-minute classes taught by teachers, police officers or school resource/safety officers. This program was evaluated on the following outcomes: 1. Social problem-solving skills 2. Beliefs about the use of violence, 3. Behavioral intentions as aggressor 4. Behavior intentions as bystander

Aggressors, Victims and Bystanders is a 12 week program and costs approximately \$70. This particular program requires 12 lessons with class participation.

Outcome 1- Social problem-solving skills

Students participating in the AVB program were surveyed before and after program involvement. Students showed a significant increase in the desired outcome of social problem-solving skills by choosing a nonadversarial goal in the surveys.

Outcome 2- Beliefs about the use of violence

Students reported a significant decrease in the belief that “aggression is legitimate, e.g., it’s ok for you to fight other kids.” Nonparticipant students reported no change in beliefs.

#### Outcome 3- Behavioral intentions as aggressor

According to NREPP’s key findings on the program, student who participated in the program showed, “a significant decrease in their intention to respond with physical aggression. These students showed a significant increase in their intention to seek more information and avoid interaction.” Once again, students that did not participate showed no change in intentions.

#### Outcome 4- Behavioral intentions as bystander

According to the data, student participants who participated in AVB showed a significant decrease in “passive bystander behavior” and there was no change for nonparticipant students.

#### Natasha Hundley Program Evaluation

Aggressors, Victims and Bystanders is an affordable program at a cost of \$70. The program addresses 4 outcomes, all involving violence and aggression. The program survey data showed very significant improvements in participants compared to nonparticipants. However, the implementation for this program is not standardized and there is very little training for the teacher, so Quality of Research rating was low.

For the purpose of this research, I consider this program not feasible, but promising if the program developers take serious steps to standardize the process and expand the program to cover more than aggression and violence. This program was one of the most replicated due to the affordability and positive outcomes.

### **All Stars**

The program, All Stars scored 2.2 average based on outcome evaluation and quality of research. The program takes on a wrap around approach and tackles several issues facing teens with the intention to limit risky behavior. The program focuses on the following outcomes: personal commitment to not use drugs, lifestyle incongruence, 1. Normative beliefs, 2. Cigarette use, 3. Alcohol use, and 4. Inhalant use.

All Stars is a 13 week program and costs approximately \$264.

Outcome 1- Personal Commitment not to use drugs

The students were surveyed before and after the 13 sessions. At the end of the program, the students showed an increased commitment to not use drugs, whereas a similar program showed a decrease.

Outcome 2- Lifestyle incongruence

Students were surveyed on their beliefs in key subject areas, i.e. sexual activity and violence, and the scores improved post program.

Outcome 3- School bonding

Once again, average scores for school bonding increased post program.

Outcome 4- Normative beliefs

Students were surveyed on whether they believed others participated in risky behaviors. Post program, students responses increased.

Outcome 5- Cigarette use

Outcome 6- Alcohol use

Outcome 7- Inhalant use

Post program, students reported lower cigarette, alcohol and inhalant use.

### Natasha Hundley Program Evaluation

All Stars is an affordable program in comparison to many of the others, at an average of \$264. The program addresses outcomes and can be disseminated in the classroom by the teacher. The program also saw significant improvements in the students, particularly for a 13 session, 45 minute program.

According to the NREPP website, over half of the participants of the program were not surveyed post program. The classroom chosen to participate was not selected randomly and each student did not participate in every session. This is most likely the reason for the lower score provided by NREPP.

For the purpose of this research, this program is not feasible. However, further study of the program could prove All Stars to be viable.

### **American Indian Life Skills Development**

According to the NREPP website, American Indian Life Skills Development scored a 2.5 average based on outcome evaluation and quality of research. The program focuses on suicide in the American Indian populations, which is high compared to other groups. The program is 30 weeks long and focuses on self esteem building, addressing hopelessness and suicide prevention skills.

American Indian Life Skills is an exceptionally affordable program at \$30 for 30 weeks.

Outcome 1- Hopelessness

According to NREPP, Beck's Hopelessness Scale is a very reliable source. The program scored a 4.0 in the reliability of measures in the Hopelessness section. Students reported improvement in comparison to nonparticipants.

#### Outcome 2- Suicide prevention skills

Role play samples were used which lack in reliability and validity.

#### Natasha Hundley Program Evaluation

American Indian Life Skills is an affordable program in comparison to most of the other programs. Once again, this program shows significant promise, but the dissemination was lacking and the quality of research of was low. Not enough students participated in the program to assign a valid outcome. However, the readiness for dissemination was high.

For the purpose of this research, this program is feasible. The low cost suggests that the program would be easily implementable in other schools. I would like to see this program implemented in a larger classroom setting.

#### **Athletes Targeting Healthy Exercise & Nutrition Alternatives**

Athletes Targeting Healthy Exercise & Nutrition Alternatives (ATHENA) is a school-based program for athletes that concentrates on positive body image. This program was evaluated on the following outcomes: 1. Diet pill use, , 2. Use of body-shaping substances, 3. Behaviors and beliefs related to nutrition, 4. Risk and protective factors, 5. Alcohol and other drug use, 6. Tobacco use, and 7. Knowledge of curriculum content.

Athletes Targeting Healthy Exercise & Nutrition Alternatives is an 8 session program and costs approximately \$302. This particular program requires 3.6 hours of classroom time.

#### Outcome 1- Diet pill use

Participants of the program reported reduced diet pill use in comparison to nonparticipants.

#### Outcome 2- Use of body-shaping substances

ATHENA program participants had less frequent uses of body shaping substances.

#### Outcome 3- Behaviors and beliefs related to nutrition

At one year follow up, ATHENA schools had students with a better knowledge of protein and calcium intake than others.

#### Outcome 4- Risk and protective factors

According to NREPP, “Compared with students in schools without the intervention, students who participated in ATHENA (1) were more likely to believe that their mood was affected by what they did and that they had increased skill in controlling their mood (2) typically indicated increased ability to turn down an offer to engage in drug use and disordered eating behaviors (3) were less likely to believe in the truth of advertisements and disagreed more often with a statement that men find thin women most attractive ,(4) agreed less often that their closest friends used body-shaping drugs and agreed more often that their closest friends would be against their drug use and (5) reported a significant decrease in perceived pressure from other females to lower their body weight.”

#### Outcome 5- Alcohol and other drug use

Compared with schools without intervention, ATHENA schools showed significant reductions in lifetime use of alcohol and marijuana.

#### Outcome 6- Tobacco use

Reported 3 years after graduation, ATHENA participants showed significantly less cigarette use.

#### Outcome 7- Knowledge of curriculum content

Students who participated in ATHENA increased their understanding and retention of ATHENA information.

#### Natasha Hundley Program Evaluation

ATHENA is an affordable program in comparison to many of the others, at an average of \$302. The program addresses 7 outcomes regarding body image and athleticism. However, the program lasts only 8 weeks and involves 45 minute sessions. Some of the positive outcome could have come from participation in a sport or physical activity.

According to the NREPP website, The Monitoring the Future survey question format used by ATHENA researchers was deemed to have acceptable levels of reliability. However, this particular program had low scores in missing data and attrition which makes the data unreliable.

For the purpose of this research, the not feasible based on poor data collection and cost with length of program. Although not discussed by NREPP, ATHENA positive results could likely be due to participation in the physical activity rather than the curriculum.

### **Building Assets- Reducing Risks**

Building Assets- Reducing Risks scored a very low 1.1 average based on outcome evaluation and quality of research. The program is administered in the schools by the teachers. The curriculum involves 26 lessons and 30 minutes of group activity. The outcomes of the program are: 1. Class failure, 2. Bullying at school, and 3. School connectedness.

Building Assets- Reducing Risks is a 30 week program and costs \$550. This particular program requires classroom participation.

#### **Outcome 1- Class failure**

Students participating in BARR who failed one or more classes decreased from 44% to 28% during the first year of implementation. There is no data for a comparison group.

#### **Outcome 2- Bullying at school**

Bullying for boys decreased by 5% as compared to 1% for those that did not participate. There was no significant difference for girls.

#### **Outcome 3- School Connectedness**

Post program, students reported their teachers were more interested in them and a higher percentage thought teachers respected them.

### **Discussion**

Building Assets- Reducing Risks did not manage data to the standards of NREPP. They were unable to follow the same students over time and all data was limited or missing.

Natasha Hundley Program Evaluation



Not feasible because program cannot be properly evaluated.

### **Care, Assess, Respond Empower**

According to the NREPP website, Care, Assess, Respond, Empower scored a high 3.5 average based on outcome evaluation and quality of research. This program includes a 2 hour assessment and 2 hour motivational counseling. CARE connects the youth with a mentor within the school, such as teacher or school-based caseworker with the parent, chosen by the youth. This program was evaluated on the following outcomes: 1. Suicide risk factors, 2. Severity of depression symptoms, 3. Feelings of hopelessness 4. Anxiety, 5. Anger control problems, 6. Drug involvement, 7. Stress and 8. Sense of personal control.

CARE is a 9 week program and costs approximately \$516. This particular program requires participation of parents and a mentor.

#### **Outcome 1- Suicide risk factors**

Participants self-reported at least a 25% decrease in suicide risk factors in more than 85%. Both male and female youth were likely to report significant decreases.

#### **Outcome 2- Severity of depression symptoms**

Depression symptoms decreased by 25% in 65% of the participants. The decrease was replicated in subsequent studies.

#### **Outcome 3- Feelings of hopelessness**

Feelings of hopelessness decreased by at least 25% in 60% of the participants.

#### **Outcome 4- Anxiety**

Students reported decreased anxiety at the 10 week and 9 month follow-up assessments. Female youth showed a greater improvement in feelings of anxiety.

#### Outcome 5- Anger control problems

Anger problems decreased by 25% in more than 65% of CARE participants.

#### Outcome 6- Drug involvement

Alcohol, marijuana and hard drug use was assessed and at the 4-week follow up students reported a significant decrease. By the 10-week follow-up an alcohol rebound was significant enough to eliminate a difference between participants and nonparticipants; however marijuana and hard drug use had decreased.

#### Outcome 7- Stress

Students reported a 25% in nearly 50% of CARE participants.

#### Outcome 8- Sense of personal control

According to NREPP, Two clinical RCTs evaluated the sense of personal control with measures from the High School Questionnaire: Profile of Experiences. The first RCT used a 4-item scale that addressed “self-confidence in handling problems,” “ability to make good things happen for self,” “ability to learn to adjust/cope with problems,” and “confident about feeling better eventually.” The second RCT used these items plus an additional item related to “feeling capable and in control.”

In the first study, students showed no improvement in personal control. However, the second study revealed significant increases.

#### Natasha Hundley Program Evaluation

Care, Assess, Respond, Empower is an affordable program in comparison to many of the others, at an average of \$516. According to NREPP the studies of CARE

were excellent design and good intervention fidelity protocols for appropriate analytic strategies.

The program received an exceptional quality of research score from NREPP and significant improvements reported by students. The program has been replicated, but the dissemination score is low indicating that the program is difficult to implement.

For the purpose of this research, feasible.

### **CASASTART**

According to the NREPP website, Striving Together to Achieve Rewarding Tomorrows scored 2.9 average based on outcome evaluation and quality of research. The program is wrap-around model that includes schools, law enforcement agencies and social and health agencies. The program aims to decrease violence and drug abuse as well improving school grades and participation. This program was evaluated on the following outcomes: 1. Use of drugs, 2. Violence.

CASASTART is a 2 year program and costs approximately \$9000. This particular program requires school, case management and law enforcement collaboration.

#### Outcome 1- Use of drugs

One year post program, students reported less use of substances as compared to the nonparticipant control group.

#### Outcome 2- Violence

There was a significant decrease in violent crimes by CASASTART participants compared to nonparticipants.

#### Outcome 3- School promotion (progression to the next grade)

Significant school promotion for the following 3 years post program for CASASTART students.

Striving Together to Achieve Rewarding Tomorrows is an expensive program in comparison to many of the others, at an average of \$9000 for two years. The program data varies greatly because participants have experienced different types and levels of services and interventions based on availability and participant involvement. .

#### Natasha Hundley Program Evaluation

For the purpose of this research the program is not affordable or available on a larger scale, so the CASASTART is not feasible.

#### **CAST (Coping and Support Training)**

Coping and Support Training scored 3.5 average based on outcome evaluation and quality of research. This comes with some expectation because the program is run by the same developers as the also high scored program, CARE. Identification of participants is done through CARE. The program is high school based and is run over 6 weeks with 12 55-minute group sessions administered by a teacher, counselor or nurse. This program was evaluated on the following outcomes: 1. Suicide risk factors, 2. Severity of depression symptoms, 3. Attitudes toward alcohol use, 4. Anxiety, 5. Anger, 6. Drug involvement, 7. Sense of personal control, 8. Problem solving/coping skills.

Coping and support training is a 6 week program and costs approximately \$1,727.

#### Outcome 1- Suicide risk factors

Students showed significant decrease in positive feelings toward suicide. This decrease was especially evident in the 4-week follow-up.

#### Outcome 2- Severity of depression symptoms

Students reported decreased severity in depression symptoms at the 10 week follow-up and additionally at the 9-month follow-up.

#### Outcome 3- Attitudes toward alcohol use

Students reported a significant decline in use of alcohol when compared to the control group. The decline remained at each follow-up.

#### Outcome 4- Anxiety

Students, particularly girls, showed a significant decrease in anxiety post participation.

#### Outcome 5- Anger

Rates of decline in anger were significant, particularly for female participants.

#### Outcome 6- Drug involvement

Students showed an overall decrease in drug involvement at each follow-up.

#### Outcome 7- Sense of personal control

Students reported rapid increase in their perceived sense of self control.

#### Outcome 8- Problem solving/coping skills

CAST participants showed rapid gains in problem solving and coping skills.

Participants showed highest level immediately after program completion.

#### Natasha Hundley Program Evaluation

Coping and Support Training is an affordable program in comparison to many of the others, at an average of \$1727. The program addresses 7 outcomes and has received success in each. The program was deemed to have used good research methods and

found state of the art methods of collecting missing data. The program has been successful and the program materials allow the CAST to be easily replicated.

For the purpose of this research, this program is feasible.

### **Coping Cat**

According to the NREPP website, Coping Cat scored 3.4 average based on outcome evaluation and quality of research. The program focuses on anxiety coping mechanisms. The program was evaluated on outcomes relating to anxiety.

Coping Cat is a 16 session program and costs approximately \$52. This particular program requires a therapist to administer the program.

#### **Outcome 1- Anxiety diagnoses/disorders**

Youth and children participating in Coping Cat have been diagnosed with an anxiety disorder. In one study the anxiety diagnoses was no longer primary in 92% of participants.

#### **Outcome 2- Anxiety symptoms**

Children reported a significant decrease in anxiety and the decrease was maintained through the long term follow-up, 7.4 years later.

#### **Natasha Hundley Program Evaluation**

Coping Cat is an affordable program in comparison to many of the others, at an average of \$52. However, the program only treats anxiety. Youth may see improvements, even if they do not experience anxiety, but the program only allows those that have been medically diagnosed with a disorder to participate.

Because of the exclusivity of the program and the requirement to have a prior medical diagnosis, this program is not feasible.

### **Familias Unidas**

According to the NREPP website, Familias Unidas had the highest score 3.9 average based on outcome evaluation and quality of research. The program is family-based interventions for Hispanic families. As previously stated in the Literature section, mental health treatment is especially necessary in the Hispanic community, due to high need. Parent involvement is necessary and a requirement for the program. Each group includes 10 to 12 parents and lasts 3-5 months. The group sessions go through 3 stages. This program was evaluated on the following outcomes: 1. Behavior problems, 2. Family functioning, and 3. Substance abuse 4. Risky sexual behaviors and 5. Externalizing disorders.

Familias Unidas is a 3-5 month program and costs approximately \$50,000. This particular program requires parent participation and Spanish speaking facilitator that is bicultural, holds a minimum of a bachelor's degree and 3 years clinical experience, or a master's degree and 1 year of clinical experience.

#### **Outcome 1- Behavior problems**

Behavior problems steadily decreased at 3, 6, 9 and 12 month follow-ups.

#### **Outcome 2- Family functioning**

The participants and control group both experienced improvement in family functioning for 3, 6, and 9 month follow-ups. Both groups experienced a decrease in

family functioning at 9 and 12 months. The decrease was more significant in the control group.

#### Outcome 3- Substance use.

There was no significant difference in alcohol use at the post program. However, there was a reported decrease in cigarette use and illicit drugs.

#### Outcome 4- Risky sexual behaviors

Participants reported a significant increase in condom use in the 6-30 month follow-up.

#### Outcome 5- Externalizing disorders

Participants reported no significant difference in disorders such as ADHD, oppositional defiant disorder and conduct disorder.

#### Natasha Hundley Program Evaluation

Familias Unidas is the most expensive program evaluated at \$50,000 for an Implementation package per site and the educational and background requirements of the facilitator. The program has excellent results and the highest quality of research ratings. However, the program is too exclusive and too expensive to implement in varying schools.

For the purpose of this research, the program is not feasible.

#### **Guiding Good Choices**

Guiding Good Choices scored 3.0 average based on outcome evaluation and quality of research. The program is family-centered and focuses on drug use prevention. Parent involvement is necessary and a requirement. The program is 5 sessions. The



sessions are interactive and skill based. This program was evaluated on the following outcomes: 1. Substance use, 2. Parenting behaviors and family interactions, 3. Delinquency and 4. Symptoms of depression.

Guiding Good Choices is a 5 session program and costs approximately \$854. This particular program requires 5 sessions of parent participation.

#### Outcome 1- Substance use

Participants reporting that they had used substances in the past showed a decrease at one year follow-up. Participants that reported never having used showed no significant difference. Through 4 years of follow-ups, families continued to report less lifetime use of marijuana and other substances.

#### Outcome 2- Parenting behaviors and family interactions

Parents reported better interactions and more effective discipline. Observations of family interactions improved in both Mothers and Fathers.

#### Outcome 3- Delinquency

Adolescents from Guiding Good Choices families showed a slower rate of self-reported activities associated with delinquency.

#### Outcome 4- Symptoms of depression

Youth showed a slower rate of increase in self-reported depressive symptoms compared with the control group.

#### Natasha Hundley Program Evaluation

Guiding Good Choices is a reasonably affordable program in comparison to many of the others, at an average of \$854. The program addresses 4 outcomes and involves the parents, which are very important to the outcomes established for this program. However,

the program lasts only 5 sessions. I believe there would be more significant and long lasting improvements if the program lasted longer.

Also, one of the discrepancies found in the study of this program was the participation. In one study, 43% of the sample pool declined to participate. The program is not feasible if it is too difficult to have parent and adolescent participation.

For the purpose of this research, not feasible.

### **Lifelines Curriculum**

According to the NREPP website, Lifelines Curriculum scored a 2.9 average based on outcome evaluation and quality of research. The program takes place in the school setting and included 4 45 minute sessions delivered over 4 weeks. This program was evaluated on the following outcomes: 1. Knowledge about suicide, 2. Attitudes about suicide, 3. Attitudes toward seeking adult help and 4. Attitudes about keeping a friend's suicide thoughts a secret.

Lifelines Curriculum is a 4 week program and costs approximately \$225. This particular program focuses only on the issue of suicide.

Outcomes 1- 4 Knowledge and attitudes about suicide

Two weeks post program, participants showed a significant increase in knowledge about suicide than the control group. There was an overall improvement in the knowledge and attitudes surrounding suicide, 2 weeks post program.

Natasha Hundley Program Evaluation

Lifelines Curriculum is an affordable program at a rate of \$225. However, the program is very short at only 4 45 minute sessions or 2 90 minute sessions. The program

focuses on suicide only. With the addition of supplemental information on other issues facing youth, this program might be feasible. However, at this point and with a lower quality of research rating, this program is not ready for dissemination for the purpose of this research.

For the purpose of this research, not feasible.

### **Lions Quest Skills for Adolescence**

Lions Quest Skills for Adolescence scored 3.0 average based on outcome evaluation and quality of research. The program focuses on several outcomes with the intention of helping students develop positive commitments and improve overall mental health. This program was evaluated on the following outcomes: 1. Positive attachment to family, school and peers, 2. Participation in counseling, 3. Attitudes toward alcohol use and 4. Self-esteem.

Lions Quest is a series of 80 45-minute sessions and costs approximately \$439. This program also includes a service learning component.

#### **Outcome 1- Social functioning**

Students who received at least 3 lessons out of 7, increased test scores by 9% at the end of the program. The test focuses on anger management strategies and internalization.

#### **Outcome 2- Success in school**

The success in school outcome was measured by 1. Student's attitude or feelings about school, 2. GPA and school records and 3. California Achievement Test scores.

Students increased both GPA and CAT scores, but there was a slight decline in students' attitudes toward their personal control of grades and attitude toward school.

#### Outcome 3- Misconduct

Misconduct was measured by teacher's daily logs. Students participating in the Lions Quest program had half the number of negative behaviors during and after the program.

#### Outcome 4- Attitudes and knowledge of drugs

The students took a knowledge test post program and showed an increased knowledge and perception of risk associated with drug use.

#### Natasha Hundley Program Evaluation

Lions Quest Skills for Adolescence is one of the most affordable programs at an average of \$431 for 80 sessions. The program takes a wrap around approach and addresses several key outcomes facing youth in schools.

According to the NREPP website, the training to teachers of this program was too short and therefore teachers were unprepared. Teachers will require more training to improve the NREPP score of 3.0. However, with some improvement, Lions Quest shows real promise of reaching a large number of youth, on a variety of outcomes, in a cost efficient manner.

For the purpose of this research, feasible.

#### **Peaceful Alternatives to Tough Situations**

Peaceful Alternatives to Tough Situations scored a 1.7 on the NREPP registry. This is an aggression management program, taught in the schools by teachers, guidance

counselors and mental health counselors. The program includes 9 weekly, 1-hour sessions. This program was evaluated on the following outcomes: 1. Psychological aggression, 2. Physical assault, 3. Forgiveness in others.

Peaceful Alternatives to Tough Situations is a 9 week program and costs approximately \$400.

#### Outcome 1- Psychological aggression

Compared to students on the wait-list, participants reported lower scores of physical aggression.

#### Outcome 2- Physical assault

Compared to students on the wait-list, participants reported lower scores of physical assault.

#### Outcome 3- Forgiveness of others

Compared with students on the wait-list, students reported a higher rate of forgiveness.

#### Natasha Hundley Program Evaluation

Peaceful Alternatives to Tough Situations is an affordable program in comparison to many of the others, at an average of \$400. The program addresses the basic, important outcomes. The program lasts 9 weeks and saw overall improvements.

However, the program had too many research weaknesses to receive a good report from NREPP. There was only one, small, nonrandomized study and not enough information was reported. I believe this is also due to lack of instructor training.

For the purpose of this research, not feasible.

### **Positive Action**

Positive Action scored a 2.5 average based on outcome evaluation and quality of research. The program is family-centered and focuses on parent-child communication. Parent involvement is necessary and a requirement. The program focuses on a variety of outcomes and has materials available for schools, homes and community agencies. This program was evaluated on the following outcomes: 1. Academic achievement, 2. Problem behaviors, 3. School absenteeism and 4. Family functioning.

Positive Action is a variable length program and costs approximately \$250. This program has several components and can be disseminated at differing lengths.

#### **Outcome 1- Academic Achievement**

Students were followed over 4 academic years and had higher improvements in math and reading proficiency and high school students received higher SAT scores.

#### **Outcome 2- Problem behaviors**

According to NREPP the program saw drastic improvement in problem behaviors, “Middle schools with relatively high enrollment from PA primary schools had 52%-71% lower rates of problem behaviors such as drug use, violence, ‘disrespectful, disobedient, and, disorderly behaviors,’ and property crime, compared with middle schools with relatively low enrollment from PA primary schools. High schools with medium enrollment from PA primary schools had 17%-50% fewer problem behaviors, including substance use, violence, sexual behavior, falsifying records, and suspensions, than did high schools with relatively low enrollment from PA primary schools. High schools with high enrollment from PA primary schools had 25%-63% fewer of these problem behaviors than did schools with low enrollment from these primary schools.”

### Outcome 3- School Absenteeism

Change in attendance was also reported. Participating students had an increased attendance rate of 1.2 days per year.

### Outcome 4- Family functioning

Family functioning was measured using 16 self-report items that assessed family conflict, family cohesion, and quality of parent-child bonding. The items were administered at pretest and posttest.

### Natasha Hundley Program Evaluation

Positive Action is an affordable program at \$250. The program addresses 6 outcomes and in some cases follows the youth through 4 academic years, which are very important to the outcomes established for this program. The study reports improvements in each of the key outcome areas and significant improvements in grades and test scores, which is particularly attractive to school implementation policies.

One of the discrepancies that NREPP reported was the data presented was based off administrative records which vary from school to school.

For the purpose of this research, this program is not feasible, but this is one of the oldest programs and “renovations” could be made that could standardize the process and make the program feasible.

### **Reconnecting Youth**

Reconnecting Youth scored a 3.3 average based on outcome evaluation and quality of research. The program is ongoing and there are specific requirements for participation. As student must have fewer than average school credits or a drop out

record. This program is taught by a “natural helper”, an RY Leader, a school staff member or a teacher. This program was evaluated on the following outcomes: 1. School performance, 2. Drug involvement, 3. Mental health risk and protective factors and 4. Suicide risk behaviors.

Reconnecting Youth is an ongoing program in the school and costs approximately \$1,325. This particular program requires training of the teacher or RY Leader.

#### Outcome 1- School performance

Students identified as high risk for potential dropout were assigned to the program and then assessed on school performance based on school records. GPAs decreased from first to second pretest but increased from pretest to posttest. Absenteeism also decreased by posttest and continued to increase for the control group.

#### Outcome 2- Drug involvement

Over time, students had a significant decrease in drug involvement.

#### Outcome 3- Mental health risk and protective factors

The participating students showed a significant increase in self-esteem, perceived school bonding, and female students showed a significant decrease in deviant peer bonding. Male students showed no difference in deviant peer bonding. Students also showed decreased depression, hopelessness, stress and anger.

#### Outcome 4- Suicide risk behaviors

85% of two different groups showed decreased suicide risk behavior scores by at least 25%.

Natasha Hundley Program Evaluation



Reconnecting Youth is an intensive program in comparison to the others. By following students throughout high school, the program is able to control the outcomes and improve the lives of the students at a greater level. Considering the length of program, this is affordable an average of \$1,325. The program addresses 4 outcomes and involves teacher participation. The program is designed to identify children at risk of dropping out and short on school credits. This program is not available for every student.

The program received a high quality of research rating from NREPP. The only issue was in the self-selection process in which groups had differentiating baselines.

For the purpose of this research, this program is feasible.

### **Responding in Peaceful and Positive Ways**

According to the NREPP website, Responding in Peaceful and Positive Ways scored 2.4 average based on outcome evaluation and quality of research. This is a peer mediation program and focuses on violence prevention. The program involves 16 sessions per year, 6<sup>th</sup>-8<sup>th</sup> grade. This program was evaluated on the following outcomes: 1. School disciplinary code violations, 2. Violent/aggressive behavior, 3. Victimization and 4. Peer provocation and 5. Life satisfaction.

Responding in Peaceful and Positive Ways is a 16 session program delivered every year of middle school. The program costs approximately \$355.

Outcome 1- School disciplinary code violations

At 12-month follow-up, there was an overall decrease in school and disciplinary violations, including violence related violations. It appears that students who had the highest initial levels of aggression, benefited most from the program.

## Outcome 2- Violent aggressive behavior

Students reported lower frequency in physical aggression and higher rates of participation. Among girls only, there were lower rates of threatening to hurt a teacher.

## Outcome 3- Victimization

For boys, there was a small decrease in victimization for program participants. There was not a significant decrease for girls.

## Outcome 4- Peer provocation

RiPP participants reported a reduced frequency in peer provocation.

## Outcome 5- Life satisfaction

RiPP participants increased their life satisfaction scores as their peers' scores decreased.

## Natasha Hundley Program Evaluation

Responding in Peaceful and Positive Ways is an affordable program at \$365 per year. The program addresses 6 outcomes and includes life satisfaction.

NREPP gave RiPP a lower quality of research score, 2.4. This was mainly due to the reliability of evidence provided by program administrators. Some schools did not complete the program and there was missing data and attrition.

## Natasha Hundley Program Evaluation

For the purpose of this research, not feasible. However, I think beginning at treatment program in 6<sup>th</sup> grade and continuing through 8<sup>th</sup> grade is a promising idea. Participants saw an overall increase in positive outcomes and the longer a RiPP participant was involved in the program, the better his/her results.

### **Safe Dates**

According to the NREPP website, Safe Dates scored 3.2 average based on outcome evaluation and quality of research. The program aims to prevent and stop emotional, physical, and sexual abuse in relationships of 8<sup>th</sup> and 9<sup>th</sup> graders. The program includes parent curriculum. Safe Dates involves a 9 session curriculum, play script, poster contest and teacher training outline. This program was evaluated on the following outcomes: 1. Perception of abuse, 2. Sexual abuse victimization, and 3. Physical abuse victimization.

Safe Dates is a 9 session program and costs approximately \$225. This particular program includes parent participation.

#### **Outcome 1- Perpetration of abuse**

Safe Dates participants reported statistically significant decreases in psychological abuse perpetration at all four follow-up points, relative to adolescents in the control group.

#### **Outcome 2- Sexual abuse victimization**

Safe Dates participants reported statistically significant decreases in sexual abuse perpetration at all four follow-up points, relative to adolescents in the control group.

#### **Outcome 3- Physical abuse victimization**

Participants reported a decrease in physical abuse victimization in all four follow-up points.

#### **Natasha Hundley Program Evaluation**

Safe Dates is an affordable program at an average of \$225. The program addresses youth dating and youth physical and sexual violence in dating relationships.

The program lasts 9 sessions with subsequent materials. Because the program is specific to youth that are in dating relationships, this program does not report on outcomes outside of that measure. The program saw increases in positive outcomes surrounding teen dating, but no data was reported on incomes specific to mental health of the participants.

NREPP reported a fairly high quality of research rating at 3.2. However, NREPP also reported substantial attrition and nonrandom missing data.

#### Natasha Hundley Program Evaluation

For the purpose of this research, this program is not feasible.

#### **Say it Straight**

Say it Straight scored 3.1 average based on outcome evaluation and quality of research. The program is designed to increase communication between youth and adults. Within the schools, the program is delivered in 5-10 50 minute sessions. This program was evaluated on the following outcomes: 1. Alcohol and drug related school offenses 2. Criminal offenses and 3. Communication skills.

Say it Straight is a 10 week program and costs approximately \$1,772. This program also involves intervention of the parent or other adults in the child's life.

#### Outcome 1- Alcohol and drug related school suspensions

At follow-up, student participants had a lower number of alcohol and drug related suspensions.

#### Outcome 2- Criminal offenses

Overall, and in every test period, SIS participants had a lower rate of juvenile offenders.

### Outcome 3- Communication skills

Parents and other adults who received the intervention showed pre to posttest decreases in ineffective communication styles.

### Natasha Hundley Program Evaluation

Safe Dates is not an affordable program in comparison to many of the others, at an average of \$1,772. The program addresses 4 outcomes and involves the parents, which are very important to the outcomes established for this program. However, the program lasts only 5 sessions. The program reported overall increased positive outcomes, but the program is too short and too expensive to implement. On the positive side, SIS was one of the few programs that surveyed the parents of the youth.

NREPP reported that SIS measurements were reliable and valid. However, there was no method to describe the missing data.

### Natasha Hundley Program Evaluation

For the purpose of this research, this program is not feasible.

### **SMART team**

According to the SMARTteam scored 2.4 average based on outcome evaluation and quality of research. This is a computer program featuring 8 separate modules that addresses issues of anger management and dispute resolution. The program can be administered separately or sequentially with a 5-stage process that ranges from novice to expert. This program was evaluated on the following outcomes: 1. Self-awareness/self-knowledge, 2. Intent to use nonviolent strategies in resolving conflicts, 3. Beliefs supportive of violence and 4. Prosocial behavior.

SMARTteam is an 8 module program and costs approximately \$1,570. This is a computer software program. There is no formalized instructor.

#### Outcome 1- Self awareness/self knowledge

One evaluation reported that participants increased awareness of how their behaviors contribute to the escalation of a conflict situation and the percentage recognized that fighting escalates conflict increased from 43% to 77%, post program. However, a second evaluation did not confirm this outcome.

#### Outcome 2- Intent to use nonviolent strategies in resolving conflicts

Students reported intent to use nonviolent strategies post program in two evaluations.

#### Outcome 3- Beliefs supportive of violence

According to NREPP, “SMARTteam participants were less likely than their peers to value violence as an option in conflict situations.”

#### Outcome 4- Prosocial behavior

In some instances, the percentage of program participants reporting prosocial behaviors doubled. Rates of name calling declined pretest to posttest.

#### Natasha Hundley Program Evaluation

SMARTteam is a more expensive program at \$1,570, but dissemination does not require a trained instructor. One CD-ROM program can be used for several students. The program has a lot of leeway in the delivery, as students can participate one time or follow the series sequentially. I believe the nonuse of a trained instructor is actually a weakness. The purpose of a mental health program is develop a relationship with a mental health or trained professional. At this point, I do not believe a software program can accomplish

this.

NREPP gave SMARTteam a lower score of 2.4 for quality of research. This is because implementation issues arose and there are no protocols for gathering outcome data.

#### Natasha Hundley Program Evaluation

For the purpose of this research, this program is not feasible.

### **SOS Signs of Suicide**

Signs of Suicide scored 2.4 average based on outcome evaluation and quality of research. This program is a screening and treatment method for depression and suicide risks. SOS is 2 days long and is delivered in a classroom setting. This program was evaluated on the following outcomes: 1. Suicide attempts, 2. Knowledge of depression and suicide, 3. Attitudes toward depression and suicide.

Signs of Suicide is a 2 day program and costs approximately \$300. The purpose of the program is screening and intervention.

#### Outcome 1- Suicide attempts

SOS participants were 40% less likely than comparable students who did participate in the intervention to report attempting suicide in the past 3 months.

#### Outcome 2- Knowledge of depression and suicide

A random sample reported that SOS participants were more knowledgeable on depression and suicide than nonparticipant students.

#### Outcome 3- Attitudes toward depression and suicide

Participants showed more desirable attitudes toward depression and suicide post intervention than nonparticipant students.

#### Natasha Hundley Program Evaluation

Signs of Suicide is an affordable program, at an average of \$300. The program addresses 2 outcomes and is delivered in the school setting. This is a screening and intervention program, lasting 2 days. Overall, the program reported significant increase in desired outcomes, but the program focuses only suicide screening and prevention. The program includes an “attempt to treat” factor, which is imperative in a screening intervention.

According to NREPP, SOS received a quality of research score of 2.4, because some data were unreliable.

For the purpose of this research, this program is not feasible.

#### **Strengthening Families Program**

The Strengthening Families Program scored 3.1 average based on outcome evaluation and quality of research. The program is family-centered and focuses on parent-child communication. Parent involvement is necessary and a requirement. The program 2 hour family sessions and lasts 14weeks. The group sessions include time with family members together and apart. This program was evaluated on the following outcomes: 1. Children’s internalizing and externalizing behaviors, 2. Parenting practices, and 3. Family relationships.

Strengthening Families is a 14 week program and costs approximately \$450. This particular program requires 28 hours of parent participation.



### Outcome 1- Children's internalizing and externalizing behaviors

Families with a parent who had experienced problems with alcohol in the past 5 years were exposed to SFP or a control group. SFP children reported decreased misconduct. SFP parents in the US reported significantly decreased conduct disorder symptoms than their Canadian counterparts.

### Outcome 2- Parenting practices

The effect of the program on parenting practices was modest. Participating parents reported lower scores of inconsistent discipline and verbal abuse.

### Outcome 3- Family Relationships

Four cohorts of families who participated in SFP reported family organization improvements.

### Natasha Hundley Program Evaluation

Strengthening Families is an affordable program in comparison to many of the others, at an average of \$450. The program addresses 3 key outcomes and involves the parents, which are very important to the outcomes established for this program. The program is lengthy compared to many others and therefore reported greater impact.

According to the NREPP website, the "use of a manualized curriculum, staff training and supervision, and a fidelity measure and process evaluations helped ensure fidelity. In the second study, which occurred over 4 years in real-world settings, improving fidelity each year produced stronger results over time." Programs with well trained staff and supervision fair best with NREPP quality of research scores.

For the purpose of this research, this program is feasible.

### **Systematic Training for Effective Parenting**

The STEP program scored 2.9 average based on outcome evaluation and quality of research. The program requires both parent and child participation. Parent involvement is part of the intervention. Although this program was designed for all types of parents, those studied had been targeted for abuse, parenting problems, child maltreatment or mental health treatment in the family. The program includes 1.5 hour study groups, facilitated by a counselor, social work or STEP Workshop participant and lasts 8-9 weeks. This program was evaluated on the following outcomes: 1) Child behavior, 2) Parent potential to physically abuse child, 3) General family functioning 4) Parenting stress and 5) Parent-child interaction.

Systematic Training for Effective Parenting is an 8-9 week program and costs approximately \$353. This particular program requires 13.5 hours of parent participation.

#### **Outcome 1- Child behavior**

In one study, parents reported no significant difference in child behavior, post program. In a second study, parents who had abused their children had reported significantly better perceptions of their children's behavior post STEP.

#### **Outcome 2- Parent potential**

Post program, parent participants had significantly less potential to physically abuse their children.

#### **Outcome 3- General family functioning**

Pre to posttest, parents, reported an overall improvement in general family functioning.

#### **Outcome 4- Parenting stress**

Three different groups were studied and each reported significantly less stress post program.

#### Outcome 5- Parent-child interaction

An overall improvement of parent/child interactions was reported by each group, post program.

#### Natasha Hundley Program Evaluation

Systematic Training for Effective Parenting is an affordable program in comparison to many of the others, at an average of \$353. The program addresses 5 outcomes and involves the parents, which are very important to the outcomes established for this program. However, the program lasts only 8-9 weeks and involves 1.5 hour sessions. The program does not focus solely on adolescents, so much of the data concerned parent/infant relationships.

According to NREPP, this particular program experienced significant drop out rates. Also, there was no instrument to measure child's behavior, so the studies rely heavily on parental reports.

For the purpose of this research, this program is not feasible.

#### **Teaching Kids to Cope**

According to the NREPP website, Teaching Kids to Cope scored the highest average at 3.7, based on outcome evaluation and quality of research. The program addresses cognitive and behavioral health based on stress and coping theory. The program is delivered weekly by a professional with bachelors in education, social work, child development, nursing, psychology or other health related field. The program is 10

weeks long, one hour sessions each week. This program was evaluated on the following outcomes: 1. Depressive symptomatology and, 2. Coping skills.

Teaching Kids to Cope is a 10 week program and costs approximately \$1,015.

#### Outcome 1- Depressive symptomatology

According to the program's key findings, "In a randomized controlled trial, from pre- to posttest, self-reported depressive symptomatology decreased for female adolescents who received TKC and increased for female adolescents who did not receive the intervention. There was no significant change in RADS scores for males in either the intervention or control group."

#### Outcome 2- Coping skills

Students reported greater use of supportant coping style in the posttest. Students also reported a greater use of seeking guidance and support than the control group. In addition, 9 months post program, participant students demonstrated a decrease in cognitive avoidance strategies.

#### Natasha Hundley Program Evaluation

Teaching Kids to Cope is one of the more expensive program at an average of \$1,015. The program addresses 2 key outcomes, depressive symptomatology and coping skills. The program lasts only 10 weeks and involves 1 hour sessions. I believe the program focuses heavily on two vital outcomes in concern to youth and mental health. The students reported significant positive outcomes, particularly the female students.

According to NREPP, unfortunately both studies had significant drop out rates, between 10-20%. However, program administrators used well established research

literature to measure outcomes and the reported statistics are strongly supported, valid and reliable.

According to NREPP, the manual for Teaching Kids to Cope offers little specific guidance for implementation and intervention. Although the program requires a highly educated and trained instructor, the program does not follow through with a detailed implementation and intervention strategy. Even though the program reported significant improvements, for the purpose of this research, this program is not feasible. If Teaching Kids to Cope program administrators restructure the implementation process and manual, this program could be feasible.

### **The Leadership Program's Violence Prevention Project**

According to the NREPP website, The Leadership Program's Violence Prevention Project scored 3.4 average based on outcome evaluation and quality of research. The program is a true school-based intervention format, in which the instructor teaches the material in the classroom setting through a variety of activities. The program includes 45 minutes classroom sessions and lasts 12 weeks. This program was evaluated on the following outcomes: 1. Use of conflict resolution strategies, 2. Normative beliefs about aggression, 3. Peer support behaviors and 4. Academic self-concept.

The Leadership Program's Violence Prevention Project is a 12 week program and costs approximately \$777. This particular program requires 5.4 hours of classroom time.

Outcome 1- Use of conflict resolution strategies

According to the program's key findings, "The use of verbal aggression remained relatively constant for VPP participants and increased for nonparticipants. The use of

physical aggression decreased for VPP participants and remained constant for nonparticipants. The use of antisocial behavior remained constant for VPP participants and increased for nonparticipants.”

#### Outcome 2- Normative beliefs about aggression

Tolerance for aggressive behavior increased for both VPP participants and the control group, but the VPP increase was much slower.

#### Outcome 3- Peer support behaviors

From pre- to posttest, participant students increased peer support behaviors slightly and nonparticipant students decreased in peer support behaviors.

#### Outcome 4- Academic self-concept

Academic self-concept increased for VPP participants.

#### Natasha Hundley Program Evaluation

The Leadership Program’s Violence Prevention Project is an affordable program, at an average of \$777. The program addresses 4 outcomes and is delivered in the classroom, which allows the program to reach varying types of students. However, the program lasts only 6 weeks and involves 2 hour sessions.

NREPP gave the program a high quality of research score of 3.4. According to NREPP, the program has “High-quality, well-organized materials for program implementation are available for a variety of audiences; these materials include detailed implementation planning guides for administrators, supervisors, and facilitators. A variety of training opportunities and on-site technical assistance and consultation are available. The training manuals are well developed and the training DVD includes clear examples of how to facilitate intervention activities.” Dissemination is significant to the

success of any mental health treatment program. VPP has high readiness for dissemination ratings.

#### Natasha Hundley Program Evaluation

For the purpose of this research, this program is feasible.

#### Discussion

Out of the 26 evidence-based programs examined, 8 were deemed feasible for the purpose of this research. There are several factors that supported program feasibility, particularly relating to cost and time. Some programs examined, had very high cost, i.e. \$50,000 and were deemed not feasible because a public school system could most likely not take on the high cost. The majority of the programs examined cost less than \$1,000. Programs that required a paid instructor tended to cost more, as well as lengthy programs that were more than 10 weeks. The feasible programs are American Indian Life Skills, CARE, CAST, Lions Quest Skills for Adolescence, Reconnecting Youth, Strengthening Families Program, Teaching Kids to Cope and The Leadership Program's Violence Prevention Project.

For the standards of this research, Reconnecting Youth which is a sister program to CARE and CAST, showed great successes. The program takes on a "peer approach to building life skills." According to NREPP, Reconnecting Youth received the highest readiness for dissemination score, of all the programs studied. This meaning, the program has had thriving implementation several times over. According to NREPP, "Materials are detailed, thorough, well organized, and user friendly. Infrastructure issues relevant to implementation sites are well addressed, and good guidance for identifying and selecting participants is offered. Program information is easy to access on the Web site. Several

highly interactive and comprehensive training options are available to implementers, as is solid and practical background material to prepare staff for their roles. The training materials are well staged, allowing participants to move through the content in a logical progression. Quality assurance is seen as integral to the cycle of implementation, and a good set of tools is provided to assist implementers. Questionnaires and various checklists allow a multidimensional array of input for facilitating and documenting fidelity.”

Reconnecting Youth is affordable at \$1,325 for a group of 8 students. In congruence with my research, Reconnecting Youth reported high success in positive outcomes because the program is ongoing and follows the youth through high school. There is no set time limit on how long a youth can remain involved in the program. The cost is very low and the length of the program is substantial. .

Time plays a significant role in the success of an evidence-based school program for mental health. The lengths of programs varied from a few hours to ongoing, or through the finish of high school. The data strongly suggests that length of program relates to success of positive outcomes. For instance, longer programs tended to report more or increased positive outcomes and more significant differences from the control groups, particularly post program at follow-ups.

The cost of program had little significance to the success of positive outcomes. Many of the pricey programs did not have greater positive outcomes, if any. For the purpose of this research, programs that cost over \$2,000 were deemed unfeasible, as the public school system cannot take on the financial burden. If other funding sources arise, some costly programs could be reconsidered.



For a list of all programs and outcomes, see attached Tables 1-3.

## Adolescent Evidence-Based Programs for Mental Health Care in Schools

Last updated: 3/22/11

	APTFA	AVBTAPV	AS	AILSD	ATHENA	BARR	CARE	DASASTART	CAST	CC	FU	GGC
<b>Cost/Program Requirements</b>												
Cash	516	70	334	30	302	550	unknown	9,000	1,727	52	50,000	854
Teacher Implementation Time												
Parent Time	12 hours											5 hours
Trained Professional Time							18 hours	2 years	12 hours	16 hours	3-5 months	
Classroom Time		5.4 hours	6 hours	90 hours	3.6 hours	16 hours						
<b>Total Cost</b>	<b>\$516</b>	<b>\$70</b>	<b>\$334</b>	<b>\$30</b>	<b>\$302</b>	<b>\$550</b>	<b>\$0</b>	<b>\$9,000</b>	<b>\$1,727</b>	<b>\$52</b>	<b>\$50,000</b>	<b>\$854</b>

### Outcomes Intervention

[illegible]

## Feasibility

[illegible]



## Adolescent Evidence-Based Programs for Mental Health Care in Schools

Last updated: 3/22/11

	TKC	VPP			
<b>Cost</b>					
Cash	1,015	777			
Teacher Implementation Time					
Parent Time					
Trained Professional Time	10 hours	5.4 hours			
Classroom Time					
<b>Total</b>	<b>\$1,015</b>	<b>\$777</b>			

### Outcomes Intervention

positive attachment to family, school, peers					
participation in counseling					
social problem solving skills					
beliefs about the use of violence		x			
behavioral intentions as aggressor/bystander		x			
addresses alcohol/drugs					
school bonding					
mental health symptoms					
addresses depression/hopelessness	x				
diet pill/body shaping substances					
behaviors related to nutrition					
risk and protective factors					
academic achievement		x			
bullying					
suicide risk and prevention skills					
self esteem					
anxiety					
anger management					
stress management					
self control					
positive peers		x			
problem solving/coping skills	x				
sexual behaviors					
school attendance					
criminal activity incarceration					
parenting					

### Feasibility

Number of Outcomes	2	4			
Quality of Research Ratings by Criteria	3.7	3.4			
Natasha Hundley Program Evaluation	F	F			

**Total**

## *Chapter 5 Conclusion*

The government, insurance companies, schools, doctors and parents are not providing sufficient mental health care to our youth in the US. Seventy-five percent of youth with mental health issues, go untreated. Private and public insurance do not sufficiently cover mental health care needs, perpetuating the problem. In my research, I discovered the most feasible option for reaching the greatest number of youth at a lower cost and using an effective amount of time was evidence-based school mental health promotion programs. There are several programs established in schools that have seen great success. The issue now, is how to make these programs accessible to more youth across the US.

I chose to discuss the mental health issue involving youth within the public school system specifically, first because that is where a child spends most of his/her time, but also because issues that are not addressed at home or in a medical facility are brought to the school. Problems happen in the classroom and on the campus because the youth are not receiving healthcare elsewhere. The responsibility then becomes that of other students, the teachers, other school staff and likely unequipped parents. According to SAMSA, in 2005-2006 an estimated 3 million youth, 12% received mental health services at their public school.

I chose to evaluate school-based mental health care in evidence based programs, specifically, throughout the US. I used the NREPP registry as the primary dataset and evaluated programs on feasibility, time and cost. I considered NREPP's own evaluations for the programs which are based on the quality of research, and I allocated a personal evaluation, based on feasibility of the program. I also considered limitations and areas for improvement in the program models and in the discussion section; I discussed limitations

and offsetting strengths. As discovered, offsetting strengths play a particularly important role in mental health care for youth, because even some treatment for an outcome that does not necessarily apply to the child, is still treatment and positive results and improvements are reported.

Programs that included several outcomes and were inclusive of more “types” of youth saw the greatest successes. Every program I researched in the NREPP database regardless of quality of research rating or feasibility, reported positive outcomes and overall improvement of the youth. Originally, I researched 33 programs.

- 17 programs scored a 3.0 or above
- 16 programs scored a 2.9 or below

For the purpose of this research, the most implementable programs are called Reconnecting Youth, CAST and CARE. CARE is a sister program to CAST. Seven programs were removed because they did not meet the implementation in public school requirement and could not be made available to all types of youth or the cost was exceptionally high and therefore not implementable.

For the purpose of this research, I concentrated only on programs disseminated in the public schools for children ages 13-17. Programs concentrated on mental health treatment and mental health promotion. Of course, programs included a variety of outcomes beyond just mental treatment and promotion, particularly drug treatment/prevention and grade improvement or grade level advancement. All in all, I researched 33 and evaluated 26 individual evidence based programs provided in public schools.

This approach formulated a mixed quantitative and qualitative study on which alternative is most likely to be implemented based on the technical feasibility of the alternative. This approach is in no way complete, but it is persuasive with the idea that a change in policy is possible on the technical level and can create greater access to mental health care for youth. The technical feasibility of each program demonstrates if the alternative policy of mental health treatment in public schools can be implemented and with deliberation of the goals and objectives, have the intended outcome.

Funding mental health care is an inevitable issue. Late into my research, I received an email from the administrators of CARE, which was one of the most promising of all the programs, that funding had run out and the program was no longer implementable. CARE has not been able to find traditional funding streams accessible for this project. They are currently applying for a small business loan to fund the program. Even with low cost, positive outcomes, high quality of research and readiness for dissemination, the program is struggling. This situation shows the lack of importance the community places on mental health for youth. I believe funding mental health treatment for youth will continue to be a struggle, regardless of positive outcome data and evidence that for at least 75 percent of troubled youth, the development into a working adult will be unfeasible.

The most exciting part of this research for me, was that overall, every program I researched demonstrated mental health improvements in the youth. All mental health treatments and programs, regardless of outcomes reported on positive outcomes, even if only for a short time. The lesson learned is that mental health treatment provided in the

schools for all youth in need is not impossible and as the evidence proves, is in point of fact, quite feasible.



## *Appendix A*

### **Quality of Research**

NREPP's Quality of Research ratings are indicators of the strength of the evidence supporting the outcomes of the intervention. Higher scores indicate stronger, more compelling evidence. Each outcome is rated separately because interventions may target multiple outcomes (e.g., alcohol use, marijuana use, behavior problems in school), and the evidence supporting the different outcomes may vary.

NREPP uses very specific standardized criteria to rate interventions and the evidence supporting their outcomes. All reviewers who conduct NREPP reviews are trained on these criteria and are required to use them to calculate their ratings.

### **Criteria for Rating Quality of Research**

Each reviewer independently evaluates the Quality of Research for an intervention's reported results using the following six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

Reviewers use a scale of 0.0 to 4.0, with 4.0 being the highest rating given.

#### **1. Reliability of Measures**

Outcome measures should have acceptable reliability to be interpretable. "Acceptable" here means reliability at a level that is conventionally accepted by experts in the field.

0 = Absence of evidence of reliability or evidence that some relevant types of reliability (e.g., test-retest, interrater, interitem) did not reach acceptable levels.

2 = All relevant types of reliability have been documented to be at acceptable levels in studies by the applicant.

4 = All relevant types of reliability have been documented to be at acceptable levels in studies by independent investigators.

## **2. Validity of Measures**

Outcome measures should have acceptable validity to be interpretable. "Acceptable" here means validity at a level that is conventionally accepted by experts in the field.

0 = Absence of evidence of measure validity, or some evidence that the measure is not valid.

2 = Measure has face validity; absence of evidence that measure is not valid.

4 = Measure has one or more acceptable forms of criterion-related validity (correlation with appropriate, validated measures or objective criteria); OR, for objective measures of response, there are procedural checks to confirm data validity; absence of evidence that measure is not valid.

## **3. Intervention Fidelity**

The "experimental" intervention implemented in a study should have fidelity to the intervention proposed by the applicant. Instruments that have tested acceptable psychometric properties (e.g., inter-rater reliability, validity as shown by positive association with outcomes) provide the highest level of evidence.

0 = Absence of evidence or only narrative evidence that the applicant or provider believes the intervention was implemented with acceptable fidelity.

2 = There is evidence of acceptable fidelity in the form of judgment(s) by experts, systematic collection of data (e.g., dosage, time spent in training, adherence to guidelines or a manual), or a fidelity measure with unspecified or unknown psychometric properties.

4 = There is evidence of acceptable fidelity from a tested fidelity instrument shown to have reliability and validity.

## **4. Missing Data and Attrition**

Study results can be biased by participant attrition and other forms of missing data. Statistical methods as supported by theory and research can be employed to control for missing data and attrition that would bias results, but studies with no attrition or missing data needing adjustment provide the strongest evidence that results are not biased.

0 = Missing data and attrition were taken into account inadequately, OR there was too much to control for bias.

2 = Missing data and attrition were taken into account by simple estimates of data and observations, or by demonstrations of similarity between remaining participants and those lost to attrition.

4 = Missing data and attrition were taken into account by more sophisticated methods that model missing data, observations, or participants, OR there were no attrition or missing data needing adjustment.

## **5. Potential Confounding Variables**

Often variables other than the intervention may account for the reported outcomes. The degree to which confounds are accounted for affects the strength of causal inference.

0 = Confounding variables or factors were as likely to account for the outcome(s) reported as were the hypothesized causes.

2 = One or more potential confounding variables or factors were not completely addressed, but the intervention appears more likely than these confounding factors to account for the outcome(s) reported.

4 = All known potential confounding variables appear to have been completely addressed in order to allow causal inference between the intervention and outcome(s) reported.

## **6. Appropriateness of Analysis**

Appropriate analysis is necessary to make an inference that an intervention caused reported outcomes.

0 = Analyses were not appropriate for inferring relationships between intervention and outcome, OR sample size was inadequate.

2 = Some analyses may not have been appropriate for inferring relationships between intervention and outcome, OR sample size may have been inadequate.

4 = Analyses were appropriate for inferring relationships between intervention and outcome. Sample size and power were adequate.

## **Readiness for Dissemination**

NREPP's Readiness for Dissemination ratings summarize the amount and general quality of the resources available to support the use of the intervention. Higher scores indicate more and higher quality resources available. Readiness for Dissemination ratings apply to the intervention as a whole.

## Criteria for Rating Readiness for Dissemination

Each reviewer independently evaluates the intervention's Readiness for Dissemination using the following three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

Reviewers use a scale of 0.0 to 4.0, with 4.0 being the highest rating given.

### 1. Availability of Implementation Materials

(e.g., treatment manuals, brochures, information for administrators)

0 = No materials or resources are available that could assist with program implementation.

1 = Limited materials and resources are available that could facilitate but not directly assist with program implementation.

2 = Limited materials and resources are available that directly assist with program implementation.

3 = Adequate materials and resources are available that directly assist with program implementation.

4 = Adequate materials and resources are available that directly assist with program implementation, and they are of high quality and appropriate for the intended audience(s).

### 2. Availability of Training and Support Resources

(e.g., tested training curricula, mechanisms for ongoing supervision and consultation)

0 = No materials, resources, and/or technical assistance are available that support training or coaching.

1 = Limited materials, resources, and/or technical assistance are available that could facilitate but not directly support training and coaching.

2 = Limited materials, resources, and/or technical assistance are available to directly support training and coaching.

3 = Adequate materials, resources, and/or technical assistance are available that directly support training and coaching.

4 = Adequate materials, resources, and technical assistance are available that directly support training and coaching, and they are of high quality and appropriate for the intended audience(s).

### **3. Availability of Quality Assurance Procedures**

(e.g., protocols for gathering process and/or outcome data, ongoing monitoring of intervention fidelity, supervision/training feedback)

0 = No materials, resources, and/or procedures are available that could help ensure quality assurance.

1 = Limited materials, resources, and/or procedures are available that could facilitate but not directly assist in ensuring quality assurance.

2 = Limited materials, resources, and/or procedures are available to directly support quality assurance.

3 = Adequate materials, resources, and/or procedures are available that directly support quality assurance.

4 = Adequate materials, resources and/or procedures are available that directly support quality assurance, and they are of high quality and appropriate for the intended audience(s).

## Appendix B

TABLE 1—Descriptive and Service Referral and Receipt Statistics, by Race/Ethnicity

	American Indian (n = 160), % (95% CI)	White (n = 1752), % (95% CI)	Black (n = 952), % (95% CI)	Hispanic (n = 476), % (95% CI)	Total (N = 3340), % (95% CI)
<b>Child's age, y</b>					
<3	33.9 (17.6, 55.1)	20.0 (17.3, 22.9)	18.2 (14.3, 22.8)	12.0 (8.0, 17.7)	18.8 (16.6, 21.4)
3-5	9.9 (4.8, 19.2)	18.8 (16.0, 21.9)	20.3 (15.5, 26.2)	23.4 (13.6, 37.3)	19.5 (17.2, 22.1)
6-10	31.3 (16.1, 52.0)	38.5 (34.8, 42.3)	34.4 (28.4, 40.9)	41.1 (27.3, 56.6)	37.5 (34.1, 41.0)
11-14	25.0 (13.7, 41.1)	22.8 (19.5, 26.5)	27.1 (22.2, 32.7)	23.4 (15.9, 33.1)	24.1 (21.7, 26.8)
Child in home at baseline	97.6 (94.7, 98.9)	95.3 (93.1, 96.8)	93.8 (91.0, 95.8)	95.7 (87.8, 98.6)	95.1 (93.4, 96.3)
<b>Caregiver risk factors</b>					
Physical impairment	8.3 (3.1, 20.3)	5.5 (3.9, 7.6)	3.8 (2.0, 7.1)	2.8 (1.2, 6.4)	4.7 (3.7, 6.0)
Impaired parenting skills	29.8 (15.4, 49.8)	29.1 (24.7, 34.0)	37.3 (30.9, 44.3)	20.3 (12.5, 31.3)	29.8 (26.3, 33.5)
Monetary problems	15.6 (8.3, 27.4)	22.6 (19.2, 26.4)	20.0 (15.7, 25.2)	23.7 (14.0, 37.2)	21.8 (18.7, 25.2)
Domestic violence	11.1 (5.3, 21.8)	13.7 (10.6, 17.5)	11.1 (7.9, 15.3)	11.6 (7.0, 18.9)	12.6 (10.6, 14.9)
Any risk factor	50.2 (32.6, 67.8)	46.9 (41.7, 52.3)	52.2 (45.0, 59.4)	46.2 (34.2, 58.7)	48.3 (44.2, 52.4)
<b>Caregiver mental health or substance use problems</b>					
Mental health or emotional problem	23.4 (11.5, 42.0)	14.3 (10.8, 18.8)	16.5 (11.6, 22.8)	6.4 (3.5, 11.6)	14.0 (11.1, 17.5)
Substance use problem	7.5 (3.8, 14.3)	13.2 (10.4, 16.6)	11.3 (8.2, 15.4)	6.1 (2.5, 14.1)	11.2 (9.2, 13.6)
ADM problem	27.0 (13.9, 45.8)	23.7 (19.1, 29.1)	23.6 (17.8, 30.7)	10.9 (5.5, 20.2)	21.7 (18.0, 26.0)
<b>Caregivers with ADM problems</b>					
Formal assessment done	14.5 (5.8, 32.0)	23.9 (18.0, 31.1)	24.1 (16.7, 33.5)	38.0 (22.6, 56.3)	24.7 (20.1, 30.0)
Referred for services	25.2 (9.3, 52.5)	30.5 (21.2, 41.8)	22.8 (16.1, 31.1)	34.9 (22.0, 50.4)	28.5 (21.9, 36.1)
Received services as result of referral	11.8 (4.7, 26.5)	24.3 (15.4, 36.1)	15.8 (10.4, 23.4)	26.8 (11.6, 50.5)	21.4 (15.6, 28.7)
Already receiving services	0.4 (0.0, 2.7)	1.0 (0.4, 2.2)	1.7 (0.4, 7.2)	8.5 (2.4, 26.2)	1.8 (0.7, 4.1)
Total received services since baseline	12.2 (4.9, 27.0)	25.2 (16.4, 36.8)	17.3 (11.2, 25.9)	32.8 (21.0, 47.1)	23.0 (17.2, 30.1)

Note. CI = confidence interval; ADM = alcohol, drug, and mental health. Sample sizes were unweighted, and population estimates were calculated with the use of survey weights to account for sampling and nonresponse bias.

**TABLE 2—Logistic Regression of Service Use at 18 Months Among Those With Baseline Alcohol, Drug, and Mental Health (ADM) Problems, by ADM Services Received**

	ADM Services Received, OR (95% CI)
Race/ethnicity <sup>a,b</sup>	
American Indian	1.00
White	2.32 (0.79, 6.83)
Black	1.39 (0.52, 3.70)
Hispanic	3.46 (1.18, 10.09)*
Child's age, y	
<3	1.92 (0.80, 4.62)
3–5	3.66 (1.15, 11.65)*
6–10	0.90 (0.39, 2.05)
11–14	1.00
Child placement at baseline	
Out of home	1.00
In home	0.53 (0.29, 0.97)*
Caregiver ADM problems at baseline	
Both mental health and substance use problems	2.43 (1.15, 5.14)*
Substance use problem only	1.00
Mental health problem only	1.20 (0.68, 2.12)
Other caregiver risk factors at baseline	
Physical impairment	0.84 (0.37, 1.91)
Impaired parenting skills	0.98 (0.46, 2.05)
Monetary problems	1.04 (0.63, 1.73)
Domestic violence	1.05 (0.59, 1.87)
N <sup>b</sup>	968

Note. OR = odds ratio; CI = confidence interval.

<sup>a</sup>Sample was caregivers who were the same at baseline and wave 3 and had an ADM problem at baseline (n = 1079).

<sup>b</sup>Sample size is unweighted, whereas population estimates were calculated with survey weights to account for sampling and nonresponse.

\*P < .05.

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