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Perspectives of Behavioral Health Providers in School Based Health Clinics (SBHC) About Behavioral Health Services and Low-Income Adolescent Males' Academic Achievement

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Perspectives of Behavioral Health Providers in School Based Health Clinics (SBHC)
About Behavioral Health Services and Low-Income Adolescent Males' Academic Achievement

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DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy in Nursing

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DEDICATION

This dissertation is first dedicated to family, first to my Dad who worked among giants with a GI Bill sponsored degree in electrical engineering, and to my Mom, who was hobbled by circumstance. To my husband, Will, whose patience and pride has gotten me through the long journey. To both of my children, Keanan and Kira, who are so smart and so strong, my heart breaks with my love for them. To the behavioral health providers who took the time to let me interview them and who provide such needed care, thank you.

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ABSTRACT

Low-income adolescent males are subject to both health and educational inequities. Male adolescents are the least likely of all pediatric age and gender groups to access either primary care or behavioral health services. This same population is most likely to not complete high school or college. Health and educational outcomes are both affected by social determinants. School-based Health Centers (SBHCs) are known for providing access to primary care and behavioral health services for low-income and vulnerable populations. The purpose of this qualitative descriptive study was to identify themes from one-on-one semi-structured qualitative interviews with behavioral health providers, who provide services to low-income adolescent males in SBHCs in high schools in New Mexico, in order to learn the providers' perspectives on how behavioral health services may impact adolescent males academically. Another purpose was to identify providers' stories for policy messaging. Seventeen behavioral health providers from SBHCs across New Mexico were interviewed and data from those interviews was analyzed using content, thematic, and narrative analyses. Providers described seeing adolescent males for behavioral health diagnoses, post-traumatic stress disorder, depression, anxiety, substance abuse and adverse life events. Many providers attributed adolescents' behaviors to family conflict and trauma. Providers described masculinity norms, at home and at school, as barriers to accessing behavioral health services and academic achievement. Additional themes included lack of school resources and unfavorable school environments; trusting relationships with behavioral health providers and safe space provided by SBHCs. When asked what they would say if they were advocating for policy related to behavioral health services, providers shared long stories to

explain students' lives and provide context. Clinical implications include the need for more gender-based approaches as well as trauma informed schools and SBHCs. Further research that includes voices of adolescent males is needed as well as more quantitative data that helps to further illuminate the protective factors that SBHCs provide to students. More collaboration is needed between all social services such as housing, Children Youth and Families, and transportation, that touch the lives of students and families in New Mexico, in particular the health and educational systems.

Table of Contents

CHAPTER 1	1
Introduction.....	1
Purpose of Study.....	1
Statement of the Problem.....	1
Social Determinants of Health	10
Research Questions.....	16
Overview of Study Methods.....	17
Definitions of Terms and Concepts	17
Assumptions.....	20
Significance.....	21
Conclusion	22
CHAPTER 2	24
Literature Review.....	24
Demographics of the United States and New Mexico	25
Health Disparities.....	35
Gender Socialization and Masculinity Norms	45
Educational Disparities	46
School-Based Health Centers	54
SBHCs and Outcomes Research.....	63

SBHC and Behavioral Health Outcomes	65
SBHC and Academic Outcomes	70
SBHC Behavioral Health Services and Academic Outcomes	84
Summary	88
CHAPTER 3	90
Methods.....	90
Setting	91
Sample.....	92
Procedures.....	93
Data Preparation and Data Analysis	94
Methodological Rigor	99
Limitations	102
Human Subjects Considerations	103
Chapter 4.....	105
Results.....	105
Introduction.....	105
Participant Characteristics	105
Research Question One.....	107
Interview Question 2.....	110
Interview Question Three	122

Long stories.....	129
Research Question Two	144
Interview Question Six.	155
Chapter 5.....	157
Discussion, Implications, and Conclusion	157
Masculinity Norms as Barriers	157
Trauma, the School Environment and the SBHC as Safe Haven	160
Mental Health and Academic Outcomes	163
Stories for Policy Messaging	164
Implications.....	166
Clinical Implications	166
Research Implications	168
Policy Implications	170
Summary	175
Conclusions.....	177
References.....	180
Appendix A.....	209
Letter of Support.....	209
Appendix B.....	210
Cover email/Introductory Letter	210

Appendix C	211
Telephone Script	211
Appendix D	212
Reminder Email	212
Appendix E	213
Demographic Questionnaire	213

CHAPTER 1

Introduction

This chapter contains the purpose of the study, a statement of the problem, a conceptual framework, research questions, and a brief overview of research methods and significance of the study. The definitions of terms is provided along with a summary.

Purpose of Study

The purpose of this qualitative, descriptive study was to identify themes from one-on-one qualitative interviews with behavioral health providers who provide services to low-income male students at SBHCs located in high schools in New Mexico to learn how behavioral health providers perceive behavioral health services to support students academically. Another purpose to this study was to identify the implications of providers' stories for policy messaging.

Statement of the Problem

Health and educational inequities continue to exist for many populations within the United States. Thirteen percent of people in the United States are between the ages of 10 and 19 years, which is equivalent to 42 million youth (U.S. Census Bureau, 2014). Among this demographic, poor health in adolescence contributes to lower graduation rates; less education in turn is associated with downstream effects of earlier onset of chronic diseases, lower income status, and in some cases, shortened lifespan (Fiscella & Kitzman, 2009). Health and educational outcomes are both affected by societal factors associated with social determinants of health (Shonkoff, Boyce, & McEwen, 2009; Viner et al., 2012). Stressors that contribute to poor health and/or poor educational outcomes are, at times, structurally rather than randomly generated; thus, a better understanding of risk process rather than the risk factors themselves can be critical in

identifying targets for prevention efforts (Glass & McAtee, 2006; Sznitman, Reisel, & Romer, 2010). A few examples of some stressors include poor neighborhood environment, immigrant status, food insecurity, and inadequate access to health care and racial biases (Bahls, 2011).

Low-income adolescent males are subject to both health and educational inequities. Low-income adolescent males experience poorer health and educational outcomes than their wealthier counterparts (Park, Scott, Adams, Brindis, & Irwin, 2014; Sznitman et al., 2010). Male adolescents are the least likely of all the pediatric age and gender groups to access either primary care or behavioral health services, and this same population is most likely not to complete high school or college (Bell, Breland & Ott, 2013; Child Trends, 2014; Fiscella & Kitzman, 2009). Rice, Purcell, and McGorry (2018) stated “boys disconnect from health-care services during adolescence, marking the beginning of a process of health-care disengagement and associated barriers to care, including presenting to services differently, experiencing an inadequate or poorly attuned clinical response, and needing to overcome pervasive societal attitudes and self-stigma to access available services” (p. S9). A 2010 study by Sznitman et al. showed that child poverty rates among adolescents were “related to both adolescent emotional well-being and educational achievements” (p.135), suggesting a link between poverty, emotional well-being, and educational outcomes. The authors make the case that most education policies do not integrate the three components and therefore fall short in solutions that make profound and lasting differences. A review of the National Comorbidity Survey-Adolescent Supplement (based on a nationally representative sample of 6,483 adolescents 13-18 years old) revealed marked racial disparities among racial/ethnic minority groups receiving lower rates of behavioral health treatment than their White-non-Hispanic counterparts (Merikangas, et al., 2010).

Youth of color disproportionately live in poverty. Poverty rates for Black Non-Hispanic

(39%) and Hispanic children (30%) ages 0-17 years are much higher than for White non-Hispanic children (11%) (U.S. Census Bureau, 2013). Children and youth who live in poverty are more vulnerable to structural stressors including environmental, educational, health, and elevated family stresses, all of which have a negative accumulative effect on mental health (for a review, see Price, Khubchandani, McKinney, & Braun, 2013). For instance, health disparities found to be associated with environmental stress include childhood asthma, hypertension, substance abuse, diabetes, obesity, and depressive symptoms (Bahls, 2011).

Current estimates on diagnosable mental health disorders in adolescents are in the range of 20% to 25% with less than half (36%) receiving treatment of any kind (Merikangas et al. 2011). According to the Substance Abuse and Mental Health Services Administration's (SAMSHA) 2014 survey data, males had lower reported major depressive episodes at 5.7% versus 17.3% for woman. That said, males with depression were less likely to receive treatment than women (37.7% versus 42.4%, respectively). That same survey showed Black and Hispanic youths with depression receiving less treatment compared to their White counterparts (40.6% and 33.1% versus 46.1%, respectively). Cummings, Wen, and Druss (2011) did a cross-sectional analysis of eight years of the National Survey on Drug Use and Health and found remarkably low rates of treatment for substance use disorder among all adolescents, with Hispanic and Black youth having the lowest treatment rates among all racial/ethnic groups. The effects of untreated mental health disorders among all demographics of youth include suicide, school failure, juvenile and criminal justice involvement, and higher health care utilization (Stagman & Cooper, 2010). The dropout rate for high school students with mental illness is 50%, which is the highest dropout rate of any disability group, while 18% of those who drop out are arrested within five years (Bogart et.al, 2013; National Alliance for Mental Illness, 2014). Considering these

disparities, both health and educational interventions for low-income adolescent male students are needed, and policies that combine health and education have the potential for a positive synergistic effect within a school setting (Stone, Whitaker, Anyon, & Shields, 2013).

Schools are obvious targets for interventions, as they offer access to youth as a “point of engagement for addressing their educational, highly related behavioral, and developmental needs” (Weist et al., 2012, p. 97). School-Based Health Clinics (SBHCs) have played an important role in providing primary care and behavioral health services to underserved youth in schools since the 1970s (Keeton, Soleimanpour, & Brindis, 2012). SBHCs have demonstrated improved access to care for disadvantaged youth, such as low-income and minority populations (Guo, Wade, & Keller, 2008; Wade et al., 2008).

Numerous studies have documented the positive effects of SBHCs. Some of the benefits include increasing the proportion of students receiving mental health services, providing access to primary care and behavioral health services for lower income students, reducing Medicaid reimbursements (boosting cost-effectiveness), increasing attendance rates, lowering rates of early dismissal, reducing school dropout rates, reducing emergency room visits, and increasing the number of health maintenance visits for under- or uninsured students (Allison et al., 2010; Amaral, Geierstanger, Soleimanpour & Brindis, 2011; Guo et al., 2008). The amount of research involving SBHCs has increased in the last decade as SBHCs have become widespread nationally.

A relatively new focus for SBHC researchers has been an effort to link SBHCs and academic achievement among students who receive services at SBHCs. As schools become more and more accountable for students’ performance due to the No Child Left Behind Act (United States Department of Education, 2002), and it’s 2015 updated version, Every Child Succeeds Act (United States Department of Education, 2015), SBHC proponents are motivated to associate

SBHC usage and students' academic achievement to garner more support from health and educational policy makers. Research directly linking academic success with either behavioral health or primary care services at SBHCs has been mixed, with some studies showing a correlation between use of all forms of SBHC services and increased attendance, higher grade point average, and a reduction in dropouts compared with non-SBHC users (Cusworth Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010; Kerns et al., 2011; Van Cura, 2010). Cusworth Walker et al. (2010) studied attendance rates between SBHC users and non-users and found that SBHC users had lower attendance rates in the Fall semester, ($p < .001$, $\beta = -0.59$) but increased overtime at rates greater than non-users ($p < .05$; $\beta = 0.06$). Discipline incidences were low in the overall sample (4.6%) yet SBHC users versus non-users had higher rates of discipline incidents ($p < .001$, $\beta = 0.31$). There was no significant change overtime ($\beta = 0.03$, NS). Grade point averages (GPAs) was also measured, SBHC users had lower GPAs to begin with but both SBHC users and non-users increased their grade point averages. The SBHC users had a more rapid increase in GPA overtime ($p < .05$, $\beta = 0.03$). Kerns et al. (2011) also had mixed findings when they measured the association of use of SBHC services and school dropout. They found that low to moderate users (1.25-2.5 visits a semester) had a 33% reduction in drop out compared to non-users. The high user group (> 2.5 visits per semester) had no difference compared to non-users in reduction of dropout rates. Van Cura (2010), used a quasi-experimental design to study 764 walk-in visits over three weeks at two high schools in New York, one with a SBHC and one without. The SBHC users had a significant reduction in number of early dismissals from school ($p = .013$), compared to students who received services from a school nurse alone.

The SBHC literature specific to behavioral health services and academic outcomes is limited but predominantly positive. Results of investigations into SHBC usage show its positive

impact on reduction in absences and tardiness, (Gall, Pagano, Desmond, Perrin & Murphy, 2000). Gall et al. identified 383 high school students with psychosocial dysfunction, by use of a standardized screening tool. These students all had greater than three times the absentee rate than those students who were not identified with psychosocial dysfunction. The students who were identified and received behavioral health services at the SBHC reduced their absences by 50% and tardiness by 25% after two months of receiving services (Gall, Pagano, Desmond, Perrin, & Murphy, 2000). Other researchers note difficulty in showing a direct correlation between use of SBHC services and academic achievement due to restrictions on access to either or both students' academic and health records (Soleimanpour & Geierstanger, 2014). There are a multitude of factors that affect students' academic achievement, which makes assessing the specific significance of the SBHC impact difficult to isolate and or quantify. Examples include the following: funding of schools, turnover rate of teachers, previous academic exposure including preschools, parental educational status, and quality of housing, availability of healthy affordable foods.

Most of the SBHC research related to use of behavioral health services and academic outcomes is quantitative, using data collected from academic and medical resources as measures. The data on behavioral health services generally focus on didactic measures such as student demographic profile, diagnosis, insurance types, and academic outcomes such as grade point average, suspension and graduation rates (Amaral et al., 2013; Gempetro, Wojciechowski, & Amer; 2012; Juszczak, Melinkovich & Kaplan, 2003). A few researchers have conducted research with the aim of collecting students' own perspectives on this connection. The research that has been done includes, direct contact with students through individual interviews or focus groups, while others relied on quantitative student self-reported data gathered via surveys (Stone et al.,

2013; Gampetro et al., 2012; Mandel & Qazilbash, 2005).

Many articles in the SBHC literature have provided qualitative contextual data related to adolescents who receive behavioral health services at SBHCs. Most notably is a study by Mangat Bains, Franzen, & White-Frese (2014). These authors conducted a qualitative study consisting of secondary analysis of semi-structured interviews with African American and Latino adolescent males who had used mental health services at SBHCs in Connecticut. In analysis of the data, they identified five themes: “the burdens and hurdles in my life”, “the door is always open”, “sanctuary within chaos”, “they get us” and “achieve my best potential” (p. 414). Within the “achieving my best potential” theme, multiple references to better academic outcomes was documented, indicating a relationship between behavioral health services and better academic outcomes

Beyond the Mangat Bains, Franzen, & White-Frese (2014) study, research that contains data collected about or from behavioral health providers in SBHCs is scant. Most of this research is survey or task based, with areas explored focusing on implementation or knowledge of clinical best practices (Aldrich, Gance-Cleavland, Schmiede & Dandreaux, 2014; Harris, Shaw, Sherman & Lawson, 2016; Mavis, Pearson, Stewart, & Keefe, 2009; Riley, Laurie, Plegue, & Richardson, 2016). A few qualitative studies included interviews with behavioral health providers, but topics of focus did not include perspectives on students’ issues or possible links to academic success (Blacksin & Kelly, 2015; Lai, Guo, Ijadi-Maghsoodi, Puffer & Kataoka, 2015). There are no known studies in which behavioral health providers at SBHCs are asked about how they perceive behavioral health services to support low-income adolescent male students academically. Polkinghorne (1983) recognized that in post-positivist human studies, researchers need to acknowledge that “science is a human activity in which the subject as knower is central” (p.

242). In this case, behavioral health providers who deliver services at SBHCs are the “knowers,” and research that includes their voices could assist us to more fully comprehend the personal and contextual realities related to experiences of low-income adolescent male students receiving services. Interviews with behavioral health providers could also help to better understand how SBHCs may affect academic outcomes. Narratives from providers could also assist in messaging for policy purposes.

Creswell (2013) suggested that qualitative research should “contain an action agenda for reform that may change the lives of the participants, the institutions in which they live and work, or even the researchers’ lives” (p. 26). Better descriptive data are needed to optimize SBHC programs, design, and evaluation. Information from behavioral health providers who serve low-income adolescent male students can assist with this effort.

Use of providers’ narratives for policy messaging was another goal of this research. When communicating research findings and or promoting policy change, it has long been recognized that data alone is not always sufficient (Stamatakis, McBride, & Brownson, 2010). Use of narratives in policy messaging has been used to bolster communication about health-related evidence. Use of narratives to enhance data findings has the potential to strengthen the argument in favor of policy change. This particular form of narrative is different due to its policy focus, with the aim of influencing public and or policy maker opinions (Shanahan, McBeth & Hathaway, 2011).

Policy narratives contain specific elements that contribute to making the story compelling. Basic components of the policy narrative include plot, characters, and a moral (Jones and Mc Beth, 2010). According to Stamatakis, McBride, and Brownson (2010), use of narratives for policy messaging should contain “contextually appropriate stories” (p. S99). Contextually

appropriate stories add value to persuasive communication by assisting the policymakers in considering the consequences of other policy choices (Stamatakis, McBride, and Brownson, 2010). To further organize messaging the World Health Organization (n.d.) (WHO) created principles to guide their communication. These include that communication (or messaging) must be accessible, actionable, credible and trusted, relevant, timely and understandable. Use of these principles were applied to the narratives from the behavioral health providers for creating potential policy messaging.

The fundamental concept of an SBHC are clinics that provide health services located on or near school property, often established in schools that serve predominantly low-income communities (Knopf et al., 2016). For the school year 2017-2018 there were a total of 48 New Mexico Department of Health, Office of School and Adolescent Health (OSAH) sponsored SBHCs in 22 of 33 counties in New Mexico. Thirty-three of the SBHCs were located in high schools, 8 in middle schools, four in elementary schools and three in combined elementary, middle and high schools (New Mexico Department of Health, 2018).

The researcher of this study asked behavioral health providers who serve low-income adolescent males in high school SBHCs in New Mexico how they perceived behavioral health services to support students academically. Narratives from the providers were identified for policy messaging. Themes generated from the interview data may contribute to policies that assist in promoting health and educational achievement in this unique population.

Conceptual Framework

This paper was guided by a conceptual framework that incorporated social determinants of health, including the notion of upstream factors as framed by nursing scholar Patricia Butterfield (Butterfield, 2017).

Because the health and wellbeing of adolescents is strongly affected by societal influences, and because the health and health behaviors of adolescents transfer into their adulthood, it is crucial to the health of the whole population that young people are presented with “supportive structures of opportunity” (Viner et al., 2012, p. 1643). While it is important that individuals have access to healthcare for “health promoting behaviors” (Braveman, Egerter & Mockenhaupt, 2011, p. S4), a wider focus on the context and circumstances that potentially shape health is needed to “create effective solutions, minimize risk factors, maximize protective factors, and ultimately, close the opportunity gap between optimal development and current experience” (Viner et al., 2012, p. 1643). In other words, we will not see advances in population health outcomes until we address the ‘causes of the causes’. As such, the use of the social determinants of health as part of a conceptual framework for research that includes adolescents is an important lens that could help to capture how external influences affect the health and educational paths of low-income adolescent male students.

Social Determinants of Health

Fundamental to the nursing profession is the study of human responses to health and illness (Mitchell, Gallucci, & Fought, 1991). Historically within both the medical and nursing professions, prevention of disease and promotion of health has long focused on individual responsibility as an agent of change. Originally, the public health approach to prevention and treatment of chronic disease was often individually focused and disease-specific, public health practitioners (both doctors and nurses) became some of the earliest researchers to recognize the influence of health outside of the health care system (Michael, Farquhar, Wiggins, & Green, 2008). According to Healthy People 2020, health is also determined in part by access to specific resources and supports available in our homes, neighborhoods, and communities. This includes

the quality of schools; the safety of neighborhoods; access to healthy, affordable foods, clean air; and the nature of our social interactions and relationships. Public health scholars characterize the effect of the environment on people as the social determinants of health. According to The World Health Organization, “the range of personal, social, economic, and environmental factors that influence health status are known as determinants of health” (World Health Organizations, N.D.).

The growing public health focus on social determinants of health includes several citations of the lifelong effects of education on health (Dilley, 2009; Link et al., 1998; Woolf & Braveman, 2011). During the adolescent growth period, there are many complex and interactive forces such as family, community, peer pressure, socioeconomic status, race/ethnicity, and/or cultural influences that can affect health choices, health and educational opportunities. It is difficult to capture and understand how multiple factors can affect adolescents. More specifically, authors Guthrie and Kane Low (2006) guard against viewing individual demographics such as race, gender, and social class separate from their “historical, cumulative, and interlocking impact on health and health behaviors” (p. 8). To help broaden social scientists’ response to disease and chronic illness, a concentrated approach that includes the recognition of the dynamic interplay between environment and individuals must be recognized and operationalized (Glass & McAtee, 2006). The use of a conceptual framework that includes a social determinants of health component can contribute to this effort.

While social determinants refer to the fundamental characteristics of society that assist in shaping the health of individuals and communities (positive or negative), they can also be thought of as the causes of the causes of ill health, or as ‘upstream factors’ (Gehlert, Sohmer,

Sacks, Mininger, McClintock, & Olufunmilayo, 2008). The term 'upstream' comes from a metaphor used to describe the nursing and public health approach to prevention. The metaphor is described as someone standing on the edge of a river in which person after person goes by and needs rescuing. The person on the bank of the river repeatedly jumps in and attempts to save each person who needs help. The person on the bank of the river eventually gets worn out from repeated attempts of rescuing people and realizes a different approach is needed. The multiple methods used in solving this problem help to portray the differences between a modern medical and public health 'upstream' solution. A traditional medical approach metaphorically would be to hire more people to help rescue drowning victims or place warning signs along the banks of the river. A public health and or nursing 'upstream' approach would include looking ahead to figure out why people are falling into the river in the first place. Interventions such as building a fence or bridge would affect the population of people at risk for falling in the river, thus changing the focus from individual intervention to a broader preventive method based in policy, communities, or other politically/socially mediated response.

More specific to nursing within the upstream approach, Butterfield (2002) notes that the stream is civilization, that civilization is filled with the things that "historians usually record" (p. 38), and that "the story of civilization is the story of what happens on the bank" (p. 38). Butterfield also asserts that "in healthcare much (but not all) of nursing occurs on the bank" (p. 38). It is what happens on the bank that is of interest and ripe for nursing research and intervention. Contextual data informing us of what issues low-income adolescent male students are dealing with in high school is an example of what is happening on the bank.

In an update to her original article, Butterfield (2017), gives a 25-year retrospective that includes an examination of the perspective of thinking upstream in nursing and description of a new conceptual model “aimed at strengthening the effectiveness of upstream actions by nurses” (p.3). In Butterfield’s review of nursing literature that included upstream thinking, she concludes that this approach was helpful in broadening perspectives but not “necessarily sufficient in guiding action” (p.4). To counter what she described as “system-level factors perpetuating health inequities” she recognized that to make changes, evidence and strategy would both be needed. Data from behavioral health providers is the data and messaging based on their narratives will be employed as strategy.

After recognizing the need for tools to assist in guiding action, Butterfield (2017) developed a model titled ‘the Butterfield Upstream Model for Population Health (BUMP Health). The full description of this model is beyond the purview of this paper, but a brief overview of relevant information will be reviewed. Observations that contributed to the BUMP Health model included: upstream perspectives had been used as a reframing device, which assisted in a more expansive awareness of disease origins: broadening of awareness regarding effects of influences outside of health care delivery, and finally upstream narratives had contributed to challenging health care’s reaction to disease rather than prevention (Butterfield, 2017). The BUMP Health model was created to be process-oriented and stresses the importance of strategy regarding “the what and when of interventions” (p.5). According to Butterfield, BUMP Health was developed conceptually to assist in “sharpening nurses’ ability to create conditions for health” (p.4). Butterfield’s emphasis on systems outside of health care lends itself to the focus of this research which includes the intersection of health and education in the adolescent population.

While adolescence is not a chronic disease or an illness, it is a phase of life in which opportunities for current and future health patterns are established. Adolescence is considered one of the more vulnerable periods of childhood. This is especially true for low-income adolescent male students. For this demographic, perhaps one of the most essential of the health patterns is good mental health. Low income adolescent male students are exposed to many negative social determinants of health such as low-income neighborhoods, poor access to healthcare, and the adverse events of improper childcare. Receiving needed behavioral healthcare can be an upstream mitigation to possible adult health and socioeconomic disparities that exist downstream for these youths. Indeed, Butterfield's BUMP Health model encourages actions that are influential enough to create systems improvements.

Braveman and Gottlieb (2014) describe complex, multifactorial causal pathways that contribute to health throughout the lifetime, explaining that "the long, complex causal pathways leading from social factors-particularly upstream ones such as income and education to health, with opportunities for countless interactions at each step" (p. 27). Provision of behavioral health services at SBHCs is a pronounced opportunity for interaction on behalf of low-income adolescent male students both for good mental health as well as academic success.

In Butterfield's Upstream Model for Population Health (Butterfield, 2017) as depicted below, adolescence is centered closer to the upstream portion of the river model in the life-course trajectory. During the adolescent period they are "biologically, emotionally, and developmentally primed for engagement beyond their families" (Patton, et al., 2016, p.2424). Accessing behavioral health services at a SBHC, (independent of parental involvement) corresponds well to independent engagement in this age group. The effects of focused targeted interventions (such as access to confidential behavioral health services) can have stronger and more lasting influence

based on their point of inflection. As noted earlier, adolescence is a dynamic period when actions or inactions can have lasting effects on health and economic well-being. During adolescence, development of capabilities related to health and wellbeing emerge, thus interventions at this life stage can be crucial to their adulthoods (Patton et al., 2016). According to Patton et al. (2016), “Adolescence is characterized by dynamic brain development in which the interaction with the social environment shapes the capabilities an individual takes forward into adult life” (p.2423). Interventions that narrow the magnitude of health and educational disparities in adolescence can advance the promise of a healthy adulthood.

Conceptual Model.

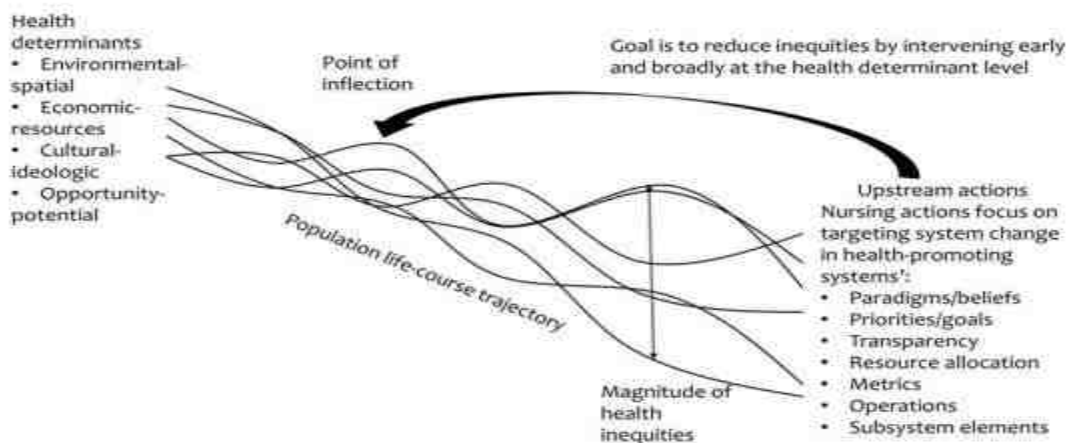


Figure. Butterfield Upstream Model for Population Health (BUMP Health).

Upstream factors that apply to adolescent health include whether their own conception and birth was planned, whether their mother had access to timely, accessible, affordable, and culturally appropriate prenatal care, whether the adolescent was breastfed, and whether they received sufficient childcare that was timely, accessible, affordable and culturally appropriate.

Other factors include the socioeconomic status of the family the adolescent was born into and whether the adolescent graduated from high school. Historical trauma can also affect multiple generations. Downstream factors affected by health and educational disparities include graduating from high school, having stable socioeconomic adult life, having control over when or if they became parents, having less risk for chronic diseases, and having access to quality, affordable, culturally appropriate health care throughout their life span.

To better understand the social factors that may be governing risk, we need more specifics, not just the common research variables such as socioeconomic status, race/ethnicity, and gender. More specific data regarding how these variables interact and fit within a person's context is required. Understanding how these variables affect people individually, how they respond and what types of risks it may set them up for is essential for any type of intervention. In other words, we need more specifics regarding what social factors may be governing patterns of risk (Glass & McAtee, 2006) as an adolescent progress throughout life. Considering health disparities through a lens that incorporates social/environmental conditions as upstream factors will allow researchers to design and implement interventions targeted at levels downstream from those conditions (Gehlert, Sohmer, Sacks, 2008). Using the combined concepts (i.e., social determinants of health, upstream river) as a conceptual framework will not only assist in capturing the role of specific social structures affecting health and educational disparities in low income adolescent male students but will also help to focus narrative messaging as well as possible targeted interventions.

Research Questions

The research questions for this study were:

1. How do behavioral health providers describe how the provision of behavioral health

services support low-income adolescent male students academically?

2. What are the implications of behavioral health providers' stories for policy messaging?

Overview of Study Methods

This is a qualitative, descriptive study. Individual 60 to 90-minute audiotaped interviews were conducted with 17 behavioral health providers who provide services at a New Mexico SBHC located in a high school setting. Use of purposeful and snowball sampling of behavioral health providers generated participants who fit the specific parameters listed above.

Direct outreach to behavioral health providers who met inclusion standards was accomplished by the researcher via telephone and/or email contact. Behavioral health providers notified the researcher if they were interested in participating. The name of the provider, SBHC and the high school remain confidential. Audiotapes of each interview were transcribed while data analysis was completed with researcher evaluation. Data analysis began with the first contact with the provider and proceeded throughout the data collection, which according to Krueger (1998) can further inform data collection. Further description and detail of data analysis can be found in chapter three.

Definitions of Terms and Concepts

The following definitions were applied to the terms used in this study:

- **Academic Achievement:** graduation of high school, stability or improvement of academic performance, less disciplinary actions or no disciplinary actions, better attendance or maintenance of current attendance (The National Center for Educational Statistics, 2016)
- **Behavioral Health Providers:** School Based health Alliance best practice protocol for

behavioral health staffing include the following licenses: Licensed Clinical Social Worker, Psychiatric Nurse Practitioner, Licensed Mental Health Counselor, Licensed Marriage and Family Therapist, Licensed Psychologist, Psychiatrist, Board Certified Child/Adolescent Psychiatric-Mental Health Clinical Licensed Clinical Social Worker, Psychiatric Nurse Practitioner, Licensed Mental Health Counselor, Licensed Marriage and Family Therapist, Licensed Psychologist, Psychiatrist, Board Certified Child/Adolescent Psychiatric-Mental Health Clinical Nurse Specialist with a current RN License, Certified Addictions Counselor Nurse Specialist with a current RN License, Certified Addictions Counselor (National School Based Health Alliance, N.D.)

- **Behavioral Health Services:** Services provided in a School-Based Health Center that includes counseling for both mental health and substance use and “encompasses a continuum of prevention, intervention, treatment, and recovery support services” (American Public Health Human Services Association, n.d., p.3).
- **Descriptive Research Design:** Qualitative descriptive studies comprise “comprehensive summarization of specific events experienced by individuals or groups of individuals” (Lambert & Lambert, 2012, p. 255). Sandelowski (2009) describes descriptive design as a qualitative research method that consists of “eclectic combinations of sampling, data collection, and data analysis” (p. 78). For the purposes of this study, a summarization and analysis of individual interviews will be done.
- **Downstream:** Individual level approaches for prevention or disease management (Brownson, Seiler, & Eyler, 2010).
- **Educational/Health Inequities:** Inequities within the health and/or public educational systems that occur when biased or unfair policies, programs, practices, or situations

contribute to a lack of equality in educational/health functioning, as well as an unequal distribution of either equal or equitable outcomes (Woolf & Braveman, 2011).

- **Ethnicity:** In the United States, ethnicity determines whether a person is of Hispanic origin or not (United States Census Bureau, 2017).
- **Low-income:** At or below 100% of the national poverty level that qualifies a student in a public school for free or reduced lunch; for a family of four: \$23,850 (United States Department of Agriculture Food and Nutrition Service, 2015).
- **Race:** In the United States, race is a person's self-identification with one or more social groups. An individual can report as White, Black or African American, Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, or some other race. (United States Census Bureau, 2017).
- **School-Based Health Centers:** Health centers that provide comprehensive care to children and adolescents in a school building or on school grounds (New Mexico Alliance for School-Based Health Alliance, n.d.).
- **School-Based Health Center Services:** Services provided by SBHCs generally include primary care and mental health; some SBHCs also provide basic dental care. The most common services provided are comprehensive physical exams, treatment of acute illnesses, prescriptions for medications, nutritional counseling, and anticipatory guidance (New Mexico Alliance for School-Based Health Care (n.d.). Reproductive health care services are also provided in some clinics based on local school board policy. Students in New Mexico can receive sensitive health services, such as reproductive and behavioral health services, without parental consent (New Mexico Alliance for School-Based Health Care, n.d.).

- **Social Determinants of Health:** Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Healthy People 2020, n.d.).
- **Upstream:** Actions that reduce the magnitude of inequity by changing the systems further up etiological pathways, strengthening prevention services, delivering care in novel ways, honoring grassroots wisdom, and or broadening care to include health and social determinants (Butterfield, 2017).
- **Vulnerable Population:** A subgroup or subpopulation “who because of shared social characteristics is at higher risk of risks” (Frohlich & Potvin, 2008, p. 218). For the purposes of this study, the vulnerable population is low-income adolescent male students.

Assumptions

This qualitative study was conducted based on the following assumptions:

1. Perceptions of behavioral health providers who deliver services to low-income adolescent male students in a high school SBHC are important to assess and understand.
2. Behavioral health providers who deliver services to low-income adolescent male students will be willing and able to accurately and confidentially recall their experience delivering services to low-income young adult adolescent male students when offered an opportunity to do so in a confidential manner.
3. Although the researcher was the primary instrument for data collection, the goal was to understand the experiences of behavioral health providers who deliver services to low-income adolescent male students who received behavioral health services at an SBHC while in high school.

4. Though not generalizable, the data collected via the subjective voices of behavioral health providers who serve low-income adolescent male students provided relevant and meaningful knowledge and insight to expand what is currently known about the issues low-income adolescent male students are dealing with and how we may better help them.

Significance

The relationship between health and education is fluid, reciprocal, and lifelong (Zimmerman & Woolf, 2014). Health and educational inequities are primarily concentrated in minority and/or low-income populations, with high dropout rates concentrated among minority and low-income students (Fiscella & Kitzman, 2009). Sequelae of non-graduation extends beyond just income and occupational impacts to involve adult chronic health issues and early mortality (Kerns et al., 2011). The high incarceration rates of minority and/or low-income youth and young adults are also correlated with high school dropout rates (Sum, Khatiwada, & McLaughlin, 2009). Because of these long-term effects on health and on life trajectory, preventing vulnerable students from not completing high school is now a public health and social justice priority (Freudenberg & Ruglis, 2007). Education is one key to health equity, as investment in education has far reaching downstream health and social justice benefits.

For the first time in 30 years, the U.S. Department of Health and Human Services (DHHS) has targeted high school graduation as a key element in Healthy People 2020's adolescent health objectives (DHHS, 2013). Nationally, nearly every racial and ethnic subgroup has seen a growth in graduation rates that brings these groups' rates closer to that of white students, indicating the achievement gap is gradually closing (National Center for Education Statistics, Institute of Education Sciences, 2012-2013). Despite the growth in graduation rates among racial and ethnic groups, national statistics still indicate pronounced racial and ethnic

disparities in high school graduation. In data collected by the National Center for Educational Statistics, the four-year adjusted cohort graduation rate by race and ethnicity for school year 2012-2013 was as follows: U.S. 81.4%, NM 69.3%; US American Indian/Alaska Native 69.7%, NM 61.7%; US Hispanic 75.2 %, NM 67.6%; US African American 70.7%, NM 64.3%; and, US non-Hispanic Whites at the top with 86.6 %, NM 75.7%. New Mexico trails behind in both overall graduation rates and is worse off in every race and ethnicity classification (National Center for Educational Statistics, May 2015).

Previous research has also shown that SBHCs provide positive impact on the mental health of students, and that students with access to an SBHC were 10 to 20 times more likely to “seek mental health or substance abuse services as adolescents without access to a SBHC” (Mavis et al., 2009, p. 263). Along with a long track record of providing services and multiple studies, SBHCs have demonstrated not only a preferred setting for adolescents seeking behavioral healthcare, but one in which minority or other hard-to-reach populations are more likely to make a mental health or substance abuse visit (Amaral et al., 2011).

Research that assists in understanding the contextual realities of low-income adolescent male students and how SBHCs facilitate academic achievement can further support educational and health policies to assist these students to succeed. Furthermore, use of provider narratives can assist with policy messaging. While generalizability is not sought in qualitative research, it is still possible that themes identified through the interviews will add to the general knowledge of SBHC literature regarding perceptions of behavioral health providers who deliver services to low-income adolescent male students.

Conclusion

Academic achievement and education are critical determinants of health across the

lifespan, as disparities in one contribute to disparities in the other (Fiscella & Kitzman, 2013).

With growing recognition that stronger partnerships between educational and health systems allow for better outcomes, research focus on addressing health and educational disparities can help to close the gap in adolescent health and educational inequities (Brookings Institute, 2012).

Proximal goals are needed to mediate effects of distal objectives such as impacting educational outcomes. Better understanding of circumstantial components of students receiving behavioral health services can assist in upstream impacts of both health and education.

Perceptions of behavioral health providers who serve low-income adolescent male students in SBHCs in New Mexico had not yet been explored in the literature and may be valuable in further understanding how to best support academic and health achievements in this susceptible population.

CHAPTER 2

Literature Review

The purpose of this qualitative, descriptive study was to identify themes from one-on-one qualitative interviews with behavioral health providers who provide services to low-income adolescent male students at SBHCs located in high schools in New Mexico to learn how behavioral health providers perceive behavioral health services to support students' academically. Another purpose to this study was to identify the implications of providers' stories for policy messaging.

This literature review is divided into several areas to provide background and context to the study. First, adolescent demographics, both in the U.S. and New Mexico, will be briefly described. This will be followed by an overview of adolescent health disparities with a focus on behavioral health disparities and leading cause of death disparities. A brief overview of gender socialization and masculinity norms are included. Educational disparities follow, with emphasis given to disparities in school discipline, graduation rate and socioeconomic status. Descriptive data on national SBHCs and New Mexico SBHCs are presented. A review of SBHCs and outcomes research, specifically physical health outcomes, was conducted. This is followed by an overview of both quantitative and qualitative research on SBHC and behavioral health outcomes, as well as an overview of both quantitative and qualitative research on SBHCs and academic outcomes. Finally, studies that explore the perspectives of SBHC behavioral health providers are examined.

A strong database of accurate, comprehensive, longitudinal, and descriptive data is needed for the prevention, treatment, and improvement of the health of the population of adolescents. Adolescence and young adulthood represent periods of transition within the life

course trajectory, mainly because during transition periods, “individuals are more sensitive to environmental input” (Mulye, Park, Nelson, Adams, Irwin, & Brindis, 2009, p. 8). Accurate information about the habits, behaviors and social circumstances of adolescents and young adults can help inform the development of “targeted interventions at the national and state levels” (Institute of Medicine, 2011, p. 8). Yet national and local data on the health and health care of adolescents and young adults is fractured at the present time. Currently, there are multiple surveys, varying sponsors, and a host of different research methodologies that examine adolescents’ and young adults’ health and health care, thus making it difficult to compare and examine data. Another factor contributing to the problem is that information on specific demographics, such as socioeconomic status, race/ethnicity, and gender are not always included or quantified in similar fashions, which makes it difficult to equate findings. According to the Institute of Medicine (2011), not only are efforts to “monitor and improve the health” (p. 1) of adolescents hampered by fractured surveillance and the “absence of standardized measures and variation in salient data sources” (p. 8), but also by efforts to consistently and accurately measure disparities in health and healthcare quality (Institute of Medicine, 2011). In this portion of the literature review data from national surveys was examined. Topics examined were health insurance coverage, access to healthcare, health disparities, and mental health issues. Within these examinations is a focus on data specific to low-income adolescent male students, including New Mexico specific data if available. Because New Mexico has a higher proportion of Hispanic and Native American/Alaska Native populations’ emphasis on race/ethnicity is included.

Demographics of the United States and New Mexico

It is important to note how demographics impact adolescent and young adult health, especially when one considers that the youth population in the United States is changing from

predominantly White Non-Hispanic to predominantly Hispanic. Thirteen percent of the people in the United States are currently between the ages of 10 and 19, which translates into 42 million youth (U.S. Census Bureau, 2014). The Census Bureau predicts that there will be 45 million adolescents in the US by 2050, or about 11.2 % of the total population (U.S. Census Bureau, 2014). The fastest growing demographic group in the United States are individuals of Hispanic and Latino origin, who are predicted to more than double from 53.3 million in 2012 to 128.8 million in 2060 (United States Census Bureau, 2012). Consequently, nearly one in three U.S. residents will be Hispanic, up from about one in six today (United States Census Bureau, 2012). In 1980, only 20% of youth ages 15-24 were Hispanic or non-White: in 2010, that figure was closer to 40%, and by 2040 that figure is projected to be over 50% (Mulye et al., 2009). These numbers suggest that the current racial and ethnic demographics of the adolescent population in America are changing, and it is important to better understand the unique health and educational needs that may be present within these changing demographics.

The demographics of New Mexico are different than the rest of the country. Of the 166,700 youth ages 12-17 in New Mexico, 58% are Hispanic, 26% Non-Hispanic White, and 10% American Indian and Alaska Native (AI/AN) (U.S. Census Bureau, 2014). In New Mexico, males ages 0-18 comprise 51% (253,175) of the total population of youth (United States Census Bureau, 2015). Information specific to gender within racial or ethnic demographics from New Mexico is not available.

Socioeconomic status demographics. Because poverty is linked to both poorer health and educational outcomes, it is important to have a clearer understanding of who lives in poverty (Fiscella & Kitzman, 2009; Price, Khubchandani, McKinney & Braun, 2013). Hispanic and non-White adolescents of color disproportionately live in poverty (U.S. Census Bureau, 2014). In

2014, the overall poverty rate (which is defined as an annual family income of \$23,850 or less for a family of four with two children) in the United States was 15%. This translates to 47 million people living in poverty (U.S. Census Bureau, 2014). In 2014, 18% of adolescents ages 10-19 were living at or below federal poverty guidelines (U.S. Census Bureau, 2014). The year of 2014 was the fourth consecutive year that the number of people living in poverty had not changed from the previous year (U.S. Census Bureau, 2014). The highest poverty rates in America were among Blacks (26%) and Hispanics (24%), with Whites having the lowest poverty rate at 10% (U.S. Census Bureau, 2014).

Thirty percent of New Mexico's children live in poverty, which is higher than the national average (U.S. Census Bureau, 2016). Twenty-six percent of New Mexico's low-income children live in high-poverty areas, with the national average at 14%. A high poverty area (also known as concentrated poverty) is defined as neighborhoods or tracts where 40% or more of residents fall below the federal poverty threshold. Living in areas of high poverty exacerbates issues such as crime, poor housing conditions, and lack of job opportunities (Bishaw, 2014).

The economic, educational, health, family, and community environments of New Mexico are a major challenge to the health and well-being of the current children and adolescents and to their future success. New Mexico ranks 50th nationally for child well-being (this includes ages birth to 17) as a function of four different indicators of child well-being indicators (Annie E. Casey Foundation, 2018). The four indicators are economic wellbeing (New Mexico ranks 49th), education (a rank of 50th for New Mexico), health (a rank of 48th for New Mexico), and family and community (a rank of 49th for New Mexico) (Annie E Casey Foundation, 2018). All four indicators in the health category (low-birth-weight babies, children without health insurance, child and teen deaths per 100,000 and teens who abuse alcohol) specific to New Mexico

adolescents were worse than the U.S. average. Two of the health indicators (children without health insurance and child and teen deaths per 100,000) were better than the New Mexico average in 2016. New Mexico's child and teen deaths per 100,000, still remain much higher than the national average 33 versus 26. Data that was gender and racially specific was not available.

Health insurance coverage demographics. For adolescents to maintain good physical and mental health, it is important for them to have reliable health insurance coverage. Health insurance coverage is a primary factor in accessing healthcare, reducing delays in diagnosis, increasing treatment, and diminishing financial burden on families (Clemans-Cope, Kenney, Waidmann, Huntress, & Anderson, 2015). Children and adolescents with health insurance are more likely to have a usual source of care while also receiving recommended preventative visits (Bethell, Kogan, Strickland, Schor, Robertson & Newacheck, 2011).

Health insurance status is measured in several different ways across several different surveys. The National Survey of Children's Health (NSCH), The National Health Interview Survey (NHIS), the Current Population Survey Annual Social and Economic Supplement, the American Community Survey, and the Medical Expenditure Survey all have different ways of measuring similar concepts. Differences among the surveys regarding insurance coverage include age groupings, data collection periods, whom the data is collected from, and questions related to insurance coverage. Variables such as race/ethnicity and socioeconomic status also differ among the surveys. Identifying consistent comparable sources of information regarding the health insurance status of low-income adolescent males is therefore difficult as a function of the various methods used by the several surveys. This, in turn, makes chronological measurement and comprehensive understanding problematic. For purposes of simplicity, only data from the National Survey of Children's Health, the National Health Insurance Survey, and the American

Community Survey will be discussed in this portion of the literature review.

The National Survey of Children's Health was last conducted in 2011/2012 and had three insurance coverage indicator questions for current coverage of children ages 0-17. These questions included "Does your child have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid?" (U.S. 93.3%, NM 94.5%), "What type of health insurance: Private Insurance (U.S. 57%, NM 41.3%) or Publicly Insured" (U.S. 37.1%, NM 52%). To more fully understand the adequacy of health insurance coverage, parents were asked three additional questions: "How often does your child's health insurance allow him/her to see the health care provider he/she needs?", "How often does your child's health insurance offer benefits or cover services that meet his or her needs?", and "is your child currently uninsured or had periods of no coverage during year?". New Mexico did not differ significantly from national data regarding these three questions.

The data for the National Health Interview Survey (NHIS) is continuously collected throughout the year. Collection of data specific to insurance coverage is done at the date of the interview, and information on whether the uninsured respondents have been uninsured more (or less) than 12 months is also collected (United States Census Bureau 2014). This data helps to broaden and provide a more comprehensive representation of insurance status. The most recently published data (2014) from NHIS indicates that across the U.S., 6.9% of children 12-17 years old were uninsured, with 57% of insured children having private insurance, 33% having Medicaid, and 2.5% classified as other. Information regarding the race of the population is included in the survey results but is not broken down into age groups. The data show that within the U.S., Whites had the highest rates of private insurance at 65.8%, compared to Blacks at 47%, American Indian or Alaska Native at 34.8%, and Hispanic at 42.5%. Non-Hispanic White single

race had the highest private insurance rate of 73% nationwide. Medicaid rates of coverage at the national level were highest for Black or African American at 33%, with American Indian or Alaska Natives close behind at 32.9%. Hispanics or Latinos had 28.3% Medicaid coverage, while non-Hispanic Whites had the lowest rates of Medicaid coverage at 13.6%. Non-Hispanic Whites were more likely to be insured and more likely if insured to have private insurance throughout the United States, while minority populations continue to struggle with gaining insurance coverage, and if covered, are much more likely to be publicly insured. Data specific to insurance coverage by gender was not available, nor was New Mexico data available within the NHIS.

The American Community Survey (ACS) is also a continuous survey that asks participants about current coverage at the date of the interview. Data from this survey has geographic details down to the census tract level (United States Census Bureau, 2014). The latest data available from the ACS is from 2014; this data indicated that the percentage of uninsured children in the United States as a whole for those under age 19 was 6.2 %, a decrease from 7.5 % in 2013 (Smith & Medalia, 2015). Types of health insurance coverage by children under age 19 nationwide were 61% for private insurance, 42.6 % for government health insurance (includes Medicaid, Medicare, Tricare, Civilian Health and Medical Program of the Department of Veteran Affairs (CHAMPVA), and 6.2% uninsured. In 2014, Non-Hispanic Whites had the highest rates of health insurance coverage in the U.S. at 92.4%, while Blacks were at 88.2%, Asians at 90.7%, and Hispanics at 80.1% (Smith & Medalia, 2015). Hispanics comprise 48% of the New Mexico population, and among New Mexico Hispanics, there was an 18% uninsured rate (Pew Hispanic, 2015). Non-Hispanic Whites in New Mexico have a much lower uninsured rate at 9% (Pew Hispanic, 2015). Hispanics under age 17 have an 8% rate of uninsured, while

Non-Hispanic Whites 17 years and younger are at 6%. Gender specific data was not available.

Stable health insurance coverage is a necessary and important part of acquiring and maintaining good health. Uninsured people (both male and female) have worse health outcomes, receive less medical care, less timely care, and a lack of insurance is a financial risk factor for low-income people (Buchmueller, Grumbach, & Kahn, 2005). While the provisions of the Affordable Care Act have greatly increased the number of Americans with health insurance, disparities remain among specific races and ethnicities, with Hispanics and Non-Hispanic Blacks continuing to suffer from higher rates of no insurance than non-Hispanic Whites. Being uninsured can affect both men and women across their lifespan, as poor health and/or financial instability because of being uninsured places an unfair burden on people within the U.S., regardless of gender or geographic location.

Access to care demographics. For the purposes of this document, access to care includes information regarding availability, quality of, and appropriateness of health care for adolescents. Access to care excludes information regarding health insurance status; that said, the health insurance portion of this chapter covers that information. With those understandings in place, it is the case that despite gains for children and youth in insurance coverage, disparities still exist regarding actual receipt of indicated health care services (Zima & Mangione-Smith, 2011). According to the Healthy People 2020 Goal of Access to Care, improved access to comprehensive, quality health care services is important because improved access can boost overall physical, social, and mental health status, prevent disease and disability, detect and treat health conditions, improve quality of life, prevent early death, and expand life expectancy (Healthy People 2020, ND). Poor access to healthcare can contribute to delays in receiving appropriate care, an inability to get preventative services, worsening of chronic conditions, and

increases in hospitalizations that could have been prevented (Kaiser Family Foundation, 2011). For adolescents, poor access to healthcare can also mean failure to address screening for risky behaviors that could affect downstream health as an adult. Access to timely, affordable, and appropriate healthcare is therefore an important component to adolescents' current and future health and well-being. It is important to note that in the nation, health care utilization is low among Hispanic and African American and low-income adolescents (Coker, Sareen, Chung, Kennedy, Weidmer, & Schuster, 2010). Because low income adolescent males have high levels of unmet health care needs, along with less encounters with primary care and higher mortality rates than females, access to healthcare is especially significant to this population (Mulye et al., 2009).

Obstacles to health care can include cost, language barriers, knowledge barriers, shortages of healthcare providers, and structural or logistical factors such as long waiting times and not having transportation (Carrillo, Carrillo, Perez, Salas-Lopez, Natale-Pereira, & Byron, 2009). Data from the 2014 National Healthcare Quality and Disparities report indicated that nationally, people in poor households had worse access to care than people in high-income households. The same report noted that Blacks, Hispanics and American Indians/Alaska Natives had worse access to care than Whites at the national level (National Healthcare Quality and Disparities Report, 2015). Additionally, children from low-income families throughout the U.S. experience more barriers in accessing health care than do children from middle or upper-class families across the nation (Carrillo et al., 2009). Although New Mexico specific data is not available, it stands to reason that trends at the national level are reflected at the state level. Indeed, according to a 2013 New Mexico Legislative Finance Committee report, New Mexico has a shortage of both primary care and behavioral health providers. In New Mexico, 40.5% of

the population is living in a primary care health professional shortage area (HPSA), compared to 19.1% of the U.S. population. An estimated 26.6% of New Mexico's population is underserved compared to 11.4% of the U.S. population.

Barriers to care also include health care that does not adequately address appropriate developmental concerns. Adolescence is a unique time in which physical and mental changes requires a variety of health services that differ from that of adults and younger children. When adolescents outgrow the need for pediatric care, they often transfer to primary care providers. Yet the primary care family practice provider may not be suitably trained in adolescent healthcare needs. Indeed, adolescent medicine specialty training is rare. Adolescent providers receive extensive training not only in health conditions specific to adolescents, but in how to best provide confidential services and build rapport (Bell, et al., 2013).

Adolescent males have one of the lowest utilization rates of primary care use of any age group in the United States (Bell et al., 2013). Less than half of 12 to 17-year-old males in the U.S. receive the recommended yearly preventive care visit (Mulye et al., 2009). Adolescent males (as compared with females) in the United States are less likely to have a usual source of care (63% versus 78%), and are also less likely to have visited a provider in the past year (Kirzinger, Cohen & Gindi, 2011). Low-income or adolescents of color have the lowest rates of receiving regular healthcare visits (Institute of Medicine, 2005). Unfortunately, New Mexico specific data in this area is not available. That said, Blumberg, Clarke, and Blackwell (2015) used data from the 2010-2013 National Health Interview survey to show that Black and Hispanic men ages 18-44 were less likely (6.1%) than non-Hispanic White men (8.5%) to report feelings of anxiety or depression, yet they were also less likely (26.4%) than non-Hispanic White men (45.4%) to have accessed mental health treatment. While data on behavioral health access

specific to adolescent males (nationally or in New Mexico) is not available, it is logical to assume that low-income adolescent males do not have a greater propensity or access to behavioral health services than low-income adult males of color.

Teens are also at risk for many health conditions that may persist into adulthood, yet only a small portion of adolescents receive screening for sensitive issues through routine assessment (Institute of Medicine, 2005). Issues regarding confidentiality are especially linked to quality and access of care for adolescents. Research has shown that some teenagers delay or avoid seeking care and withhold vital information about themselves to keep their parents from finding out about a health issue (Kaiser Family Foundation, 2011). Adolescents are more likely to seek medical care when they identify and are verbally assured by their provider that the information will be kept confidential, provided that the adolescent is not placing themselves or others at bodily risk (Akinbami, Gandhi, & Chen, 2009). Research of clinicians who serve adolescents indicate that most providers report they routinely screen adolescents for at risk behaviors, diet, and exercise, yet fewer than half of adolescents concur with the survey data (Chung, Lee, Morrison, & Schuster, 2006).

The behaviors that most place adolescents at risk for mortality and morbidity are not found by physical exam alone. The American Academy of Pediatrics (2017) recommend annual and periodic screening and counseling for adolescents as a way of detecting factors that could lead to morbidity or mortality. National guidelines also recommend all adolescents have access to confidential services (Klein et al., 2007), as ensuring confidentiality assists with more accurate information regarding risky behaviors. According to Osius and Rosenthal (2009), mental health, substance abuse, and reproductive/sexual health are particularly problematic issues for adolescents and may contribute to or be symptoms of more risky behaviors. Yet these very

issues are the most difficult and least likely for health care providers to monitor. Fox et al. (2013) discusses how adolescents are at risk for poor health outcomes as they transition into adulthood because most do not receive the clinical preventive care they need. They also stress the importance of using every clinical encounter as an opportunity for preventive care screening.

Because many adolescents initiate adult behaviors such as sexual activity, motor vehicle use, and substance abuse while an adolescent, it is central that quality healthcare include screening for these risk behaviors. Adolescence is a crucial period in which access to age and developmentally appropriate health care can assist not only in the lowering of morbidity and mortality rates for adolescents, but also aid in the transition of adolescents into healthy adulthood. Disparities remain in accessing this care, especially for low-income adolescents of color. Adolescent and young adult males as a group in the U.S. have higher mortality, less access to and engagement with primary and preventative care, and greater levels of unmet healthcare needs (Bell et al., 2013). According to Mulye et al. (2009), youth who “rely heavily on institutional support face greater risk of poor outcomes” (p. 8). Thus, low-income adolescent males face greater challenges in a healthy transition from adolescence to adulthood. According to Amin, Kagestan, Adebayo and Chandra-Mouli (2017) adolescent males face “distinct risk factors and health problems that shape their health trajectories throughout the life course, with interpersonal violence and injuries, HIV and Aids and suicide being the top causes of mortality and morbidity”, (S3). The upstream intervention of access to age appropriate, adolescent-focused primary care can help youth not only remain healthy as adolescents, but also transition to adulthood with better health and health habits.

Health Disparities

Certain groups of adolescents have a higher probability for multiple risk factors that

make them more vulnerable to poorer health and poorer educational outcomes. Adolescents groups such as those living in poverty, those in the foster care system, youth who are lesbian, gay, bisexual, or transgender, those youth who live in families that have recently immigrated to the United States (especially undocumented immigrants), and/or those youth in the juvenile justice system are all at greater risk for health disparities (U.S. Department of Health and Human Services, 2015). These youths are also more likely to engage in risky behavior as compared to the overall adolescent population in the United States (U.S. Department of Health and Human Services, 2015). Understanding the current health and educational disparities of high-risk youth is, therefore, important to understand as background data for this research project. To this end, this section will examine behavioral health disparities information and leading causes of death disparities information.

Behavioral health disparities. Having access to developmentally appropriate screening and treatment for behavioral health disorders is a crucial component to comprehensive care for adolescents. While stigma and cultural norms are some of the barriers that prevent adolescent male youths of color from seeking mental health screening and/or treatment, shortages of behavioral health providers (especially in rural areas) also contributes to the difficulty in providing behavioral health services to male adolescents of color. Adolescence is one of the most important developmental stages of life, and as such, it is a critical time to diagnose and treat any chronic mental illnesses so that effective treatment can begin. Delayed or untreated behavioral health disorders in youth places children at much greater risk for later substance abuse disorders, educational failures, unemployment in adulthood, incarceration in both adolescence and adulthood, and future socioeconomic difficulties (Adams, Knopf & Park, 2014; Cummings, 2014; Price et al., 2013).

Surveillance of mental health disorders among children and adolescents in the US is important but not systematically collected and reported. According to Perou, Bitsko, Pastor, Ghandour, Gfroerer et al. (2013) varying surveillance systems differ in the following ways:

1) What is measured (e.g., diagnostic criteria for a mental disorder, reports of previously diagnosed conditions, reports of mental health symptoms, or other indicators of mental health problems), 2) reports of sample (e.g., age range, geographic regions), 3) source of information (e.g., proxy respondent for the child, self-report by child or administrative records), 4) The way the data is collected (e.g., in-person interview, telephone interview, self-administered survey, and administrative records), 5) sample size (e.g. precision of estimates) and 6) periodicity of data collection (e.g., annual or other) (p. 3).

Data from the National Comorbidity Survey-Adolescent Supplement (NCS-A) provided the first prevalence data on a wide-range of mental disorders in a nationally representative sample of US adolescents (Merikangas et al., 2010). Data from the NCS-A included face-to-face surveys with 10,123 adolescents aged 13-18 years during a collection period between 2001-2004. Data from this survey has been used in 157 publications (Kessler, 2017). Based on the data from the NCS-A, the lifetime prevalence of mental illness nationwide (for the age group 13-18 years) was approximately 46.3% (Merikangas et al., 2010).

More recently Ghandour et al., (2019) reported data from the 2016 National Survey of Children's Health that showed differing measures (annual incidence versus lifetime prevalence), different results and different age groupings. Ghandour et al., (2019) reported that between 13%-20% of children in the US have a mental, emotional, or behavioral disorder each year. For the age group 3-17 years, the current estimates of diagnosis anxiety was (7.1%), behavioral/conduct disorder (7.4%), depression (3.2%), the authors noted that the prevalence of each disorder was

“higher with older age and poorer child health or parent/caregiver mental/emotional health” (p.256). The prevalence of behavioral/conduct disorders in boys was more than double that in girls, and peaking in middle childhood (6-11 years), while depression and anxiety were more common among adolescents (age 12-17). Non-Hispanic White children experienced more anxiety while behavioral/conduct problems were most common among non-Hispanic black children (Ghandour, et al., 2019). Half of all lifetime cases of mental illness start around age 14, and three-quarters of all mental illness cases manifest by age 24 (Alegria, Carson, Goncaves & Keefe, 2011). Data specific to New Mexico and low-income adolescent males regarding the most prevalent behavioral health disorders was not available. That said, the 2015 New Mexico Youth Risk and Resiliency (2015) mental health data indicated that the rate at which New Mexico’s youth felt sad or hopeless (in the past 12 months) was significantly higher than the U.S. youth population as a whole (32.5% NM vs 29.9% U.S.). Suicide is the second leading cause of death in New Mexico youth (ages 10-24 years) with 62 deaths in 2013 (New Mexico Department of Health 2015). New Mexico’s youth suicide rate is twice the national rate but has remained stable from 1999-2013 (New Mexico Department of Health 2015). The American Indian population in New Mexico (younger than 35years old) have some of the highest suicide rates in the nation (Centers for Disease Control and Prevention, 2015). The suicide rate for males ages 15-19 years in New Mexico is more than three times that for women (Centers for Disease Control and Prevention, 2015). More formative work that includes more consistent measurements, methods and reporting as well as accessible and affordable behavioral health services is needed to more accurately measure and reduce the mortality and morbidity associated with mental health in the adolescent population.

Mason-Jones, Crisp, Momberg, Koech, De Koker, and Mathews (2012) note that the goal

of access to mental health services are a “high priority policy objective” (p. 1) for high risk adolescents. The association between good mental health in youth and later positive outcomes is important, as addressing depression and other behavioral health issues during adolescence can help to affect the upstream life course of adulthood. Yet despite knowledge of the downstream adult effects of untreated behavioral health issues, the availability of behavioral health services for adolescents remains a problem. Seventy percent of children and youth with a mental health disorder do not receive mental health services; most of these children are from lower socioeconomic and minority statuses (Merikangas et al., 2010). In 2015, only 39.3 percent of three million adolescents with depression received treatment nationwide (U.S. Department of Health and Human Services, Substance Abuse and Mental Health Administration, 2016). According to a Substance Abuse Mental Health Administration (SAMHSA) report on New Mexico data from 2008-2012, 41.3% of New Mexico youth with a major depressive disorder diagnosis received services, which is a trend that is not significantly different than trends found in overall U.S. data (SAMHSA, 2013). New Mexico data specific to low-income adolescent males with a major depressive disorder diagnosis was not available.

Unmet mental health needs are especially common among low-income minority adolescents (Costello, He, Sampson, Kessler & Merikangas, 2014). The Institute of Medicine reported that minority youth not only have less access to behavioral health services, but also receive lower quality services than their non-Hispanic White counterparts (Institute of Medicine, 2011). More specifically, Black and Hispanic youth are only half as likely to receive treatment as Whites (Garland, Lau & Yeh, 2005, National Academy of Sciences, 2015). A higher proportion of Hispanic youth have unmet behavioral health needs as compared to their Black and White peers (National Academy of Sciences, 2015). Other studies on mental health services among

adolescents also show disparities at the national level based on income, gender, race/ethnicity, geography, and sexual orientation (Substance Abuse and Mental Health Services Administration Office of Applied Studies, 2007). In general, males are less likely than females to receive behavioral health services during youth, and older adolescents (ages 16 to 17 years) are less likely than younger adolescents (regardless of age or race/ethnicity) to receive behavioral health services in an educational setting (National Academy of Sciences, 2015). Data specific to New Mexico in this area was not available beyond what was previously discussed.

Access to care not only includes health insurance and adolescent-friendly providers who screen for high risk behaviors and behavioral health problems, but also the availability and ease of access to behavioral health providers. Children and adolescents from low-income families and communities are unequally exposed to frequent and sometimes severe life stressors. These experiences can result in adverse effects on emotional regulation, as well as activation of the brain's stress management system (McLaughlin & Hatzenbueler, 2009). As a result, children and adolescents from lower socio-economic backgrounds show higher rates of depression, anxiety, attention problems, and conduct disorders when compared to children and adolescents from higher socioeconomic backgrounds (Hackman, Farah, & Meany, 2010). Children and adolescents from lower socioeconomic backgrounds also demonstrate a higher incidence of internalizing (e.g., depression or anxiety) and externalizing (e.g., aggressive and impulsive) behaviors. Poor adolescents are apt to be challenged by mental health problems that hinder their ability to achieve academically (Sznitman, Reisel, & Romer, 2010).

Another example of the link between common stressors and adverse mental health outcomes among youth can be found in New Mexico. New Mexico socioeconomic data related to behavioral health incidences indicated that suicide attempts by high school students varied

with parent education (New Mexico Youth Risk and Resiliency Survey, 2015). Specifically, suicide attempts were reported by 12.3% of high school students whose parents did not graduate from high school, 7.3% of those whose parents graduated from high school but not college, and 6.6% of those whose parents completed college or professional school (New Mexico Youth Risk and Resiliency Survey, 2015). Given these numbers, it is the case that in New Mexico, lower income students were more likely to attempt suicide, and while females were more likely to attempt suicide, males were more likely to succeed (New Mexico Youth Risk and Resiliency Survey, 2015).

Environmental, parental, and discriminatory stressors that accompany poverty can also lead to early childhood neglect or maltreatment. Early child maltreatment has been linked to impaired neurodevelopment through effects on the neuro-regulatory systems (Felitti et al., 1998; Niwa et al., 2013), as environmental stressors during childhood and adolescence can affect both brain maturation and various behavioral patterns in later in life. The effect on mental and physical health of what is coined “Adverse Childhood Experiences” is well documented. Adverse Childhood Experiences (ACE) researchers identified 10 different childhood experiences as risk factors for chronic disease in adulthood. These include emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, violent treatment towards mother, household substance abuse, household mental illness, parental separation or divorce, and having an incarcerated household member (Felitti et al., 1998). Children and youth who live in poverty are more likely to experience the risk factors associated with ACEs due to stressors involved with instabilities that go along with poverty. More recent studies on ACEs have been able to identify the more immediate negative consequences, such as functional changes to the developing brain (Butchart, Felitti, & Brown, 2010). These more immediate negative consequences have a

significantly higher prevalence among juvenile justice-involved youth as compared to youth in the general population (Baglivio et al., 2014). The prevalence of mental illness among adolescents in the justice system across the nation is as high as 80%, as compared to 20% of the total adolescent population in the U.S. (Kamradt, 2000). Many of these mental health problems go untreated when youth are detained. This alone may account for the fact that suicide rates in juvenile detention facilities are more than four times higher than for adolescents overall nationwide (Hayes, 2009).

Comparison of New Mexico ACE data with national data was captured in a recent study by Cannon, Davis, Hsi, and Bochte (2016). The Cannon et al. study involved a partnership between faculty from the University of New Mexico (UNM) School of Law, the UNM School of Medicine, and New Mexico's Children Youth and Families Department (CYFD). The scope of the partnership was to compare ACEs at a national and local New Mexico level. The study's aim was to provide a better understanding of the link between early childhood trauma and delinquency. Of the New Mexico males in the juvenile justice system (n=220) included in the study, 74.8% had exposure to five or more ACES and were seven times more likely to have four or more ACEs than a similar cohort in Florida and the original adults in Felitti et al.'s 1998 Kaiser Permanente study. The New Mexico youth experience depression, PTSD, and anxiety disorders at a much higher rate than the general population, indicating not only significant ACEs, but also prior lack of access to or screening for mental health illness.

With respect to the outcomes associated with mental illness, it is the case that people with mental illness are 4.5 times more likely to be arrested than those in the general population of Americans (Dumont, Brockmann, Dickman, Alexander, and Rich, 2012). Incarcerated individuals are substantially more likely to have a history of mental illness, including psychotic

illness and depression, as well as of trauma stemming from abuse (Dumont et al., 2012). The disparities in who is arrested, detained, and incarcerated are comparable to what is found in the adult criminal statistics for the US as a whole. In 2013, Black males were incarcerated at a rate of 804 per 100,000, American Indian males at 496 per 100,000, and Hispanic males at 296 per 100,000. This is compared to White males who were incarcerated at a rate of 49 per 100,000 (The National Center for Juvenile Justice, 2015). These racial discrepancies are stark and suggest the possibility of racial bias within the law enforcement community. More information that correlates the day-to-day issues that adolescent youth of color experience downstream that can lead to mental health issues upstream is therefore vital when seeking to correct these disparities. While racism may play a role in incarceration rates, adverse childhood events leading to mental health illness may also contribute to this process. Identification of ACEs, assessment for mental illness, and addressing the larger issues of racism and poverty are therefore critical for healthier outcomes for New Mexico children and youth who are at risk.

Low-income adolescent males of color must also contend with racism, which compounds the effect of other chronic stressors. Low-income minority males who encounter environmental stressors such as institutional and/or daily racism, poverty, parental substance abuse, domestic violence, and/or untreated parental mental illness experience sustained stress levels. Because adolescence is a critical developmental period in which one forms cultural, ethnic, and racial identities, the added stress of racial discrimination may significantly contribute to difficulties in forming a positive cultural, ethnic, or racial identity while also furthering the heightened cortisol and stress levels. Veldman, Bultmann, Almansa and Reijneveld (2015), using data from a prospective cohort study involving 2,230 Dutch children (9 year follow up), could link childhood adversities among boys with poorer educational outcomes. The authors' findings suggest that

boys compared to girls are less likely to cope with childhood adversities, and that additional monitoring of that population is important.

Starting at the headwaters of poverty and racism, the downstream effects of adverse childhood events, life-long stressors, and racism can lend physiologic and behavioral affect to developing children and youth. Recognition that effect of ACEs also contributes to mental health in youth is an important step in any proposed remedy. Screening for trauma, depression, anxiety, individual perception of racism, and increasing awareness and access to behavioral health services are therefore a vital step in the prevention of downstream sequelae.

Leading causes of death disparities. Data indicating the leading causes of death for youth ages 10-24 is collected annually by the Centers for Disease Control (CDC). The most recent data is from the 2013 National Vital Statistics Report; this data was published in February 2016 (Herone, 2016). The leading cause data are taken from death certificates and are reported separately by race and Hispanic origin.

Many of the leading causes of death in adolescents are preventable, with unintentional injuries as the largest category of death in ages 10-24. In 2013, the death rate for adolescents nationwide was 33 per 100,000, with nearly 60% of injury deaths being from motor vehicle accidents and firearm injuries. Homicides accounted for 20% of injury deaths, and suicides accounted for 25% of injury deaths. The death rate for adolescent males is almost two times the rate for females, and males have a higher injury death rate compared to females in all childhood age groups (Herone, 2016).

With respect to the nationwide data taken from the CDC, less than 1% of adolescents ages 12-19 years, die annually, but there are stark differences among race and ethnicities regarding who dies and from what. While accidents (unintentional and intentional) are the

leading cause of death in most adolescents ages 10-19, almost 50% of Black and non-Hispanic Black male youth are dying from assault rather than accidents. Hispanic and non-White males have the highest frequency of injuries nationwide, be they intentional or unintentional (Herone, 2016). Thirty percent of all other adolescents' death are from unintentional injuries. Suicide is the second leading cause of death in all youth ages 10-19, except for Black and non-Hispanic Black males in which suicide is the third leading cause of death after assault and accidents. The ratio of male to female suicide deaths in the U.S. is 4.7:1 in age group 15-19 (Vander Stoep, McCauley, Flynn & Stone, 2009). The suicide rate among American Indian or Alaska Native youth ages 10-19 is close to double the rate in any other race category. For the older age bracket of 15-19, suicide is still the highest among American Indians or Alaska Natives at 34%, almost 10% higher than any other race category.

Disparities related to adolescent deaths from intentional and unintentional causes is stark. Adolescent males of color, especially Black and Non-Hispanic Black males, are dying from intentional injuries (specifically assault) at a much higher proportion than all other youth deaths that are either intentional or unintentional. Along these same lines, AI/AN suicide rates are close to double that of any other race category. This data points to the importance of early screening and treatment of behavioral health problems in youth, and especially for high risk low-income adolescent males of color.

Gender Socialization and Masculinity Norms

Gender socialization of boys and adolescent males in general is an often-overlooked factor contributing to health behaviors and outcomes (Amin, Kagestan, Adebayo and Chandra-Mouli, 2018). The adaptation to masculine gender norms during adolescence, particularly traditional hegemonic masculinities “remain the most honored way of being a man in most

places” (Patton, Darmstadt, Petroni and Sawyer, 2018, p. S6). According to Patton et al., traditional masculine identities such as domination of women, minority groups of men with differing sexual orientation promote domination and marginalization of those groups. These masculine traits are often associated with high risk behaviors, violence, substance abuse educational failure and premature death (Amin, Kagestan, Adebayo and Chandra-Mouli, 2017). Relative to female adolescents, male adolescents have poorer rates of recognizing mental health symptoms and are less literate about management of symptoms (Rice, Purcell, and McGorry 2018).

Educational Disparities

High or low educational achievements mark upstream predictors of health and well-being, as a low level of educational attainment is one of the primary contributors to health inequities and early mortality. Education can also impact a person’s exposure to multiple health risks and is “linked to a malleable set of material and nonmaterial resources that allow individuals to maximize their potential for a long and healthy life over time and in multiple socioenvironmental and socio epidemiologic contexts” (Link 2008; Link & Phelan 1995 p.86). It is estimated that having less than a high school education is the largest contributor to premature death, as this status characteristic accounts for 240,000 deaths annually, as compared to 125,000 for stroke and 70,000 for diabetes (Galea, Tracy, Hoggatt, DiMaggio & Karpati, 2011). As such, an examination of how educational disparities impacts the health and well-being of adolescent males of color is necessary.

Educational inequities tend to affect the same subgroups of American youth that are also affected by health inequities. The common set of socio-environmental and racial factors that affect health and health outcomes are also involved in educational outcomes. This is

compounded by the fact that educational disparities begin even before children enter school. Nationwide, many children from low-income families start kindergarten one or more years behind their classmates (United States Department of Education, 2015). Two major contributors to the disparity in preparedness are poor access to high-quality preschools and a vocabulary gap known as the 30-million-word gap (Hart & Risley, 2003; United States Department of Education, 2015). This 30-million-word gap is present between children from the wealthiest and poorest families, with recent evidence showing this gap can be present by three years of age nationwide (Fernald, Marchman, & Weisleder, 2013). This vocabulary gap places disadvantaged children at risk for language delays and poorer school performance starting in kindergarten and lasting throughout the child's school years (Fiorentino & Howe, 2004).

A way to overcome the vocabulary gap is found in preschool. Indeed, preschool is one of the better examples of how an early intervention can lead to better upstream outcomes. Children who participate in high-quality preschool programs have better health, social-emotional, and cognitive outcomes than those who do not participate (Yoshikaga, et al. 2013). The benefits of preschool are particularly important for children from low-income families and those who, on average, start kindergarten 12 to 14 months behind their cohorts. Despite these facts, access to good quality preschool differs based on geography, race, and income in the US. According to the 2015 State Preschool Yearbook, access to a high-quality preschool program remains highly unequal. Nationally, six out of ten eligible children are not enrolled in publicly funded preschool programs through state preschool, Head Start, and special education preschool services (United States Department of Education, 2015). In a recent report issued by The National Institute for Early Education Research (2016), about 11% of New Mexico's low-income children were enrolled in a Head Start program in 2014-2015, a number that just exceeded the national average

of 10%. Also reported was the fact that New Mexico's Head Start program ranked worst in the nation for instructional quality and workforce preparation. The authors of the report noted that the percentage of Head Start teachers holding a BA or higher is well below the national average of 73%, as only 36% of New Mexico Head Start teachers have a BA or higher (National Institute for Early Education Research, 2016). As a result, many low-income children in New Mexico begin school already behind their peers educationally, and some never catch up.

Researchers using data from a 2017 Quality Counts Report released by Education Week rated New Mexico's educational system with a "D". This ranking was based on 3 broad categories: school finances, student achievement, and environmental factors (Wall St. 24/7, 2017). Researchers noted that only 40.7% of three and four-year old children were enrolled in preschool, (15th lowest in the nation) and that New Mexico ranks lowest in the nation for the percentage of 4th graders who are proficient in reading (22.9% vs 34.8% nationally). New Mexico ranks 29th in the nation for per pupil spending. In a 2014 lawsuit filed against the state of New Mexico (*Yazzie, Martinez vs. State of New Mexico*), families and seven school districts (Albuquerque, Espanola, Gadsen, Las Cruces, Magdalena, Santa Fe and Zuni) claimed that the state's lack of educational funding disproportionately impacted students from low-income families, Native American families, and English language learners (Burgess, 2017). An example of the impact of funding cuts included a reduction in funding for a K-3 Plus summer program that offered an additional 25 days of school for children, kindergarten through third grade. This funding reduction decreased the number of students served from 5,000 to 3,000. Most of the students who would benefit from the extra school days are children from low-income families, as well as English language learners. States with higher rates of poverty need to provide adequate funding for school districts that serve low-income students, and New Mexico has not delivered in

that area.

School discipline disparities. Disparities in discipline rates also contribute to ongoing educational disparities that can impact the health of adolescent male youths of color. Research indicates that when students are suspended or expelled from school, they are several times more likely to drop out, fail out of high school, and be incarcerated later in life (Lamont, 2013). Data from the U.S. Department of Education (2014) show that African American schoolchildren of all ages are more than three times more likely to be suspended and expelled than their non-Hispanic White peers. American Indian/Alaskan Native youth are similarly overrepresented in school discipline data nationwide, as they account for 0.5% of total enrollments but are 3% of total expulsions (U.S. Department of Education, Office for Civil Rights, 2014). Referrals to law enforcement also differ among races: while Black students represent 16% of student enrollment, they represent 27% of students referred to law enforcement and 31% of students subjected to a school-related arrest (U.S. Department of Education, Office for Civil Rights, 2014). In comparison, White students represent 51% of enrollment, 41% of students referred to law enforcement, and 39% of those arrested in the U.S. (U.S. Department of Education, Office for Civil Rights, 2014). The metaphor “school to prison pipeline” incorporates the various issues that result in students leaving school (such as suspension) and becoming involved in the criminal justice system. New data nationwide indicate that discipline inequities begin in preschool. Within the school districts with children participating in preschool programs, 6% reported suspending at least on preschool child. Black children only represent 18% of preschool enrollment, but 42% of the preschool suspensions (U.S. Department of Education, Office for Civil Rights, 2014).

While New Mexico statewide school discipline rates are not available, a study on disciplinary data from Albuquerque Public School District was published in 2013 (Heath &

Dickman and Associates, 2013). The data suggest that Black, Hispanic, and Native American students had significantly higher suspension rates than White or Asian students. Almost half of suspensions were for minor offenses such as disruptive behavior and disrespect. Seventy eight percent of students suspended qualified for free or reduced-price meals. Findings also indicated that students who received health and wellness services both before and after their first infraction were half as likely to have a second infraction. What the health and wellness services consisted of was not well described in the study and appeared to vary among schools. That said, SBHC mental health services and case management were mentioned as doubling during the study period from 2,058 students in 2008 to 4,490 in 2012, yet 59% of schools had students who needed but did not receive services in 2011-2012. It was not clear if SBHC were part of the health and wellness teams on a consistent basis. Second infraction rates were reduced by 50% with a health and wellness visit. The authors noted that the distribution of health and wellness services across schools and within schools varied greatly. Yet racial discrimination regarding suspension rates was shown to be evident in Albuquerque Public Schools, and as a result, it is not difficult to expect similar patterns across the state.

Graduation rate disparities. While graduation rates have increased in the past twenty years, disparities in rates of school completion among minority populations, and adolescent male students of color, remains pronounced. These disparities can be articulated by way of varying methods and results used to document high school educational achievement. There are multiple ways to measure educational outcomes: some are based on graduation, while others on drop-out rates or percentage of young adults ages 18-24 who did not complete high school or receive a GRE. For example, the average freshman graduation rate (AFGR), and the adjusted cohort graduation rate (ACGR), both measure the percentage of public-school students who attain a

regular high-school diploma within 4 years of starting 9th grade for the first time (The National Center for Educational Statistics, 2016). These measurements vary in the following ways: the AFGR is an estimate of the on-time 4-year graduation rate derived from aggregate student enrollment data and graduate counts, while the ACGR uses detailed student-level data to determine the percentage of students who graduate within 4 years of starting 9th grade for the first time. The ACGR data is more accurate but obtaining ACGR data from all states has only become available in recent years, thus making it difficult to follow trends (The National Center for Educational Statistics, 2016). All AFGR estimates are less precise than the ACGR, but the AFGR can be estimated as far back as the 1960s. According to the United States Department of Education (2013-2014), the national ACGR for White students (87%) was 14 percentage points higher than the national ACGR for Black students (73 %). Hispanic students also graduated in lower numbers than White students, with White students scoring 11% higher in national ACGR than Hispanic students (87% versus 76%, respectively). Data specific to New Mexico indicate even larger disparities, as overall the state average ACGR was 69%, compared to the U.S. total average of 82%. White students in New Mexico had an average ACGR of only 75%, with Blacks at 62%, Hispanics at 67%, and American Indian / Alaskan Native at 61%. Economically disadvantaged students had a 62% ACGR score. All New Mexico's ACGR score are at least ten points below the national average. Male graduation rates from cohort class of 2010 was 62.8%, while female graduation rates were at 72.8%.

Another educational measurement is called 'high school completion rate' and is based on nationwide data from the Current Population Survey, in which the percentage of young adults who had completed high school with a diploma or an alternative credential such as a General Educational Development (GED) certificate was measured. In 2014, U.S. data indicated that

94.7% of young adults (ages 18–24) qualified as completing high school; this is compared to 84% in 1980 (Ryan & Bauman, 2016). Yet for minority populations, high school completion rates have not increased at the same pace as non-Hispanic White young adults. Among White non-Hispanic young adults nationwide, the high school completion rate increased from 87% in 1980 to 94.7% in 2014. The high school completion rate for Black non-Hispanic young adults increased from 75% in 1980 to 91.7% in 2014. While Hispanic young adults have had a consistently lower high school completion rate than their White non-Hispanic and Black non-Hispanic peers, the rate for Hispanic young adults increased from 57% in 1980 to 87.1% in 2014. The high school completion rate for American Indian or Alaska Native young adults between 2003 and 2014 has only increased by a small fraction (78.1% to 78.7 %) (Ryan & Bauman, 2016). While high school completion rates are better now than ever in the past, disparities remain, with White youth completing high school at greater rates than students of color, in particular American Indian or Alaska Native youth.

The terminology “status dropout rate” refers to the percentage of 16- to 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a GED certificate). Males remain behind females in high school completion rates, according to Ryan and Bauman (2016). Between 1990 and 2014, the male status dropout rate nationwide declined from 12.3% to 7.1% of all students in school (Ryan & Bauman, 2016). New Mexico’s four-year graduation rate has increased since fiscal year 2008, but dropout rate has also increased (Legislative Finance Committee, 2015). In 2013 alone, nearly 7,200 students out of 152,000 student’s grades 7-12 dropped out of the state’s public-school system. Ten school districts account for 68% of the states’ high school drop outs, and 50% of the 68% is concentrated in 25 schools (Legislative Finance Committee, 2015). Data pertinent to the

dropout rates in the school year 2017-2018 are not available.

Low socioeconomic status disparities. Low socioeconomic status is now understood to be a mediator in the relationship between poor health in children and substandard educational outcomes (Basch, 2011). Fifty percent of public-school children in the United States had low-income students in 2014 as defined by being eligible for free or reduced lunches (Department of Education, 2014). New Mexico leads the nation in percentage of low-income students at 67% (Department of Education, 2014). Although information that specifically links socioeconomic status disparities to AFGR and ACGR rates could not be located, it is the case that in New Mexico during fiscal year 2013 alone, 57% of the total number of drop outs (7,185) were low income students New Mexico (Legislative Finance Committee, 2015). Low socioeconomic status is also a risk factor or upstream predictor of slower development of academic skills (Morgan, Farkas, Hillemeier, & Maczuga, 2009).

The high amounts of stress that can accompany poverty can directly affect a child's academic abilities. Another mechanism in which low socioeconomic status affects educational achievement is the schools that these students attend. Students from low socioeconomic backgrounds usually attend schools that are poorly funded, have less resources, and have more transition among teachers, all of which contribute to poorer academic outcomes (Aikens & Barbarin, 2008). Research indicates that school conditions contribute more to socioeconomic status differences in learning rates than family characteristics (Aikens & Barbarin, 2008). Research also continues to link students from lower socioeconomic backgrounds to lower academic achievement and slower rates of academic progress as compared with students from higher socioeconomic backgrounds. With inequities in resources and wealth distribution rising in the United States and especially prevalent in New Mexico, particular attention to the reduction of

economic inequities and bolstering of schools in low-income communities is essential.

In summary, low income and youth of color, particularly males, are at a significant disadvantage when it comes to behavioral health and educational outcomes. Because there is a causal and reciprocal relationship between health, education and poverty, understanding where and how to best intervene along the stream is essential. Many of New Mexico's students are at high risk for poor behavioral and educational outcomes, and New Mexico's adolescent male students of color are at particular risk of an accumulation of adverse childhood events such as racism, harsher school disciplinary actions, and less access to behavioral health services. These factors contribute to the lower educational achievements of these students and a concomitant reduction in socioeconomic achievements and positive health outcomes in later adulthood. Information that can more specifically guide policies that bolster behavioral health and educational achievements is therefore needed. Information from behavioral health providers who provide services to low-income adolescent males of color in school settings could contribute to this effort.

School-Based Health Centers

The following sections will include general information on national data related to SBHCs including history of SBHCs, locations, services provided, staffing and demographics of the population served by SBHCs.

National School-Based Health Centers. Nationwide, School-Based Health Centers (SBHCs) have played an important role in providing much needed access to primary care and behavioral health services to children and youth since the 1970s (Keeton, Soleimanpour, & Brindis, 2012). SBHCs provide convenient, accessible, and comprehensive health care services to students in grades pre-K-12. SBHCs often do this by utilizing an interdisciplinary health

provider team co-located and integrated within the school setting (Price, 2016). Because more than 90% of SBHCs are located on school campuses, transportation barriers are alleviated. These on-campus clinics are generally staffed by non-school personnel, which is usually a primary care provider such as a nurse practitioner or physician assistant, as well as by a behavioral health provider (Keeton et al., 2012).

School-Based Health Centers provide care where children and youth spend much of their day. SBHCs do this by bringing healthcare services to low-income students, as more than 75% of SBHCs serve schools that are Title I, while 76.5% of SBHCS are in schools where more than 50% of students were eligible for free or reduced-price lunch (School-Based Health Alliance, 2013-2014 Census). SBHCs have been proven to excel in delivering adolescent friendly services such as preventive care, reproductive healthcare, and mental health care (Keeton et al., 2012). SBHCs can also provide confidential services, such as reproductive and/or behavioral health services, thus removing access obstacles that many youths might otherwise face when seeking these types of services (School Based Health Alliance, N.D.).

The School-Based Health Alliance, an advocacy organization founded in 1985, does a triennial national survey of all SBHCs. The latest report from 2013-2014 noted that there were 2,315 SBHCs in 49 of 50 states and the District of Columbia, a 20% growth rate since the 2010-2011-time period (School-Based Health Alliance Census, N.D.). The greatest growth of SBHCs since the last survey in 2010-2011 was in rural areas, with almost 60% of new SBHCs being in rural areas. Eight of ten SBHC served students 6th grade or higher, 23.4% were in high schools, and 27.9% were in schools that include prekindergarten through high school. These numbers demonstrate that SBHCs provide a high percentage of services to the adolescent population who would otherwise have trouble accessing these services.

Behavioral health and substance abuse services at SBHCs. SBHC have a long tradition of providing both primary care and behavioral health services, both of which are critical to the health and wellbeing of adolescent males of color. Recent data indicates that of the 2,315 SBHCs nationwide, 67% had both primary care providers and behavioral health providers on staff (School Based Health Alliance, 2013-2014 Census). While national data indicates that 67% of all SBHCs had both primary and behavioral health care, national statistics regarding the reason for visits to SBHCs ranged widely. That said, most visits to SBHCs across the U.S. were for primary care, behavioral health visits, and/or substance abuse counselor visits (Amaral et al., 2011; Balassone, Bell & Peterfreund, 1993; Kaplan et al. 1998; Anglin, Naylor & Kaplan, 1996). Behavioral health services provided at SBHCs include crisis intervention, mental health assessment, grief and loss therapy, and medication dispensation (School Based Health Alliance, 2013-2014 Census), while substance abuse counseling was provided to treat cigarette, alcohol, and marijuana use, as well as harder drug use (Amaral et al., 2011; Balassone et al., 1993). These services are critical for youth, as many students often have no other alternatives for these services. For example, Soleimanpour, Geierstanger, Kaller, Mc Carter, and Brindis (2010) indicate that of the 1,528 students who received behavioral health services in their study of students in Alameda County, California, 31% reported the SBHC as their usual source of care for behavioral health services. Amaral, Geierstanger, Soleimanpour and Brindis (2011) described how students in their study who reported having “nowhere to go” (p. 142) for health services of any kind were more likely to be SBHC behavioral health users than students who listed other sources of care. Along these same lines, Kaplan, Calonge, Guernsey, and Hanrahan (1998) calculated that adolescents with access to a SBHC were more than ten times more likely to make a behavioral health or substance abuse visit than students without access. This is because

students who are referred from the primary care providers at the SBHC to the behavioral health providers enjoy what has been termed as a “warm handoff”. According to the Substance Abuse and Mental Health Services Association (2012), this is an approach in which a primary care provider introduces the patient to the behavioral health provider to which they are referred. In the case of a SBHC, this can literally be walking the student across the hall to the behavioral health provider’s office. This approach helps to assure coordination of care and prevent loss of follow up due to uncoordinated health care systems.

Funding of SBHCs. In order to provide the aforementioned services, SBHCs must be funded. Yet consistent funding of SBHCs have been an ongoing struggle in their forty plus years of existence. Funding and sponsorship of SBHCs varies nationally. Notwithstanding their established success, SBHCs have consistently faced barriers to guaranteeing funding for operational purposes (Keeton et al., 2012). In 1995, federal funding from the Health Resources Services Administration (HRSA) subsidized the building of new SBHCs (Frederico, Marshall, & Melinkovich, 2011; Gustafson, 2005). The Affordable Care Act provided \$200 million in funding from 2010-2013 to address significant and pressing capital needs to improve delivery and support expansion of services at SBHCs (Pilkey, Skopec, Gee, Finegold, Amaya & Robinson, 2013). However, most SBHCs still depend on funding from state (76%) and/or local governments (37%) for their operations (School-Based HealthAlliance, N.D.).

The School-Based Health Alliance Census report revealed that the variety of funding sources SBHCs use include patient revenue (third party and self-pay), public and private sector grants, and in-kind partner support to assist with non-billable expenses (School-Based Health Alliance, ND). Funding has consistently been an issue because of states’ fiscal constraints. Patient care revenues have been insufficient to support SBHCs, and additional core grants are

required to sustain quality programs (Osius & Rosenthal, 2009). State general funds have represented the largest source of funding (80%), followed by other sources (14%) such as Medicaid match funds and Social Service Block Grants (School Based Health Alliance, N.D.). The 2013-2014 School-Based Health Alliance report also indicated that for school year 2013-2014, 18 states provided direct funding totaling \$85.1 million to a total of 915 SBHCs. This was a decrease of 5% since 2010-2011. Because of fluctuations in states' annual budgets, consistent and robust funding has been unpredictable, and consistency regarding number of hours open and number and type of providers available has suffered.

In a recent economic analysis of startup and operational costs of SBHCs, authors Ran, Chattopadhyay, and Hahn (2016) noted that results from studies on SBHCs showed that societal benefit per SBHC exceeded intervention cost, with the benefit-cost ratio ranging from 1.38:1 to 3.05:1. Medicaid net savings ranged from \$30 to \$969 per visit, meaning that there was a net total savings to Medicaid because of SBHC use. In 2013, the New Mexico School Based Health Alliance funded a study to estimate the expected value-return investment on services provided by 56 SBHCs funded by the New Mexico Department of Health. Their findings indicated an estimated annual return on investment per dollar of funding to be \$7.01 (New Mexico Alliance for School-Based Health Care, 2013). Yet despite these cost savings and return on investment both nationally and in New Mexico, SBHCs struggle to maintain adequate sustainable funding limiting their ability to provide primary care and behavioral health services to vulnerable populations. SBHCs services contribute to the prevention downstream obstacles and more costly care. Further investment in preventative measures such as those delivered at SBHCs not only provide downstream savings but can help balance inequities in educational and health achievements.

SBHC users. Demographic information regarding SBHC users is important data that can help shape policies that govern the services provided by SBHCs. Some user descriptors are frequency of use, potential positive behavioral health findings, adverse childhood event accounts, as well as information linking gender to use of services and diagnosis. The following paragraphs help to explore the SBHC literature data regarding SBHC user information.

Exploring frequency of SBHC use is important to better understand the characteristics of students who use SBHC services. To differentiate characteristics between average SBHC users (≤ 3 visits), frequent users (≥ 4 or more), and nonusers, authors Pastore, Juszczak, Fisher and Friedman (1998) analyzed data from 630 students enrolled in an urban New York City high school with a SBHC. Of the 630 students surveyed, 60% were enrolled in the SBHC. The authors found that 31% of all the 630 students surveyed screened positive for depression, alcohol use one or more times per month (21%), daily alcohol use (5%), a history of a suicide attempt, (10%), and being involved in a school fight (25%). Fully 50% of the students surveyed indicated they know someone who had been murdered. There were no differences found between average, frequent, and nonusers of SBHC regarding depression, suicidal ideation or attempt, alcohol use, or exposure to violence. Of the SBHC users, 75% reported average use, and females were more likely than males to be frequent users. Behavioral health services constituted approximately 34% of the SBHC user visits. This data suggests that a large majority of students served by a SBHC experience adverse stress, depression, and substance abuse. Although the data were specific to New York City, it is not unreasonable to argue that similar trends may be present within SBHCs across the nation.

Gender data regarding SBHC users is varied. That said, in general males were less likely to visit SBHCs: 17% in a study by Juszczak, Melinkovich, and Kaplan (2003), 40% in a study by Amaral et al. (2011), 45% in a study by Pastore et al. (1998), 37% in a study by Soleimanpour et al. (2010), 43% in a study by Adelman, Barker & Nelson (1991), 47% in a study by Balassone et al. (1993), and 37% in a study by Kaplan et al. (1998). Adelman et al. (1991) found no significant differences among females and males in rate of SBHC use. Wolk and Kaplan (1993) also reported frequency data on 1,413 SBHC users at three high schools in Denver. Frequent users (fifteen or more visits per year) were more likely to be female (71%), have lower grade point averages, have higher risk behavior profiles, and had a higher percentage of behavioral health visits. Most the SBHC data indicate that females are more likely to visit a SBHC, as well as more likely to have multiple visits and receive behavioral health services more often than males. While overall it appears that male students' access SBHC services less than females, this does not indicate they are not in need of services. This may reflect ongoing gender and/or cultural norms. Research that assists in better understanding of this phenomenon (especially related to use of SBHC services) is therefore needed.

Racial/ethnic demographics of SBHC users vary but a majority of findings from states such as California (Adelman et al. 1991; Amaral et al., 2011), Colorado (Anglin, Naylor & Kaplan, 1996), and New York (Pastore et al., 1998) indicate that the racial/ethnic makeup of the students who use SBHC services tend to reflect that of the school as a whole. As mentioned earlier, SBHCs across the U.S. tend to be located in schools where more than 50% of the students are eligible for free or reduced priced lunch, indicating that SBHCs serve a more vulnerable population. More Hispanic and non-White children and adolescents live in poverty

relative to Non-Hispanic Whites; therefore, the students served by the SBHCs in low-income neighborhoods tend to reflect a non-White Hispanic and low-income population.

Summary of national SBHC information. Nationally, SBHCs provide primary care and behavioral health services to low-income students of color in both metropolitan and rural settings. The majority of SBHCs are in high schools where they provide much needed services to high risk students. More female adolescents tend to use all forms of SBHC services than male adolescents, and female adolescents also tend to use behavioral health services more often than male adolescents. Also, SBHC users tend to reflect the student population as a whole, as most SBHCs are located in low-income neighborhoods with larger minority populations.

New Mexico's SBHCs. The majority of New Mexico's SBHCs are partially supported by the New Mexico Department of Public Health's Office of School and Adolescent Health (OSAH). Other sponsoring agencies include Federally Qualified Health Centers (FQHC) (63.01%), Regional Education Cooperatives, (8.22%), Universities, (10.96%), Indian Health Services/Tribal (9.59%), Hospital (5.48%, Other 2.74%) (New Mexico Alliance for School-Based Health Care, 2018). The sample for this study was recruited from SBHCs in New Mexico. According to the 2017-2018 New Mexico School-Based Health Centers Status Report (New Mexico Department of Health, 2018), during school year 2017-2018, OSAH supported 48 SBHCs located in 22 of 33 total counties in New Mexico. Sixty eight percent of SBHCs are open three days a week or fewer, primary care hours offered an average of 17 hours per week, and behavioral health 22 hours per week. Sixty three percent of students were Hispanic, 23% White, and 9% American Indian. Females constituted 59% of the visits and males 41% (New Mexico Department of Public Health, 2018). A total of 18,609 students made 56,566 visits to SBHC. Eighty six percent of visits were for primary care, 26% for behavioral health services, four

percent for oral health. Twenty five percent of male patients reported depression and/or anxiety, while 36% of females reported the same. Fourteen percent of all patients identified as Lesbian, gay, bisexual, transgender or queer (LGBTQ), and 56% of those students reported depression and/or anxiety. Seventy one percent of students who reported depression and/or anxiety also reported a history of abuse, and 55% reported a history of homelessness. Of the 26% who received behavioral health services, 40% were for severe stress, 17% general, 18% depression, and 9% anxiety. The majority of SBHCs (98%) also provided health promotion and prevention services, 83% provided youth engagement, 69% included reproductive health care, 69% provided immunizations, and 17% provided oral health care (New Mexico Department of Public Health, 2015).

Koenig, Ramos, Oreskovich, McGrath, and Fairbrother (2016) examined medical claims data from the 2013-2014 New Mexico OSAH's SBHCs encounters to describe patterns of care and service use. The total number of students who received services was 7,885, with 33.4% of users being White non-Hispanic students, 35.8% Hispanic students, 14.1% American Indian or Alaska Native students, and 1.8% Black students. Males accounted for 35.3% of the users and females for 64.7% of the users. Frequent users were defined as having four or more visits during the year, and infrequent users were defined as having one to three visits during the year. Females accounted for 73.7% of the frequent users, and males for 26.3% of the frequent users. Most of the visits were for reproductive health (22.9%) and behavioral health (42.4%). Males were more likely than females to receive behavioral health services. American Indian and Hispanic youth had higher odds (adjusted OR=1.88 and 1.70, respectively) of receiving behavioral health and physicals than other races/ethnicities. The results of the Koenig et al. study clearly indicates the need for and use of behavioral health services by adolescent males of color in New Mexico.

SBHCs and Outcomes Research

Conducting rigorous quantitative studies that track the outcomes of SBHCs are difficult for a variety of reasons. One reason has been put forward by Bersamin, Garbers, Gold, Heitel, Martin, Fisher, & Santelli (2016) in their review of the SBHC evaluation literature. The authors note that the literature encompasses “different outcomes and varying target populations, study periods, methodological designs, and scales” (p. 3). Challenges to rigorous studies of SBHC health outcomes are identified as maturation, self-selection, low statistical power, and displacement effects (Bersamin et al., 2016). In addition, in the past two decades there have been two laws that have made it more difficult to link educational outcomes with SBHC interventions. The Health Improvement Protection and Portability Act (HIPPA) and the Family Educational Privacy Rights Act (FERPA), both limit access to medical and educational records of students. Researchers have had to use less precise data such as overall graduation rates or dropout rates rather than data from individuals.

A consequence of these limitations is that it has become hard to ascribe any one SBHC intervention to specific outcomes due to a variety of factors that cannot always be controlled for by research design or statistics. SBHCs are not uniform, as most vary in number of hours open and services provided. Provider turnover and number of years open can also affect services, which also contributes to researching SBHC as an intervention problematic. According to Federico, Marshall, and Melinkovich (2011), while it is “difficult to associate SBHCs with individual student success or health outcomes, data focused on health and health care use has been more promising” (p. 4). Perspectives from behavioral health providers on services to low-income adolescent male students could add to health care use data. Despite the above listed limitations, the remaining review of literature includes a focus on SBHC and behavioral health

outcomes, SBHC and academic outcomes, and provider perspectives research. This section also includes a discussion regarding why this research is important, a presentation of the methodological challenges associated with this research, a review of the studies that include direct and indirect outcome measures, identifications of gaps in the literature, and a discussion about how the proposed research may help to fill these gaps.

SBHCs and physical health outcomes. Notwithstanding the difficulty in conducting rigorous quantitative studies in this area, many studies related to SBHC outcomes have been published over the past 20 years. In a systematic review of 46 SBHC studies on the effectiveness of educational and health-related interventions, Knopf et al. (2016) concluded that the presence and use of SBHCs was associated with educational and health-related outcomes. Improved health outcomes included vaccine delivery, asthma morbidity, emergency department and hospital admissions, and contraceptive use among females, prenatal care and birth weight, and increased use of preventative services.

In a systematic review of the role of SBHC related to adolescent sexual, reproductive, and mental health, Bersamin et al. (2016) indicated there was a scarcity of high-quality research in this area, especially since they were not able to locate any randomized control studies. In a comparison study of 3,599 adolescents (790 SBHC users and 925 non-SBHC users) from nine SBHCs and nine Community Clinics in Denver, SBHC users were more likely to have made three or more primary care visits (52% vs. 34%), less likely to have an emergency room visit (17% vs. 35%), more likely to have received an influenza vaccine (45% vs. 18%), a tetanus booster (33% vs. 21%), and a Hepatitis vaccine (46% vs. 20%), as well as receiving a health maintenance visit (46% vs. 33%) (Alison, Crane, Beaty, Davidson, Melinkovich, & Kempe, 2007). In a controlled before and after study, Ethier, Dittus, DeRosa, Chung, Martinez and

Kerndt (2010) found that girls who received care at a SBHC at a high school in Los Angeles were more likely to be tested for sexually transmitted infections (33.8% vs 22.7%), receive STI/pregnancy prevention care (61.4% vs 53.1%), and have increased hormonal contraceptive use (18.1% vs 12.4%) compared to non SBHC users. There were no significant outcome differences between male participants who used a SBHC and those who did not.

Despite difficulties in conducting rigorous qualitative physical health outcomes studies, there is evidence that SBHCs can affect physical health habits and health outcomes. This includes the number of vaccinations, health maintenance visits, BMI, students' screen time, reduced emergency room visits for students with asthma, as well as reduced absenteeism related to asthma symptoms. SBHC studies had mixed results related to reproductive health outcomes, yet multiple unaccounted variables and not being able to randomize study participants could account for this discrepancy.

SBHC and Behavioral Health Outcomes

SBHC behavioral health outcomes: quantitative research review. Review of SBHC behavioral health studies is an important component to better understanding how SBHC may contribute to reducing the high school dropout rate and improve academic outcomes. Both quantitative and qualitative studies that included behavioral health outcomes related to use of SBHCs or behavioral health service were few or limited in strength of design. Like much of the SBHC research, there are no randomized controlled trials in this area. Results associated with studies of SBHCs and behavioral health outcomes were varied. Two studies (Juszczak, Melinkovich & Kaplan 2003; Kaplan et al., 1998) did include control groups to account for self-selection effects. Most of the other quantitative studies were descriptive with common themes including frequency of visits, statistics regarding gender of users, percentage of high-risk

behaviors by users of behavioral health SBHC users, insurance types, and reasons for seeking services. For the purposes of this review, only studies that were done in middle schools or high schools will be included.

Motives for seeking services and diagnosis ascribed to SBHC behavioral health users varied, but several issues were prominent across multiple studies. These commonalities included family conflicts (Adelman et al. 1991; Mangat Bains et al., 2014; Kaplan et al., 1998; Menden Anglin et al., 1996; Pastore et al., 1998; Soleimanpour et al., 2010), suicide ideation or attempt (Adelman et al., 1991; Amaral et al., 2011; Kaplan et al. 1998; Anglin et al., 1996; Pastore et al., 1998, Soleimanpour et al., 2010), anxiety or adjustment and anger management (Balassone et al., 1993; Kaplan et al., 1998; Anglin et al., 1996; Soleimanpour et al., 2010), a student's own alcohol or drug use (Adelman et al., 1991; Amaral et al., 2011; Kaplan et al., 1998; Pastore, et al., 1998). Other reasons mentioned were academic performance (Adelman et al., 1991; Soleimanpour et al., 2010), depression (Kaplan et al., 1998; Pastore et al., 1998), peer relationships (Adelman et al., 1991; Soleimanpour et al., 2010), posttraumatic stress disorder (Kaplan et al., 1998; Anglin et al., 1996), a student's family member using alcohol or drugs (Kaplan et al., 1998; Pastore et al., 1998,), sexual issues (Adelman et al., 1991), insomnia (Amaral et al., 2011; Anglin et al., 1996), physical abuse, (Balassone et al., 1993), sexual abuse (Balassone et al., 1993), weight concerns (Balassone et al., 1993; Pastore et al., 1998), pregnancy (Pastore et al., 1998), conflict and violence, (Pastore et al., 1998), cultural conflict (Pastore et al., 1998), and negative peer pressure (Kaplan et al., 1998).

Although not specifically about outcomes of SBHCs, two studies suggest that access to a SBHC increases utilization of those services. Using a retrospective cohort design, Juszczak et al. (2003) compared medical encounter data on SBHC users versus a similar cohort using services at

a local community clinic. Findings included higher rates of both primary care and behavioral health service use by minority youth, with Hispanic youth averaged 6.6 visits per year and African American youth averaged 10.6 visits per year at the SBHC. Thirty-four percent of the visits to the SBHC were for behavioral health services, as compared to 97% primary care visits only at the community clinic. Male SBHC users were 45 times more likely to have a behavioral health visit than male adolescents at the community clinic. Male SBHC users made one to four more visits a year to the SBHC than to the community clinic. No statistical differences were found in utilization of behavioral health services based on race. In the SBHC user group, behavioral health visits accounted for 45% of all visits for students with Medicaid, and 30% of visits for uninsured students.

Kaplan et al. (1998) also used a retrospective cohort design to compare Health Management Organization adolescent members' use of health services between students who had access to a SBHC and those who did not. Those adolescents who had access to a SBHC were ten times more likely to make a behavioral health or substance abuse visit than those students who did not have access to a SBHC. Thirty-one percent of students who used the SBHC also used behavioral health services, and 8% used substance abuse services. Thirty-seven percent of all visits to the SBHC were by males; that said, information regarding use of primary care or behavioral health visits by gender was not included. Both Juszczak et al. (2003) and Kaplan et al. (1998) suggest that the existence of a SBHC may encourage behavioral health visits when compared to usual community health care services. What remains unclear is whether these visits have a positive effect on students' behavioral health or academic outcomes.

Two studies have demonstrated positive effects of SBHCs on behavioral health. Of all the factors associated with SBHC behavioral health, substance use in adolescence is most frequently

comorbid with behavioral health problems (National Institute on Drug Abuse, n.d.). In a study of the impact of SBHCs on the substance use behaviors of low-income inner-city African American adolescents, Robinson, Harper, and Shoeny (2003) surveyed 2,114 9th- and 11th-grade students from seven inner-city public high schools (three with SBHCs and four without SBHCs). Of the initial 2,114 students, 598 SBHC students and 598 non-SBHC students were matched using ethnicity, grade, gender, and propensity scores. The propensity scores were derived from a logistic regression equation with SBHC status (i.e., SBHC vs. non-SBHC) as the dependent variable and socioeconomic status index, family health insurance status, number of parents living in home, family functioning, self-reported academic standing, and social stress used as independent variables. The results of separate grade by gender by SBHC analysis of variance outcomes indicated significant interactions between grade and SBHC, such that substance use decreased in SBHC schools while increasing in non-SBHC schools for cigarettes and marijuana, but not for alcohol. These findings show that the SBHC intervention model is promising toward the prevention and reduction of substance use among high-risk African American adolescents and highlight the importance of accessible behavioral health care.

In a 2010 study of 7,410 students using 12 SBHCs in California, Soleimanpour et al. (2010) evaluated the impact of visits to the behavioral health provider on mental health outcomes. To track impact data, behavioral providers documented the status of students' presenting concerns and resiliency factors on a standardized mental health encounter form. Providers were asked to rate students on both their presenting concern and resiliency factors at each visit based on their clinical expertise. Only data from students with at least three mental health visits was evaluated. Comparison of "baseline visit" (first mental health visit) and their "follow-up visit" (last visit at least three months after the baseline visit) was assessed. If clients

were missing provider-reported data at baseline or follow-up, they were excluded from the analysis. Students qualifying for inclusion in the sample made an average of 17 visits each (with a range of four to 184 visits). Behavioral health providers reported significant improvements from baseline to follow-up in nine of 12 documented presenting concerns: these included anxiety or nervousness, depression or sadness, eating disorders, grief, loss, or bereavement, oppositional/defiant behavior or anger management problems, relationship issues or conflict, self-injury, substance abuse, and suicidal ideation or attempt. The presenting concerns that did not improve significantly over time were identity issues, school behavior or academic performance issues, and posttraumatic stress disorder. It is important to note that outcomes were based on individual behavioral health providers' subjective evaluation of students' progress (or lack of progress). It is unclear from the article if the tool used for measurement, the so-called "standardized mental health encounter form," was a validated tool. The providers' individual interpretation and classification of results could have varied widely. A finding from this study that could be relevant to the current proposed study is that SBHC behavioral health counseling did not lead to improved academic performance. However, providers were not interviewed about their perspectives regarding how behavioral health services at a SBHC may impact academic outcomes of students served.

Data from these quantitative studies helps to support the argument that SBHCs increase access and utilization of behavioral health services to hard to reach populations such as low-income adolescent male students. Provision of behavioral health services that are easily assessable and responsive to the needs of adolescents may help to reduce health and educational disparities in youth of color.

SBHC behavioral health: qualitative research review. In a qualitative study of 18 youth receiving behavioral health services from a SBHC in Chicago, Gempetro et al. (2012) explored behavioral health needs and gaps in SBHC services through semi-structured interviews. Repetitive themes emerged from the data analysis, especially under the category of adolescent concerns. Several themes were identified as being major issues, including personal and family relationships, educational and vocational choices, health maintenance, and financial independence. Family relationships were one the most commonly voiced concern, with distress regarding family members' physical health and relationships with parents and significant others also being prominent concerns. Graduation, grades, and studying for ACT emerged as the most common educational concerns. Most of the students interviewed indicated that the SBHC was their primary source of medical and behavioral health services. Gempetro et al. (2012) reported that students felt that the behavioral health services were "reliable, supportive, and confidential" (p. 28). One student did indicate that without the SBHC counseling services they would not be in school: "I think I'd be... I would be somewhere doing stuff I'm not supposed to be doing" (p. 28). It should be noted that the interviewers did not ask about student's grades or academic standing, and that data from the school regarding academic standing was not collected. Interviews of the behavioral health providers were also not included.

SBHC and Academic Outcomes

SBHC and academic outcomes: quantitative research review. In this section, research related to SBHCs and academic outcomes will be reviewed. As noted above, current research measuring the impact of SBHC services in general is somewhat limited by methodologic and logistical challenges, including restriction to individual educational data by the Family Educational Rights and Privacy Act (FERPA). FERPA is a federal law that protects the privacy

of student education records; this law applies to all schools that receive federal funds from the U.S. Department of Education (U.S. Department of Education, N.D.). This limitation makes it difficult to link individual academic outcomes with SBHC use. Indeed, the literature suggests that the linkages between SBHCs and health care outcomes are closer than the linkages between SBHCs and academic performance (Strolin-Goltzman, Sisselman, Auerbach, Sharon, Spolter, & Beth Corn, 2012). With persistent behavioral health and educational disparities among low-income students of color, research into the linkages between SBHCs behavioral health services and academic performance is essential.

Specific measurement outcomes and methodological designs of studies examining SBHCs and academic outcomes often vary. In a 2014 white paper, Soleimanpour and Geierstanger¹ set about to assist SBHC researchers to better study associations between SBHCs and academic indicators. Academic success was defined by these authors as “outcomes, behaviors or characteristics of students that lead toward high school graduation” (p. 5). Because SBHCs do not provide direct educational activities (accepting the individual or classroom-based health education), the relationship between SBHC and academic outcomes is thought of as indirect (Soleimanpour & Geierstanger, 2014). Based on this, the design of research outcome measurements can be divided into two types: direct and indirect. What are termed “direct” outcome measures mean those that directly measure academic success such as attendance, drop-out rate, improvement or maintenance of grade point average (GPA), school tardiness, college

¹ The Soleimanpour and Geierstanger (2014) paper is an updated report of a 2004 article entitled *Documenting the Link Between SBHC and Academic Success* by Peterson Geierstanger, Amaral, Mansour, and Russel Walters (2004).

preparatory activities, graduation rates, rates of disciplinary actions, rates of promotion to the next grade, and early dismissal. Further distinction of direct outcomes includes the division between measurement of educational outcomes and educational behaviors. Educational behaviors include such measures as school attendance, tardiness, and discipline rates, while educational outcomes include graduation rates, promotion rates, or drop-out rates. A focus on educational behaviors versus educational outcomes is a purposed strategy to overcome the difficulties in correlating use of SBHC or presence of a SBHC with more distal educational outcome indicators such as graduation or promotion to the next grade (Geierstanger, Amaral, Mansour & Walters 2004). Indirect measurement outcomes refer to outcome measures that are thought of as having less direct effect on individuals and more positive effect on the learning or school environment. These include perceived high expectations by adults, better engagement of students to their schools, and association of caring adults. In some instances, indirect indicators can affect direct indicators, thus causing synergy between the two (Geierstanger et al., 2004).

Another example of how the measurement outcomes and methodological designs of studies examining SBHCs and academic outcomes often vary can be found in data from a study by Soleimanpour et al. (2010). Their data included a survey of student reported impacts of use of SBHC services, although the study did not differentiate between primary care and behavioral health services. Of the 264 responses (94% of the sample), 59% indicated that use of the SBHC had helped them stay in school. In contrast, Adelman et al. (1991) found no significant differences between SBHC users and non-users in self-reported grades and absences, they too did not distinguish between primary care users and behavioral health users. Amaral et al. (2011) found that SBHC behavioral health users had overall poorer grades (Cs, Ds, and Fs) than both SBHCs primary care users and SBHC non-users.

Similar to the works discussed above are the findings of an investigation by Walker, Kerns, Lyon, Bruns, and Cosgrove (2010). These authors reported that while overall the SBHC users had lower grade point averages than non-users, use of the SBHC was predictive of increases in GPA overtime, especially for those receiving behavioral health services. Attendance rates were lower for all SBHC users, with both primary care and behavioral health users increasing attendance rates over time but not reaching levels of significance. The authors reported that the change was observed more strongly in the primary care group.

The mixed findings in these studies illustrate the difficulty in conducting SBHC outcomes research but also to the complexity in attributing SBHC services (either primary care or behavioral health services) to specific outcomes, particularly academic measurements. Yet despite the methodological challenges of accessing students' academic records, some researchers have been successful in determining the efficacy of SBHC services and specific outcomes. For example, McCord, Klein, Foy, and Fothergill's (1993) School-Based Clinic Use and School Performance study is one of the earliest studies examining SBHC use and academic outcomes. Outcome measures were direct and included students' absences, suspension rates, drop-outs, and graduation or promotion rates. A positive correlation was found between users of the SBHC and staying in school (i.e., not dropping out), promotion to next grade level, and graduation as compared to non-users. Absenteeism rates were not statistically different between the SBHC users and non-users. Subpopulation data suggest that Black males who used SBHCs were three times more likely to stay in school than Black male non-SBHC users. Two-thirds of Black males who graduated or were promoted were also SBHC users. There was also a linear relationship between number of times a SBHC user accessed the SBHC and graduation or promotion. Problems associated with the study include that the school was an alternate high school for

“students not able to succeed in traditional educational programs” (p. 91); as such, the findings could not be generalized to most other public high schools. Additionally, all the students at the high school were high risk. This means that the authors were not able to distinguish differences between the SBHC users versus non-users, as propensity scoring was not used to reduce bias based on non-randomization of the two groups. Missing from the reported data was information distinguishing types of visits (behavioral health versus physical health) which could offer a more distinctive understanding of how use of SBHC services, specifically behavioral health services, may have correlated with graduation or promotion. Behavioral health providers themselves were not included in the study. Number of hours of utilization was also missing from the data, thus making it difficult to discern if there was a dose response rate (hours of utilization) also associated with the outcomes. Examination of data that included gender, ethnic or racial demographics of students was absent.

Cusworth-Walker, Kerns, Lyon, Bruns and Cusgrove (2010) used a longitudinal retrospective model to examine direct effects of SBHC use on academic outcomes for a new cohort of ninth graders entering high school in Seattle. The authors had access to linked school district and SBHC data for all school district youth from September 2005 through January 2008. Differences between SBHC users and non-users were controlled for via the use of propensity scoring. The SBHC users were more likely than non-users to have lower GPAs, lower attendance rates, higher discipline rates, be eligible for free or reduced lunch, be of African American or American Indian / Alaskan Native race and be female. Findings were inconsistent among outcome variables. For example, attendance rates were favorable for the SBHC users, with initial attendance rates dropping and then gradually increasing over time at a rate greater than non-users. Grade point average increased in both groups over time, but there was a more rapid

increase for SBHC users. This effect was stronger for behavioral health users. While discipline rates were low overall for both users and non-users, discipline incidence was not favorably affected by SBHC use. SBHC users, compared to nonusers, also had significantly higher rates initially and maintained those rates throughout the study period. The authors also noted that the discipline rate for medical services users and behavioral health users were both higher than non-users at baseline, and that this did not change over time. It is important to note that Cusworth Walker et al. overcame bias in maturation, selection, dosage, and systematic differences by use of entering class proxy base-line study design, propensity score methods, and the linkage of different data sets, all of which offered a stronger design and ability to measure outcomes.

Van Cura (2010) and Bersamin et al. (2016) examined the relationship between SBHC use and direct academic outcomes (standard measures of absence and early dismissal rates) in a quasi-experimental study. Their choice of outcome measures helped to overcome the flaws of using conventional attendance data as a direct outcomes measure, as students are often counted as “present” even if they were sent home within an hour of arriving to school (Van Cura, 2010). Loss of seat time, which was measured as the time elapsed from when the student first entered the health center until the official end of school day, was also captured. Using a convenience sample from two urban high schools in New York (one school with a school nurse and a SBHC and one with a school nurse), data was analyzed and compared between students who saw the school nurse and those who were seen at a SBHC during a three-week period. Findings included that students not enrolled in a SBHC were significantly more likely to be sent home. There were no statistically significant differences by age, gender, race, or poverty. Loss of seat time data indicated that students not enrolled in a SBHC lost three times as much seat time as SBHC users. Missing from the study was data regarding types of services offered and utilized. Knowledge of

why students were being seen by the SBHC could also help to better understand how more exactly SBHCs may keep students in school versus students who are seen by the school nurse or those students seen at the SBHC and then sent home. Data collected from the behavioral health providers could also have assisted in better understanding of the dynamics involved in how being a SBHC user could help to decrease a student's potential loss of seat time, thus suggesting that more study in this area is needed.

A more recent study also measuring direct outcomes and had inconsistent findings. Bersamin et al. (2016) used population level data to examine the association between SBHC presence and school-wide measures of academic achievement and college preparation efforts. Publicly available data from 810 public high schools in California was used; propensity scoring was the method to match schools with a SBHC to comparison schools without a SBHC. Measurement outcomes included percentage of students taking all three of the College Board exams, graduation rates, and meeting college bound graduation requirements. SBHC services were not heterogeneous across clinics (i.e., not all the SBHC provided the same services), as the authors noted that while 87% of SBHC in California provide medical services, only 64% provide mental health services. The presence of a SBHC was positively associated with college preparation (i.e., test taking efforts), but not with actual graduation rates or meeting college graduation requirements. The authors attributed the inconsistent findings with their research to the fact that high school graduation reflects “a long trajectory of academic achievement” (p. 244), while test taking and enrollment in college preparatory courses are more suggestive of current involvement in high school. Maturation was unaccounted for as the description of what services were provided, hours of operation, and length of SBHC presences specific to this study were not discussed within the article. Discussions regarding the mechanisms of action suggest

that SBHC studies include more indirect outcome measures of SBHCs such as contributing to students' connectedness with schools, a caring adult, and improving school environment, variables that this proposed qualitative study may help to explore.

The studies reviewed so far have involved direct measures of academic outcomes, but other studies look at more indirect effects. In a review of the literature on school climate, Libbey (2004) found nine constructs related to school connectedness across studies. These constructs include academic engagement, belonging, discipline and fairness, likes school, student voice, extracurricular activities, peer relations, safety, and teacher or school staff support. The author found that these nine factors are often measured in different ways but are still highly associated with student outcomes (Libbey, 2004). SBHC research regarding more indirect effects of SBHCs on academic outcomes of students base their measurement outcomes on many of the reported nine constructs, as well as relationship with trusted adult, which is implied in the construct of teacher or school staff support.

Strolin-Goltzman assessed the relationship between schools with a SBHC and school learning environments (Strolin-Goltzman, 2010; Strolin-Goltzman et al., 2012; Strolin-Goltzman, Sisselman, Melekis & Auerbach, 2014). In the first two articles by Strolin-Goltzman and colleagues (2010 and 2012), researchers used secondary data from a Board of Education Learning Environment Survey (LES) to compare schools with a SBHC and without a SBHC. Participants included parents, teachers, and students (grade 6-12) from 208 large northeastern city schools with a SBHC and 208 schools without a SBHC. A retrospective quasi-experimental design was used to examine the correlations between SBHCs and perceptions of the overall school learning environment. Areas of inquiry included academic expectations, communications, engagement, safety, and respect. Propensity scoring, and nearest neighbor technique were used to

select matching schools. Five covariates were used in the analysis for producing the propensity score: race/ethnicity, poverty (free lunch), enrollment, percent special education, and percent English language learners. Data was analyzed at the student, parent, and teacher level at each school. Students and parents from schools with SBHCs rated academic expectations and school engagement significantly higher; parents in schools with SBHCs rated communication higher as well. Yet teachers in both groups of schools did not rate either academic expectations, communication, or school engagement significantly different. Safety and respect were rated higher by students in schools with SBHCs, but the difference was not statistically significant. There was no statistical difference between parents and teachers in the control and comparison groups regarding safety and respect. Findings also suggested that the presence of a SBHC is associated with greater satisfaction with three out of four learning environment domains (safety and respect, communication, engagement and academic expectations). Students and parents from schools with SBHCs perceived their schools more favorably than students and parents in schools without SBHCs. Missing data from this study included gender, race, and ethnicity, and the authors did not include behavioral health providers as subjects.

In the second article, Strolin-Goltzman et al. (2012) used the same data to address whether there was a difference in the effect of SBHC on the learning environment depending on school type (i.e., elementary/middle/high school). While there was a positive difference in learning environment for those in an elementary or middle school with a SBHC (as measured by safety and respect, communication, engagement, and academic expectations) the authors found no significant differences between student groups at the high school level. It is possible that there were other significant differences between the schools besides the level of schooling; as such, and to make the outcome measures stronger, more data regarding the SBHCs, along with an

independent survey regarding the school from the SBHC staff, should be used to gain better insight.

The third article published used the same data as the first two, but in addition, school administrative records and surveys were used (Strolin-Goltzman et al., 2014). Grades, tardiness, attendance, and grade promotion data were collected. Also included was a survey documenting demographic variables, SBHC usage, and perceptions of school connectedness. A structural equation model was used to analyze the relationship between SBHC usage, school connectedness, and academic performance. Results suggested that SBHC users in middle and high school had GPAs that were 2.5 points higher than those for non-users and were more likely to be promoted to the next grade (90% versus 83%). There were no significant differences in absenteeism. School connectedness outcomes were more consistent, as SBHC users scored significantly higher on all six of the items related to school bonding. School attachment items were also rated higher by SBHC users; indeed, this was especially prominent regarding relationships with adults at the school. SBHC users had significantly higher measurements on five of the eight items measuring commitment to educational future. SBHC users were also more likely to report that they could reach their goal, succeed in school, and attend college. Limitations to the study include lack of description of SBHC characteristics and more specific statistics regarding types of SBHC use (primary care versus behavioral health services). Also missing was data collected from behavioral health providers, which is a significant gap this investigation hopes to overcome.

Stone, Whitaker, Anyon, and Shields (2013) used cross sectional data and propensity scoring to adjust for potential bias in the observed relationship between SBHC use and school assets. They used student reported data from a statewide survey to measure indirect outcomes

measures that included student reported caring relationships with SBHC staff and school assets, which was defined as the “presence of caring adults, high behavioral expectations, and opportunities for meaningful participation” (p. 526). Direct outcomes data was collected from students in the San Francisco Unified School District, which has SBHCs in 15 of its 19 high schools. Findings suggested that any use of a SBHC was positively related to students’ reports of a caring relationship with an adult SBHC staff member, total school assets, caring adult relationships, high expectations, and meaningful participation. Post-hoc analyses revealed evidence of a linear dose relationship between the number of times a student used the SBHC (one-two, three to five, and >10) and their reports of caring adults in the SBHC. A linear response was not found for school assets. For students who reported use of the SBHC >10 times, post-hoc analyses revealed significantly higher scores on caring relationships with adults, high expectations, and meaningful participation. Students who were in the other two user groups (one-two visits and three to five visits) did not differ from each other. Additional data collected from the behavioral health providers regarding how they viewed their relationships with the SBHC users could have enriched the findings associated with this research project.

SBHC and academic outcomes: qualitative research review. Only one qualitative study addresses students’ perceptions of academic outcomes related to SBHCs. In a study regarding students’ experiences and perceptions of behavioral health services at SBHCs, Mangot Bains et al. (2014) analyzed 22 individual interviews of African American and Hispanic males receiving behavioral health services at seven separate SBHCs in Connecticut. Four of the SBHCs were in high schools, and three in middle schools, all with similar socioeconomic demographics. The authors describe five themes as emerging from the analysis: the themes were “the burdens and hurdles in my life”, “the door is always open”, “sanctuary within chaos”, “they get us”, and

“achieve my best potential” (p. 414). Within the theme of “achieve my best potential”, many of the students recalled that by receiving behavioral health services at the SBHC they could “function to the best of their ability” (p. 416). This was linked to better academic performance by some of the students. As one student reported, “My grades are going up, everything is going up, I only got one suspension so far. That’s a great improvement” (p. 416). Another student reported “she helped me, and I got an A+ in the class” (p.416). One limitation was that interviews of the behavioral health providers at the SBHCs were not included in the study.

Summary of SBHC and academic outcomes studies. The assumption that healthy students make better students is logical one. Indeed, in a landmark study by Ickovics, Carroll-Scott, Peters, Schwartz, Gilstad-Hayden and McCaslin, (2014), students with more health assets were more likely to be at goal and achieving goals with respect to standardized testing in math and English as compared to students with lesser health assets. While SBHCs play an important role in providing access to care for low-income students of color, quantification of and correlational associations between SBHCs and specific academic outcomes have not always been found. Despite inconsistent findings among direct outcome measure studies, McCord, Klein, Ford and Fothergill (1993) did find a linear related relationship between number of times used and staying in school, graduating, or being promoted to the next grade. That said, Cusworth et al. (2010) had more nuanced findings that were less consistent with ‘terminal’ findings such as graduation or promotion to the next grade. This included measurement of GPAs over time and not just at end of semester or school year. This technique helped to elucidate that SBHCs users (when compared to non-users) had greater increases in GPA over time, and that SBHC users who received behavioral health services were more likely to improve their GPAs. Cusworth et al.’s exploration of more intermediate educational behavioral outcomes such as GPA, discipline rates,

tardiness, and attendance rates among user versus non-users, as well as types of services used, did help to ascertain less direct routes of association between SBHCs and academic outcomes, although again, results were not uniform. A better distinction of and control for risks among students using a SBHC (attendance less than 90%, grade point average less than 2.5, free or reduced lunch status, being Hispanic or African American), along with quantification of use (low, moderate and high) did further the understanding of who benefits the most from what services within the Cusworth et al. study.

Findings relating SBHCS to the educational behavior outcomes of being tardy, discipline rates, and days absent were also not consistent across studies. Strolin-Goltzman et al. (2014) found there were no significant differences in days absent between SBHC users and nonusers, and that SBHC users were tardy more often than non-users. Cusworth Walker et al. (2010) found no differences in rates of discipline between users and non-users over time. Further distillation of methodology would suggest that educational behaviors among subpopulations be conducted with attention to specific SBHC services (Soleimanpour & Geierstanger, 2005).

Indirect outcomes studies helped to reveal the possible role that SBHCs play in promotion of school connectedness. Again, findings were inconsistent, as authors Strolin-Goltzman (2010), Strolin-Goltzman et al. (2012), and Strolin-Goltzman et al. (2014) used a large secondary data set to explore the relationship between SBHC and the school learning environment. Differences between student, parent, and teachers regarding the presence of a SBHC and perception of its effects on academic expectations, communication, safety, respect, and school engagement were nevertheless revealing, as findings indicated that teachers from schools with and without a SBHC did not appreciate any differences among all measures. This is an important finding, as it could indicate a need for SBHC staff to reach out more to school staff

and/or communicate outcomes related to having a SBHC on campus. Findings from Strolin-Goltzman et al. (2012) suggest that SBHC outcomes may vary by type of school (elementary, middle or high school); as such, SBHC researchers could vary their outcomes measures based on the type of school the SBHC is located at. Indirect measurement outcomes may better identify risk process rather than risk factors and thus help to identify prevention targets. Risk processes are difficult to capture with quantitative data and direct measurement outcomes. To change the discourse on SBHCs and academic outcomes, it will be necessary to include contextual factors. Current SBHC research contains very little data regarding the experiences and perspectives of the providers that serve the students, which leads to a gap within the literature. The current study hopes to use qualitative data to fill this gap.

Inconsistencies across all studies in describing SBHC staffing, hours of operation, and length of time present at school, as well as consistency in staffing of SBHC and services used, make it difficult to attribute use of SBHC as a single independent variable. Therefore, future SBHC research needs to include as much detail about the SBHC as possible. All the studies cited were conducted in large urban school districts, none of whom had a majority Hispanic or Native American population. Because New Mexico has both a large Hispanic and Native American population and number of school districts in rural counties, more information is needed about how SBHC may affect the academic behaviors and outcomes of these populations. Missing from most of the studies reviewed within this chapter was research that included behavioral health provider perspectives on various aspects of providing care, especially with respect to their perspective on how behavioral health services may assist low-income adolescent male students to succeed academically. According to Soleimanpour and Geierstanger (2014), qualitative approaches can help to “yield important insights into program strengths and weaknesses” (p. 8),

a point which is missing from the current extant literature on SBHCs. While some SBHC qualitative data includes information from students and parents, there is no locatable research concerning behavioral health providers specific to how behavioral health services may affect academic outcomes.

SBHC Behavioral Health Services and Academic Outcomes

Health providers' perspectives. There have been very few SBHC studies that have included either primary care or behavioral health provider input. The few studies available have focused more on implementation of programs and processes of clinics rather than perceptions of providers regarding students and how receiving behavioral health services may affect students' academic outcomes. One article reporting on a case study by Blacksin and Kelly (2015) does include providers' perspectives on SBHC effects on student risk and protective factors. Blacksin and Kelly (2015) used a case study approach to better understand SBHC provider working relationships, motivations, and structure. Included in the case study approach were interviews with providers from the SBHC. Data was all collected from a high school SBHC in a suburban Chicago neighborhood. Interviews with SBHC staff participants included eleven staff members, all were female; additionally, eight were White non-Hispanic, one was African-American, one was Hispanic, and one was Asian. Their ages ranged from 36-58 years old. Of the 11 participants, eight were providers (3 family nurse practitioners, 3 pediatricians and 2 social workers). During the year of research, the SBHC had an enrollment of 1,868 students and had 2,588 clinical encounters from 845 students. Mental health services accounted for 571 of the 2,588 clinical encounters. The authors included a table describing the utilization of the SBHC by gender, race, and insurance status; that said, it should be noted that the information was on 'enrolled students' and did not include demographics specific to the enrolled students who

actually utilized the SBHC. Demographics provided included that 971 females and 897 male students were enrolled, 42% were Black non-Hispanic, 13% White-Hispanic, and 42% White non-Hispanic. The overall school population demographics were similar for a total of 3,147 students. Of the 1,868 SBHC enrollees, 46% had private insurance, 11% were uninsured, and 43% had Medicaid insurance. Forty percent of the overall school population were low-income, which indicates that a majority would either be uninsured or on Medicaid, which was similar to the SBHC enrollee students.

The authors developed the participant interview guide from the “theoretical framework, literature, and personal experience with the SBHC model and included items about working at the SBHC, service provision, access to care, and the SBHC as an influence on adolescent risk and protective factors” (p. 92). Semi-structured interviews with SBHC providers indicated that the SBHC under investigation was student centered. Three themes were identified as important to the concept of student centeredness: these included immediate access to adolescent-friendly services, providers as connectors, and a focus on the whole adolescent. The first two findings attest to the placement and process of SBHCs being student centered, as their location on campus greatly assists with access. Having both primary care services and behavioral health services available was invaluable to providing care to the ‘whole adolescent’ and for the role of providers being ‘connectors’.

A limitation of the study is that the interview guide was based on the theoretical framework and literature as described above and may have limited the providers’ responses. Student outcomes directly related to SBHC services was not included; instead, the focus was directed toward the provider perspectives on how the SBHC affected student risk and protective factors. Low academic achievement was associated with risk taking behavior. Thus, by

bolstering protective factors and reducing student risk taking behavior, SBHC services may indirectly affect academic outcomes. The individual providers' viewpoints on how their services may affect the academic outcomes of students was not collected. The authors did not mention use of open-ended questions or solicitation of providers' perceptions on direct or indirect educational outcomes related to SBHC services. Differentiation between behavioral health and primary care provider responses was not included.

Other than the investigation mentioned above, the SBHC research that included providers' perspectives is scant. Most of this literature included elements regarding process, or measurement of program implementation and as such was not reviewed here. The one qualitative study that included interviews of SBHC providers had an explicit goal of ascertaining how SBHCs affect the health and wellbeing of SBHC users (Blacksin & Kelly, 2015). The themes outlined were broad and not specific to academic outcomes. Research specific to SBHC behavioral health providers' perspectives on how SBHCs may affect academic outcomes of low-income adolescent male students is missing from the literature.

The data from quantitative research on SBHCs and behavioral health outcomes is limited and did not include any randomized controlled studies. Data that was collected tended to be descriptive rather than inferential. None of the studies included behavioral health providers as subjects. The qualitative studies focusing on SBHCs and behavioral health did provide contextual information from students about their hardships and the role of the SBHC in their medical and mental health needs. Research that included behavioral health provider interviews was missing. SBHC research on academic outcomes also included quantitative and qualitative studies. The quantitative studies primary focus was on students reported and student outcome data. Some of it was very favorable, but again due to HIPPA and FERPA laws, randomized

controlled studies were not conducted. Outcomes in the research were divided into direct and indirect. The direct outcome findings were mixed depending on data analyzed, while some students who used the SBHC may have missed more school, others had more improvement in GPAs over time than non-SBHC users. The indirect outcomes data was more promising with some data indicating that school connectedness specifically belonging, staff support, and presence of caring adults were positively associated with school outcomes. All of these measures could be linked back to the presence of a SBHC and in one study specifically to the number of times a student had been seen by a behavioral health provider. Missing from the data is the perspective of the behavioral health provider regarding this link. There were no quantitative studies that included behavioral health providers as subjects. The qualitative research related to SBHCs and academic outcomes included one study that consisted of interviews of adolescents regarding their perceptions of behavioral health services at a SBHC. Some of their responses alluded to academic gains. Perspectives of the behavioral health providers who served these youth were not included.

The literature reviewed for this paper has shown successful research techniques, but more importantly, some favorable physical and emotional health outcomes as well as some direct and indirect academic outcomes related to SBHC services. Despite the awareness within the SBHC scholarly field of the difficulty in obtaining data associated with linking services to outcomes of any type (including numerous systematic reviews, recommendations and guides to documenting the links between SBHCs and specific outcomes), no author has suggested interviewing providers directly. The few articles that do include provider input does not include direct questions related to providers' perspectives on how their services may affect a student's academic outcomes, and more specifically how it may affect low-income adolescent male

students.

Recent review articles regarding evaluation of SBHC research have the following recommendations relevant to this study's premises and design. Bersamin et al. (2016) recommend that further research on SBHCs needs to include the impact on "the health status or behaviors of specific understudied subpopulations such as males" (p. 9). Soleimanpour and Geierstanger (2014) advocate for the use of qualitative data to chronicle student 'success stories'. Understanding what is beyond behavioral, biological, and psychological factors that influence health is needed to help recognize what constrains and facilitates these factors (Hackman, Farah & Mooney, 2016). Missing from the SBHC literature are studies that focus on provider perspectives. Interviews with behavioral health providers at SBHCs in New Mexico regarding their perceptions of how behavioral health services support low-income adolescent male students academically can help to fill this gap.

Summary

Conducting SBHC research that supports evidence of direct health or educational outcomes is difficult. Some of the more promising quantitative studies on use of behavioral health services and academic outcomes, indicated minority male youth were more likely to access behavioral health and primary care services at a SBHC than in community clinics, this was also supported by one of the qualitative studies in which individual youth who accessed SBHC behavioral health services were interviewed. More specific to SBHC use and academic outcomes studies, promising findings included use of SBHC was predictive of increases in GPA overtime, attendance rates, staying in school, promotion to the next grade level, and graduation as compared to non-users. Positive outcomes from studies that included data related to students who used SBHCs or schools that had SBHC were as follows: Schools with SBHCs were more

likely to be positively associated with safety and respect, communication, engagement and academic expectations by students and parents than schools without SBHCs in the same school, students who received behavioral health services at a SBHC reported higher levels of caring relationships with adults, (a linear dose response). Weaknesses related to the literature on SBHCs and academic outcomes included inconsistencies among findings such as effect of SBHC use on tardiness, discipline rates, and days absent, as well as variations in SBHC characteristics such as hours of operation, number of hours that primary care and behavioral health services were available, and consistency of staffing. Limitations in the SBHC research literature include limited access to individual health and educational records, difficulty in comparing findings across schools and SBHCs due to multiple possible variations. Gaps in the literature include lack of research on SBHCs that include American Indians, Hispanic students, and no known research that specifically includes interviews with behavioral health providers at SBHC about their perceptions related to adolescent males, behavioral health services and academic outcomes. This qualitative descriptive study of behavioral health providers in SBHCs in New Mexico fills a large gap in the SBHC research literature by including behavioral health provider perspectives, and contextual information (provided by provider interviews) about adolescent males' lives in relation to school and behavioral health issues.

CHAPTER 3

Methods

Included in this chapter is the description of the study design, the study setting, sampling procedures, a description of the recruitment procedures and data collection protocol. An overview of the data preparation and data analysis is provided. A brief discussion explaining the researcher's choice of the term adolescent males (a biological term) instead of a social/gender terminology such as 'young men' or 'boys' is included. Finally, a discussion regarding methodological rigor, as well as ethical considerations of the research concludes the chapter.

Study Design

A descriptive qualitative methodological design, similar to Thorne's (2016) "Interpretive Description" (ID), was used to investigate:

- A. Perspectives of behavioral health providers concerning SBHC behavioral health services as supporting academic success among low-income adolescent male students.
- B. Behavioral health provider narratives for use in framing policy messaging.

According to Lambert and Lambert (2012), qualitative descriptive studies focus on "discovering the nature of specific events under study" (p. 256). Qualitative descriptive studies differ from phenomenology, grounded theory, and ethnography, as a qualitative descriptive study remains predominantly in the descriptive domain while the other three while also using rich descriptive detail "also tend to explain phenomena" (Lambert & Lambert, 2012, p. 255). Descriptive qualitative research is also different because it is "grounded in the general principles of naturalistic inquiry" (Jiggins Clorafi & Evans, 2016, p. 17). A descriptive qualitative approach

was therefore appropriate for this study, as individual interviews of behavioral health providers from SBHCs in New Mexico provided “rich descriptive content from the subjects’ perspective” (Jiggins Clorafi & Evans, 2016, p. 24).

It is important to note that Thorne (2016) developed her interpretive descriptive design “from the necessity to find a way to do the kind of applied qualitative research that could generate the kinds of understandings of complex... clinical phenomena that would be... relevant to the practice of nursing” (pp. 29-30). This approach is not attached to a particular theoretical or methodological tradition, but instead poses clear questions that have immediate clinical implications attached to their findings. As such, Thorne’s ID is compatible with Lambert and Lampert’s (2012) work, and it has the benefit of offering a lens through which to conduct the current study.

Setting

The study took place with behavioral health providers employed at 16 high school SBHC’s in New Mexico. For the 2017-2018 academic school year there were a total of 47 SBHCs in 42 separate communities in New Mexico, 42 of them are located in high schools.

Of the 166,700 youth ages 12-17 years in New Mexico, 58% are Hispanic, 26% Non-Hispanic White, and 10% American Indian and Alaska Native (AI/AN) (U.S. Census Bureau, 2014). Thirty percent of New Mexico’s children live in poverty, which is higher than the national average (U.S. Census Bureau, 2016). These statistics suggested that recruiting behavioral health providers from high schools that have a SBHC and provide services to low-income adolescent male students was feasible. A letter of support from the Executive Director of the New Mexico Alliance for School-based Health Care was obtained (Appendix A).

Sample

The study sample consisted of 17 behavioral health providers who worked in 16 SBHC (at the high school level) in New Mexico. A total of 42 SBHCs were contacted to participate in the study, one group consisting of three SBHCs, all sponsored by the same employer, were prohibited from participating. A total of twenty-six providers did not return emails or multiple telephone messages. Only one provider who did return a call declined to participate. Two providers were referred by providers the researcher had already interviewed.

Purposeful and snowball sampling was used. According to Patton (2002), purposeful sampling is commonly used in qualitative research for the “identification and selection of information-rich cases” (p.67). Inclusion criteria for participation specified that the individual be a behavioral health provider who worked at a SBHC (at the high school level) in New Mexico. In addition, participants’ must be comfortable conducting the interview in English, and participants must provide informed consent to participate in the study. It should be noted that exclusion criteria included behavioral health providers who work at a high school at which the researcher’s child attended.

In qualitative studies, there are no specific rules for estimating a sample size. Patton (2015) states that “sample size depends on what you want to know, the purpose of the inquiry, what’s at stake, what will be useful, what will have credibility, and what can be done with the available time and resources” (p. 311). That said, Guest, Bunce, and Johnson (2006) noted that data saturation usually occurs when 12 or more interviews are collected. As qualitative research sampling is more of an iterative series of decisions than a single decision (Guetterman, 2016). Data saturation was felt to occur during the thirteenth or fourteenth interviews, a few more interviews were conducted before the researcher felt satisfied and the final sample size was

reached at seventeen interviews. According to Bowen (2008), saturation is reached when the “researcher gathers data to the point of diminishing returns, when nothing new is being added” (p. 140).

Procedures

Recruitment procedures. All consent-related documents and forms required by the University of New Mexico Health Sciences Center Human Research Protections Office (HRPO), also known as the Internal Review Board (IRB), were prepared for accuracy to ensure that all guidelines were followed for the ethical conduct of research. Following approval from HRPO, email and telephone contact information for SBHC clinic managers and behavioral health providers was obtained from the New Mexico Alliance for School Based Health Care. A letter explaining the research project, as well as providing proof of IRB approval, was sent via email to all the SBHC clinic managers and behavioral health providers (Appendix B). As SBHC clinic managers often operate as gatekeepers to the clinic, inclusion of these individuals assisted in recruitment proceedings. The letter included a brief description of the project, how long individual interviews may take, and the researcher’s contact information (i.e., telephone number, email address). A follow up telephone call was made one week after sending the email. If the clinic manager and or the behavioral health provider was not available at the time of the phone call, a message with the researcher’s telephone and email contact was left. Despite messages being left either with clinic staff or on provider telephone messaging machines, multiple telephone calls were required to talk with behavioral health providers, sometimes taking up to three or four weeks to talk to them directly.

If a provider was interested in participating, then more specific details regarding the study and an estimation of the time required was provided both by telephone and email. If the potential

participant agreed to be included in the study, a specific date, time, and place away from the high school campus for an in-person interview was scheduled. One week prior to the scheduled interview, a reminder email was sent to the participant verifying date, time, and place of interview (See Appendix C). Most interviews took place at small restaurants in the school's communities throughout New Mexico.

Data collection protocol. Data was collected using individual semi-structured interviews (Appendix F) conducted at a time and site away from the high school campus that was most comfortable, private, and convenient for study participants. Written consent was obtained prior to the start of each of the interviews. A brief demographic questionnaire was given to the provider prior the start of the interview (Appendix D). Digital audio recording of the interviews was done to ensure accurate capturing of data. None of the participants declined to be recorded, however technical difficulties with two of the interviews did occur and responses were handwritten by the researcher at the time of the interview. The audio recordings, as well as transcribed interviews, were kept a locked file cabinet at the researcher's office at the College of Nursing at 1650 University Avenue, Albuquerque, New Mexico.

Data Preparation and Data Analysis

Data preparation. A CITI-trained transcriptionist was employed to transfer the audio content to written form. The researcher audited every transcription against the audio recorded interview and made corrections accordingly.

Data analysis. Analysis began with the first interview and proceed throughout the data collection, which according to Krueger (1998) can further inform data collection. Hand coding was used for this study. Use of hand coding was possible and preferable to this researcher as she had collected her own data and used her firsthand experience with the participants and settings to

assist in the coding and subsequent data analysis. Because the data only consisted of 17 interviews, hand coding was possible and reasonable. Analysis included separation and review of each providers' response to each interview question, division of that data into repeated words or phrases was done to further reduce the data into "meaningful segments" (Creswell, 2013, p.180), often referred to as codes. Codes are defined as a word or short phrase "that symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language-based or visual data (Saldana, 2012, p. 3.). According to Averill, (2015), codes are "the smallest distinct units of measurement that one begins to find by synthesizing the raw data in to distinct ideas or conceptual units" (p.3). First level coding is described Averill as a "process of early sense making of all the data, or by Punch (2014) as use of "the descriptive, low inference codes, which are very useful in summarizing segments of data and which provide the basis for later higher order coding", (p. 174). Use of a second level of coding consisted of review and analysis of codes identified above and further refinement and categorization to begin the formation of themes. Themes are broad components of information that consist of several codes "aggregated to form a common idea" (Creswell, 2013, p. 186). Formation of themes is a level of the analysis process that entails locating and grouping of commonly coded items in a new document (Averill, 2015). This process culminated into more refined ideas or categories of meaning. Relationships between categories were examined to identify and refine core themes for each research question. An iterative process was used throughout the data analysis this included return to earlier data to recode, or refine codes and sometimes combine them, labeled by Elliott (2018) as "revalidation of earlier coded material". The refinement and development of findings linked various themes meaningfully.

Data analysis was organized to explore themes specific to the study's two research

questions:

1. How do behavioral health providers describe how the provision of behavioral health services support low-income adolescent male students academically?
2. What are the implications of behavioral health providers' stories for policy messaging?

Organization of the data analysis was also based on the study's interview questions.

1. When you see young adolescent males, what are they coming to see you for?
2. What stories do you hear about their academic life and academic challenges?
3. In research literature, there is an argument that SBHCs help students academically. What has been your experience?
4. Is there an example that really stands out in your experience?
5. If you had to go to Santa Fe or Washington DC and make a pitch for SBHC behavioral health services, what would you say?
6. Is there anything else you would like to add?

Data from interview questions 1-4 informed the first research question, and data from interview question 5 informed research question two. Responses from interview question 6 were reviewed but did not add any new data so were not further analyzed or included in this chapter.

Data was input into a data grid by interview question and was analyzed according to the data analysis plan described above. For interview question one, content analysis yielded a list of the problems that adolescent males brought to receive behavioral health services. Content analysis is a term for a strategy to analysis data (Elliott, 2018). Content analysis is referred to as

“any qualitative data reduction and sense-making efforts that takes a volume of qualitative material and attempts to identify core consistencies and meanings” (Patton, 2002, p. 453.)

Thematic and narrative analysis methods were also used to examine and analyze the data from this research study. Thematic analysis shares the same aim as content analysis, in that it is the analytical examination of narrative materials “by breaking the text into relatively small units of content and submitting them to descriptive treatment”(Sparker, 2005,p.192). Thematic analysis consists of synthesizing and integration of “recurrent patterns and linkages between and among codes, emergent across all of the data, into distinct themes or propositional statements” (Averill, 2015, p. 6). Narrative analysis was used to analyze and interpret data from the stories told by the behavioral health providers about the students. Narrative analysis is a method of interpreting texts that are in a storied form (Riessman, 2008). According to Creswell (2013), there are multiple options for using a narrative analysis approach, the approach used by this researcher in this study used was one in which included how the story was told, what the contents of the story was and use of pronouns by providers. This approach assisted in interpretation of the larger meaning of the stories told by the providers.

For interview question two, providers were asked what stories they heard about the adolescent males’ academic life and challenges. However, providers did not give individual stories, they gave population-based descriptions of the boys’ academic challenges. A thematic analysis and narrative analysis were used to identify the various types of challenges. Participants also gave explanations for why boys experience academic challenges. A thematic analysis was conducted to identify the types of explanations given. Interview question three asked about the argument that SBHCs help students academically, what has been your experience? For this question a thematic analysis was also used to identify key elements of behavioral health services

that support adolescent males academically. Interview question four asked is there an example that really stands out in your experience, answers included both long and short stories. Use of thematic and narrative analysis were used to divide answers into long or short stories. Interview question five asked if you had to go to the legislature or Washington DC what would you say? Question five yielded advocacy messaging directed to hypothetical policy makers. A thematic analysis was conducted and identified the topics that organized providers messages. Question six asked is there anything else you would like to say? Very few providers answered this question and those answers repeated data already covered by previous questions.

Sex and Gender Terminology

Sex and gender are terms commonly used in research and are often misused or used interchangeably (Day, Mason, Lagosky and Rochon, 2016). According to Day et al., sex is a biological factor while gender is a socio-cultural factor. Gender has often been used as a euphemism for the sex of a person (Daimond, 2002). Gender identity is described as one's own personal understanding of one's gender and how one wants to be seen by others. The concept of gender identity has developed over time starting in the mid 1960's (Moleiro & Pinto, 2015). Initially the concept of gender identity was binary, with identification either as a female or a male (Lev, 2004). The concept of gender identity evolved to include those people who do not identify either as female or male(non-binary). More recently gender is viewed on a spectrum with cisgender (people who identify as same as the sex they were assigned at birth), non-binary, (a person who does not align with either woman-man binary) or agender (someone who sees themselves as not having a gender (Day et al., 2016). Transgender individuals may variously identify as a man or woman, or as a non-binary gender identity. Genderqueer is used as both an identity and an overall term for non-binary identities (Day et al.).

According to Day et al. (2016), there is growing acknowledgement of the importance of the integration of sex and gender considerations in research. Problems with “inconsistent terminology, difficulties with applying the concepts of sex and gender, failure to recognize the impact of sex and gender, and challenges with data collections and data sets” (p.1) contribute to obstacles in accurately using sex and gender terminology in research. For this research project the researcher choose to use the biological terminology ‘adolescent males’ to describe the population served by the behavioral health providers. The term adolescent males indicates biological terminology instead of social/gender terminology (such as ‘adolescent boys’ or ‘adolescent young men’). There is no gender-specific term for the intermediate stage between boy and a man except ‘young man’ making it difficult to accurately describe this population using gender terms burdened with a ‘child’ or ‘adult’ age dimension. Day et al., (2016) acknowledge that sex is used more often in clinical research while gender is used more often in population health research. The term ‘adolescent male’ is used by the researcher in this project, acknowledging it is technically inaccurate in terms of gender and sex research usage perspective but correctly indicates the transitional age range. The choice of ‘adolescent male’ primarily reflects the lack of suitable terminology for the in between stage of neither boy nor man.

Methodological Rigor

The qualitative research community is not unified in its approaches and beliefs regarding the importance and role of validity in qualitative research. Ongoing debate exists among qualitative scholars regarding the role and form of methodologic rigor that should be used. The major matter of concern stems from which paradigmatic perspective upon which the researcher bases her inquiry. Some qualitative researchers have strived to replicate the quantitative approach using alternative terminology that adheres more to a positivistic approach (Creswell,

2013). Other qualitative researchers reject the notion of rigor altogether when questioning why standards of validity from the positivistic-based validity quantitative field are being promoted (Whittemore, Chase & Mandle, 2001). Yet Morse, Barrett, Mayan, Olson, and Spiers (2002) contend that “without rigor, research is worthless” (p. 14) and that “validity remains appropriate concepts for attaining rigor in qualitative research” (p. 13). A brief review of validity techniques is therefore in order and will be discussed.

Qualitative validity pertains to the assurance that the researcher checks for the accuracy of findings using specific and consistent procedures (Creswell, 2014). These approaches vary depending on the philosophical perspective of the researcher. As Cohen and Crabtree (2008) explain, “understanding the concept of validity requires understanding beliefs about the nature of reality (p. 334). Briefly, a positivist paradigm consists of the belief that there is one reality that can be observed and through the process of research knowing this reality is possible (Cohen & Crabtree, 2008). Also, fundamental to a positivist paradigm is the assumption that “there is a single objective reality and that this reality is knowable” (Morse et al., 2002, p. 336). Because qualitative research is lacking “the certainty of hard numbers and p values” (Morse et al., 2002, p.14), research rigor techniques have been developed that somewhat mirror quantitative standards. There is concern within the qualitative researcher community regarding this process. Leading this matter is that the researcher runs the risk of missing possible threats to validity if this not done during the research process (Morse et al., 2002). Morse et al. emphasis that researchers while employing strategies to verify validity during the research process can “self-correct” (p. 14) along the way. Self-correction by the researcher was realized throughout the research project by review of every audio recording to assure transcript accuracy, frequent debriefing with committee members regarding data collection, interview techniques and review

of data. Central to Morse et al.'s argument is that responsibility for ensuring rigor is placed with the researcher herself (and not an external reviewer) after the data collection is complete.

An interpretive perspective includes that we cannot separate ourselves from the world and that who we are and how we understand the world are linked (Cohen & Crabtree, 2008). Also, central to this paradigm is the understanding that “realities are multiple, fluid, and co-constructed” (Cohen & Crabtree, 2008, p. 336). Thus, techniques to ensure rigor differ based on these beliefs. By use of expert peer debriefing (debriefing with dissertation committee members), reflexivity was built into this research process and potential biases were captured. According to Carsen et al. (2001, p.5), the knowledge acquired in this discipline is socially constructed rather than objectively determined. Thus, use of an interpretative perspective adds credence to reflexivity of the researcher throughout the research process. For the purposes of this research project, the author used an interpretive perspective. During the first six interviews the researcher using clinical questioning techniques and strayed from the interview question guidelines. This resulted in multiple additional questions unrelated to the specific research and interview questions being asked. After consultation with multiple committee members, the researcher readjusted her interview questioning technique to stay within the research and interview questions. Guidance on appropriate prompting methods was also reviewed with committee members.

Validity through verification. Verification strategies endorsed by Morse et al. (2002) include the insurance of methodologic coherence, sampling sufficiency, development of a dynamic relationship between sampling, data collection and analysis. Methodological adherence has been discussed earlier in relation to use of descriptive inquiry. This method matches the research questions while the data and analytical procedures were scrutinized as the research

unfolded. Sampling strategies and appropriateness of participants has also been described earlier. Concurrent collection and analysis of data helps to form an interface between what is known and what one needs to know (Morse et al., 2002), as the iterative interaction between data collection and analysis is the essence of attaining validity. Earlier descriptions of review of audio recordings, and the review of transcripts was used iteratively throughout the research process as a way of establishing verification, and by extension, achieving validity of data.

Explaining and clarifying the bias of the researcher adds to validity of the study. This was accomplished by the researcher's self-reflection, and intermittent discussions with committee members. These findings were not directly included in the research data analysis but rather used as an aid to clarify the researcher's bias as a researcher with a history of working in SBHCs as a nurse practitioner.

Limitations

This study has several potential limitations. First, the use of a purposeful sample can increase the possibility of self-selection bias and representativeness (Burns & Grove, 2009). Another limitation is that this descriptive study only used behavioral health providers at high school SBHCs in New Mexico. Because of this, the results may not be able to be generalized to SBHCs in other states (Burns & Grove, 2009), as well as only reflecting the opinions of the person participating, and not the general community of behavioral health providers. However, since the aim of qualitative studies is not to generalize (Patton, 2015) but instead to offer insight, deepen understanding, and suggest future studies, it still serves a useful purpose in the health care planning for young adults in New Mexico. The focus of this study is on behavioral health providers only, not on the adolescent males themselves, the study may have been enhanced by the inclusion of adolescent males who receive behavioral health services at SBHCs in high

schools in New Mexico. The findings are further limited by the uniqueness of individual SBHCs; while there are many consistencies within SBHCs, each SBHC is distinctive in the number of hours it is open, how many and what types of primary care and behavioral health providers are available, and the referral process both between the school staff and the SBHC and within the SBHC. Inconsistencies listed above may affect how behavioral health providers perceive and interact with low-income adolescent male students at a particular SBHC thus making comparison between and among clinics less reliable. Of the seventeen providers interviewed only two were male, thus a gender bias limitation may exist, though this proportion of females to male providers is reflective of the ratio of female to male providers at SBHCs throughout New Mexico. Another potential limitation was the varying amounts of experiences among providers, those with more limited experiences had a much narrower standpoint to base their responses on. Another potential limitation could also be that the researcher herself was previously a provider to the kinds of students of interest in this study and is a strong proponent for SBHCs. To address this possibility of bias, the researcher debriefed frequently with her dissertation committee members.

Human Subjects Considerations

Potential risks and plans to minimize risk. This research had minimal risk involved as the research project only included asking behavioral health providers about their perspectives concerning their everyday work with low income adolescent male students. Even though there was minimal risk, some potential harm could have come about among participants if they become uncomfortable discussing this topic. Participants also faced potential harm by loss of confidentiality regarding their feelings and thoughts on this subject matter. To mitigate both risk and harm, any specifics concerning the names of individuals or information that may have

geographically located them was redacted from the final transcribed data that was used for all analyses.

All consent-related documents and forms required by the University of New Mexico Health Sciences Center Human Research Protections Office (HRPO), or Internal Review Board (IRB), were prepared for accuracy and the ethical conduct of research. Because New Mexico has a relatively small population, the exact name and location of the SBHCs where the providers work were and will be kept confidential. The behavioral health providers' names will also be kept confidential. Participation in the study was voluntary and required informed consent. Consent was obtained in person prior to the audio recorded interview. Participants were free to discontinue participation at any time during the interview. Confidentiality was safeguarded through use of a system of participant pseudonyms. The principal investigator (PI) will maintain data management. No representative of the organization employing study participants will have access to the raw data. A master list of all study participants with names, addresses, telephone numbers, and corresponding code numbers, along with the audio recordings and PI's field notebook, will be kept electronically. The researcher is storing her data on a UNM Health Sciences Center, College of Nursing O drive. Password protected access to computerized data was established and maintained.

Potential benefits. There were no specific benefits gained by the participants for their participation in the study. Professional benefits included knowledge acquisition to assist behavioral health providers to improve educational and health outcomes for low-income adolescent males of color. It is my opinion that the potential benefits of the proposed study outweighed the potential minimal risk to individual study participants.

Chapter 4

Results

Introduction

In this chapter, the results of the data analysis will be discussed, including demographic information and the main themes that were relevant to each of the two research questions, guided by the six interview questions.

Participant Characteristics

A total of seventeen behavioral health providers agreed to be interviewed (two were from the same SBHC). The participants' characteristics are described in Table I.

Table I.

Participant Characteristics (N=17)

Characteristic	Result
Length of time worked at current SBHC	<ul style="list-style-type: none"> • Range: 3 months - 10 years • $M = 3.7$ years • $Mdn = 4$ years • 10 participants (59%) worked > 3 years
Number of hours worked during week	<ul style="list-style-type: none"> • Range: 4 - 45 hours • $M = 23.76$ hours • $Mdn = 20.00$ hours
Type of counseling license	<ul style="list-style-type: none"> • Licensed Mental Health Counselor (LMHC): 4 (24%)

	<ul style="list-style-type: none"> • Licensed Professional Clinical Counselor (LPCC): 7 (41%) • Licensed Clinical Social Worker (LCSW): 5 (29%) • Licensed Marriage and Family Therapist (LMFT): 0 (0%) • LPCC/LMHC: 2 (12%)
Length of time with counseling licenses	<ul style="list-style-type: none"> • Range: 1 - 36 years • $M = 9$ years • $Mdn = 3$ years • ≥ 15 years: 5 (29%) • 10-14 years: 0 (0%) • 5-9 years: 4 (24%) • < 5 years: 8 (47%)
Work at other SBHCs	<ul style="list-style-type: none"> • No: 14 (82%) • Yes: 3 (18%) <ul style="list-style-type: none"> • Middle school: 1 • Multiple locations under same sponsoring agency umbrella: 1 • Unknown: 1

The providers in this sample were relatively experienced. The average length of time that providers reported working at their current SBHC was more than three years; one provider had worked at her SBHC for more than ten years. When asked about how many hours a week they worked at their SBHC, most worked at least 20 hours, less than one third worked fulltime. One provider only worked four hours a week and commented that she had a three-month waiting list for students to be seen. It was rare for a provider to work at more than one SBHC. The majority of

providers had been licensed ten years or less, with the majority of them being licensed under five years. Almost one third of the providers had been licensed more than fifteen years.

Table II.

Major Themes

Research Question One Themes	Research Question Two Themes
Masculinity norms at home and school act as barriers to academic success and accessing behavioral health services	Educating policy makers about “the link” between education and health
Stressors on families and students influence the mental health and academic outcomes of adolescent male students.	Educating around differing norms
School districts’ lack of resources and unfavorable school environments negatively affect adolescent male students.	Advocating for comprehensive approaches
Trusting relationships, consistency and safe space provided by SBHC staff, and behavioral health providers support adolescent male students.	Advocating for the importance of SBHCs

Research Question One

How do behavioral health providers describe how the provision of behavioral health services support low-income adolescent male students?

This question was answered by asking the following four qualitative interview questions:

1. When you see young adolescent males, what are they coming to see you for?
2. What stories do you hear about their academic life and academic challenges?
3. In research literature, there is an argument that SBHCs help students academically. What has been your experience?
4. Is there an example that really stands out in your experience?

Interview Question One. When providers were asked “When you see young adolescent males, what are they coming to see you for?” their responses provided a long list of problems including behavioral health diagnosis, post-traumatic stress disorder (PTSD), depression, anxiety, substance abuse, and adverse life experiences. Others described problem behaviors; these included “getting into trouble”, “they get in fights at school”, “stomping out of the classroom”, “behavior concerns in the classroom”, “aggressive behaviors”. Providers also indicated students presented with problems related to “substance abuse”, “smoking pot”, “E-cigarettes”, and “any drug use”. Some described the adolescent males seeking behavioral health services because of problems with emotions such as “anger” and “grief”. Many providers also discussed students seeking help related to adverse life experiences including trauma, home life, and “mass shootings in the news”.

Nearly all of the providers reported male students receiving services related to abuse and violence. Some students that these providers saw had been victims of domestic violence or were witnesses to domestic violence. Providers also reported that male students came to the school-based health center for students’ own aggressive behavior. These behaviors included fighting or bullying. One provider explained “I collaborate a lot with the juvenile probation office so many of the males who come in are on probation for a variety of fights”. In addition, some male students were brought to the school-based health center specifically for conflict resolution related

to aggressive behavior.

Putting behavioral health problems in context. Providers mainly explained the reasons behind these male students' behaviors as related to family conflict. One provider indicated that "family of origin is the biggest problem". Instability within families was a consistent theme reported by all providers interviewed. Examples included the following: parental separation, divorce, and presence of a parent's boyfriend or girlfriend. In addition, students' conflicts and disagreements with parents was a common explanation. Providers also described lack of parental involvement, with one provider stating that "parents' level of involvement is very low; parents' level of attentiveness is very low, I don't always know the reason". Difficulties within and with families were commonly described by providers as affecting students' behavioral health and academic achievement.

Several providers also described that some male students are expected to assume the role of the adult parent in the family.

"I see a lot of parentification of the teens. The adult caregivers within the family system have vulnerabilities or demands in their life that they're dealing with and that can lead to some neglect of duties... The adolescents will then be expected, I mean sometimes it's like consciously I need you to do this but often times it's more of an unspoken family rule... The adolescents will be expected to take on adult type of roles whether it's for younger siblings, whether it's for taking care of or accommodating their parents under-functioning or whether it's being an adult to themselves".

This description highlights the often-hidden stresses and responsibilities that affect young adolescent male students. In contrast, one provider relayed that "some parents want help for the student", indicating that some parents are aware of the need for services available at the SBHC.

Some providers discussed students caught between the two “cultures” of school and home, signifying these students had differing expectations placed on them from adults at school and parents at home.

“That can show up in some difficulty understanding one another and communicating with one another and setting reasonable expectations for how to support that teen in this cultural context, while also supporting their cultural identity from the parents’ heritage as well”.

This explanation emphasizes the provider and parents’ “difficulty” in determining and deciding the students’ needs and or priorities in school and at home. As described above, parents may want students to prioritize family obligations over schoolwork. Teachers do not always know what obligations the students have at home and wonder why students are not doing well at school.

Interview Question 2. To further clarify information regarding how behavioral health issues may affect academic outcomes, the behavioral health providers were asked a second question “What stories do you hear about their academic life and academic challenges?” This open-ended question elicited stories about providers’ understandings of what boys’ experience as well as what the providers do to support the students’ academic performance.

These examples illustrate not only the difficulty these students have with maintaining focus on school work but the snowball effect of getting behind. By delaying asking for help, they are put in an even more compromised position academically.

Context of traditional masculinity. Gender norms of traditional masculinity for young adolescent males include emotional stoicism, autonomy as well as physical toughness (Amin, Kagesten, Adebayo, & Chandra-Mouli, 2018). Many providers included examples of traditional

masculinity and gender norms related to it. Some providers reported that “boys don’t know what to do when they experience feelings”. They linked this difficulty to classroom behavior, problems as one provider described in the following way. “Sometimes the male student ends up having a conflictual relationship with the teacher because they sometimes have to just stand up and leave a classroom without explaining the reason”.

One provider explained:

“I think as you know, boys are very socialized to be successful, to do well and not to cry, and not have feelings...And when that happens, they don’t know what to do with it”.

Other providers emphasized boys’ silence about their feelings,

“A lot of the kids have underlying PTSD and are very reluctant to talk about ...I mean their symptoms indicate PTSD, but you can’t figure out and they won’t tell you”.

One provider described male students getting behind academically and struggling to catch up.

“They’ll get behind and then they start missing school because they feel overwhelmed and then they’re even more behind. A lot of times they’ll reach out for help almost too little too late”.

Some providers noted how some students with academic challenges removed themselves from high school and went to other academic settings such as a junior college or an alternative high school.

Additional aspects of traditional masculinity were described by providers. Providers explained how “boys feel obligation to provide for the family if the father figure dies or is gone” Boys are expected to help the family by working summer jobs and doing ranch work. One provider also noted that “boys prioritize family wellbeing and school success is a second

priority” and also that “boys feel low self-esteem when they can’t help their family”.

Compounding boys’ inability to seek behavioral health services, stigma and shame are also part of traditional masculinity. Providers described boys experiencing stigma related to seeking and receiving help.

“Because they get lost and are not protected, the kids are not going to go ask for help even if with a lot of encouragement... They're not going to go ask for help, that's not what they do... Nobody’s really helped them in their life. They’ve been on it on their own, so, it just falls apart”.

Another provider explained “they feel guilt for seeing us”. While another said, “they get shamed in the family for seeking help”.

These examples illustrate that many male students need help (emotionally and academically) but due to gender norms of masculinity do not ask for assistance. Requiring aid of any kind is viewed as a weakness, which is disadvantageous to their emotional and academic realizations.

Factors affecting academic performance. In telling stories about adolescent males’ academic life and challenges, providers gave a wide range of explanations for what affects these students’ academic performance. Providers described many outside influences as affecting student’s behavior when relaying stories to the researcher. Overall, the explanations fell under seven themes and included the following: behavioral health problems, students themselves as a cause, social determinants of health, stress at home, school environment, lack of school resources, and substance abuse. Additionally, many providers explained what they did to help students academically in response to this question.

Behavioral health problems. The most common explanation was behavioral health

problems. The providers described PTSD, trauma, anxiety, depression, intergenerational trauma, undiagnosed or misdiagnosed mental health, or developmental learning disabilities. Some described the importance of proper diagnosis and how some students are misdiagnosed with ADHD when they really have PTSD.

“A lot of the kids that maybe seem like they have ADHD and, in my clinic here I have identified several kids who come in with ADHD diagnosis and I am like, *‘This kid has PTSD, this is not ADHD, this is anxiety’*. That is why your medication doesn’t help you because all it is doing is increasing your arousal symptoms. The criteria for PTSD or any kind of stress related disorder is intrusive thoughts, intrusive memories, concentration difficulties, irritability, hyper vigilant, exaggerated, startled response. How in the world is a kid going to learn Algebra, if they are suffering from all of those things?”

This provider highlights the connection between academic challenges and behavioral health symptoms and the struggles students face when combating significant emotional symptoms while trying to concentrate on school work. She also emphasizes the issue of misdiagnosis as not only as a problem in itself but if treated with the wrong medication can be more harmful to the students. Other providers explained how mental illness and trauma can negatively affect academic performance. One provider said, “Trauma symptoms are completely debilitating to learning”. Another provider stated, “They have lots going on in the home, with depression they can’t concentrate”. Another provider commented that “(m)any of them are already not at grade level in terms of reading and math, so that just adds to their struggle, a lot”. Another provider also commented on the young male students struggle with a history of trauma in regard to getting misidentified as “trouble makers”.

“A lot of them have problems with lack of concentration, issues in school, they get

identified as being behavior problems when really there's a lot of trauma stuff going on with the kids too...I think in New Mexico in general".

These examples show that some male students who seek assistance have been misdiagnosed with ADD when their true diagnosis was PTSD. Treatment for ADD can worsen PTSD symptoms. Providers implied that with so many New Mexico students exposed to trauma that they are viewing their behavior problems with the wrong lens and thus overlooking opportunities and an obligation to help the students.

Concurrent with overt behavioral health issues such as anxiety and depression, providers described how lack of self-esteem and self-doubt contribute to students' academic performance. One provider describes how self-doubt prevents male students from asking for help "Avoidance of schoolwork due to self-doubt and just feeling like, I don't know how to do this and difficulty asking for help so being assertive and struggling with this, can I get some help?".

These avoidance behaviors link back to the masculinity premise, in that adolescent males who have low self-esteem and/or self-doubt do not have the skills necessary to ask for help.

Providers also explained the physical as well as mental effects of untreated behavioral health illness and trauma, "It comes out in the body, those symptoms of anxiety and depression". Another provider said, "They come out, the trauma it comes out." Classroom disruptions as well as confrontation with school staff are described as physical displays of students' struggling with behavioral health issues. This provider explained that instead of receiving behavioral health services students would receive disciplinary action, "They would get disciplined for it instead of dealt with it like, let's deal with this on an emotional level". Again, by misinterpreting students' actions, school staff miss a chance at helping these students.

Students as cause. Some providers blamed students for poor academic performance citing

things they did such as “students blame their teachers”, “students avoid school work”, while other providers blamed students for what they were lacking or not doing such as “students lack plans for the future”, “students don’t ask for help”, “students feel hopeless in a school setting”, and “lack of student motivation”. In contrast another provider suggests that students lack academic motivation in the following quote.

“Honestly the young ones I talk to don’t talk that much about their academic life or academic challenges. It is not a priority; it is not something they talk about, sometimes they may say ‘I’m working on getting my grades up’, so they don’t have to retake ninth grade or what-ever, repeating grades is fairly common. What I’m hearing is that they’re all struggling, and school is not – they’re not interested in school, they’re not interested in accomplishment, I mean, their grades mean nothing. I mean, the ones that I’m seeing”.

The provider describes what she views as lack of student interest or involvement in school.

Social determinants of health as the cause. Many providers described multiple social determinants of health as playing a major role in affecting male students’ academic success. Larger societal issues such as racism, intergenerational trauma, poverty, and impoverished environments in the city, rurally or on reservations were reported to affect students, families, and communities. Unemployment and poverty are described as affecting students and families. One provider described the effect of poverty in the following quote. “There’s a lot of poverty, there’s a lot of poverty that causes a student’s insecurity...It’s hard to find work, there’s a lot of financial instability in families”.

Another provider commented on the effects of poverty on a larger level “The issues in the community with the lack of resources, the racism, and the stuff going on at home, the families really have a lot of trauma”. A different provider reported on the effects of historical trauma.

“I think the historical trauma of the native populations, the boarding schools of the old days and removing kids from the home, there is so much attachment problems and family violence”.

Intergenerational trauma is described by one provider as creating high adverse childhood events scores “sexual abuse, verbal abuse, these families and students have high ACE scores”. Another provider described Mexican immigrants experiencing trauma too, “We also get a lot of immigrants from Mexico, and you see a lot of generational trauma in those kids and families”.

Like the provider who connected the health symptoms with difficulty in school, these providers strongly link intergenerational and historical trauma to academic difficulties. These providers also connect historical trauma with PTSD, which was previously explained to be prevalent in New Mexico as well as disruptive to academic attainment.

Stress at home context. Stress from events happening at home was frequently reported to affect students’ ability to perform academically, one provider stated:

“They have lots going on in the home, with depression they can’t concentrate... Attention and concentration focus, listening skills can be hard to do if you have a lot of internal chatter whether it’s ‘I didn’t eat breakfast’ or whether ‘I’m super tired’, this leads to feeling incompetent, and that is anxiety producing... Humans first response to anxiety is avoidance, so these students will avoid or skip questions, or demonstrate a chaotic response”.

Aside from family and school cultural differences and generational or immigrant trauma, these providers highlight the negative effect of home disruptions on students’ ability to focus and achieve academically.

School environment. School environment was reported by multiple providers as affecting students' ability to perform academically. Providers' described poor classroom environment, lack of teacher and school support, as well as lack of school district funding and support.

Classroom problems that affect students' learning included noisy classrooms, "I hear frustration about being in a classroom, being noisy, they sense teacher's frustration and stress". Another provider commented that "Classrooms are loud and boisterous; a lot of kids don't want to pay attention". These providers were able to identify that chaotic classroom environments contributed to students' difficulty concentrating, a finding consistent with the education literature on distractions. (Pierce, 1994)

Some providers indicated that ineffective teachers also contributed to students' academic difficulties: "I think discipline or lack of it in the classroom is an issue because if there isn't classroom management there is no learning". Another provider said, "Teachers are often unwilling to teach". Another reported "Papers and assignments get lost". These providers linked ineffective teaching skills to additional student academic struggle.

Another provider specifically mentioned lack of support from the teachers, "Some students are letting me know like, we don't know even feel like we can talk to our professors, they will tell us, you go back, and figure out on your own". A different provider mentioned that, without teacher support, students feel hopeless. "The adolescents often feel more hopeless as opposed to effective in the school setting...So, it's often a sense of frustration or 'I'm kind of stuck with this'". These providers describe students' being left on their own to problem solve without adult support. The theme of lack of support was described by providers as prevalent at school as well as at home, leaving many students without a safety net.

Lack of school resources. Lack of resources and support from schools and school districts were also reported to affect students' academic abilities. One provider explained "Several of my clients, I think likely have learning disabilities or some kind cognitive difference. Whether that is dyslexia, ADHD, auditory processing, dysgraphia disorder, who knows? They have never been assessed. Normally, for any of them to get assessed it has to be a very strong push from either a really carrying teacher or from their parents". Even when students are identified as needing an assessment for a learning disability, providers found it difficult to obtain one,

"There is a huge deficit of school psychologists or school counselors...Somebody told me last week that there's only two Licensed Professional Clinical Counselors (LPCCs) in the entire district for 11,000 kids...Even LPCCs cannot do psychological testing for learning...So, I don't know how many psychologists there are in our school district, but I don't know of anybody. I don't have any names, I don't know who I can refer to".

This provider reports feeling powerless in the face of the school districts own behavioral health workforce shortage. Furthermore, providers discussed lack of resources at various levels.

"I will see a kid that it is very clear to me that he is very smart, but he is doing very poorly in school...It is really affecting his self-esteem and it is really bothering him...I have no idea how to rally the resources around him so that he can make it...There is no tutoring, he needs a tutor, he needs an evaluation...He might need a medication and I personally don't even know how to help him get access to that and identify what's going on there".

One provider discussed the dynamics of students not receiving help and how that set students behind further,

“Lack of help and not a lot of help tutoring and things like that...A lot of them are pretty small schools that don't get a lot of resources and so they'll get behind and then they start missing school because they feel overwhelmed and then they're even more behind”. This demonstrates how consistent lack of access to resources contributes to students' downward trajectory affecting their future potential.

Providers also mentioned low expectations of students and their prospects, one provider stated:

“And these kids have very few sources of encouragement, sources of hope and support, that they don't have the support to set goals for themselves and to try and achieve those goals and to deal with failure or to deal with barriers”.

This provider suggests that students without support, lack inner resources to plan a future and overcome adversity. Another provider reported the following.

“I hear that they feel or especially this one boy feels that nobody cares about him at school, that he's already been written off as someone who is going to have a menial job, or work at McDonald's and that he, they don't see him as a smart person and a confident person”.

One provider talked about how instead of being welcoming to students, teachers are sometimes sarcastic saying things like “I can't believe you showed up”, instead of “I'm glad you showed up”. From this providers perspective “Most of the challenges that these kids have in school is just getting along with the teachers”. These examples highlight the importance non-judgmental support for all students.

Substance abuse. Substance use in the form of marijuana was described by some providers as common among adolescent male students and many providers discussed helping

students to recognize behavioral health symptoms and reduce dependence. Some providers described how marijuana is used to treat symptoms of trauma.

“A lot of them have admitted that the marijuana use definitely impacts their ability to do school work...It impacts their ability to concentrate, to remember...So, some of them, some actually say, that, ‘Marijuana definitely helps me to concentrate’... ‘It definitely helps me do my school work’...That is because they are already dependent because if they are not using, they can’t concentrate because they are in withdrawal...Which they don’t believe of course because they can ‘stop at any time’ (supposedly)...And then marijuana use is totally understandable with the lack of resources with some of the traumatic physiological response that they are experiencing all the time”

Another provider discussed reduction of use during school hours as one of her goals of therapy.

“I worked on a harm reduction approach with substance abuse and less use of substances during school hours”

Another provider linked students’ marijuana use to self-medication of their PTSD.

“A lot of them use marijuana because it helps them concentrate...because it quiets down all of the noise of the trauma that they have been through...the kids don’t even recognize it is trauma because it is normalized”.

These providers recognize the role marijuana use plays in the lives of students who suffer from PTSD and whose schools lack proper resources for them. Teaching students to recognize behavioral health symptoms and reduce dependence of marijuana use (especially during school hours) was a common intervention.

How providers support students to succeed academically. Providers also discussed what they did to help students academically. One provider said, “So there's some cases with the

permission of a student, I've done some bridgework to try to repair their relationship with their teachers". Furthermore, this provider shares details of the process in the following quote.

"Sometimes, if a kid is in a lot of trouble, he'll text me to see if I'm available to go up and meet the principal with him...A lot of times that they -- things escalate, once these kids get in front of principals at times...And so, sometimes, just having me in the room with them is enough to, kind of, keep them grounded, and keep them in school".

This description illustrates the power of trust between provider and student and the importance of having an advocate "in the room".

In comparison, some of the providers reported how collaborating with school counselors was useful in assisting students.

"But yeah, I work closely with the school counselor just monitoring students whose grades are declining that are failing and meeting with them...Because a lot of times we've noticed students that have poor grades and they're consistently getting poor grades are usually students that have issues at home, are struggling with something in their home life or struggling with peers as well".

Another provider discussed teaching self-calming techniques:

"And then the other thing with almost all the kids is just teaching the basic mindfulness skills of how to calm down, how to breathe, how to think before you punch someone, take a pause, all of that, that's ... even if they won't do anything else with you, a lot of times they'll do that".

Skill building is also mentioned as a frequently used tool by providers to assist students' ability to focus on academics. One provider explained

“Helping them develop skills to deal with the symptoms that they're having is -- helps them academically... A lot of these kids are continuously being traumatized and it's not necessarily like they are ...this is something that just happened one time to them, or it's like just the chaos in their life...I don't do a lot a whole lot of processing I do a lot of skill building”.

Themes related to looking and seeing were reported. Interventions related to those themes were described by providers. One provider describes helping students to look and see themselves: “And a lot of times they don’t even recognize the signs that they’re starting to not do well and then they’ll come out and be like oh yeah I’ve been not coping well, doing stuff well”. Providers reported teaching self-awareness and monitoring of emotions: “Yeah we teach them to monitor what’s going on and look at signs outside of how they’re feeling”. Additionally, providers report that students don’t see something is wrong “Because a lot of people that have depression and anxiety don’t notice until it’s extreme”. “They almost normalize it when it’s not normal”. These providers discuss teaching students to identify indicators of behavioral health problems.

Interview Question Three

Question three asked:

“In research literature, there is an argument that SBHCs help students academically. What has been your experience?”

Safety and trust supporting academic achievement. Multiple providers indicated the association between students feeling safe and trusted with academic achievement.

“Generally speaking, how the student health clinic supports the students academically I would say that one of the key parts is that in order to be ready to learn, our brains need to

feel connected and safe...And sometimes the relationship with the providers of the school-based health clinic creates that feeling of safety and being seen and heard and valued and that attachment and that bond can then help the child indirectly to be ready to learn in the classroom, and then if their brain is ready they're more likely to perform”.

Another provider also reported that the providers’ relationship with students was crucial to the students’ ability to succeed.

“Consistent trusting relationships with a lot of the students. I can really see that...So, the students know that there's a place at school where they can show up and just be themselves even if they're not having a good day”.

Another provider discussed that being authentic with the student came before gaining their trust:

“I think for the most part it's been pretty positive because I've seen students come in for things whether it's my arm hurts, I don't feel good or whatever and they are able to trust the people within the school-based health center”.

Yet another provider commented that along with trust, the students’ felt protected by the providers which increased their motivation:

“I think one of the biggest things, if I have a boy, especially who was about to drop out, and then they start seeing a therapist or they start seeing me, and then they feel a little bit more motivated because there's someone at school who has their back and is looking out for them”.

These multiple examples all illustrate how beneficial a trusting relationship between provider and student can help the student academically.

Another provider described the SBHC itself as a place of refuge.

“Our team health center provides enormous support to these kids... They can come even if they don't have an appointment, they can come and just calm down in the group room”

Along with trust and safe place, consistency was mentioned by providers as being important to students' trust:

“Our nurse practitioner this is her second year here and you know the students like that... They like having that consistency of having someone come in and be like... and they always ask for her by name you know”.

One provider also commented that consistency of the SBHC being open and providing services also helped with students' trust and reduction of stigma. This provider also indicated that peer referrals helped with students' trust and reduced stigma.

“And so, there's sort of the word of mouth thing is these last few years, I've really seen that a lot, and the stigma has been decreased, because it's coming from their friends. You need to go talk to (name of provider)”.

These themes of trust, consistency, relationship and SBHC as refuge are important to how providers view their services as supporting students' academic success.

Treatment of mental health illness. Another one of the major supporting themes that providers explained was that the treatment of mental health leads to better academic performance. One provider gave a comprehensive view:

“For example, if we're able to help the student come up with ways that they can have some control over their depression then they are going to be more likely to be an active student as opposed to more passive and not following through with work and not able to really concentrate... That's part of what makes a diagnosis, it has to be functional impairment... For this other young man, it was like because we did work on the

depression, that piece, he was then motivated to start to do some school work... You kind of clear up their anxiety and depression and all of a sudden they can focus”.

Part of behavioral health treatment is symptom management; this provider was able to see a direct link between treatment of symptoms and better academic performance.

Other providers also linked better control of mental health symptoms with better capacity to concentrate on school work. One provider stated,

“I would say if they’re feeling better, if they’re not as angry, if they’re not as depressed, anxious, whatever, if you can reduce their use of marijuana during a school day, that helps, and the focus is on keeping them in school and on bringing their grades up”

Here a provider details the process in which further reduction of symptoms is related to changes in academic work.

“I think learning to manage their anxiety and depression they’re able to focus more in the classrooms... They’re able to retain the information better, they’re able to complete their assignments because their motivation goes up... I’m sure that if they’re going through depression and anxiety they’re not focusing very well, so maybe as in their coping skills on, “Okay. How can you manage your anxiety?”

This provider highlights the need for students to cope with bullying while trying to learn,

“How can you manage when somebody’s laughing at you in class?”. These providers’ stories illustrate their knowledge and experience with how behavioral health symptoms such as anxiety or depression can significantly interfere with a students’ ability to concentrate on school.

Another provider discussed using a student’s grade as an emotional indicator.

“They’re grades come up which then snow balls into them feeling better and then the grades come higher and that type of thing’. “We see that quite often. I can usually tell how the kids are doing by their grades”.

This provider reports on using grades as a tool for students with which to associate their mental wellbeing. The provider stated, “So we have a look at ‘your grades are slipping what’s going on, do you not understand, are you not feeling good, what’s going on, are you missing school for some reason, have you been sick?’”. In contrast, some providers expressed that it was difficult to make the connection between SBHC behavioral health services and academic outcomes. Other providers felt strongly that it was not their job to monitor students’ academics.

“So maybe temporarily they – their grade might be worse, sometimes with some of the mental conditions, they have to get to a much worse place before they get better and I think human health is the same...So, I do not like to give advice about academic performance unless they come to me, ask me a very specific question. I don't like to take over the direction the ship is going”.

This provider presents a clear distinction between her role as a therapist as being separate from that of an academic counselor. Another provider indicated that it was difficult to make a correlation as they did not have students’ grades available to them, “It's really hard as a school-based health center to really understand the correlation between grades and behavioral health services because we don't see their grades”.

Other providers were ambivalent about the connection or found it difficult to measure.

One provider stated:

“Sometimes it’s hard to tell if the student is not disclosing a lot about their academics...And sometimes it can be hard to make the link, but I absolutely believe the

link is there...So I've seen kid's grades – boy's grades go up after some therapy, whether it sticks or not, that's hard to measure and it's hard to see...It's really hard as a school-based health center to really understand the correlation between grades because we don't see them”.

Another common finding from the providers was their role in the recognition and assistance with educational deficits.

“My experience has been that it does indeed help kids academically in addition to school-based health services, the (sponsoring organization) also has comprehensive community support staff that are able to go into the schools, and work with kiddos to help get IEPs to increase that communication between myself, teachers, and the staff...A lot of times we even identify kids that need IEPs and so we're able to help navigate that more quickly with the schools. I've been getting them the appropriate testing in, getting them on an IEP or a 504 or getting that extra assistance in the schools”.

This provider identifies that her school already has educational support systems that may not be fully utilized.

Many of the providers recognized the link between good mental health and educational attainment. They were also able to recognize that adolescent male students who suffered from symptoms of anxiety and depression had greater difficulty with focusing on school work. Some providers did not believe it was their job to monitor academic outcomes preferring to remain in the role of a therapist not school counselor. Other providers discussed that by not having access to a student's grades they were not aware of or could not measure academic outcomes. Other providers felt ambivalent about the connection between behavioral health services and academic

outcomes stating it was hard to measure. Some providers were able to identify educational disabilities and were able to assist in getting the student more school resources.

While there was not a lot of consistency in provider's answers regarding the connection between students' receiving behavioral health services and academic outcomes, none denied the possible association. Many expressed difficulties in measuring outcomes but most conveyed confidence that it existed.

Interview Question Four. Next, we examine the data from interview question four. Question four asked: Is there an example that really stands out in your experience? This data looks at provider stories to give us more detailed insight into research question one: How do behavioral health providers describe how the provision of behavioral health services support low-income adolescent male students academically?

Story examples are divided into long and short stories. Long stories will be presented first. In the longer stories, providers include more background information on the student's family situation and sometimes also contained accounts of the students' past academic difficulties. Also incorporated was information regarding involvement of family and school personnel. The long stories provided more rich detail about providers' interventions including at times their reflections on the outcomes of the intervention. The long stories tended to chronicle the students' development over time. In the longer stories, we can better appreciate the students' ongoing struggles with mental health issues and academic outcomes.

The short stories contained very basic information about the student, the students' problems and how they were addressed. Missing from the shorter stories were details regarding the students' family life, past mental health history, and other specifics regarding past academic challenges. Also omitted were details regarding involvement of family or school staff on behavior

of the student. The shorter stories describe brief interventions that are more crisis interventions than long term ones. The brief stories did sometimes describe interventions that can accomplish several things at once.

In all of the stories a narrative analysis was used to identify, how the providers made the link between behavioral health and academics, the stories providers told about their interventions. Also included are unique themes that emerged in the intervention story, as well as examination of use of the language of I and we, to understand the perspective of the provider about partnerships involved in the interventions.

Long stories.

Anxiety and testing. One provider told a story about anxiety and test taking. This provider focused on the link between anxiety and test taking and measures she enacted to help support this student.

“I was working with one boy, on his pretty significant test anxiety. So, performance anxiety during testing. So, what we've worked on was developing a better understanding of how the anxiety is presenting and what he was really reacting to with the anxiety and then exploring possible accommodations that could put boundaries around his anxiety so that he could function better when he is needing to take a test. And then working with him on developing a strategy to assert his request for those accommodations and then identifying who are going to be his allies to get those accommodation request presented to the people who have the authority to grant accommodation.

And then supporting him and following up how are we doing with this process and then he did. He asked him mom for help with these accommodations. We wrote them all down what he needed. And then his mom had a meeting with the school. She spoke on his

behalf, requested the accommodation. And the staff was supportive, then he had a test. So, we saw the implementation and then we de- brief how that went. So that was an example. I mean the natural version is we can develop strategies for accommodations of how your mental health is impacting your learning and then figuring out how to get those implemented. So that was one big part”.

This provider initiates her intervention by making the link between symptoms (anxiety) interfering with a common educational task (test taking). The provider addresses his symptoms in a therapeutic approach by incorporating teaching the student self-insight about his anxiety and how he might manage it better. Her intervention includes involving the student in broader problem solving by helping him with a strategy to ask for special accommodations. She also helps him identify school staff who were most likely to be of assistance. The provider also discusses involving a parent to also advocate for the student. This provider describes assisting the mom to engage school staff in problem solving for the student.

One of this provider’s unique themes in this story was her reflection of debriefing the intervention, showing continued interest and involvement with the student. Within the narrative of this story the provider begins by using the pronoun “I”, but quickly transitions to using “we”. The ‘we’ in this narrative is the provider and the student. Her language reflects a partnership with the student. She goes on to describe other partnerships including the partnership between the student and his mom, as well as the partnership between the student and the school staff.

This example is an excellent description of a complex set of actions that Behavioral health provider at a School-based Health Center did after identifying that a male adolescent student had a behavioral health problem that was interfering with his academic work. This holistic approach included a partnership with the student, as well as engaging his parent as other

school staff on his behalf. The provider helped the patient identify the problems and symptoms, engaging the patient in problem solving, engaging a parent to speak up for the student needs. This description provides a comprehensive approach to how School-based Health Centers are linked to academic outcomes.

Trouble maker and school suspension. The student in this story exemplifies many of the students described by behavioral health providers, unruly or disruptive in class who then get suspended and fall behind further academically. This story also exemplifies the power of teamwork.

“I had a student, he was like a trouble maker in mid school and was always put in In school suspension or out of school suspension and so his grades of course, not being in the classroom, tanked”. “Not being in the classroom of course, the kid kept getting behind more and more and then they started feeling really stupid and then he was afraid to be in the classrooms”. Every time he would be in the classroom, he would be disruptive and the clown. So, we got this kid referred to us and when we did our School Health Questionnaire (SHQ), we found that the kid was depressed and had a lot of problems in the home and so he had a lot of trauma”. We started working on cognitive behavior therapy and started recognizing what was going on, teaching coping skills and how to think about things differently a little bit and then we got him some resources, some tutoring help and then we found an unidentified learning problem”. “The schools decided to do testing and identified a learning issue, so the kid was put on an Individual Educational Plan and got some more support that way. That kid’s goal was to drop out”. “This kid’s goal was that as soon as I turn 16, I’m dropping out because that’s how this whole family was”. He was going to drop out, but through all the resources and support

and all that stuff, he went to high school”. Our high school team is awesome, the principle, the councilors there and the teachers there”. “We really try to save this kid and they sort of sort of cocooned this kid, got him into sports and then the kid is graduating this year and wants to go to college”. “This kid went from going to be a drop out and just was going to do whatever to going to college. We really helped support this kid”.

In this story about a student who labeled as a trouble maker, this provider makes the link and identifies that the student has possible behavioral health issues. She also makes the association of missing class and getting behind as furthering low self-esteem with this student. Her intervention includes screening for and finding depression as well as PTSD and she begins therapy. The provider also recruits school staff and they identify a learning disability. School staff as well as the Behavioral health provider work together to “cocoon” the student. What is unique to this provider’s story is her recounting of the strength of the school staff’s investment in this student’s success.

This provider begins her narrative using “I”, then quickly transitions to “we”, she describes rallying multiple teams, none of whom refer to a partnership with the student. The first “we” she is refers to is the primary care provider at the SBHC, the other “we” is the staff she names from the school that include the principle, councilors, as well as the teachers. Instead of punishing him these teams were able to assist him to do better in school and to adjust his goal of dropping out.

This student’s goal was to drop out of high school at age 16. Due to the collaboration between school-based health center staff and school staff that included identification and treatment of his mental health and educational deficits he graduated high school. The provider

really emphasized the importance of school personnel and the SBHC staff working together for this student.

Social phobia and truancy. In this patient centered approach, this provider describes a complex set of decisions negotiated by her and the student, with an end result that includes a healthier student as well as a different but positive academic outcome.

“So, I’ll give you a little extreme example, this doesn’t necessarily fit in a school system. I have a student who had a social phobia, he didn’t – he couldn’t come to school because the noise, the lights really affects his cognitive level to pay attention in the classroom. He stopped coming to school, school stopped contacting his family. They gave up. He and I made agreement, he doesn’t have to come to school, but he has to come and see me once a week because I do – I want to see he still wakes up in the morning, has regular hygiene, eats, dresses well, not to lose the routine of coming to school”. Sometimes I see the student more than once a week. So, after even half of the therapy, he made a decision, his own decision, I didn’t tell him. Public school is not good for him and he dropped out, enrolled in a GED program at the local community college and that worked beautifully for the student”. “And by being in a new environment, he was able to find what he wants to do for his future. So, in terms of data, in terms of maybe a public-school point of view, maybe he didn’t make the school look good because he’s a dropout. “But for me as a therapist, I have to see beyond that. In the long term, I think he made a better choice”.

This provider describes symptoms of a mental health condition that greatly interfered with this student attending school. This high school setting was not conducive to this student’s mental health. The provider recognizes the importance of keeping some regularity to the student’s routine. To accommodate that she had the student come to school for therapy. The

provider allows the student to make his own decision regarding how to progress academically, this choice did not include staying at the high school.

This provider describes a patient centered approach to achieve what is best for the student. How success is defined is unique to this story, his success was defined differently, outside of the traditional academic setting for someone his age. The provider shepherded this process with the student. The provider uses “I” throughout her description of the students’ story but also discusses making an agreement with the student, thus including him in a decision. She also describes how she supported his decisions, again indicating a collaborative relationship.

This story exemplifies a strong patient centered therapeutic approach to helping this student. She recognizes that the current school setting was not working for him. While she agreed to let him stay home, she still therapeutically intervened by having him come to school for therapy on a regular basis thus forcing some routine on his day. The student found a way to progress academically, but it did not include graduating from that high school. By showing ongoing support of this student’s decisions, the provider demonstrates care for the whole student, not just trying to get him through high school.

Student participation. In this example, the provider describes a team effort that included the student, his parents, the SBHC staff and school staff. This provider includes a lot of description of the student, the student’s development, description of the student, lots of student-based observations, a story of his struggles and successes, and who he is. This provider also includes a narrative of the student’s own words.

“We started working with a boy, he was presenting with a lot of significant depression symptoms. He was being seen for medical, for a physical, and then that’s where we identified him. And then I offered services for counseling”. Through the years, what

happened is that he would do okay, and then he wouldn't do so okay. We were finally able figure out it was all due to psychosis and depression". "He did not actually have trauma or an attachment disorder or anything like that. We don't really know where it was coming from. He was just having some psychosis. But he used therapy well and eventually, we got his parents involved. They were a family from another country. "We were actually able to get them to agree to medication for him, an anti-depressant. He's actually a senior now, so he's going to be graduating soon".

"Off and on for years he got services, because he was there at the high school. It was easy for him to come in, it was easy to call him out of class. He really uses our support very well". "We really worked with that boy a lot. And so, we're really pleased that through those four years, he's been able to go in and out of counseling and go in and out of having to use medicine to help his symptoms. Now he's not been on medicine this entire school year and he's doing okay. I still think he could probably use it, but he's saying, "No, I'm going to try to do it without it." He's doing sports, he's driving, he's of course, getting into trouble a little bit, getting speeding tickets here every now and then. But academically, he's okay and he's going to graduate". "We had about three different instances where he was actively suicidal. One of the times, I actually had to have him taken by an ambulance. He wasn't hospitalized to my dismay. But it got everybody's attention at a different level. He's been one of our worst cases of like, "I'm suicidal, and I want to kill myself, and I'm going to do it this way, and I'm going to do it now." "He would have killed himself. He was super depressed, he was psychotic depressed. He had psychosis". Now he is going to graduate.

In this complex example, this provider describes a very ill student that was able to continue in school and would be graduating soon. His very serious mental illnesses, depression, psychosis, and suicidal ideation put him at high risk of dropping out of high school. His interventions included therapy, engagement of parents and intermittent medication. She describes the student participating in his care, seeking services, making decisions about medications. What is unique to this story is the acuteness of his illness throughout the years including three incidences where he was actively suicidal.

The provider begins the story stating, “we started working with a boy”, this “we” indicates the behavioral health provider as well as the primary care provider. She also uses “he” a lot as she describes what the student did to help himself. She describes “He really uses our support well”, indicating the student himself asserting his autonomy as well as recognition that it wasn’t all the providers, parents, or school staff that were active in his care.

This is again an example of a multifaceted, ongoing set of interventions that included a very ill student who was at high risk of suicidality; however, the provider, parents, school staff, and investment from the student kept the student not only alive but thriving. The provider displays knowledge of the desire for autonomy that is a hallmark for this age group.

PTSD and conduct issues, suspension, and expelled. This provider offers a long story about a student with significant PTSD, who has been labeled “difficult”. She is able to develop a relationship with the student and helped him identify his strengths and address some of the extreme stress in his life.

“I have a client who came in. I can’t remember if he was school ordered or not. He might have been, and his mom came in with him”. “He had some signs of conduct or oppositional defiant issues. They said, “Do you have any male therapists because he

really doesn't like women and he really doesn't like therapists. He has been expelled and suspended all this time," I met him, and we sat down, and we did an assessment". "He actually enjoys coming in now. I have created a safe space for him. He feels like he must be the responsible one at home and make sure that he is there taking care of other siblings". "But we have actually developed a therapeutic relationship and he has been opening up about how things have been going". "I just think this kid so easily could have been labeled a bad kid, not doing well in school, gets in to fights, talks back, hates women, violent blah blah blah and he's absolutely not".

"He has witnessed a lot of stuff, he has Post Traumatic Stress Disorder. He has never told me what the trauma is which is okay. I think eventually he might, but in the meantime, I have given him some space and allowed him to have some boundaries with me and given him a chance to try and really understand what has been going on in his life".

"And him, like so many of the kids that I see, all they need is one adult who really gives a crap and gives them some individual attention and let them know they are important and is interested, and doesn't judge them, doesn't yell at them and doesn't correct them". "I really do think that when that happens, I mean school is kids' jobs and they want to do well". "Like any of us, if we have a job that we don't do well at we quit because we hate it, we feel terrible about ourselves". "So, when kids are not doing well, they are not motivated to do better, they just feel more discouraged and take it personally". "I think he is one example of somebody who has been labeled and has been stereotyped, when he actually got some very, very deep severe trauma, but he is actually working it out and he is okay."

This provider describes a student that had been characterized as a 'bad' student, she describes him as possibly having conduct disorder or oppositional defiance issues that may have contributed to his being expelled and suspended several times. The provider describes helping him understand that he has had some significant trauma in his life. By assisting him to understand how trauma is emotionally damaging, she begins to help him sort out how the trauma has affected him and how he behaves. She helps him to understand he is not an innately bad person. This provider was able to build a trusting relationship with this student that included honoring boundaries. She also touches on self-esteem, and when students are not doing well academically it negatively affects their self-esteem, implying that if she can help them feel better about themselves, they will do better academically. The provider also describes the recurrent theme of trusted adult, specifying behaviors such as "not yelling", "not judging", and "not correcting" them as part of the therapeutic component to the relationship.

One of the unique themes in this story is that the provider reveals a strong belief in this student. She recognizes that he has been labeled and judged which contributed to his ongoing poor performance. She was also able to recognize his strengths such as care for his younger siblings. She summarizes well by stating, "All they need is one adult who gives a crap".

This provider begins with using "I", as in "I have a client" claiming him as her own, she then switches to "we" stating "we" have a therapeutic relationship, indicating a partnership with the student. She describes what he was able to do after establishing a therapeutic relationship. She tells a lot of stories about him, using "he", she ends with "he is actually working it out and he is okay".

This example highlights many of the common themes such as characterization of a student based on behavior that was rooted in deep trauma. She also describes how by providing a

place where he was not being judged, corrected or yelled at she was able to begin a therapeutic relationship with the student. This provider also linked low self-esteem with having poorer outcomes in school.

Other stressors and boundary setting. In this story, the provider does a great job of describing the multiple outside stressors with which some students deal. The provider focuses on the role of male figures in this student's life. For this student, many other commitments were competing for his attention, including coaches asking for more of his time. This provider does an excellent job of describing how he was able to help the student set boundaries and focus on controlling what he could and stop focusing on the things he had no control over.

"I have kid, dad and mom split up, dad moved away and there was no contact. He had been abusive. This kid was worried about his older brother and sister who were not here legally. He was here legally. I mean, they were legal in a sense, the mom had a green card but it's certainly, since the election, all that's up for grabs. So, he had a lot of anxiety over that. He was playing sports. He was working to help support the family but just - and he wanted to be the first to graduate from high school and the first to go to college. So, he had that pressure on him. And some of the pressure was within the family too, his brother had an addiction to drugs and a partner that wasn't very healthy and that caused a lot of stress in the family. So, we did a lot of talking and he had been - he had a - I don't know if he had clear PTSD from the father's abuse because he wasn't the recipient of a lot of it, but he had the trauma of watching his mother and older siblings being abused. So, there was a lot of work around dealing with that trauma and not feeling so responsible because he was a little boy at that time. You get older, you feel responsible. And he did better academically. Some of it was setting limits and boundaries to them. He played

sports, it just seems to be a lot of pressure on kids to help raise money for the team. -So, if they say, "My family has something going on. Or I got to work, or I got to study." You're looked at. And I hear that from lots of kids. it's not always a good thing and they feel very uncomfortable saying, "Oh, I got to do this paper. I got to work until midnight, and I got to go home. And I can't do the carwash to raise money for the team." And kids feel like they can't do that. I think high school sports should teach kids things, but it also should be fun. Yeah, with school, and being assertive and respectful because he would get angry. So, he'd get angry quickly because of this history. And he originally came because of anger issues, he would get angry too quickly. And he knew that. And he would get pissed off real quick. And he realized that wasn't helping him in certain situations. So, we worked on anger, we worked on different techniques, mindfulness, some CBT techniques for the past traumas, things like that. Issues of control, he wanted to control his brother because his brother was in a crazy relationship. And the things that he could control versus his goals which was to finish high school and go to college."

This provider describes the link between anxiety, trauma and the pressure for this student to succeed. The student is doing better academically after getting counseling for his PTSD and learning to set boundaries. We see parentification of the student when the provider describes the student feeling guilt over not being able to protect his mother and siblings from the abusive father. One of the providers' interventions includes helping the student not feel responsible about his father's abuse of his other family members, something the student would perhaps never have been able to identify on his own as hindering his academic progress. The provider also describes helping the student to set boundaries and learn to speak up for himself, the example he gives is being able to tell his coach that he has school work or family obligations that come before

helping a car wash fundraiser. By his coaches asking him to raise money for their team we see the school parentification of this student, adding additional pressure to his life. This provider also describes some basic therapy skills he teaches the student to help with controlling anger.

Unique to this story is the focus on the male figure; the provider opens the story with describing the father as abusive and then moving away. He also emphasizes the student's concern for his older brother's struggles. This provider describes a common theme among male students, not asking for help, or setting boundaries because of societal and cultural expectations that they can handle anything. The provider almost exclusively uses "he" to tell the long and complex story about this student. He converts to using "we" when he describes the work they did together in therapy.

The short stories. Some providers gave shorter examples of student's stories. These short stories are lacking in detail, such as academic history and /or family history. However, they do provide further information about brief interventions that can be useful in certain situations with specific students.

Suicidal ideation and resource room. In this example the provider describes a high-risk student who had educational difficulties along with significant mental health problems.

"I have one guy that had tried to kill himself; he is not doing well in school. He had an IEP, so with his permission I signed a release of information form. I spoke to the school counselor about him going into the resource room more where he can have help. That's been more recently. That is a direct impact. Is that going to be soon enough and enough before the end of the year? I don't know. My main goal was keeping him alive".

This provider identifies a student who has suicidal ideation and distinguishes that he is not doing well academically. She collaborates with the school councilor after getting legal permission from

the student. She finds a place at school where the student can get more help and possibly take refuge. She maintains participation with the student and the intervention which reveals her ongoing investment with this student. Additionally, this provider emphasizes the priority she places on the student's behavioral health issues before academic considerations. She does not directly link better academic outcomes with behavioral health services but overtly implies that by accommodating his behavioral health symptoms, he will have a better chance at obtaining his academic goals. The student has a safe place at school that he can get some academic assistance.

Test anxiety and self-esteem. In this story the provider gives a short example of helping a student by assisting him to examine his study habits and helps him make some adjustments to accommodate his needs.

“I had a kid that was feeling super anxious and about testing, So, part of working with that, with anxiety around testing with the boys has a lot to do with changing their self-esteem, and their thoughts around, their capability”. “Asking him other things, well, what happened with your last test? And oh, I got an F. Okay. So, what did you do to prepare for that test? Well, nothing. Okay. So, what can you do differently this time? Well, I can't study because I can't sit still and I'm too busy, and I'm too all the different excuses. Okay. So, what do you think about studying? How do you see studying? What does studying mean to you? Well, that means you have to sit for hours and hours and hours, being on your butt and not doing anything else. Well, he said, well, yes, that's one way to study”. “But there's also these other ways, we did a lot of breaking things down into little chunks for them, and saying, what about sitting down for 15 or 20 minutes with the timer?”.

This provider identifies low self-esteem in boys as a barrier to academic progress. She explores the students' study habit history, which also exposes the student's misconception of what his study options are. By assisting with better study habits the provider implies that the student has a better chance to succeed and thus accomplishes two things, better study habits and thus better grades as well as possibly raising his self-esteem with positive feedback from better grades. This provider's story demonstrates the theme of low self-esteem holding students back academically, and how better self-esteem contributes to better academic outcomes. This provider includes actual conversations she had with the student including actual quotes from the student. She transitions to the use of "we" near the end of the story indicating a collaboration with the student.

Trusted adult and school motivation. While very brief, this short story clearly illustrates the motivation for students to come to school when they have a trusted adult with whom they can talk.

"Well, I think about this student and I don't know if he's actually focusing more, but at least now, one of the things that he says is that "Oh, having somebody that he can talk to in school has made him more -- he's motivated to go to school." "Before, he's one of those that he doesn't have any friends at school, so he didn't really want to be in school that much. But now, that he feels that he can come to the clinic and talk, he says, he looks forward to that".

While this provider does not make a direct link with behavioral health issues and academic outcomes such as "better focus", she is sure that he is coming more often which implies better academic progress. Unique to this story is the provider mentioning the student feeling isolated at school, not having any friends, so the relationship he has with SBHC staff is therapeutic in more

than one way. The provider begins this short story using “I” but quickly evolves to placing the focus on “him”, using he and him multiple times to tell his story.

When asked about specific examples of when providing behavioral health services to an adolescent male student helped with their academic outcomes, providers were able to supply some complex and evocative stories. Many of the themes were embodied in answers to earlier questions materialized in their chosen patient stories.

These stories bring to light many of the struggles adolescent male students deal with at home, in their communities and within school systems. Some providers described assisting students to leave the high school setting to support their mental health. Providers repeatedly link low-self-esteem with poor academic performance, suggesting that not only do students who present to school with histories of trauma causing low self-esteem but that by doing poorly in school their low-self-esteem is compounded. Concurrently providers frequently report a snow-ball effect of when students do well in school, they feel better about themselves and are thus rewarded and inspired to continue to do well. While the short stories did not provide much contextual detail some of the brief interventions mentioned could be helpful in specific situations.

Research Question Two

What are the implications of behavioral health provider’s stories for policy messaging?

Interview question five, SBHC behavioral health provider’s advocacy messages to policy makers. To elicit providers thoughts on policy regarding SBHCs and adolescent male student’s academic achievement, providers were asked Question Five: If you had to go to Santa Fe or Washington DC and make a pitch for SBHC behavioral health services, what would you say? They told stories that emphasized four different messages.

Educating policy makers about “the link” between education and health. Some of the providers discussed the need for educating policy makers, school staff, and SBHC providers about the link between health and education. One provider acknowledged that while policy-makers want children to succeed academically, they often don’t understand how important basic health is to achieve that goal. This provider offers a compelling dialogue:

I probably would want to start with providing a little bit of education about systems and the intersection between health and education. Policy makers probably want children to have high academic performance. That's probably there. But in order to support that desire and intention, we need to attend to their health because there's no way to create a dualism between their health and their performance academically.

This same provider also described how her therapy impacts the students. This provider stated:

I think a big part of what behavioral health can do is helping these boys to develop an identity that promotes resilience, acceptance of vulnerability, self-expressiveness, asserting appropriate boundaries, and identification of their strengths, and emotion regulation. So, we work on that and if they can really identify as okay, I’m secure and I’m different than other people and that's okay. If I can help them promote that identity and through my validation of their personhood then they will use that identity to be more effective working in school, then later in a job setting as well.

Some providers addressed staff and teachers not policy makers. One provider focused their message on educating teachers regarding using a “trauma-based” approach to interacting with students, this provider said:

So even educating staff about what are some typical responses to trauma, what are some of those cues, or triggers that are happening, because at times, we can unintentionally

trigger someone else. A teacher who is very authoritative, and a kiddo who comes from a home where there's a lot of violence, so there's a lot of yelling, or maybe their parents are physically abusive to them. They're not going to respond the same way to a teacher who may be is a little more passive, and who has a different demeanor.

These providers presented examples and arguments for the link between behavioral health and academic progress.

Educating around differing norms. Many providers focused their policy message on how students receiving medical and or behavioral health services through the SBHC, as opposed to a traditional outpatient facility or no receipt of services at all, challenges norms as well as instills norms. One provider described how seeking of Western medical services (physical and psychiatric) was construed in a negative manner and not organized around these clients. This provider stated:

Their parents, their families, their situations do not have the capacity or the understanding...to be able to bring them to a service which feels very western, very medical and has a lot of stigma.

The negative norms mentioned by this provider hints at some of the resistance some families may have in seeking medical services of any kind even in an emergency. It also hints at what may be a negative bias by the provider against families indicating they may be “lacking” capacity or “lacking” understanding in seeking medical assistance. Resistance by families could indicate that they feel the western medical system is not tailored for them, while bias of the provider is also a negative connotation. The same provider describes some parental outlooks on seeking behavioral health services:

Parents they are not going to take them in to the emergency room, they are not going to.... They don't want their kid in the loony bin, they take it personally, they feel stupid, they feel like they are bad parents.

This provider then argues that SBHC behavioral health services is the only way some students will receive services. This provider stated:

“So, kids who come from highly dysfunctional homes are never going to get the services they need without a school-based health center. It is the only way our most needy kids are ever going to get the help they need. That is the pitch I would make”.

The negative norms stated by this provider indicate some possible explanations for why some families do not seek treatment, but also portray some possible bias on her part, both of which have negative connotations.

In contrast to these negative norms, many providers' messages focused on positive norms, with the overall message that behavioral health is part of complete wellness. One provider described introducing the norm of behavioral health to young children, this provider said: “You know, instilling in children since they're very young, their behavioral health is a part of complete wellness”. This provider is signifying the importance of viewing behavioral health as a positive norm. Another provider's message emphasized the importance of seeing potential in students rather than problems, she said:

“We work on the same team (SBHC staff, school staff, principle) and so we really like looking at the potential. This kid has potential and we don't look at them as a problem, we look at them as how do we develop a solution. They're acting out is not the problem. There's something else going on and we need to find the solution and try to help these kids”.

This provider carefully suggests that the normative stance should be to view the potential in students and support that.

As part of the behavioral health norm, another provider's message highlights how behavioral health services values and normalizes feelings, she states:

“Also, let them be vulnerable. I can cry with you, I can tell you that I'm sad, I can tell you that I'm depressed. It's not modulating my emotions, I'm regulating them on becoming more aware of how I'm feeling. That helps to balance everything out, that certainly helps even academically with graduation rates, how they interact with others, and just that big message.

This provider describes how the normalization of all feelings is part of complete wellness, one not often used with adolescent males. This message challenges the gender norm and provides a healthier alternative.

Advocating for comprehensive approaches. Many of the providers describe that they would advocate with policy makers for various types of comprehensive or systematic approaches to optimization of methods to support students and families at the SBHC, school or community levels. One provider focused on a systems level approach. The provider's message for policy-makers contained arguments of a comprehensive approach to student's health. Included is the recognition of both physical and mental health, access to care, continuity of care, inclusion of family therapist to address family system dysfunction as well as specific suggestions regarding therapy approaches, she stated:

In order to really attend to those health needs we need to create systems that have really low barriers to entry to access those health care services. Health needs to be seen holistically as behavioral health, mental health, and medical issues, your health service is

right here at school. Having that staffing for family members to be serviced is great. And then for the summer to be staffed. And there can be more continuity of care and consistency in the relationship with the healthcare provider if it is a school-based health clinic because a lot of these boys and lower income children and youth a lot of them do not have the most consistent relationship with just community mental health provider. I would also really emphasize the need to be more connected with medical family therapists, because family therapists are specifically trained on how to work with family systems, relationship issues, and of course mental and behavioral health that they have a more comprehensive range than in terms of relationship skills than any of the other mental health disciplines. But I think a big part of what behavioral health can do is helping these boys to develop an identity that promotes resilience, acceptance of vulnerability, self-expressiveness, asserting appropriate boundaries, and identification of their strengths, and emotion regulation.

To contextualize her approach and highlight the importance of services that SBHCs provide, one provider described the context of attitudes towards health care in New Mexico. She explained that, when experiencing behavioral health problems, most kids are told to “get over it”, instead of being taken in for assessment and treatment.

“I know especially here in New Mexico and it's not just behavioral health but health in general where they feel like a lot of it is not important. Oh, I don't need to go to the dentist, oh I don't need to see the doctor because it's not that bad, I'm not dying, I'm not killing anyone. Oh, I'm just sad once in a while it doesn't matter. I'll get over it. A lot of these kids here especially like the male, they are oh get over it. It's not hurting anybody, you're not depressed. You just need to get over it”. There's a lot of depression going on

and he's like well, I don't know, my family they just say you just need to get over it? I'm like, well can you get over it when you're sleeping 12 hours a day? And having him look at there is something that he needs to address and maybe his family needs to see as well because not only was there a significant amount of anger, he was also dealing with a lot of depression.

This provider's message to policy makers includes information about some parents' perspective on where, when or if to seek help for their children. She also includes stereotypical gender norms regarding males seeking emotional support.

A whole school approach termed as a "trauma-based approach" to schools and SBHCs was recommended by one provider. This lens consists of acknowledgment of the prevalence for PTSD in students and the responses or interactions in the school as a whole, that may trigger an adverse response. She stated:

So even educating staff about what are some typical responses to trauma, what are some of those cues, or triggers that are happening, because at times, we can unintentionally trigger someone else. A teacher who is very authoritative, and a kiddo who comes at home where there's a lot of violence, so there's a lot of yelling, or maybe their parents are physically abusive to them. They're not going to respond the same way to a teacher who may be is a little more passive, and who has a different demeanor.

She goes on to also describe how it's important for teachers to look beyond the stereotypes linked to behavior and view behavior as symptoms not problems, she stated:

And even if there's not trauma, kiddos with ADHD, kiddos with ODD, having teachers understand that the kids aren't always defiant, because they can't sit still, because they're needing to get out of the classroom, and because they're forgetting to bring in their class

work is not due to, “I don’t want to do it. I’m just saying, I’m not going to do it.” But rather is related to a subsidy symptom attached to ADD, or potentially attached to ODD.

In this whole school approach, this provider tells a message that urges policymakers to understand that many students’ behaviors are stereotyped as disruptive and to consider that many students’ behaviors are symptoms of a larger behavioral health or mental health problem such as PTSD, ADHD or ODD. While not a specific policy recommendation, this provider included education around misidentification of students, classifying them as disobedient instead of recognizing and addressing the symptoms of ADHD and or PTSD. This provider wants to emphasize this particular disfunction to policy makers.

Her message also highlights the therapeutic relationship she utilizes with the students and the importance of policy makers to understand why this is important. She stated:

And having a strong consistent role model that’s there, weekly, however it needs to be who's not in that punitive side. To also let them be vulnerable. I can cry with you, I can tell you that I'm sad, I can tell you that I'm depressed. It's not modulating my emotions, I'm regulating them on becoming more aware of how I'm feeling. That helps to balance everything out, that certainly helps even academically with graduation rates, how they interact with others.

She describes a type of co-regulation that happens within the therapeutic relationship that promotes awareness and acceptance of emotions rather than minimization. The message for policy makers is that this approach differs from the standard approach in which young male students are told to “get over it”.

Another provider’s message focuses on the small community, she states:

I think that that's imperative to small communities that, you know, can't go to the different, you know, agencies for all of these services I provide, and they know the staff at the school-based health centers, you know, they know the kids because they see them every day. They see what, you know, they see their – their highs and lows, they see their struggles, they see their accomplishments on a daily basis. So, it's very rare that when a child comes in to the office, we don't know what it's about and I think they're still comfortable with the center because the school nurses there, the nurse's assistant, you know, the providers that they see at the clinic, you know, here, when you're right in here"

Here a provider places her behavioral health work in the context of community, and the message the provider has for policy makers is how SBHC services are suited to small communities and how SBHCs also help schools become small communities. Again, this provider did not choose a direct policy message for her response, instead she choose to describe how the SBHC is part of her small community and the importance of that.

Advocating for the importance of school-based health centers. Some of the providers' messages to policy makers emphasized the varying functions of SBHCs, one provider described the SBHCs as something that connects the school to the community, she stated "School-based Health Centers are, you know, the – the glue between the community and the school or they should be". She also describes the flow of services across dominions such as the school and the SBHC:

"That flow of service from the school to the SBHC is, you know, imperative and important and it also give the kids a sense of support because we provide medical, we also provide behavioral health and as they're seeing, behavioral health is a stigma and you know, so I mean, if the kids are, you know, seeing counselors since young because, I

mean, they're there and the counselors will go up and ask them how they're doing that's already connection to the counselor. you know, instilling in children since they're very young, their behavioral health is a part of complete wellness.”

This provider's message highlights the importance of the normalization of behavioral/emotional health, she recognizes that by having counselors on campus who know them and care about their well-being, students not only normalize the importance of mental health but also learn connectedness with the counselors.

Another provider's message included how SBHCs function as a bridge between multiple systems, she stated:

I think they're a good bridge between the medical world, the clinical world, and the schools. It's important for those systems to work together. Even the justice system, I think it's important that they all work together because if we communicate and work together, we get a full picture of what's going on with the kid.

This provider's message to policy makers is the importance of SBHC being part of multiple systems working together (including and especially the justice system) to best support adolescent male students.

Another provider's message to policy makers describes one of the SBHCs' functions as promoting adolescent development, she stated:

By learning how to take care of themselves in many different ways. Learning how to – learning basically life skills just by learning how to make an appointment, learning how to reach out, learning – go to the appointment on their own, how to know that there's something wrong, or not wrong with them physically, or mentally”

This provider emphasizes the role SBHCs play by providing students with the opportunity to seek services on their own. Her message to policy makers is that SBHC provides opportunities for adolescents to practice independence by recognizing they have a problem, asking for help and doing so through SBHC.

Another provider's message also considered how SBHCs help students to develop [their own independence and voice], she stated:

It's helpful for them to know that they have rights and that they have the means to take care of their own healthcare. And that they have a voice in that – it's about them taking care of themselves, and it's not about the parents taking care of everything for them.

Because they want to do everything on their own anyway. So, why not include that in health. It makes them more responsible for wellness, for prevention.

These providers' messages to policy makers highlight important aspects of how behavioral health providers function in schools and SBHCs helping adolescents to learn and develop skills not normally emphasized but equally important to adolescent development. In terms of policy action this could be viewed as a message for helping students gain skills towards self-care, first recognizing they need assistance and then having access to services.

Another provider discussed students learning how to care for each other, she described students who bring friends to the SBHC for services.

The SBHC also promotes kids taking care of each other, because they'll bring their friends, they'll come with their friends. They bring their friends down for Plan B, and it also for the males, it really – I see so many for confidential services, or even other services.

These are examples of messaging to policy makers about the function of SBHCs in development of adolescent independence related to self-care and care for others.

Interview Question Six.

Is there anything else you would like to add? Eleven of the seventeen providers interviewed answered interview question six. A review of all of the responses revealed answers validating issues already highlighted by the previous interview questions.

Summary

Seventeen behavior health providers from SBHCs around New Mexico were interviewed about their perspectives on how behavioral health services may affect low-income adolescent male students academically, they were also asked about what they would say to policy makers about SBHCs. Along with extensive lists of behavioral health diagnosis, providers indicated that adverse life experiences were common for adolescent male students. Stories offered by the providers detailed context in which the students and families live. This included stories about generational and historical trauma, and how violence and poverty affects students, families, and whole communities. Adherence to traditional masculine gender norms was also reported by multiple providers to be detrimental to adolescent males' help seeking behaviors. Other providers reported that sometimes the adolescent males' family culture conflicted with the school culture causing distress for some students. Providers also discussed that the SBHC provided a safe place for students at school as well as trusted relationship with the staff which they felt helped students academically. Many providers stressed the link between treatment of behavioral health issues and better academic outcomes. The messages the providers gave regarding policy suggestions were not easily captured for policy messaging, instead providers offered long stories

that fit within four different message categories: educating policy makers about “the link” between education and health, educating policy makers about differing norms in relation to some families relationship with the medical system and a more positive norm of how behavioral health is a part of complete wellness. Providers also advocated for comprehensive approaches to support students and families, going beyond just what the SBHC should provide. Finally, providers promoted the importance of SBHCs stressing the convenience, confidentiality and role in promoting adolescent development.

Chapter 5

Discussion, Implications, and Conclusion

This qualitative descriptive study provided one of the first known explorations of behavioral health providers' perspectives of how the provision of behavioral health services in SBHCs support low-income adolescent male students academically. Providers were also asked about policy recommendations related to how their services may support low-income adolescent males academically. In this chapter, four of the major findings of the study will be addressed. These findings include male gender specific behavioral health and academic vulnerabilities, how stressors on families and students influence the mental health and academic outcomes of adolescent males, how lack of school resources and unfavorable school environments effect adolescent males, as well as how trusting relationships, the safe space provided by the SBHC staff, and behavioral health providers support students. The discussion of these findings will be followed by clinical, research, and policy implications; and a conclusion.

Masculinity Norms as Barriers

The first major finding is that providers described masculinity norms, at home and at school, as barriers to academic achievement and accessing behavioral health services. Providers identified several challenges unique to the adolescent male students they serve. Issues related to gender roles and gender norms appeared in numerous provider responses to several interview questions. Providers mention students struggling with adult responsibilities they have at home, such as parenting younger siblings and/or being employed to help the family financially, which conflicts with their school responsibilities. This conflict is directly associated with the gender expectation that some boys have placed on them to assume adult responsibilities in assisting with family obligations. Differing gender expectations are highlighted by this division of home versus

school culture. The male providers interviewed described the need for adolescent boys to have a male role model in their lives.

In addition to adolescents' conflicts between home and school responsibilities, providers also noted that masculinity norms created barriers to seeking health care. According to Rice, Purcell, and McGorry (2018), gender is a crucial driver of mental health outcomes, and adolescent males "do poorly on indicators of mental health evidenced by elevated rates of suicide, conduct disorder, substance abuse, and interpersonal violence related to their female counterparts" (p. S9.). While not in a SBHC setting, Grace, Richardson, and Carroll (2018) interviewed behavioral health providers working with young men about their perceptions of factors that support or inhibit young men from seeking services for mental health reasons. Their results included a discord between youth attempting to "save face", (p. 252) preserving masculinity, and a real need for behavioral health assistance. Providers in this study also linked traditional masculinity and gender norms as obstacles for adolescent males in recognizing and seeking help for mental health issues as well as academic problems.

Because traditional gender norms emphasize male autonomy and independence, many adolescent males are reluctant to ask for help. As an example, multiple providers mentioned adolescent male students either not seeking or delaying asking for help with either school work or mental health problems due to stigma and shame associated with help seeking behaviors. The fear of stigma or shame in asking for help exemplifies how the gender socialization of adolescent males while starting in early childhood intensifies in adolescence (Amin, Kagesten, Adebayo, & Chandr-Mouli, 2018). According to Rice and colleagues, males have poorer rates of mental health symptom recognition and mental health literacy compared to their female counterparts. So adolescent males' adherence to traditional male gender norms not only lead to a lack of

recognition of mental health symptoms but also reluctance to seek services due to fear of appearing weak and less masculine.

Providers in this study noted that adolescent male students faced a double barrier in accessing BH services: while adolescent males may not access behavioral health services because of perceived masculine norms, those same adolescents may also be labeled or managed by school personnel based on these personnel's' perceived norms as well. Providers reported that when some adolescent male students act angry and aggressive in classrooms, they are labeled as disruptive or diagnosed with conduct disorder and are punished for their behavior instead of getting screened for behavioral health problems. Some providers reported adolescent male students coming to the SBHC because of fighting or aggressive behaviors. These findings are similar to the high prevalence of mental illness among adolescents in the juvenile justice system (Kamradt, 2000), indicating that unrecognized and untreated mental health disorders can lead to encounters with the juvenile justice system.

Recently the American Psychological Association (APA) issued its first set of guidelines specific to working with men and boys (Pappas, 2019). According to Pappas, authors of the guidelines concluded that traditional masculinity is psychologically harmful. Boys' suppression of emotions was also recognized as harmful to themselves as well as potentially harmful to others, girls in particular. According to Patton, Darmstadt, Petroni, and Sawyer (2018) while the focus on gender equity as a social determinant of health has brought progress to girls and young women's lives, the same gains has not been present for boys and adolescent males. This is not only important for advances in adolescent male lives but also may also affect women and girls they encounter. Patton et al. contend that due to gender norms, adolescent males are more "vulnerable to specific health problems, including violence and homicide, accidental injury, and

substance abuse and particular social risks” (p.56). The findings from this research also suggest that adherence to traditional male gender norms may harm their emotional health and academic achievement.

Trauma, the School Environment and the SBHC as Safe Haven

The second overarching finding from this study was that providers perceived that most behavioral health issues in adolescent male students, stem from trauma and may be exacerbated by the disciplinary emphasis in schools; providers described the SBHC as a safe place for male students. Additionally, providers emphasized the role of trauma in the adolescent males’ personal history, families, and communities. They described families and students struggling with generational and historical trauma, poverty, and lack of resources. Providers inferred that most of the adolescents’ behavioral health issues stemmed from past or current trauma experienced by students. Providers described students with multiple adverse childhood events (exposure to violent events, being victims or perpetrators of verbal or physical abuse) as predominately affecting student’s mental health status and thus their ability to achieve academically.

The predominate reporting of trauma linked to adverse childhood events in adolescent male students is similar to findings from the New Mexico Adverse Childhood Events (ACE) data report by Cannon, Davis, Hsi, and Bochette, (2016). In their study of 220 adolescent males in the juvenile justice system, 74.8% had exposure to five or more ACEs and were seven times more likely to have four or more ACEs than a similar cohort in Florida and the original adults in the Kaiser Permanente study (Felitti et al., 1998). The data reported by the providers in this current study adds additional detail to understanding the types of ACEs that adolescent males in New Mexico experience. This includes but is not limited to the following: instability within families, parentification of teens, exposure to violence as witnesses, victims or perpetrators, and historical

or generational trauma causing ongoing problems within families and communities. With a better understanding of the specific sources of trauma and adverse childhood events, systems to prevent and treat these issues can be enhanced.

Many providers also emphasized the important link between behavioral health symptoms and academic challenges. Providers described young men presenting with a range of behavioral health issues related to trauma. These included anxiety, depression, and PTSD. Poor understanding and recognition of the effect of PTSD on adolescent males by teachers and school personnel was reported by providers to lead to misdiagnosis and punitive measures rather than proper diagnosis and treatment. Additionally, providers described adolescent males experiencing adverse events at school that contributed to their stress and trauma. Providers described teachers' aggressive or hostile reprimands as adding to the students' trauma. Additionally, providers expressed concern with male students who are labeled as "disruptive" in class and treated in a punitive fashion as well as adolescent males who are misdiagnosed with ADHD (also due to disruptive behaviors) when the underlying diagnosis is associated with trauma. Recognition and treatment of mental health issues in adolescent male students could help change the focus from punitive to supportive, allowing schools and SBHCs to change the trajectory of many adolescent male students' outcomes.

Providers described other aspects of schools and school districts (e.g. lack of special education experts, psychologists and tutors) contributing to poor educational outcomes in adolescent male students. Providers consistently commented on negative school environments and lack of school and school district resources as strongly affecting adolescent males. Some providers expressed concern that students who needed evaluation were not getting it because students are not routinely screened and unless families or teachers press for evaluation it is not

done. Even when a student is recommended for evaluation of a learning disability, there may not be enough qualified personnel available to provide the service. Providers also mentioned lack of academic resources for students who need tutoring or extra help and how this particularly affects adolescent males as they are more reluctant to ask for help. These findings were echoed in the recent state court ruling in the consolidated lawsuit *Yazzie v. State of New Mexico* and *Martinez v. State of New Mexico* (New Mexico Center on Law and Poverty, 2018). The 2014 lawsuit against the State of New Mexico, filed by The New Mexico Center on Law and Poverty on behalf of several families in New Mexico, contended that the State of New Mexico education system violated the state's constitution by failing to provide students a sufficient public education (New Mexico Center on Law and Poverty, 2018). In July of 2018, a New Mexico state court judge ruled with the families stating that New Mexico's public education department is failing to provide students, particularly low-income, students of color, English Language Learners and students with disabilities, the proper resources needed for their education as mandated by the state's constitution. According to the Final Judgement and Order, the Public Education Department failed to provide "at-risk students with the programs and services needed for them to obtain an adequate education" (2019, p. 2), but did not specify behavioral health services. The defendants were given until April 15, 2019 to take steps to ensure that New Mexico schools have resources necessary for at risk students (New Mexico Center on Law and Poverty, 2018). According to the providers interviewed in this study, students with behavioral health problems deserve appropriate behavioral health services, which do fit into the above category of services needed for an adequate education.

In contrast to the classroom and school environment, providers considered SBHCs as a "safe space" for students. Behavioral health providers described the importance of trust and

consistency in their relationships as well as offering connection and safety to the male students. For traumatized adolescent males, providers concurred that having a trusted adult in a safe environment at school contributed to the adolescent's emotional and academic wellbeing. Similar to the results in this study, non-SBHC behavioral health providers in Grace, Richardson, and Carroll (2018)'s research cited the need for a more sustained relationship, in which "safety, trust, and rapport" (p. 252) were foremost. They suggested that sports, technology, and social media were effective ways to engage young men.

Behavioral health providers interviewed in this study also concluded that the safe place provided by SBHC as well as trusting relationships with the behavioral health providers were key components to provision of care to adolescent males in SBHCs.

Mental Health and Academic Outcomes

The third finding from this study was that providers described two different perspectives about behavioral health services and male students' academic outcomes. The first more common perspective described the link between mental health and ability to focus on academics and how poor mental health affects a student's capacity to concentrate on school work. A second less common perspective asserted that providers should primarily focus on students' mental health problems and that the academic issues were not the behavioral health providers' purview. Across these two perspectives providers emphasized their primary role as clinicians providing behavioral health services, and that students with behavioral health problems need access to treatment.

Previous SBHC studies addressing academic outcomes of students receiving services at SBHCs has proven difficult to conduct and findings have been mixed. No known prior studies have specifically targeted perspectives of behavioral health providers on how their services may

affect the academic outcomes of adolescent males. While Blacks and Kelly's (2015) case study in one suburban Chicago high school did include providers' perspectives on the effects of SBHC on student risk and protective factors, their study did not differentiate between responses of behavioral health versus primary care providers and they did not ask questions specific to individual provider's perspectives on the effects of SBHC services. Their findings did include that high risk-taking behavior was associated with low academic achievement. The findings from this study are similar to the Blacks and Kelly findings including providers linking poorer mental health with poorer academic outcomes, yet the findings from this study are more specific to behavioral health services and the possible association with academic outcomes.

The findings from this study also are aligned with those from a qualitative study by Mangat Bains, Franzen, and White-Frese (2014). Their research consisted of a secondary analysis of semi-structured interviews with adolescent males who had received behavioral health services at a SBHC. Themes revealed included "the door is always open", "sanctuary within chaos", "they get us" (themes consistent with this study's finding that the SBHC is seen as a safe haven) and multiple references within "achieving my best potential" to better academic outcomes that indicated an association between receiving behavioral health services and better academic outcomes.

Stories for Policy Messaging

In this study, providers were asked what they would say if they had to go to Santa Fe or Washington, D.C. and advocate for behavioral health services. Contrary to expectations, providers offered long stories instead of short policy messages. Providers explained the link between good mental health and academic achievement and used stories to explain students' lives and provide context. They included descriptions of the effects of poverty, racism, and lack

of resources in communities and educational systems in New Mexico. Providers also advocated for and explained the value of behavioral health services in SBHCs. Within these stories, providers mention several key areas of policy action including a comprehensive trauma informed approach for schools and SBHCs. Included in this approach would be training for teachers, providers and school personnel on differing approaches to students that may have behavioral issues due to exposure to trauma. Overall many of the providers' policy recommendations supported the view that for adolescent males, SBHCs are vital sources of services, and that behavioral health services were seen as vital to a trauma-based approach.

The four major findings from this study provide compelling data to assist in widening our focus on the contexts and circumstances that may help shape the health and educational outcomes of adolescent males in New Mexico. The Healthy People 2020 definition of health includes social determinants which includes school quality, neighborhood safety, and community resources. The data from this study indicate that many students, families and communities are lacking in resources needed to obtain and maintain good health. According to Butterfield's (2017) updated conceptual model, named the Butterfield Upstream Model for Population Health (BUMP) for strengthening the effectiveness of upstream actions, evidence and strategy are needed. The evidence provided by the behavioral health providers in this study have provided context specific evidence. Butterfield's BUMP Model stresses strategies that provide the "what and when of interventions" (p.5) as well as inclusion of systems outside of health care. The clinical, research and policy recommendations discussed below are based on context specific evidence, and application of upstream interventions to strengthen the educational and health of adolescent male students in New Mexico. The "when" of each intervention is included if possible. While many upstream factors affect the health and wellbeing of adolescent males in

New Mexico, elevating the systems that most affect adolescents such as educational and health systems, could have a profound effect on the downstream adult years.

Implications

This section will include implications of the research findings for clinical practice, research opportunities and policy propositions. Social determinants of health and education are overlapping, this study reinforces the value of that intersection. In the implications discussed below, when possible both health and educational outcomes will be included.

Clinical Implications

Several clinical implications will be discussed regarding gender norms and trauma findings, specific to both behavioral health providers and nurses.

Providers highlighted gender norms of masculinity as hindering adolescent males from seeking behavioral health services. The findings of this study are supported by the APA's newly released guidelines specific to providing care to boys and men (Pappas, 2019). Based on the findings of this dissertation, it is recommended that the Office of School and Adolescent Health provide trainings for primary care and behavioral health providers based on the new APA guidelines. The APA also found that boys are more likely to be diagnosed with attention-deficit hyperactivity disorder and receive harsher punishments than girls, especially boys of color (Pappas, 2019). Based on that finding, along with providers from this study recognizing that many adolescent males were misdiagnosed with attention-deficit hyperactivity disorder when most likely they were suffering from PTSD, it is recommended that teachers and school personnel are taught to recommend behavioral health screening for PTSD prior to punitive measures. Not recognized by the APA but reported by providers from this study was a gender specific cultural aspect of some families' expectations that adolescent males should stay home or

work to help support their family. Based on the recognition that being absent from school is not always due to delinquency but could be an expectation placed upon a student by their family, it is recommended that processes are developed for behavioral health providers and school personnel to work collaboratively (within the HIPAA and FERPA guidelines) to accurately screen, assess and diagnose adolescent males that are struggling to do well in school or struggling to attend school.

Based on the providers reports of gender identity and traditional masculinity affecting adolescent males from seeking behavioral health services, it is recommended for nursing programs (all levels), as well as behavioral health provider clinical programs to incorporate the APA guidelines specific to practice with men and boys into the curriculums. Use of a gender aware approach to clinical practice is important for working with both men and women. In a 2007 study, research revealed that the more men conform to stereotypical masculinity roles the less likely they were to seek health care services as well as being more likely to engage in risky health habits such as heavy alcohol use, tobacco use, and have overall poor diets (Mahalik, Burns, & Syzdek, 2007). Recognition by both medical and behavioral health providers that a gender-based approach is important but that men who have traditional masculine identities are also at greater risk for not seeking services and have higher risk health habits.

The finding that many adolescent male students and their families struggle with trauma is relevant to how providers work with students who may be suffering from PTSD. Clinical implications include behavioral health providers, nurses and primary care providers being trained in trauma-based approaches. According to Courtois and Gold, (2009) trauma assessment and training are not included in the curricula of most mental health provider graduate programs. Wheeler (2018) advocates for trauma informed care to be integrated into nursing education,

stating “it can then be easily integrated into patient and family education and incorporated into regular nursing care” (p.21).

The need for more nuanced approaches to clinical care of adolescent males is being recognized more widely across many disciplines. Methods specific to adolescent males and adolescent males who may be suffering from trauma are being recommended as part of many health clinician curriculums. Based on the findings from this research, it is recommended that both gender-based and trauma informed care be formally integrated into both nursing and behavioral health providers’ curriculum.

Research Implications

The need for further research studies proposed in this chapter includes qualitative as well as quantitative studies. The qualitative research approach used in this study allowed for rich detail regarding social and emotional factors influencing adolescent males and how receiving behavioral health services may have helped them academically. The behavioral health providers in this study offered many long stories about the adolescent male students; they also told long stories of what they did to help the students, which were all very individualized information encouraging further qualitative studies. What is missing in the literature, is similar data from adolescent male students. Future qualitative studies that incorporate adolescent male students as research team members as well as obtaining their perspectives on what allowed them to seek and receive behavioral health services at a SBHC are needed. As adolescent males have often been blamed for not seeking help for medical or mental health needs, studies that include adolescent males’ perspectives about how to best engage them could assist in creating systems that proactively involve these youth. Use of adolescent males in as part of the research process could also assist a more youth friendly or oriented set of research questions, methods etc. Use of that

research data could also help to expand how schools and SBHCs engage with adolescent male students around seeking and receiving behavioral health or other assistive services.

The findings from this study highlighted the need for additional quantitative research as well. Linking SBHC services to better academic outcomes has been a difficult task for researchers but an important one for ongoing advancement of services and economic support of SBHCs. Previous research findings have been mixed but include some positive results, particularly related to access, utilization, and to students receiving behavioral health services. Studies that measure such indirect outcomes such as school-connectedness have had mixed findings but show promise in helping to identify risk processes rather than purely risk factors. Gaps in the literature include studies that help to distinguish contextual factors related to possible indirect outcomes of receiving behavioral health services in a SBHC.

Providers from this study indicated consistency of providers is important as well as by providing safe space and connection for students, the students are then more able to focus on academics. Based on those findings, one particular quantitative study would be to add questions to the New Mexico Youth Risk and Resiliency Survey (NM YRRS) specific to SBHCs to better understand the potential association with use of SBHC services (both behavioral health and primary care) and protective factors already included in the NM YRRS. The NM-YRRS includes seven statements designed to elicit information about protective factors related to relationships with adults. Rather than a primary focus on prevention of risk factors, a better understanding of protective factors can expand an intervention tool kit and would develop evidence-based data regarding SBHCs, behavioral health services and possible protective factors.

Policy Implications

The findings from this study have policy implications in four areas. First, the results of this research strongly support the need for behavioral health services and trauma informed approach to schools and services provided at SBHCs. Both health and educational organizations are recognizing the pervasive effects of trauma across communities and the need for a more focused approach based on the unique effects of trauma on children, youth and families. According to Ko, Ford and Adams (2008), students who have repeated exposure to traumatic events are susceptible to alterations in psychobiological development and are at increased risk for poor academic performance, engagement in high risk behaviors as well as difficulties in relationships with family and peers. From dramatic events such as school shootings to more prevalent incidences such as physical or sexual abuse, witnessing domestic violence, bullying, racism and insecurity of housing and financial resources, there has been a call (Bath, 2008, Walkley and Cox, 2013) for what is known as a trauma informed approach for both health care institutions, primary care and behavioral health providers, educational institutions and school personnel. Consistent with both this literature and the findings from this study it is recommended that both SBHC providers and schools implement trauma informed policies and educational approaches related to health and education.

OSAH should enact use of an evidence-based treatment improvement protocol titled “Trauma Informed Care in Behavioral Health Services” (SAMHSA, 2014) from The Substance Abuse and Mental Health Administration by primary care and behavioral health providers in SBHCs. This guideline includes trauma-informed screening and assessment tools, techniques, strategies, and approaches that help behavioral health and primary care providers assess and treat students who have been exposed to traumatic events. Introduction to Trauma Informed Care

could be presented at the annual conference Head to Toe. Head to Toe is sponsored by the Department of Health, Office of School and Adolescent Health and offers a potential venue for presentation to a statewide audience of health and educational professionals. Use of such a venue could serve as both an introduction and reinforcement of this new approach. In addition to policy changes related to protocols for SBHCs, all school districts in New Mexico should integrate a trauma informed approach and trauma specific interventions into their school policies. According to the National Child Traumatic Stress Network (n.d.), a trauma informed framework should be integrated into the educational system with the goal of creating a school-wide environment that addresses the needs of all students, staff, administrators, and families who might be at risk for experiencing traumatic stress symptoms. This framework should be guided by SAMHSA's six key principles to a trauma-informed approach and trauma-specific interventions that address consequences of trauma and facilitate healing. These include: 1), Safety, 2), Trustworthiness and transparency, 3), Peer support and mutual self-help, 4), Collaboration and mutuality, 5), Empowerment, voice and choice, 6), Cultural, historical, and gender issues.

Second, the results of this research suggest that behavioral health services and SBHCs are important and should be expanded. Providers in this study had two main perspectives about adolescent male students receiving behavioral health services and academic outcomes but both perspectives acknowledge and emphasize the implication that if adolescents are in school and have behavioral health problems, they deserve help. The providers imply that the students' right to education is blocked by unmet needs of behavioral health problems. This study suggests that providing SBHC behavioral health services is critical to students' basic public education and mental health well-being.

Currently in New Mexico, there are 73 total SBHCs, with 42 located in high schools, 11 in middle schools, four in elementary, and 16 in combined grade campuses (New Mexico Alliance for School-based Health Care, 2018). Overall, users in 2017-2018 were 41% male, 63% Hispanic, and 9% American Indian. Sixty-six percent indicated they needed to talk about emotions/mood, 59% needed to talk about stress, and 15% reported a history of abuse. Among males, 25% reported depression and/or anxiety symptoms, with 71% of those reporting a history of abuse and 55% reporting a history of homelessness. All provide behavioral health services and 26% of all SBHC visits were for behavioral health, with no breakdown by gender. The most common behavioral health counseling services provided were for severe stress (40%), general, (17%), depression (18%), anxiety (9%).

Based on this latest data and informed by this study's findings, it is recommended that the N.M. Public Education Department collaborate with the Office of School and Adolescent Health to expand behavioral health services at SBHCs to more schools, particularly high school and middle schools, as well as expanding behavioral health service hours at existing high school SBHCs. Criteria for placement of new SBHCs is difficult to propose as many schools have poor graduation rates, are in primary care provider shortage areas and are located in areas of poverty. The principles to base expansion of services is an area in which collaboration between The Public Health and The Public Education departments and Children Youth and Families as well as community stakeholders could prove fruitful.

Third, based on the complexities of the social problems that affect a vast majority of students, families and communities in New Mexico, it is recommended that the Children's Cabinet of New Mexico be the lead agency in designing and enacting a curriculum for a more deliberate collaborate approach that is based on principles already developed by the California

Health In All Policies Initiative described below (Center for Health Care Strategies, 2018).

Collaborating agencies should include departments such as Public Education, Department of Health, Children Youth and Families, Human Services and Indian Affairs.

Health in all policies is an approach used across sectors and within public sector in recognition that social determinants of health “falls to many non-traditional health partners, such as housing, transportation, education, air quality, parks, criminal justice, energy and employment agencies”, (Rudolph, Caplan, Ben-Moshe, & Dillon, 2013, p. 6). California has enacted an initiative titled ‘Health in All Policies’ that endorses a collaborative approach to improving the health of all Californians (Better Health Beyond Health Care, 2018). The goal of the task force created by this initiative was to help identify strategies to improve the health of Californians while supporting departments to incorporate not only health but equity considerations into their policy development and day to day processes. While the California Health in All Policy Initiative is farther reaching than what is proposed by this author, it constitutes a type of blueprint for how multi-stakeholders can work together to better support health and equity outcomes of students, families and communities across New Mexico.

Fourth and last, the results of this study have important implications for policy advocacy. Identification of providers’ own approaches to policy messaging was another goal of this research. The policy messaging offered by the participants in this study included vignettes that highlighted complex pictures, rather than short, concise messages as expected. Although this response by the providers may show their lack of policy or advocacy knowledge, it more likely indicates providers’ recognition that complex problems merit complex solutions.

Consistent with main stream policy strategy on how to successfully communicate about a policy issue, Perkins (2008) lists three persuasion techniques: facts and logic; credibility of

speaker; and appealing to a basic emotion, need, or desire (p.145). The goal of communication with policy makers can be to share information and/or persuade them to draw a conclusion about information and to get them to believe in the recommended intervention and take an action (Young & Travis, 2008). While many policy communication recommendations include messages that are “clear, concise, logical, and ideally rooted in evidence” (Chaffee, 2012, p. 105), the providers in this study did not deliver “clear, concise, logical” messages, they told stories. The providers’ stories fit under the appealing to basic “emotion, need or desire” persuasion technique.

Providers’ use of stories also aligns with an emerging public health tool known as vignettes. According to Mah, Taylor, Hoang and Cook (2014), vignettes can be used for both health policy research and public health policy deliberation. Mah et al., describe one of the uses of vignettes in qualitative data collection “to capture complexity in the operationalization of concepts through their representation of real-world situations” (p. 1826). The complex stories told by the providers in this study are samples of “capturing complexity” in the real-world situation of adolescent males struggling with behavioral health problems in New Mexico.

Vignettes have also been used as an advocacy resource, The American College of Teachers Education (AACTE), provided on-line vignettes for use in advocacy work by its members. These vignettes consisted of “powerful narratives”, (VanHoutin, 2018, p1) on the significance of a grant to assist student teachers. Use of some of the provider stories as a vignette could assist health and education policy advocates when presenting to policy makers. Based on the providers’ narrative policy messaging, presentation of this studies’ findings and the development of vignettes to key advocacy groups and policy makers such as New Mexico Alliance for School-Based Health Care, New Mexico Voices for Children, Mission Graduate of

Central New Mexico, New Mexico Cradle to Career Policy Institute, Office of School and Adolescent health, Individual School Boards is recommended for use in policy proposals and other public messaging.

Summary

In this qualitative descriptive study, 17 behavioral health providers from SBHCs across New Mexico were asked about their perspectives on how behavioral health services may support low-income adolescent males academically, and what they would say to policy makers about SBHCs. Data was collected using semi-formal one on one individual digitally recorded interviews. The audio recordings were then transcribed to written form. Data analysis was an iterative process beginning with the interview and continued throughout data analysis. Hand coding was done using content, thematic and narrative analysis. For research question one (how do behavioral health providers describe how the provision of behavioral health services support low-income adolescent male students?) the four main findings included: how masculine norms at home and school act as barriers to academic success and accessing behavioral health services, stressors on families and students influence the mental health and academic outcomes of adolescent male students, school districts lack of resources and unfavorable school environments negatively affect adolescent male students, and that trusting relationships, consistency, and the safe space provided by the SBHC staff and behavioral health providers support adolescent male students. In response to research question two (what are the implications of behavioral health provider's stories for policy messaging?), providers offered long stories instead of short policy messages. The messages fit into four different message categories: educating policy makers about "the link" between education and health, educating policy makers about differing norms in relation to some families' relationship to the medical system and a more positive norm of how

behavioral health is a part of complete wellness. Providers also advocated for more complete and comprehensive approaches to support students and families in schools and at SBHCs. Finally, providers promoted the importance of SBHCs for support of behavioral health and academic outcomes of adolescent males.

Based on the data results the following clinical implications were suggested:

incorporation of the new APA guidelines for primary care and behavioral health providers in SBHCs; integration of both gender-based and trauma informed care into nursing and behavioral health providers' curriculum; recommendation that school personnel consider behavioral health referral to screen for PTSD rather than punitive measures; and development for SBHC and school personal to work collaboratively (within HIPAA and FERPA guidelines) to accurately screen, assess and diagnose adolescent male students who are chronically absent and may be staying home to help their families. The research implications based on the findings include further qualitative studies that include the adolescent male students' voices on how to better engage them in services as well as including them in the research process. Another research implication is to include additional questions on the YRRS specific to SBHC use, in an attempt to further understand protective factors that SBHCs provide. The policy implications based on the research findings include a trauma informed approach to schools and services provide at SBHCs, as well as SBHC behavioral health services available at every high school, with collaboration between PED, OSAH and CYFD to prioritize expansion. Another policy recommendation is for the Children's Cabinet to be a lead agency in designing/enacting a template for a collaborative approach based on the public health approach termed "Health in all polices", this approach is used across sectors and within the public sector in recognition that social determinants of health falls to many non-traditional health partners. The last policy

recommendation is for health and education policy advocates to use vignettes created by the behavioral health providers when advocating for changes.

Conclusions

The same social determinants that affect health also affect education. Poverty, racism, poorly funded educational systems, lack of access to healthcare, all contribute to poorer health and educational outcomes. Behavioral health providers who work at high school SBHCs in New Mexico all identified those same social determinants as contributing to current and past trauma as well as obstacles for low-income adolescent male students. Our current academic and health systems operate in silos when they have many common goals including healthy students who learn better and an educated person becoming a healthier adult. Areas for collaboration will be essential to moving forward to solve both educational and health problems. The findings from this research can inform the policies and practices of organizations responsible for ensuring the health, wellbeing and educational needs of some of our most vulnerable populations.

In recent years the heightened awareness of the importance of early childhood interventions has grown. Specifically, New Mexico has invested in home visitation programs, legislative proposal for state funded pre-K to all 4-year old's as well as a new cabinet level department that's specific focus is early childhood programs. Services that are now spread across a few state departments will be consolidated under the new agency. According to Cohen, Bishop-Josef and Kahn, (2012), the advocacy group Zero to Three used research on the adverse effects of trauma on infants' brains to advance science-based policy agendas to improve infant and children's physical and socio-emotional health. Cohen et al. contend that the concurrent research on the effects of social determinants of health and health disparities has helped to shape policies that protect children and families that are most affected by such disparities as poverty,

neighborhood environmental exposures and poor access to good health and educational opportunities. The recognition that social determinants of health are important to policy approaches has assisted with further significance of the “intrinsic connection between educational attainment and health outcomes” (Cohen, Bishop-Josef & Kahn, 2012, p. 341).

Less attention has focused on the adolescent time period. In a recent publication by the Robert Wood Johnson Foundation titled ‘Adolescent Wellness: Current Perspectives and Future Opportunities in Research, Policy and Practice, (Geisz & Nakashian, 2018), 25 leaders in adolescent health were interviewed regarding critical issues in adolescent wellness: gaps in research; translation of research to policy and practice: and opportunities for learning and action. Under policy perspective, this report acknowledges that there has been inadequate attention of adolescents among policy makers. They also acknowledge much more attention has been paid to young children and infants than to adolescents. Adolescence is newly being recognized as the second “zero to three”, indicating in the adolescent period youth are as vulnerable as in infancy. According to Steven Adelsheim (in Geisz and Nakashian, 2018) “adolescence is a time of risk and development, when we look at impulsivity, adolescent risk behaviors, there is a biological explanation for them. We are trying to give (adolescents) the skills to manage stress, as a part of developing resiliency, we’re looking at ways of helping them learn to cope with difficult situations and to avoid the maybe really bad choice that could potentially have a lifelong impact”. (p. 25).

As adolescent male students in New Mexico navigate high school, they carry multiple burdens that may affect their mental health status and ability to focus on school. Provision of services such as behavioral health, additional educational support and school and health policies based on gender and trauma awareness could help the long-term trajectory into their adult lives.

Adolescents are downstream from health effects of prenatal care, infancy and early childhood education. While it is important to continue to strengthen all of those factors to support healthy childhoods, adolescence is upstream from adulthood and is currently considered the second most vulnerable period of childhood. Interventions during adolescence that protect and foster health as well as provide easy access to assistance when needed can mitigate poor health and lifetime struggles downstream. According to Woolf (in Geisz and Nakashian, 2018), although health is shaped through five domains (health systems, individual behaviors, the physical and social environment, socioeconomic factors and public policies and spending), the policy domain is most important as it has the potential to affect all other domains. Future studies of adolescent male students need to be situated in the context of their educational and school experience. Policies that promote good health and educational outcomes can have lasting impact on individuals and communities, specifically for low-income adolescent males in New Mexico.

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Appendix A

Letter of Support

New Mexico

Alliance for School-Based Health Care



Nancy Rodriguez
Executive Director

Therese Hidalgo
Board President

November 10, 2017

University of New Mexico
College of Nursing
2502 Marble Ave. NE
Albuquerque, NM 87131

To Whom It May Concern,

The New Mexico Alliance for School-Based Health Care, is a 501c3 non-profit organization that envisions healthy students who are ready to learn. NMASBHC represents over 70 SBHCs within New Mexico and collaborates with other partners to promote, facilitate, and advocate for comprehensive, culturally competent health care including health education in schools.

The Executive Director and Board Members of the New Mexico Alliance for School-Based Health Care support the research project proposed by University of New Mexico College of Nursing PhD Candidate Suzanne Gagnon. One of the core commitments of NMASBHC is to advocate in support of School-Based Health Clinics in their delivery of medical and behavioral health services at schools for students when and where they need it. We believe the information garnered from this project can assist us to better understand the health care needs of students in New Mexico.

Additionally, research such as this can be valuable for our Advocacy Committee. The purpose of the Advocacy Committee is to influence public policy and create social change through collective support of policymakers, schools, communities, state agencies, organizations, and individuals. This type of research could contribute to advocacy efforts at the legislature.

We look forward to seeing the results of this research.

Sincerely,

Nancy Rodriguez
Executive Director

Appendix B

Cover email/Introductory Letter

My name is Suzanne Gagnon. I am a Family Nurse Practitioner and a PhD student. I am writing to request your participation in my doctoral study: Perspectives From Behavioral Health Providers in School Based Health Clinics (SBHC) About Academic Support for Low-Income Adolescent Male Students . I am conducting this study with Beth Tigges PhD, RN, PNP from the University of New Mexico College of Nursing. I have worked in several SBHCs in New Mexico and have served on the board of the New Mexico Alliance for School-Based Health Care. I am interested in learning about behavioral health service provider's perspectives about how behavioral health services may academically support low income adolescent male students.

I am interested in interviewing you because of your role as a behavioral health provider in a SBHC. If you agree to participate, I will work with you to schedule a convenient time during the day at a location away from the high school. The interview will be recorded and will take between 60 and 90 minutes. If you are willing to participate, please contact me at the phone number or email listed below.

Thank you!

Suzanne Gagnon, MSN, Ph.D. Candidate, CFNP

sgagnon@salud.unm.edu

505-440-5811

Appendix C

Telephone Script

Hello, Good morning/afternoon,

My name is Suzanne Gagnon. I am a PhD Candidate at the University of New Mexico (UNM) College of Nursing. I am calling to speak with you about my research study. The purpose of this study is to examine SBHC behavioral health providers' perceptions of how behavioral health services support low-income adolescent male students academically. This study is voluntary and involves an in-person 60-90 minutes interview. The interview will be located away from the high school campus at a location of your convenience. The date, time and place of the interview will be chosen by you. The interview will be recorded. Each provider and the SBHC where you work will remain confidential. You will not be asked about any specific patient information.

What questions do you have?

Are you interested in participating?

Here is my contact information:

sgagnon@salud.unm.edu

505-440-5811.

Thank you, Suzanne Gagnon, MSN, Ph.D. Candidate, CFNP

Appendix D

Reminder Email

Date

Dear _____,

This is an email to remind you of our upcoming interview. We are scheduled to meet on (This date, at this time, in this place). As I mentioned in an earlier communication, I will be audiotaping our interview and it should last somewhere between 60 and 90 minutes.

If you need to reschedule or change the interview time or place, please contact me as soon as possible. I can be reached at: 505-440-5811, sgagnon@salud.unm.edu.

Thank you and I look forward to meeting you,

Suzanne Gagnon, MSN, Ph.D. Candidate, CFNP

Appendix E

Demographic Questionnaire

1. How long have you worked at your current SBHC?
2. How many hours a week do you work at the SBHC?
3. In addition to you, how many behavioral health providers provide services at your SBHC?
4. How many hours a week is the SBHC open?
5. Is the SBHC open in the summer?
6. If yes, how many hours a week for how many months in the summer?
7. Do you work at any other SBHCS?
8. If yes, how many?
9. Have you worked at other SBHCs in the past?
10. If yes, how many and for how long?
11. What is your counseling license?
12. How long have you had those credentials?

13. Is there a primary care provider at your current SBHC?

14. If yes, how many hours a week do they work?

15. How long has your current SBHC been open?

Appendix F

Research Questions

Interview Questions Guide

Interview Questions

Research Questions

1. How do behavioral health providers describe how provision of behavioral health services support low-income adolescent male students academically?
2. What are the implications of behavioral health provider's stories for policy messaging?

Opening Statement:

This study is about behavioral health services for low income adolescent male students, so I'd like you to think about that group as you answer these questions.

Remember that I don't want you to use any students' real names.

Interview Questions:

1. When you see young adolescent males, what are they coming to see you for?
2. What stories do you hear about their academic life and academic challenges?
3. In research literature, there is an argument that SBHCs help students academically. What has been your experience?
4. Is there an example that really stands out in your experience?
5. If you had to go to Santa Fe or Washington DC and make a pitch for SBHC behavioral health services, what would you say ?
6. Is there anything else you would like to add?