IMPACT OF ACADEMIC AND NONACADEMIC SUPPORT STRUCTURES ON THIRD GRADE READING ACHIEVEMENT

Megan A. Peugeot

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Committee:
Natalie M. Abell, Ph.D.
Chair, Dissertation Committee

Jon Brasfield, Ph.D.
Committee Member

Michael A. Scoles, Ed.D.
Committee Member
ABSTRACT

Through a Whole Child lens a cross-sectional quantitative research design evaluated the impact of academic and nonacademic support structures on student reading achievement per the third grade Ohio Achievement Assessment (OAA). Two demographically similar public school districts within geographical proximity in Ohio were involved utilizing elementary educator perceptions and historical data. A bivariate correlational analysis explored the relationship of OAA scores and support structures. Strong negative correlations existed between student assistance team meetings and OAA results (-0.75), and student participation in elementary athletics and OAA results (-0.69). A percentage response was calculated for rank order items with higher perception indicated by a lower mean rank. Overall, mean rank ordering indicated guidance counselors most positively impactful (3.24), followed by behavior specialist (3.93), student assistance team (4.36), school social worker (4.44), parent and family involvement (4.8), nutrition program (4.83), volunteers (5.74), before/after school program (5.8), and elementary athletics (7.63).

A slope graph demonstrated the relative relationship of support/OAA correlation to elementary educator perception. The correlation of score to support was commensurate to educator ranking for both guidance counselor and parent and family involvement. Student assistance team (SAT) was not strongly correlated with achievement; nevertheless, educators perceived SAT highly impactful. The correlation of volunteers to achievement was depreciated by perception. A strongly positive correlation lacked between elementary athletics and achievement. Educators attributed little regard to elementary athletics. In summary, to attain positive educational change decisions should incorporate academic and nonacademic data
through a multifactored approach. Individual student consideration to employ resources internal and external to the district is needed.
DEDICATION

This dissertation is dedicated to my brother, Jason Pitcher. He is the reason I entered a career in education and have been driven to better the educational process for all students both in practice and in theory.
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Thank you to all who have supported me personally and professionally.

To my parents, ultimate thanks go to you. You have encouraged me, challenged me, and supported me my entire life. Throughout this process, you have not only cared from me, but you have cared for my children. You taught me I could do anything I put my mind to, instilled in me the drive to never give in, and modeled a work ethic without which I would never have completed semester one of the doctoral coursework let alone the entire process. I could not have completed this marathon without you.

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CHAPTER I. INTRODUCTION

Background of the Problem

Researchers warn since humans develop as a single, interconnected unit in which all needs and experiences impact all other needs and experiences, one aspect of a child cannot be developed in the absence of the other pieces (Slade & Griffith, 2013). In addition, when one component of the child is undernourished, the other components may falter and misfire leading to observable difficulties, such as educational difficulties. Consequently, the support networks for all human needs, academic and non-academic must communicate and adjust in rhythm, thereby, maintaining internal homeostasis for the child.

The whole child approach to education “is an understanding that children’s growth and development, including academic development, cannot be fully realized without providing a system of supports for their non-academic needs.” (Slade & Griffith, 2013, p. 22). The Whole Child Commission contended, in the absence of school and community support of non-academic needs, support of traditional academic areas of reading, writing, and math results in insufficient student preparation for adult roles as active, contributing members of society upon high school graduation.

Motivational theorists have postulated, theorized, and studied the nucleus of human motivation. In 1943 Abraham Maslow reported a hierarchy of needs attesting a base of primary needs must be met prior to acquisition of more cognitively driven needs and desires. In order for humans to achieve at higher and more cognitively advanced levels, human beings require to first have their deficiency needs met. Deficiency needs have been referred to as the first four noted by Maslow: physiological, safety, love and
esteem (Maslow, 1943). Acquisition of the fifth and final need, self-actualization, only occurs once the more primary deficiency needs are fulfilled. Maslow (1943) referred to self-actualization as the “desire for self-fulfillment…to become actualized in” (p. 383) your potential. “This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming” (Maslow, 1943, p. 383). Until a student reaches self-actualization, he or she is not able to advance academically to fulfill his or her potential (Gobin, Teeroovengadum, Becceea & Teeroovengadum, 2012). Consequently, Maslow attested as children and students develop they go through levels, each level fulfilling needs on which the next level may build. At the final level of development a student has acquired all primary needs and is now able to complete the level of development on which he or she attains internal realization of his or her potential for lifelong achievements. As such, the student makes conscious choices and commits efforts to his or her education in order to fulfill this realized potential. Without self-actualization, a student is unable to educationally achieve at an optimal level.

Unfortunately as Riedl (2002) argued, the current education system is a barrier to a student’s ability to attain Maslow’s highest level, self-actualization. Meaning, due to initiatives such as the No Child Left Behind Act (NCLB) the current educational system views academic outcomes myopically. Discrete skills easily quantifiable determine educational priorities, as opposed to priorities set by individual student needs as affirmed necessary through the Whole Child Approach. Danielian (2009) attests NCLB led to stronger mandates for data to drive educational decision-making and an “unparalleled focus on accountability” (p. 2). The push toward educational accountability through the
use of quantifiable student data led to data driven decision-making (DDDM). Data driven decision-making supports the district-level need to provide proof to State and Federal officials that students from all subgroups have increased their academic skills following educational instruction.

However, Murray (2014) resonates the flaws demonstrated by Danielian (2009) regarding DDDM, “educators lack skills, expertise or the capacity to analyze, interpret, and use data-driven decision making to bring about changes that will result in improvement of student achievement” (Danielian, 2009, p.5). Moreover, the analytical determination of priority skills is completed by educators who may have little to no training in the analysis and interpretation of data. Consequently, due to the manifestation of inaccurately or incompletely analyzed data, and misinterpreted data, data from standardized assessments is used for purposes beyond “their intended use and inherent limitations” (National Association of Psychologists, 2003, p. 1). Prior to legislative acts, such a focus on data use had before been unheard of in education. Providing for the safety, security, health, support, and rigor demonstrated by individual students was left to local determination and was the focus of educational provisions.

What would later become the No Child Left Behind Act (NCLB) in 2001 began as the Elementary and Secondary Education Act of 1965 (ESEA). Within the same decade Maslow was introducing the world to his Hierarchy, President Lyndon Johnson created ESEA. The reality of ESEA was focus on increasing student achievement and lessening gaps observed between various groups of students and segments of the population, such as gaps observed between races, ethnicity, socioeconomic status, and disability groups. Several other presidential and legislative movements have occurred in the last several
decades increasing state and district accountability for student achievement. Student achievement is not only measured at the overall district level, but at the individual student level as well.

The *No Child Left Behind Act* in 2001 was a reauthorization of the ESEA. The NCLB Act…incorporates…principles and strategies…[that] include increased accountability for States, school districts, and schools; greater choice for parents and students, particularly those attending low-performing schools; more flexibility for States and local education agencies (LEAs) in the use of Federal education dollars; and a stronger emphasis on reading especially for our youngest children (United States Department of Education, 2002).

NCLB not only increased expectations on districts with regards to student performance, it also gave parents more power to choose the school they feel most able to provide their child an exceptional education. Through publicized and standardized accountability systems, parents are provided concrete information to determine educational fortitude, such as student reading achievement levels by school building. As a result, NCLB can be viewed as a catalyst for a greater push toward the use of quantifiable student data to measure student success.

President Obama signed the *Every Student Succeeds Act* (ESSA) into law on December 10, 2015, thus revamping educational law. “Passed with bipartisan support, ESSA represents a shift from broad federal oversight of primary and secondary education to greater flexibility and decision making at the state and local levels” (Ohio Department of Education (ODE), online resource page, February 9, 2016, para. 1). Following a transition period, ESSA completely replaces NCLB on July 1, 2017 and reauthorizes
ESEA for fiscal years 2017-2020 (ODE, online resource page, January 2016). The law allows states increased say in decisions made at the state level, as well as places content standard requirements on local education agencies. Although prohibitive of incentives or mandates tied to specified standards, the United States Department of Education requires through ESSA “‘challenging’ English language arts and mathematics standards aligned to credit-bearing, remediation-free coursework in [the] state university system” (ODE, online resource page, January 2016, p. 1). Thus, public school districts must ensure the educational programming provided to students prepares students immediate admission into state university programs without first requiring remedial coursework to build college-ready skills the student should have otherwise gained in high school coursework.

In addition to academic fortitude requirements, ESSA specifies assessment provisions, as does NCLB. The *Every Student Succeeds Act* “[r]etains current testing requirements by grade level and subject area: mathematics and English language arts in grades 3-8 and once in high school; science once each in the elementary, middle and high school grades” (ODE, online resource page, January 2016, p. 1). Accountability at the state and federal levels regarding student performance is necessitated, as is school improvement planning at the state and district levels. “[T]he NCLB-defined sanctions and prescribed interventions…are eliminated. Instead, states will identify schools in need of ‘comprehensive support and improvement’ and require local education agencies to develop an improvement plan in collaboration with community stakeholders” (Smith, Ash, & Shaner, electronic mailing list message, December 11, 2015, para. 9). Testing and accountability systems are granted more flexibility at the state and local levels, with local stakeholders providing precursory contribution to federal regulations. Regardless of
contributions allowed, states and local education agencies continue to be under federal accountability, including accountability related to discrete skills rather than accountability reflective of the Whole Child Approach to education. Academic achievement of low-income students continues as a focus of ESSA as it had been in prior authorizations of ESEA, including NCLB. Nonetheless, nonacademic student needs are given a nod by ESSA. For accountability purposes ESSA requires the inclusion of subgroup disaggregation, including “at least one non-academic measure of quality disaggregated by subgroup” (ODE, online resource page, January 2016, p. 1). Therefore, student engagement and acquisition of skills predictive of life long success remain critically important to students in current kindergarten through grade twelve, as well to students following graduation from compulsory education.

At play in the current educational environment is a battle between the prosperity promised to all children in the United States of American, and the national drive to determine educational decisions on discrete student skillsets. Consequently, at jeopardy for attainment are the holistic needs of a child that if nurtured and developed will lead to self-actualized adults. All children within the United States of America are guaranteed an education. Legislation, such as Public Law 94-142, Public Law 99-457, Public Law 93-380, passed through the decades broadened and reinforced the rights of all children regardless of the child’s gender, race, presence of exceptional needs, or socio-cultural status, and afforded them an education nurturing their individual skills, strengths and needs. Through the provision of an education, children receive a foundation on which they may establish skills and ultimately realize personal values, beliefs and ideas.
As summarized by the University of Michigan (n.d.), educationists believe during childhood “a child [is] particularly impressionable” (para. 1). Thus, the educational theorist, Locke, attested “‘the true purpose of education is the cultivation of the intellect’” (University of Michigan, n.d., para. 2). Intentional data usage empowers educational systems, educators, and students with an awareness of students’ skill sets thereby tailoring educational decisions with precision and fostering the development of children. As such, in order to appropriately target decisions on areas of individual need, a holistic approach accounting for all developmental needs must be embraced. Conversely, data limited by discrete skill sets leads to continued faulting attainment of educational reform initiatives, such as NCLB. In stark contrast to discrete data the motivational theories guiding the Association for Supervision and Curriculum Development in 2006 to form the Whole Child Commission remain present. The association recognized if educational structures and policies continue to focus solely on academic successes while neglecting other human needs and motivating forces, national academic goals would continue to escape realization.

In 1943 the Association for Supervision and Curriculum Development was formed to support and educate school leaders. The Whole Child Commission formed by ASCD in 2006 was charged with recasting the definition of a successful learner from one whose achievement is measured solely by academic tests, to one who is knowledgeable, emotionally and physically healthy, civically inspired, engaged in the arts, prepared for work and economic self-sufficiency, and ready for the world beyond formal schooling (ASCD, 2007, p. 4).
In 2009 following increasing political pressures for quantitative metrics, the Association for Supervision and Curriculum Development altered its focus to reflect the framework of Maslow’s five needs (Slade & Griffith, 2013, p. 26) and became ASCD. The ASCD shifted “the association’s drive … [to] promoting and advocating for a more holistic and progressive approach to education” (Slade & Griffith, 2013, p. 22). Thus, without all needs recognized and cared for the Whole Child Commission concluded students would not actualize the definition of a successful learner.

Work by Bredekamp (1987) preceded the whole child approach and warns, “[b]ecause development cannot be neatly separated into parts, failure to attend to all aspects of an individual child’s development is often the root cause of a child’s failure in school” (p. 63). Slade and Griffith (2013) attest in order for communities to successfully raise and educate a child, they must mesh together all needs presented by a child. Communities, and schools, must address the academic and nonacademic needs presented by each student in order for the student to attain their greatest potential. Connections between student nonacademic needs and lifelong outcomes “tend to be too fragmented in the academics-above-all approach prevalent in too many countries that emphasize cognitive abilities above, and often to the exclusion of, all else.” (Slade & Griffith, 2013, p. 23). As Slade and Griffith (2013) warn, “if we base our educational progress merely on a finite and stratified set of metrics, we run the risk of adjusting educational policy and practice to suit the test score and not the child” (p. 30). The study completed in the Chicago Public Schools by Lee, Smith, Perry, and Smylie (1999), in addition to Bredekamp (1987), demonstrated the significance of social support in tandem with
academic press in order to gain optimal student academic achievement over a one-year period, whereas in isolation, the growth was less pronounced.

Consequently, a study assessing the impact academic and nonacademic supports have on student academic achievement is necessary. Evaluations conducted within schools should appraise the child in entirety, discrete aspects easily quantifiable as well as connected nonacademic factors equally impactful on the child’s learning outcomes. Multifactored evaluations hold in esteem emotional functioning of a student, social interactions, communication skills, and student behavior, all of which may be poorly reflected through or under-reflected by quantitative results. A multifactored evaluation necessitates a team approach to gathering a variety of data from a multitude of data sources when evaluating student learning needs and making educational determinations. Such a process characterizes adult commitment to child-centered educational decisions derived from information most reasonably representative of the whole child. Research results from this study will demonstrate relationship strength between various support structures and increased discrete academic outcomes. Furthermore, research will implicate if elementary educators are appropriately equipped to activate academic and nonacademic support structures leading to optimized achievement on standardized assessments.

**Rationale & Significance of the Study**

Educational reforms have yet to result in sufficient learning outcomes for all students. This study will provide additional evidence to support the actual needs presented by students ultimately leading to life-long success. The study is needed to demonstrate if a multifactored approach should be added to student accountability
systems in order to strengthen learning outcomes for all students. Thus, this study broadens conversations relative to student outcomes. Moreover, the research will lend to the on-going scholarly conversation regarding school reform to include education of the whole child. The study will reinforce the need of educators and educational reform initiatives to view student needs horizontally and vertically. Vision of the end point desired following completion of kindergarten through twelfth grade education must remain within the consciousness of those making student decisions during each year of education. If sight of the end, a well-rounded adult academically and emotionally prepared to participate in society, is lost in the immediacy of academic achievement goals, both the student and society loose the opportunity to advance themselves.

Legislative implementation of educational reforms occurred in order to increase academic expectations and academic outcomes for all students regardless of ability level. The reforms institute utilization of prescribed, standardized assessments from which quantitative scores are derived through normative standards by grade level, regardless of student exceptionalities. Thus, exemplify DDDM focused on singular objective metrics rather than the holistic developmental needs of a child as a means to standardize expectations and implement concrete guidelines to which students are held in an “effort to raise standards and expectations for all students” (Freedman, 2001, p. 1).

A multifactored approach to evaluation asserts in order for an evaluation to be thorough and valid, the appraisal must reflect a multitude of evaluative methods and the perspective from more than one individual. Meaning, evaluations must incorporate “(a) a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information about the child” (Ohio Operating Standards for the Education
of Children with Disabilities, 2014, p. 105). In addition, through a multifactored evaluation process each team member receives an equal voice in decision determination (Ohio Operating Standards for the Education of Children with Disabilities, 2014, p. 109). Afforded membership with equal esteem, the child’s parents have equal authority with the educational members of the team when making determinations. Furthermore, and as noted by the Ohio Operating Standards for the Education of Children with Disabilities (2014) as well as Freedman (2001), “IDEA specifies that no single test can be used to determine placement or programming for children with disabilities” (p. 21). Rather, discrete assessments should be viewed in tandem with all evaluative pieces. As such, special education decisions are the result of a team effort to collect, analyze, and interpret holistic, developmental student strengths and needs. The multifactored approach to decision making is reiterated through caution urged by the National Association of School Psychologists (2003) regarding the use of group-administered, high-stakes assessments as the basis of educational decisions. “NASP strongly opposes the use of large-scale testing as the sole determinant for making critical, high-stakes decisions about individual students and educational systems, including…retention or promotion” (p. 1).

This study is timely. With the authorization of ESSA in 2015 state and local agencies are granted increased voice in accountability systems. As such, the practical outcomes of this study are impactful on the student in holistic terms. The ripples set into motion from the pebble tossed by federal legislation impact the individual student, family, school district, local community, and state. Results from the study will contribute to practical dialogue regarding accountability, achievement, social and emotional development, as well as have economic and societal ramification.
Decisions assigned to educators such as those mandated by the Third Grade Reading Guarantee (TGRG) are potentially life changing for students. Educators have within their hands the power to alter the life course of a student, impacting the extension of K-12 schooling by a year through the postponement of graduation, as well as impacting social and emotional factors for students. Furthermore, the use of standardized tests with DDDM impacts financial decisions in districts.

The TGRG mandates retention in third grade of students who do not pass at a State of Ohio established minimum quantitative score (Ohio Department of Education [ODE], online resource page, November 25, 2014). Mandated student retention in the third grade impacts a student’s entire life course. At minimum, retained students remain in compulsory schooling for one additional year of life. Consequently, society and individual students accrue costs; financial, emotional, and the cost of time lost. “On the rise for the past twenty-five years, retention today is estimated to cost over 14 billion dollars per year to pay for the extra year of schooling” (Anderson, Whipple, & Jimerson, 2002). Furthermore, teaching requirements for the TGRG retained student stipulate “a high-performing reading teacher …[teaches] 90 minutes of reading instruction each school day” (ODE, online resource page, November 25, 2014, para. 7). Thus, a reduction in time otherwise spent in either another core academic class or supplementary curricular course. As reported by the ASCD (2007), 90 percent of school districts having more than 75 percent of their students “eligible for free and reduced-price meals” (p. 8) reduce instruction time for non-tested areas to elementary students in core subject areas.

Requirements established by NCLB and TGRG that all students must attain at prescribed academic levels on an achievement test reduces instructional time on non-tested skills.
Consequently, holistic nonacademic student needs are impacted by legislation, and application of nonacademic systems supportive of increased academic outcomes are at risk for extermination.

NASP (2003) admonishes, “high stakes testing…narrow[s] the curriculum and unduly emphasizes basic skills to the exclusion of the arts, technology, sciences, and humanities” (p. 2). Therefore, vertical holistic student needs leading to self-actualizing outcomes risk oversight by horizontal discrete academic achievement. According to the ASCD (2007), instructional time cut to subjects is as follows: “social studies (33 percent), science (29 percent), art and music (22 percent), and physical education (14 percent)” (p. 8). Hence, prior to mandates such as NCLB, school districts possessed more time in the school day to provide instruction in areas benefiting the development of the whole child. Instruction influential on nonacademic learning factors, and supportive of a safe, secure, healthy, engaged, and challenged student. Following legislation schools have less time to develop student skills in areas knowingly lending to life long successful learning beyond the academics, nonacademic skills.

With regards to social and emotional factors, studies have shown effects on both students and adults when holistic student needs are superseded by discrete high-stakes decisions. Holmes (1989) meta-analyzed 63 studies, and found “[o]n average, retained children are worse off than their promoted counterparts on both personal adjustment and academic outcomes” (Shepard & Smith (Eds.), 1989, p. 27). A point furthered by NASP (2003), “students may experience long-term anxiety, low self esteem, depression, etc.” (p. 3). With regards to the systems level, high-stakes assessments “can put students, teachers, and administrators at risk for anxiety and other forms of emotional distress.
These consequences can impact not only test taking but also learning and motivation” (National Association of School Psychologists [NASP], 2003, pp. 2-3). Moreover, Anderson, Jimerson, and Whipple (2002) showed once a student has entered kindergarten, retaining the student is psychologically more traumatic to a student than experiencing the death of a parent. Further, peer pressures associated with retention, such as the alteration of established social groups, significantly impact the social and emotional functioning of a student. Jimerson, Anderson, and Whipple (2002) found retention to be one of the greatest predictors of whether a student would eventually dropout of high school. Consequently, overall student development viewed with vertical reference to life-long outcomes is fogged by decisions benefiting short-term accountability.

The elevated relationship between retention and dropout rates has been substantiated by NASP as well (NASP, 2003, p. 2). The NASP Position Statement (2003) furthered the negative effects of retention by noting, “extensive research over many years indicates that student achievement rarely improves when repeating a grade” (NASP, 2003, p. 2). As compared to their promoted peers, retained students were 2 to 11 times more likely to drop out before completing high school (Jimerson, Anderson, & Whipple, 2002). As such, when retained, a self-fulfilling prophecy may emerge in which the student subconsciously lowers his/her own educational and life expectations, and ultimate goals for his/her future success. Retention then becomes an unmitigated factor inhibiting the development and realization of a student’s nonacademic skill potential.

In addition to direct effects on students, families also acquire social and emotional stressors when discussion of retention occurs; thereby, “increasing the psychological
Due to legislative requirements supportive of student metrics and neglectful of nonacademic considerations and needs of the individual student, mandates placed on districts necessitate families receive a notice of intention to retain a child following a student’s failure to obtain minimum proficiency scores. Ergo, social and emotional stressors are imposed on a family due to legislation. The factors and persons most impactful on a child during formative years, the factors constituting a safe, secure, healthy, engaged, and challenged child, are challenged and potentially strained by threats of retention.

In addition to social and emotional impacts felt by students and families, societal costs are accrued following educational reform legislation. Specifically, financial costs accrue; school districts base financial decisions, in part, on quantitative data. Public school districts have a limited coffer of financial funds. Funding to support personnel and curriculum is allocated based on quantitative data. Additionally, district financial limitations impact exactly who comprise the personnel and the area(s) of expertise of those personnel. Professionals with more experience and/or have higher levels of training are more expensive to employ. When funds are limited, districts ration their funds to support core areas of instruction such as language arts, math, social studies, and science (NASP, 2003). Although inadvertent, further condoning of core academic areas as instructional priority comes in the form of State of Ohio mandates such as the TGRG.

The TGRG reiterates to districts the importance of discrete student literacy scores. As such, core academic areas like language arts have a greater percentage of staff allocated for instruction than areas supportive of holistic student development like guidance and counseling, activities, and the arts. When legislative mandates specify time
for interventions and training requirements of individuals able to provide instruction and intervention (ODE, online resource page, November 25, 2014), districts apply more financial resources in order to remain in compliance. Additionally, legislation based on academic achievement at one isolated moment in time impacts training conducted for staff, and impacts academic focus in the classroom. Time, money, and manpower remaining after mandates are met must then be divided amongst additional or auxiliary resources. The additional and auxiliary resources embody instruction and support of student learning needs that are nonacademic in nature such as social workers and behavior specialists. Resources to address overall developmental student needs, both academic and nonacademic, may be limited by financial and time constraints. Consequently, there is urgency for this study.

Stakeholders must possess broad visions of student objective and subjective needs when making decisions impactful to student life-long outcomes. Catalyzing initiatives such as ESEA, NCLB, and ESSA, push toward the use of quantitative student metrics to measure student success. However, educators receive criticism for their overreliance on untrained personnel to analyze and interpret data for the purpose of change (Gobin, Teeroovengadum, Becceea, & Teeroovengadum, 2012). Furthermore, reliance on quantifiable data as the basis of educational decisions may or may not focus educators on all critical areas of student development leading to optimal student achievement. Traditional student metrics do not readily embrace or recognize less tangible human needs also contributing to student success during compulsory schooling and successful lifelong outcomes. As Slade and Griffith (2013) assert, the whole child approach to education “does not seek to divorce itself from academic development but it does seek to
expand what constitutes academic development in the 21st century and aims to refocus attention on all attributes required for educational and societal success” (p.21). In other words, separation does not exist between academic skill development and fostering the enrichment of a child so the child might become a contributing member of society upon high school graduation. Rather, whole child education attempts to infuse itself into the general development of students, thus leading to internal realization of a person’s potential for lifelong achievement.

By failing to prepare, you are preparing to fail. To further the statement, if our preparedness is inadequate or inadequately focused, failure is certain. Educators working to reform systems in a manner leading to greater long-term student achievement stand to gain from continued research. Currently, educators, specifically special educators of students with disabilities, are pushed to focus on long-term student outcomes, the paths students with disabilities follow after high school graduation and the corresponding successes obtained. Further evaluation into the components impacting educational decisions is critical if society desires student obtainment of long-term success in addition to student ability to independently maintain success throughout a lifetime. Researchers Slade, Griffith, and Fleming may be interested in the results as they seek to expand 21st century educational reforms. Likewise, the study results may impact the ASCD and their drive to educate the whole child. Further, local, state, and federal committees working to guide ESSA testing and accountability guidelines may also benefit from these research findings. With increased data substantiating the concrete pulse educators have on student academic and nonacademic needs, conversations may sprout and flourish regarding the addition of educator intuition to state accountability systems. Conversations and debates
may occur concerning the most appropriate means to identify and implement academic and nonacademic supports for students to generate optimal long-term student outcomes. Finally, Ohio Senate Bill 316 supported by Governor John Kasich has roots in quantitative data. Therefore, politicians of future legislation may borrow findings from this study.

**Purpose of Study**

This study will address the contradiction existing between the legislative move toward the use of quantitative data as the basis of educational decision-making, and a multifactored approach to educational decision-making. Additionally, this study will address the definition of a successful learner according to the whole child approach attesting educational success cannot be measured by quantitative metrics alone. Whole child learning factors encompass components more difficult to quantify than traditional reading, writing, and math. This study will consider the sufficiency of quantifiable academic metrics as the basis from which educational decisions are made. In particular, using the third grade Ohio Achievement Assessment (OAA) results, this study will appraise the relative importance of academic and nonacademic supports to student reading achievement. Additionally obtained and analyzed are the perceptions of elementary educators regarding the influence academic and nonacademic supports have on student academic achievement. Of gathered variables impacting academic student outcomes, this study correlates the impact of academic and nonacademic supports on student reading achievement at the elementary level. This study also identifies nonacademic factors highlighted by current research as influential on student success. Furthermore, determination occurs regarding the significance between identified
academic and non-academic student supports at the kindergarten through grade three levels with quantitative third grade reading OAA results. Finally, through the study and as prioritized by educators, determination will be made regarding the statistical significance of academic and nonacademic learning supports on the metrics used by ODE to evaluate Ohio students and schools in the 2013-2014 school year.

The research study within is applicable to the current problem existing between schools of thought related to educational decision-making. Through research results, this study lends support to the items districts may wish to prioritize when allocating financial, human, and curricular resources in an effort to increase student academic outcomes. Additionally, the results will enrich the conversation surrounding the whole child approach to education with respect to the impact academic and nonacademic student needs have on increased student educational outcomes. Data will be added to the DDDM and whole child learning discussions regarding educator perceptions relative to maintenance of student needs in order to increase student achievement. Educator perceptions will be juxtaposed to quantitative OAA data in order to assess the degree educators have their finger on the pulse of student needs. If educators possess accurate insight relative to student needs impacting academic achievement, concerned educators, politicians, and community members may have sound basis from which to advocate for increased local control and less state mandated testing. Finally, with concrete data the study contributes to current knowledge as related to predictive factors for educational success. Thus, discussions as to where and on what, district resources, financial and human, should be allocated.
Theoretical Framework

The lens through which this study developed originated from the ASCD’s basis for the establishment of the Commission on the Whole Child. The ASCD attests, the development of a successful learner may only occur “through a whole child approach to learning and teaching” (ASCD, 2007, p. 4). The whole child approach to learning and teaching declares academic achievement as only one component from which a learned and developed student ultimately grows. Additionally, academic achievement remains only one component of a “complete system of educational accountability” (ASCD, 2007, p. 3). Development of the whole child evolves through a framework of related and adjoined systems all intersecting to “support the development of a child who is healthy, knowledgeable, motivated, and engaged” (ASCD, 2007, p. 3). The ASCD furthered their school improvement initiatives with the 2014 launch of “[t]he Whole School, Whole Community, Whole Child (WSCC) model combin[ing] and build[ing] on elements of traditional coordinated school health approach and the whole child framework” (ASCD, website, February 14, 2016, para. 2). Therefore, communities, health organizations, schools, and teachers are identified as essential elements that must unify in order to jointly support the development of our students. The premise of a successful learner according to the Commission on the Whole Child was established on Maslow’s Hierarchy of Needs. Maslow’s Hierarchy essentially postulates, in order for a student to come to the level on which he or she demonstrates his or her true educational and life potential, he or she must obtain fulfillment of essential needs. Consequently, the framework for this study originated by juxtaposing the position of the Commission on the
Whole Child in relationship to Maslow’s Hierarchy to the reading achievement requirements placed on third graders in the State of Ohio.

Ohio Senate Bill 21 brought about the TGRG. The TGRG requires in order to promote a third grader to fourth grade, a third grader in the State of Ohio must take the OAA in the area of English language arts (ELA) and pass the assessment at a level pre-established by the State. Prior to the 2015-2016 school year, the TGRG requires retention of a third grade student in the State of Ohio if the pre-established score is not achieved on the ELA portion of the OAA, in addition to provision that the retained student receive daily, additional reading intervention (ODE, online resource page, November 25, 2014). As identified by the ASCD (2007), due to legislative mandates for DDDM, such as TGRG, reductions occur by school districts to the time spent on non-tested academic areas in order to frontload State assessed content so students are prepared for, and pass, standardized State tests. Curricular frontloading may inadvertently isolate the developmental needs of a third grade student to those academic areas easily identifiable, testable, and quantifiable.

Thus, reduction in curricular focus may reduce opportunities to develop the remaining areas noted by the ASCD as essential when developing the whole child into a successful learner. The remaining areas beyond academic achievement include: emotional and physical health, civic mindedness, involvement with the arts, preparedness for financial independence through well-established employability skills, and preparedness to live a productive life following high school graduation (ASCD, 2007). Therefore, the ASCD identifies of a successful learner through more complex means than by what is achievable through the current OAA results. In order to accurately identify a
successful learner, the assessment process is suggestively more closely aligned to a multifactored assessment process as conducted for student identification in special education. Through the multifactored process, multiple evaluators conduct and analyze a combination of standardized assessments, interviews, observations, classroom data, and a review of student’s records to determine a student’s educational achievement, strengths and needs.

Through the use of a cross-sectional design and a convenience sample of two demographically similar districts, the first research question establishes the relative importance of academic and nonacademic supports to discrete student assessments. Academic supports are defined as those supports leading directly to student academic achievement. Nonacademic supports are a bridge between academic needs and academic achievement. Thus, nonacademic supports are pivotal links in the direct relationship between student academic need addressed by instructional intervention, and culminating student achievement, creating a three-step process by inserting a middle step: the nonacademic support. The result, academic needs are step one. A nonacademic support is step two. For example, behavioral interventions provided for a student by the behavior specialist so the student is equipped to behaviorally maintain in a classroom and therefore access the academic support services allowing attainment of academic achievement. Academic achievement results in step three. Consequently, once the basic needs of a student are satiated through employment of nonacademic supports, the student is able to academically benefit from higher order cognitive teaching provided by the classroom teacher through curriculum and instruction. Maslow (1943) asserts satiation of basic
needs is necessary prior to a student being cognitively capable to access higher order demands, such as those required for academic achievement.

Through research question two, principals and teachers of students in grades kindergarten through third from two demographically similar school districts were invited to participate in a researcher created rank order instrument assessing student supports both academic and nonacademic most predictive of student success. Rank order instrument responses were quantified and the supports ranked by perceived influence on student achievement. Additionally, reading OAA results from the 2013-2014 third grade class collected from ODE for District 1 and District 2 elementary buildings were juxtaposed to the academic and nonacademic supports available to District 1 and District 2 students. Determination of statistical significance followed regarding building and district performance; thus, validating existing research relative to academic and nonacademic support importance to academic student outcomes. As a result, this study evaluates the ability to generalize quantitative data to high-stakes student retention decisions in isolation of other nonacademic learning factors. Finally, the third research question assesses the relationship of research question one and research question two. The question assesses the correlational rank order relationship between educator perceptions and student achievement on the OAA, and the mean rank order resulting from educators’ perceptions regarding the influence of nine academic and nonacademic supports on student academic achievement. Results of the third research question may add to conversations concerning the appropriateness of increased local control of educational decisions for high stakes decisions.
Research Questions

1. Do the presence of academic supports, such as student assistance teams and nonacademic supports, such as physical, social, and emotional supports relate to student reading achievement as identified by the third grade reading Ohio Achievement Assessment (OAA)?

2. How do educators perceive the influence of various academic and nonacademic supports in terms of student achievement?

3. Do the correlational results of research question one align with the rank order perceptions of educators in research question two?

Definition of Terms

Key terms have been defined in order to establish common definitions for this study.

*Academic and nonacademic supports:* Supports reflective of holistic student needs. Supports may come directly from the district or through collaborative community efforts from various organizations and public agencies. Supports must meet student needs defined by the Whole Child Approach to Education (ASCD, 2014) for a healthy, safe, engaged, supported, and challenged student. Specific academic and nonacademic supports noted in this study: before/after school programs, behavior specialist, elementary athletics, guidance/school counselor, nutrition program, parent/family involvement, school social worker, student assistance team, and volunteers in the school.

*Academic outcomes:* Academic outcomes will be defined as academic achievements obtained by students as a result of compulsory education received, “such as enhanced grades, [and] proficiency scores” (Anderson-Butcher et al., 2008, p. 168).
Data driven decision making (DDDM): DDDM is the push toward educational accountability through the use of quantifiable student data. “[T]eachers, principals, and administrators systematically collecting and analyzing various types of data, including input, process, outcome and satisfaction data, to guide a range of decisions to help improve the cusses of students and schools” (Marsh, Pane, & Hamilton, 2006, p. 1).

Educational outcomes: Educational outcomes will be defined as non-academic achievements obtained by students as a result of compulsory education received, such as “attendance, self-concept and self-esteem, school climate, as well as reduction in problem behaviors such as disruptive and aggressive behaviors, dropout, and truancy” (Anderson-Butcher et al., 2008, p. 168).

Every Student Succeeds Act (ESSA): “Passed with bipartisan support, ESSA represents a shift from broad federal oversight of primary and secondary education to greater flexibility and decision making at the state and local levels” (Ohio Department of Education (ODE), online resource page, February 9, 2016, para. 1).

High-stakes assessments: Assessments for which a prescribed level of mastery is mandated by an authority agency, without which a student is denied advancement to the next grade level, or graduation from high school. The effects of the resultant decision are immediate as well as long lasting (National Association of School Psychologists, 2003, p. 2).

K-12: K-12 refers to grades in school ranging from kindergarten through twelve.

Multifactored evaluation: The word “multifactored” remains unhyphenated as reflected by Fagan and Wise (2000). A multifactored evaluation reflects an evaluation conducted in a manner similar to the evaluation process used for special education
eligibility in the State of Ohio. Furthermore, from the *Ohio Operating Standards for the Education of Children with Disabilities* associated with the Administrative Code from the Ohio State Board of Education effective July 1, 2014, a multifactored evaluation is:

1. An evaluation conducted through “a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information about the child” (p. 105).

2. An evaluation that does “not use any single source of information, such as a single measure or score, as the sole criteria” to determine needs (p.105).

3. Not “discriminatory on racial or cultural basis” and it is “administered in the child’s native language” (p.106).

4. “Sufficiently comprehensive to identify all of the child’s…needs” (p. 106).

5. An evaluation that includes the review of classroom data and work samples, observations of the child in the school setting, parent information, curriculum based assessment results, and intervention data (p. 107-108). Thus, the use of “information from a variety of sources” (p. 110).

6. An evaluation of data by a team of “qualified professionals and the parent of the child” (p.109) in order to determine a student’s needs.

*No Child Left Behind Act (NCLB):*

The NCLB Act…incorporates…principles and strategies…[that] include increased accountability for States, school districts, and schools; greater
choice for parents and students, particularly those attending low-performing schools; more flexibility for States and local education agencies (LEAs) in the use of Federal education dollars; and a stronger emphasis on reading especially for our youngest children (United States Department of Education, 2002).

Percentage promoted: The percentage of Ohio “third grade students who [attain] the promotion score on the grade 3 English language arts test...eligible for promotion at the end of the school year. This score can be attained on the fall, spring or summer administration of the grade 3 English language arts test” (ODE, 2016, p. 12). The percentage promoted is according to the Ohio Department of Education (ODE) (ODE, [2013-2014 Third Grade Reading Guarantee results], 2015).

Primary needs and deficiency needs: Primary needs and deficiency needs are used interchangeably. Primary needs have been referred to as the first four noted by Maslow: physiological, safety, love and esteem (Maslow, 1943).

Quantitative data: Data able to be numerically measured and statistically manipulated.

Self-actualization: Self-actualization is when a student actualizes his/her potentials in life (Maslow, 1943, p. 383). The student is then able to advance academically to fulfill those potentials (Gobin, Teeroovengadum, Becceea & Teeroovengadum, 2012).

Third Grade Reading Guarantee (TGRG): The Ohio TGRG “is a program to identify students from kindergarten through grade 3 that are behind in reading” and immediately provide additional reading interventions to remediate reading deficits
In order to be promoted to fourth grade, a student must meet or exceed a score pre-established by the Ohio Department of Education.

**Whole child education:** The whole child approach to education “is an understanding that children’s growth and development, including academic development, cannot be fully realized without providing a system of supports for their non-academic needs.” (Slade & Griffith, 2013, p. 22). Moreover, creation a successful learner through practices and supports that not only foster the development of academic knowledge, but also foster the emotional and physical health of a child, inspire them to be civic-minded, involved with the arts, prepared for employment and financial independence, and ready for adult life beyond K-12 education (ASCD, 2007, p. 4).

**Delimitations**

The intentional scope and boundaries of this study include the chosen problem, purpose, participants, research question, and theoretical perspective applied. This study is from the perspective that sound educational decisions shall only be made when all stakeholders have an equal voice in the decision, have access to data derived from multiple sources of information, data analyzed by credentialed evaluators, and the data is utilized only to an applicable, validated degree (NASP, 2003, p. 2). This research study will investigate the impact of academic and nonacademic supports on student achievement in order to provide further information to schools of thought, such as the Commission of the Whole Child and data driven decision making, resulting in a greater awareness of student learning needs. To program for, provide for, and prosper student
development, the significance of identified student learning needs to current educational trends is critical, hence, the identification as a delimitation.

Study participants are intentionally isolated to the 2013-2014 third grade student classes within District 1 and District 2 who attend elementary schools comprised of demographically similar students. Imposition of an intentional study length limits this study to one school year in order to elicit data reflective of study constraints, such as population, grade, and academic and nonacademic resources available during that time period. Results may be generalized to students of various ethnicities in moderately sized school districts within the State of Ohio, and the United States of America in general. Additionally, results may be generalized to educators of elementary-aged students in culturally similar districts.

Limitations

This study possesses innate limitations resulting from the grade level and age of student participants, as well as the sample size of the research population due to historical data only returned by one district. Additionally, imposed adult pressures on students involved in the study are an unmediated limitation. The study employs results derived from an achievement assessment; consequently, the normative value of the assessment itself may be a limitation in this study comprised, in part, of minority students (NASP, 2003).

The third grade students who constitute participants in this study are juveniles approximately eight- and nine-years of age. Students of this age are an impressionable population, easily influenced by social and emotional pressures, health and wellness, nutrition, and confidence. These variables may fluctuate hourly, daily, and seasonally, as
well as when adults in the immediate environment experience similar changes in functioning. Intuitiveness of third grade students allows for the internalization of associated adult pressures, thus, potentially positively or negatively impacting the student’s ability to perform during the isolated testing window. The testing window during which students participate in OAA examination is delineated by the State of Ohio in an attempt to standardize and maintain test security throughout the State, and is therefore, a further study limitation. The student evaluation does not necessarily occur on an individually determined, opportune time for peak academic performance.

Geographic convenience dictated the third grade student population chosen for the study. A longitudinal study comparing the OAA results of the current third grade class with results from previous and future third grade classes would provide stronger evidence base than would results derived from a single school year. Furthermore, the rank order data elicited for this study was based on teacher and administrator perspective. The teachers and administrators completing the surveys under pressures established by state and district expectations, and mandates requiring all students to demonstrate reading proficiency at a designated third grade level prior to advancement to the fourth grade level. High-stakes testing decreases “teacher job satisfaction” (NASP, 2003, p. 2). A State of Ohio imposed limitation is the designated reading proficiency level. As such, adult anxiety associated with student OAA results was a limitation, as was anxiety potentially reflected by teachers onto the student academic and nonacademic support rank order instrument.
Researcher Bias

This study evaluated the impact academic and nonacademic supports had on student success measured by third grade reading standardized assessments. Further, pulse acuity demonstrated by elementary educators relative to impact academic and nonacademic supports was judged following correlation of perceptions to scores attained by third grade students on a standardized assessment. Consequently, the sole use of standardized assessment at the third grade level as the basis of student promotion to the fourth grade was also addressed through this research study. Following a three year graduate training program for school psychology in which much coursework involved assessments, the identification of appropriate assessment tools to provide targeted data, administration of assessments, and analysis and interpretation of assessments; in addition to more than a decade as a practicing school psychologist in an Ohio public school district, this researcher acquired expansive knowledge of assessments. This researcher is well versed with both individually administered assessments as well as group administered assessments, criterion-referenced and standardized assessments.

Furthermore, throughout a career in education approaching two decades, this researcher has witnessed firsthand the impacts academic and nonacademic support structures have on student academic success. This researcher has also developed, implemented, and employed procedures and programs to specifically address the negative impact both academic and nonacademic needs have on student academic achievement. Thus, this researcher agrees with the NASP Position Statement (2003) and the Ohio Operating Standards for the Education of Children with Disabilities (2014) that standardized assessments provide a single piece of data, although overreliance on
standardized assessments may result in stretching data to cover too many areas for which educational decisions must be made, hence, a bias. Further, having knowledge of evaluation procedures, such as the multifactored evaluation process employed by school psychologists during the individual student evaluation for special education eligibility, populates the consciousness of a researcher preparing to evaluate sufficiency of a single data source to drive high-stakes student advancement to fourth grade, or conversely, retention in third grade.

A final bias evolved from observations of students and adults approaching standardized assessments knowingly facing impending judgment following receipt of assessment results. When entering the assessment situation, students and adults have been observed to present with one or more of the following behaviors related to deficiency needs as reported by Maslow: increased stress levels, sleep and appetite changes, altered memory, fear and/or anxiety. Consequently, resultant quantitative data from a single standardized assessment as an accurate and adequate reflection of student achievement in the absence of holistic nonacademic factor analysis may be questioned. However, biases toward standardized assessments were mitigated through use of quantitative data derived from the research study. Moreover, mitigation of biases associated with standardized assessments and data were achieved through thorough and comprehensive review of literature associated with pros and cons of standardized assessments.

Despite the biases noted, results of the current research study reflect the outcomes summarized within this document. Assumptions of outcomes were devoid in this research study as the chosen students had not been subjects of previous study.
Additionally, the ethnic backgrounds and family economic levels varied among the students thus creating a more complex population of participants, and thereby decreasing the possibility of assumed preconceived results. Having an awareness of potential biases in a research study increases the opportunity for the researcher to purposefully plan for and avoid research errors leading to flaw or questionable procedures and results.
CHAPTER II. LITERATURE REVIEW

A popular saying states, “Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.” Within the United States of America there is an educational movement of data driven decision-making. When used correctly, data driven decision-making is an appropriate and beneficial decision making practice. However, if data is stretched beyond its initial intended purpose, there is risk the process will ultimately erode the foundation on which the data was established (Murray, 2014). As such, parents, educators, community stakeholders, legislators, and the students themselves, will pass judgment on schools, school districts, and students for which there is insufficient merit (Turgut, 2013). Consequently, the fish analogy is applicable to the exploration of quantifiable student metrics sufficiency for high-stakes decision-making. In order to ethically utilize data driven decision-making, data must be applicable to the decision rendered otherwise the educational system runs the risk of practices perpetuating or exacerbating the achievement gap (Lee, Smith, Perry, & Smylie, 1999).

Student derived data is used to juxtapose the educational fortitude of different districts and different states (Paulson & Marchant, 2009). Further, parents may base education choice scholarship decisions on student-derived data. Additionally, educational decisions regarding staffing, professional development, and content focus are highly driven by standardized assessment data (ASCD, 2007). Students are determined worthy of grade promotion (Ohio Department of Education [ODE], online resource page, November 25, 2014), and ultimately worthy of graduation, by performance on a single assessment instrument. However, the degree the assessment instrument reflects overall
student abilities, including academic achievement, social and emotional development, vocational readiness, physical and psychological health, and environmental stressors, is limited by data aggregation (Paulson & Marchant, 2009). As related to educational decision-making, student, personnel, district, and state-level decisions should only be based on quantitative data aligning with assessments validated to reflect the collective topic (Murray, 2014). However, risk exists (Huddleston, 2014) when educational decisions are based on insufficient data. Therefore, the United States educational system, and each public school student of compulsory age educated within the system, is impacted by decisions made through quantitative student metrics (Sahlberg, 2010).

**Topic Importance**

Americans are afforded educational rights, rights further strengthened by legislation and acts, such as the *Elementary and Secondary Education Act of 1965* (ESEA) (20 U.S.C. and 34 C.F.R.) the *No Child Left Behind Act* (NCLB) in 2001 (No Child Left Behind [NCLB], 2003), and the *Every Student Succeeds Act of 2015* (Ohio Department of Education (ODE), online resource page, February 9, 2016). All students are promised an education supportive of long-term outcomes whereby the student becomes an adult who is an active, independent, contributing member of society able to support themselves and their family, as well as contribute to America’s authority to lead the global economy. Decisions driving educational reform, local and national policy, determination of student success and preparedness derive from standardized assessments. However studies, such as Turgut (2013), assert caution with the use of assessment results for decision-making.
Turgut (2013) established current standardized assessments are not the best means of comparison between nations dissimilar in demographics, educational goals and approach. The author indicated need for a multidimensional approach to education supportive of input and suggestions from educators and families, not just the beliefs of policy makers. Additionally, Turgut (2013) suggested educational decisions should be derived from more than one source of information and more than one methodology. He also asserted, in order for educational reforms to be long lasting and significant, there must be uninterrupted time with one policy. Change is not quick to occur; neither is the impact of educational reform quick to emerge with positive trends. In order to create positive trends, educational reforms must also embody a collaborative approach with the community thereby supporting all student needs (Turgut, 2013). Poignantly noted, the author professed educational problems do not occur in isolation within the schools; as such, reform must not occur in isolation in the school setting. Rather, reform must occur through collaboration with other community and government agencies supportive of children and family needs. (Turgut, 2013).

Murray (2014) commented on the potential benefits from data driven decision-making, as well as lamented the current pitfalls educators face with data. The author stated educators are not trained well enough to utilize data to its fullest potential; furthermore, educators are relying on standardized assessment data as the sole basis of improvement decisions. The author warned, without the inclusion of other forms of data (demographic, perception, and school process data) in addition to achievement data, increased student learning goals would fall short of potential. In order to increase the usability of data, and thus student achievement through more informed goals and
decisions, Murray (2014) suggested continued and on-going professional development to create greater capacity of staff to utilize data to its intended potential.

**Definition of Key Terms**

When reviewing the extent to which student metrics reflect overall student needs common terms appear. As such, terminology will be defined in order to establish meaning used within the Literature Review.

**Academic and nonacademic supports.** Supports reflective of holistic student needs. Supports may come directly from the district or through collaborative community efforts from various organizations and public agencies. Supports must meet student needs defined by the Whole Child Approach to Education (ASCD, 2014) for a healthy, safe, engaged, supported, and challenged student. Specific academic and nonacademic supports noted in this study: before/after school programs, behavior specialist, elementary athletics, guidance/school counselor, nutrition program, parent/family involvement, school social worker, student assistance team, and volunteers in the school. As reviewed by Adelman and Taylor (2011), nonacademic learning supports are “the resources, strategies, and practices that provide physical, social, emotional, and intellectual supports intended to enable all pupils to have an equal opportunity for success at school” (p. 33).

**Data.** Data is most generally used to refer to recorded information. In this review, data will be defined more specifically as quantitative student standardized assessment results, such as the OAA reading results from the 2013-2014 school year.

**Successful learner.** As such, the nonacademic supports referenced by Anderson-Butcher et al. (2008) are similar to factors referenced by The Whole Child Commission
formed by the ASCD (formerly the Association for Supervision and Curriculum Development) in 2006 when defining a successful learner. The Commission defined a successful learner as “one who is knowledgeable, emotionally and physically healthy, civically inspired, engaged in the arts, prepared for work and economic self-sufficiency, and ready for the world beyond formal schooling” (ASCD, 2007, p. 4).

**Literature Search Strategies**

To conduct the literature review, the Shafer Library at The University of Findlay was accessed. Using “OneSearch,” peer reviewed articles were sought according to topics relative to quantitative data as the basis of educational decision-making. Search terms included: community collaboration, motivation, school supports, standardized assessments, and whole child learning. No date constraints were applied to the search. The target was set to identify at least twenty articles for review.

Additionally, once articles were identified through “OneSearch”, the reference lists from the articles were reviewed in order to extricate further relevant articles for review. If the articles identified from the reference lists were unavailable through the Shafer Library system, a Google Internet search was completed in order to locate the article.

**Extent and Nature of the Literature**

The articles identified for review incorporated various approaches. Literature reviewed included qualitative studies, quantitative studies, and mixed-method studies. Furthermore, the literature review highlighted previous literature reviews, as well as case studies. Also, author commentaries are included, in addition to school improvement model analyses, and an original research project.
Literature Review Organization

The remainder of the literature review is organized by literature relevancy to two theories: data driven decision-making and the whole child approach to education. From the theoretical considerations, the relative topics of motivational theories, school support systems, community collaboration for school improvement, and student achievement and standardized assessments will be reviewed in literature context. The chapter will be concluded with a summary of the information and a discussion including the conclusions, implications, and suggestions for future research.

Theoretical Considerations

Data Driven Decision-Making

The No Child Left Behind Act in 2001 (NCLB, 2003) was the impetus for a greater push for data driven decision-making (DDDM). The age of educational accountability was spurred by the need to provide proof to State and Federal officials that students from all subgroups have increased their academic skills following educational instruction. However, flaws in the use of DDDM are noted. Professionals are insufficiently prepared and trained to correctly employ data for student gain (Danielian, 2009; Murray, 2014), and an educational system holding test scores as the pinnacle of academic achievement undermines the priority of learning for the sake of self-improvement (Riedl, 2002).

In response to an increasing DDDM approach to educational decision-making, the ASCD established The Commission on the Whole Child. The intention of the Commission was to refocus school improvement efforts on items bettering overall child development, not just the academic increases of a child demonstrable through
standardized assessments. As such, the Commission began efforts to bring together community agencies for physical health and well-being, in addition to academic supports as well as supports developing the child for lifelong community, and global, success.

**Whole Child Approach to Education**

With the birth of the Commission on the Whole Child, there was a renewed and strengthened call to address all needs presented of a child so educational success is attainable (Bredekamp, 1987). In a 2010 article, Sahlberg reviewed the need for education to be targeted at producing a “knowledge society,” focused not on instilling competitive practices and ideas in youth; but rather, education needs to increase a global sense of caring for one another, and thus, cooperatively supporting our planet. Education should instill a sense of trust, and nurture within children the desire and curiosity to learn (Sahlberg, 2010). Although Sahlberg (2010) agreed some level of accountability was necessary in education, he asserted first we must have trust in the educational system and educators, as well as an established community approach to take responsibility for the cultivation of our youth. Furthermore, the test-based approach to education assumes all students enter school with a homogeneous skillset and demographics. Since this homogeneous theory is untrue of most modern nations, in order to create sustainable school improvement, education must embrace creativity and trust in those assigned to educate youth to perform their jobs (Sahlberg, 2010). Additionally, communities must take responsibility for the education and development of society’s youth, a responsibility charged not just to schools (Sahlberg, 2010; Slade & Griffith, 2013).
Student Motivation

**Human motivation theory.** Maslow (1943) reported a theory of human motivation based on hierarchy of needs through a general-dynamic theory. He asserted, base needs must be satisfied prior to acquisition of more cognitively advanced needs and desires. However, at no point is a person fully satiated and no longer motivated by a need (Aanstoos, 2016). Rather, higher order needs surface when prior deficiency needs are sufficiently addressed, a notion known as degree of relative satisfaction (Maslow, 1943). Deficiency needs are defined as the first four noted by Maslow: physiological (food, water, shelter, air, and warmth), safety (safety, insurance), love (affectionate relationships) and esteem (self-worth, accomplishment) (Maslow, 1943; Aanstoos, 2016). To acquire self-actualization, the final need must first be aptly satisfied. As described by Maslow, self-actualization is the “desire for self-fulfillment...to become actualized in” (p. 383) your potential. “This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming” (Maslow, 1943, p. 383). Therefore, children develop through motivational clusters, fulfilling needs from which further development builds. Internal realization ensues at the final level and following satisfaction of all prior levels of need. With internal realization, a person attains his or her potential for lifelong achievement. Conscious choice to commit efforts for the betterment of oneself through education and thus attain life potential occurs at the fifth and final level, and therefore, a person becomes self-actualized.

However, threat to basic need satisfaction and need development exists in the denial of freedoms (Maslow, 1943). Maslow (1943) declared threats to freedoms,
including freedom of speech and freedom to defend oneself, result in emergency responses. These threats paralyze one’s ability to self-discover and find truths. The closer a threat or behavior is to a need, the more psychologically important it is to a person (Maslow, 1943).

Needs do not develop in isolation of other more primary needs; however, there is no order to need development that can conclusively be applied to all people (Maslow, 1943). Rather, needs typically develop in a standard order, but some individuals hold one need to higher esteem than do most individuals. Furthermore, the value attributed to needs may vary as some people may devalue a need for which they have no memory of existing without, such as hunger (Maslow, 1943). As such, Maslow (1943) states needs are mostly unconscious in existence and are culturally impacted. Furthermore, behaviors are typically motivated by many basic needs at one time as opposed to isolated in motivation. However, not all behavior is motivated by basic needs (Maslow, 1943). When behaviors simply reflect a personality, the behavior is not considered to be motivating.

**Self-efficacy.** Decades of study have occurred regarding motivational theories. Bandura (1977), for example, initiated the charge with his findings that one’s perceived self-efficacy impacted performance on a novel threat more so than past performance. This may be applied to student performance in testing settings. When students approach a setting for which they feel capable of performing well, students do better than if they approached the task feeling unprepared.

In Ohio, student preparedness for fourth grade is measured through reading assessment at the end of third grade. In a 2011 study by Solheim, the impact of how a
student’s belief in their own ability to do well and approach the completion of difficult
tasks influenced reading comprehension scores (with reading decoding, listening
comprehension, and nonverbal abilities taken into account). Additionally, Solheim
(2011) assessed the impact of low reading efficacy and high reading efficacy on overall
comprehension scores. The two hundred seventeen fifth grade students (51.2% girls,
48.8% boys) assessed were primarily from middle class households in Norway, from five
schools, twelve classrooms. They were given equal numbers of fiction to nonfiction texts
and then asked to answer multiple choice and constructed response comprehension
questions. Results indicated multiple-choice reading comprehension question accuracy
was more greatly impacted by self-efficacy than were constructed response items
(Solheim, 2011). Further, self-efficacy had a positive overall impact on student
comprehension scores of read material (Solheim, 2011).

Furthering the self-efficacy findings applicable to elementary students, the 2014
Fan and Wolters study was reviewed. Data from the Educational Longitudinal Study of
2002 was used to determine if expectations could mediate between school motivation and
dropping out of high school. A total of 16,194, tenth grade students from public and
nonpublic (religious based and secular) schools in the United States, fifty-four percent
being white, of near equal numbers from each gender, were surveyed. The enjoyment of
English and math classes was found to have no relationship to dropping out (Fan &
Wolters, 2014). However, students were more likely to remain in school regardless of
English and math abilities, when they had post high school expectations for themselves,
with the impact greater for English than for math (Fan & Wolters, 2014). Meaning,
students who felt they were capable in English were more likely to remain in school if
they had post high school educational intentions than students who felt mathematically capable. Fan and Wolters (2014) reported, when assessing whether or not a student will drop out of high school based on English and math performance, one cannot overlook motivational beliefs. Furthermore, the authors asserted with regards to academics, motivation and expectations can be changed (Fan & Wolters, 2014).

**Internal motivation.** Self-efficacy has been assessed to impact student achievement. However, other factors beyond self-efficacy are known to impact student academic performance, internal motivation being one. Wentzel and Wigfield (1998) reviewed studies completed by other researchers regarding the impacts motivation, academic and social, have on student educational success. With regard to motivation, beliefs and value systems were noted to impact motivation such that students motivated by their own belief in their ability to accomplish a task performed academically better than students believing they had the skill to perform well on a task (Wentzel & Wigfield, 1998). Furthermore, research was summarized indicating student achievement was higher when believing in their own internal control over success, as opposed to students believing environmental factors maintain control over their success (Wentzel & Wigfield, 1998). Additionally, academic achievement was well predicted by a student’s belief in, and value of, their own competencies (Wentzel & Wigfield, 1998). Moreover, the review completed by the authors found a link between social and academic motivation, both with regard to a hierarchy where academic success led to acquisition of greater goals, as well as basis of complimentary goals for social success and academic success. Social success was noted through study analysis to be related to interpersonal relationships between students and teachers (Wentzel & Wigfield, 1998). Teachers’ expectations of students
impacted a student’s achievement; however, students also impacted their own success by performing better when given voice in their education (Wentzel & Wigfield, 1998).

Further, the 1998 Wentzel and Wigfield study reviewed complications for minorities. Minorities faced competing cultural expectations for education, to societal education expectations. Thus, direct opposition was found between compliance to expectations of cultural standards, and compliance to society expectations for educational success (Wentzel & Wigfield, 1998). Therefore, for a minority student to be accepted by a social group the minority student might be expected to depreciate educational values of society at large (Wentzel & Wigfield, 1998). A final indication of the research reviewed by the authors was school goals impacted both teachers and students, such that teachers and students faired better when schools supported skill attainment for all over individual comparisons of strengths and weaknesses (Wentzel & Wigfield, 1998).

Cohen (2006) reviewed historical educational goals and juxtaposed current educational research relating to social-emotional, ethical, and academic principles and practice to those goals. Responsible citizenry is the primary goal identified by Americans in a 2000 Rose and Gallup Poll referenced by Cohen (2006). In order to become responsible citizens, Cohen (2006) asserts social-emotional skill development “and ethical dispositions…provide the foundation for the tests of life, health, relationships, and adult work” (p. 228). Despite knowledge that happiness drives our existence (Noddings, 2003), educators do not readily incorporate practices and curriculum specifically targeted to increase student happiness. Further, Cohen (2006) cites the 2005 work of Seligman, Steen, Park, and Peterson, “[h]appy people are healthier, more successful, and more socially engaged” (p. 203). Therefore, to increase internal happiness and effectively
increase student engagement, Seligman (2002) reports students require programming for “positive emotion and pleasure, engagement, and meaning” (Seligman as cited in Cohen, 2006, p. 203). Cohen (2006) goes on to hypothesize, “social-emotional competencies provide an essential foundation for many, if not all, aspects of pleasure, engagement, and meaning” (pp. 203-204). Therefore, internal motivation to perform in the educational setting requires belief in oneself and voice in educational decisions (Wentzel & Wigfield, 1998), as well as social-emotional competencies from which happiness and resultant success are derived (Cohen, 2006).

School Support Systems

Perceived and received support. Motivation for success and future goal attainment impacts a student’s actual attainment of goals; however, research further finds other factors impacting success. Educationally, success is largely defined in terms of quantitative scores. However, student success needs to be viewed not only in terms of current academic achievements, but also in the likelihood a student will graduate from high school and gain lifelong successful employment while contributing to his/her community and the world.

Through a mixed method study, Wethington and Kessler (1986) examined the impact of perceived social support and received social support to a person’s ability to overcome future life events that are psychologically distressing to an individual. The results of the study indicated a person’s perception of having available supports was more positively impactful to future ability to overcome stressful events, than was actually receiving support during a psychologically stressful event (Wethington & Kessler, 1986). Study participants totaled 1,269 individuals who were married and between the ages of
21 and 65. All participants were surveyed to assess their level of physical symptoms associated with psychological distress, and then grouped regarding how recently the event occurred. The 365 individuals having experienced a psychologically distressing event within the last year where then further analyzed to determine from five options, the level of received support they were given when faced with the distressing event. Results indicated a person’s perception of support availability impacted the person more positively than the actual receipt of supports themselves (Wethington & Kessler, 1986). Thus, regardless of supports actively provided, a person psychologically benefited more from the perception support systems were available to them than they did by the activation of available support systems (Wethington & Kessler, 1986).

**Resilience.** As perceived and received supports impact student achievement differently, student resilience impacts individual student achievement differently throughout a student’s educational career. According to the Doll, Jones, Osborn, Kooley, and Turner (2011) longitudinal study of thirty-four Midwestern elementary students beginning in grade three and continuing through grade five student performance in school fluctuated over a three year period. With regard to three early indicators of school wellness via a resilience paradigm, “strong active engagement in learning, few homework problems, and effective peer friendships” (Doll, Jones, Osborn, Kooley, & Turner, 2011, p. 653), and as measured through teachers, parents, and student perspective, student achievement shifted from year to year. Students reflected a diverse student population, ethnically, culturally, linguistically, and economically, in a neighborhood school of seven hundred ninety students geographically near an industrial region. With a high poverty rate in addition to high mobility, the school touted strong financial and academic
supports. Particularly, a strong student assistance team comprised of staff representing academic, mental health, administration, parents, and special educators provided student support. The student assistance team utilized data-driven decision making for both behavioral and academic student needs.

Via annual standardized assessment completed by teachers regarding student academic engagement, annual parent standardized evaluation of student homework, and student self-report of peer friendship quality, evaluators ascertained student resilience in the three identified predictor areas fluctuated over the five years (Doll et al., 2011). In the third grade, ten of the thirty-four assessed students demonstrated difficulty in at least one of the three-predictor areas for academic wellness. However, of the ten students, only four demonstrated continued concerns in later grades; while three of the four were assessed by teachers to present concerns in at least two areas (Doll et al., 2011). Insufficiencies in focus and persistence were specific engagement deficits reported by teachers for three of the four students. The fourth student possessed one area of difficulty in third grade, homework, which later morphed into additional engagement deficits in all subsequent grades (Doll et al., 2011).

By fourth grade, all but six of the thirty-four students in the study reported by Doll et al. (2011) demonstrated success in the three evaluated predictive areas. Three of the six students indicated no predictive areas of concerns while in the third grade. Furthermore, in at least one of the areas predicative of school wellness eight of the fifth grade students yielded ratings suggestive of problem. Disengagement and inattention were most categorically descriptive of behaviors observed from students in the elevated category for lacking school wellness. Of the identified eight at-risk students, five had
previously been identified in fourth and/or third grades as demonstrating predictive behaviors of academic concerns. The study concluded although maturation through grades tended to result in increased student success, some students did exhibit longitudinal concerns. It was not an individual annual warning of one indicator most predictive of long-term school difficulties; rather, students having two or three indicators of concern present in third grade were most likely to demonstrate long-term school distress. Furthermore, students having distress patterns spanning third and fourth grades also demonstrated difficulties in fifth grade. Doll et al. (2011) report parallel findings to Condly (2006) and Masten et al. (2008) such that students in all studies demonstrated resilience when faced with short-term or minor difficulties. However, when students were exposed to long lasting or pervasive hardships they were less likely to experience long-term educational wellness. In conclusion the researchers caution, despite the presence at any point in time of the predictive variables, students may or may not overcome adversity and attain long-term academic wellness.

**Extracurricular activities.** Resilience factors such as strong peer relations and active engagement in learning are referenced in research relative to the impact of extracurricular activities on student academic achievement. Dumais (2006) implies increased social interactions with peers and adult coaches, as well as engagement in desirable activities as positive factors on reading and math achievement for elementary students. Further, the author implicates a transference may occur of positive skills gained from extracurricular involvement into academic studies. Constructive self-confidence and diligence to difficult activities learned in the extracurricular setting may be applied to the academic setting.
Dumais (2006) utilized data derived from the Early Childhood Longitudinal Study to assess relationships between elementary student extracurricular involvement and achievement in reading and math per standardized assessment and teacher report. Socioeconomic status and gender were among the investigated variables. Social science research was used as basis for study development, including “the term cultural capital [by] Bourdiea (1973, p. 80) define[d] ... “as ‘linguistic and cultural competence and that relationship of familiarity with culture which can only be produced by family upbringing when it transmits the dominant culture’” (Dumais, 2006, p. 118). Social reproduction theory developed by Bourdieu (1973, 1984, 1997) was also utilized as it “states that the society’s class structure is reproduced via the educational system and the way that cultural capital functions within it” (Dumais, 2006, p. 119). The premise of cultural capital is applicable as reported by Dumais (2006) since Bourdieu professed cultural capital increases as students age, and is highly impacted by cultural exposure of a child by his/her parents. Therefore, the author notes positive correlation between student privilege and long-term academic and life successes. Furthermore, Dumais (2006) referenced work by DiMaggio (1982) and DiMaggio and Mohr (1985) finding educational outcomes are highly impacted by student exposure to cultural activities. Furthermore, Dumais (2006) references work by Lareau (2002, 2003) finding extracurricular activities beyond those of cultural arts impactful to student educational success. Per Dumais (2006), the work by Lareau (2002, 2003) indicates the gains observed in children who participated in either high arts, or sporting activities were due to the participation, in addition to the adult interactions provided through the activity. Lareau (2002, 2003) asserted, “cultural capital...arose from interacting with adults and
growing a sense of entitlement, rather than from participating in activities that were considered high art” (Dumais, 2006, p. 123).

While other similar studies prior to Dumais (2006) employed qualitative design, Dumais (2006) developed her study on quantitative measures in an attempt to connect the impacts of early extracurricular involvement to educational outcomes. The researcher addressed social class participation rates, type of relationship between extracurricular participation and academic outcomes, degree of impact based on socioeconomic status; and finally, if the impact was due to the kind of activity (high art, sports or clubs), or purely the result of organized activity in an extracurricular activity. Five-thousand six-hundred ninety-six public school children were assessed annually from kindergarten through third grade according to standardized reading and math assessment results, teacher comment of student reading and math success, and parent report of student participation in one or more extra curricular activities (Dumais, 2006). Results from Dumais (2006) did not substantiate the Bourdieu theory such that high culture activities were not found to have greater impact on students overall as compared to athletic or club activities. Further, a socioeconomic impact was unobserved. Rather, Dumais (2006) found the more extra curricular activities in which a student participated, the higher the student’s reading standardized assessment result. Math standardized assessment results were not significantly impacted by participation. However, teacher report of student achievement in math was indicated to be higher with student participation in extra curricular activity, although, notable impact was devoid per teacher report of reading achievement (Dumais, 2006). Teacher evaluation of student achievement was highest for students of highest socioeconomic status, as well as for white students (Dumais, 2006).
As a result, Dumais (2016) supports educational impact relative to cultural capital resulting in both skill level increases on reading standardized assessments between first and third grades, and teacher favoritism toward students involved in extra curricular activities propagating inequalities (Dumais, 2006). Despite the findings, the researcher asserts additional research is necessary to determine causation for increased student academic achievement having participated in one or more extracurricular activities. Dumais (2006) suggests the correlation may be related to four possibilities. First, the increased skills acquired by students having participated may be leading to reading and math achievement. Second, parents who are involved to the extent compelling immersion of their child in extracurricular activities are likely to be involved with their child at home including reading to the child more frequently than do less involved parents. Third, parents of students who are involved in extracurricular activities are likewise exposed to adults sharing new and varied options for activities to which other parents may expose their children. Fourth, extracurricular involvement with other children exposes children to enriched socialization opportunities with children from potentially higher social classes and greater cultural capital. As such, children gain from extracurricular involvement both by increased reading achievement, as well as higher teacher regard of math skills. Most significantly, the less a child’s socioeconomic status, the greater the benefits gained from extracurricular involvement (Dumais, 2006).

**Guidance counselors.** Guidance counselors are available in school districts beginning in the elementary, and existing throughout a student’s educational career. However, guidance counselors are not typically plentiful in school districts. Although
available, guidance counselors serve hundreds of students, and not all students seek the guidance counselor for assistance.

Lapan, Wells, Peterson, and McCann, (2014) assessed the degree school counseling services decreased educational risk factors, and increased school connectedness. The school district chosen was one of the largest urban districts in the United States, educating 68,000 students yearly. As reported by the authors, this western US school district was racially diverse with 43% of students being from minority populations, and 118 languages were represented in the district (plus English). For the study, seventh through twelfth grade males and females were studied from 16 junior highs and nine senior highs (n=5595). Each year the district collected survey information from students regarding counseling services received, and then analyzed the surveys with HML (high, medium, low) (Lapan, Wells, Peterson, McCann, 2014). With no real gender variation, students who reported a relationship with the counselor felt more connected, safe, engaged and career focused than students who reported no such relationship; consequently, academic success increased (Lapan, Wells, Peterson, McCann, 2014).

According to the American School Counselor Association (ASCA) (n.d.), “[e]ffective school counseling programs are a collaborative effort between the school counselor, parents and other educators to create an environment that promotes student achievement” (p. 1). In order to promote student achievement, the ASCA notes four necessary components, with subcomponents for each. The first component is foundation. Within the foundation component, “[s]chool counselors create comprehensive school counseling programs that focus on student outcomes, teach student competencies and are
delivered with identified professional competencies” (American School Counselor Association [ASCA], n.d., p. 2). As such, the school counselors identify future goals for general student achievement, necessary programming to attain student goals, and ethical decision-making ensuring students and school counselors are protected throughout the process.

The next component, management, includes assessment of student and organizational needs, in addition to counselor competency. Following, annual agreements with supervising administrators are developed outlining paths to goal accomplishment. Advisory councils and data assist in recommendation generation “as well as to promote systemic change within the school system so every student graduates college-and career-ready” (ASCA, n.d., p. 2). Third, delivery is the component on which 80% or more of the activity time should be spent (ASCA, n.d.). Delivery may include direct or indirect services to students, families, school personnel, and the community. School counselors utilize “curriculum consist[ing] of structured lessons designed to help students attain the desired competencies and to provide all students with the knowledge, attitudes and skills appropriate for their developmental level” (ASCA, n.d., p. 3). Furthermore, they assist students to plan personal goals, and provide immediate counseling and crisis response services. Indirectly serving students, school counselors refer students for additional assistance, consult and collaborate “with parents, teachers, other educators and community organizations” (ASCA, n.d., p. 4). Finally, school counselors employ data to demonstrate the fourth component, accountability. “School counselors use data to show the impact of the school counseling program on student achievement, attendance and behavior and analyze school counseling program
assessments to guide future action and improve future results for all students” (ASCA, n.d., p. 4).

Included within the Executive Summary (ASCA, n.d.) are appropriate and inappropriate activities for school counselors. Although commonly believed to be appropriate, appropriate activities for school counselors do not include “coordinating paperwork and data entry of all new students”, “coordinating cognitive, aptitude and achievement testing programs”, “teaching classes when teachers are absent”, “computing grade-point averages”, “maintaining student records”, “providing therapy or long-term counseling in schools to address psychological disorders”, or “coordinating schoolwide individual education plans, student study teams and school attendance review boards” (ASCA, n.d., p. 3). Since the suggested ratio of school counselor to student is 1:250 (ASCA, n.d., p. 1), appropriate use of the school counselor’s time is imperative. Relying on the school counselor to perform unrelated professional functions, such as coordinating paperwork and computing student grade-point averages, undermines the importance of student relationships with the school counselor in order for students to reap the benefits of increased academic success noted by Lapan, Wells, Peterson, and McCann (2014).

**School health.** School supports extend beyond those of the guidance counselor, such as health supports available in schools. Murray, Low, Hollis, Cross, and Davis (2007) reviewed literature to determine the impact of school health programs on academic achievement. Overall, there was little evidence to support significant impacts on academic achievement from school health programs beyond the supports for asthmatic students (Murray, Low, Hollis, Cross, & Davis, 2007). However, programs training
parents and teachers, as well as students in social skills demonstrated a positive impact on academics (Murray et al., 2007).

Although the Murry et al. (2007) study failed to prove significant academic impacts from school health program, basic student health is known to be imperative for overall life functioning as well as academic functioning in the education setting. As such, the Healthy Schools Campaign was established as a nonprofit organization working to provide healthy educational environments to staff and students (Healthy Schools Campaign, 2016). The Campaign exemplifies belief that through collaborative efforts between school and health agencies, all students will be afforded healthy school environments in which learning will occur. The Healthy Schools Campaign promotes the connection between healthy students and academic success through initiatives like those advocating for educational indicators in the areas of health and wellness (Blad, 2014).

Blad (2014) references a study in the Lincoln Public Schools by Dr. Rauner; over a five-year period, fitness and student achievement were correlated. Blad (2014) related, regardless of socio-economic status, Dr. Rauner found physically fit students, defined as those students able to pass a fitness test, passed state reading and math assessments at a rate of two times more than those who were not physically fit. Furthermore, Blad (2014) reports Illinois to be among the states to include health and wellness factors in the school accountability system.

Such connections perceived as pivotal for student success reported by Blad (2014) are also expressed by the ASCD and WSCC. “Health and education affect individuals, society, and the economy and, as such, must work together whenever possible. Schools are a perfect setting for this collaboration” (ASCD, 2014, p. 2). In the publication, the
ASCD (2014) references a “meta-analysis Healthier Students Are Better Learners” (p. 3) in which the author, Charles Basch, called “health the missing link in school reforms to close the achievement gap” (p. 3). Further reviewed and referenced by the 2014 ASCD publication are studies by Bradley and Green (2013); Murphy et al. (1998); Rampersaud, Pereira, Girard, Adams, and Metzl (2005); Taras (2005); Murphy (2007); Widenhorn-Muller, Hille, Klenk, and Weiland (2008); Alaimo, Olson, and Frongillo (2001); Centers for Disease Control and Prevention (2009); Centers for Disease Control and Prevention (2010); Fedewa and Ahn (2011); Taras (2005); Trudeau and Shepard (2008); and Centers for Disease Control and Prevention (2013) demonstrating “when children’s basic nutritional and fitness needs are met, they attain higher achievement levels” (p. 3).

Despite the preponderance of studies linking health and education, the coordinated school health approach “has been viewed by educators as primarily a health initiative focused only on health outcomes and has consequently gained limited traction across the education sector at the school level” (ASCD, 2014, p. 5). Consequently, through theWSCC model, the ASCD and the United States Centers for Disease Control and Prevention (CDC) joined “to strengthen a unified and collaborative approach to learning and health” (ASCD, 2014, p. 6). The WSCC model reflects multidisciplinary acknowledgement that a student’s health and achievement are not mutually exclusive. Rather, the two are interrelated; thus, coordinated systems are necessary in order to increase overall school improvement. “More than merely a way to boost achievement or academics, the whole child approach views the collaboration between learning and health as fundamental. The development of the whole child is more than the acquisition of knowledge or skills, behavior or character; it is all of these” (ASCD, 2014, p. 9). Healthy
children are engaged in the educational process, academically, socially, emotionally, and behaviorally. When fully engaged, children’s learning is enhanced.

**Social support.** As referenced by Murray et al. (2007), social skill training impacted student academic achievement. However, prior to the literature review by Murray et al. (2007), a mixed method study was conducted by Lee, Smith, Perry, and Smylie (1999) in the Chicago Public Schools (CPS) to assess the degree to which social support and academic press impacted student academic growth over a one-year period in the areas of reading and mathematics. Social support and academic press were defined by the authors, with the definition of social support incorporating home and school support networks. Student reading and mathematics growth from 1996 to 1997 was assessed through the Iowa Test of Basic Skills (ITBS). The assessed student population was comprised of 28,318 CPS students in grades sixth through eighth. Additionally, over 5000 teachers from 304 CPS elementary and middle schools, in addition to the 28,318 students, took a Consortium survey in 1997. Finally, school-specific programs targeted at increased academic press and increased social supports were taken into account. Analysis of student ITBS data was conducted via four groups: schools assessed to have high academic press and low social support, schools with low academic press but high social supports, schools with both low academic press and social support, and schools with both high academic press and social support (Lee et al., 1999).

Although students in all four groups demonstrated growth, students in buildings having both high academic press and high social support demonstrated the greatest gains in both reading and mathematics (Lee et al., 1999). Results of ITBS indicated a reading achievement growth equivalence of 1.82 and a mathematics growth equivalence of 2.39
for this group (Lee et al., 1999). Whereas schools with low social support and/or academic press presented with lower growth rates in both reading and mathematics (Lee et al., 1999). Therefore, the report demonstrated the significance of social support in tandem with academic press in order to gain optimal student academic achievement over a one-year period; whereas in isolation, the growth was less pronounced (Lee et al., 1999).

Corrigan, Higgins-D’Alessandro, and Brown, (2013) discussed the merits and benefits of prosocial education by first establishing the current theoretical basis of educational. They further noted, despite federal efforts, the United States of America continued to drop in global standing as compared to other nations on the Programme for International Student Assessment (PISA), high school graduation rates were dropping, and the achievement gap was showing little overall improvement. In addition, public schools were becoming narrower in educational focus (reading, math), and eliminating educational pieces that supported the functional development of students that factored into adult independence and social awareness (Corrigan, Higgins-D’Alessandro, & Brown, 2013). The authors defined prosocial education as “school processes, school climate and culture, and particular programs and interventions, such as school improvement efforts; school diversity and multicultural education; character, moral, and values education; and civics and democratic education, that promote prosocial understanding and behavior” (Corrigan, Higgins-D’Alessandro, & Brown, 2013, pp. 39-40).

As such, the authors argued education must join academic curriculum with social and ethical needs in order to nurture, educate, and develop functioning members of
society who were both academically healthy as well as emotionally and physically healthy (Corrigan, Higgins-D’Alessandro, & Brown, 2013). Although there is no curriculum to define prosocial education, the authors offered a structure. As part of prosocial education, the authors stressed parental engagement was a necessity to increase academic skill development. Finally, to prosper in life, students required an academic capacity, but also social and civic mindedness (Corrigan, Higgins-D’Alessandro, & Brown, 2013). Therefore, academic only goals and policy did not offer the breadth of education necessary to create a flourishing and globally competitive society (Corrigan, Higgins-D’Alessandro, & Brown, 2013).

**Third element: Learning supports.** Adelman and Taylor (2011) juxtaposed a two-component framework and a three-component framework to school improvement. While the authors asserted a solid curriculum and instruction were essential to effective educational practice, they claimed the current two-component framework focused on improvement in instruction while managing resources (Adelman & Taylor, 2011). This led to fragmented application of intervention services and supports. Consequently, overall school improvement remained stagnant and under effective (Adelman & Taylor, 2011). However, Adelman and Taylor (2011) offered a three-component framework option through which a third element was added to the school improvement model.

The third element added by Adelman and Taylor (2011) aimed to infuse the currently fragmented supports and interventions so a web of joined resources supported instruction and resources. Of primary focus with the third element was re-engagement; thus, mitigating known risk factors for education failure. The authors defined the third element as “learning support…[meaning] the resources, strategies, and practices that
provide physical, social, emotional, and intellectual supports intended to enable all pupils to have an equal opportunity for success at school” (Adelman & Taylor, 2011, p. 33). The structure established by the learning supports would strengthen existing instruction and resources; thus, culminating into increased school improvement efforts (Adelman & Taylor, 2011).

Prior to the work by Adelman and Taylor (2011), Cohen (2006) reviewed research findings supportive, essentially, of learning supports. Cohen (2006) asserted educational mandates from the federal government have increased educational focus on English language arts and mathematics literacy. However, “[s]ocial, emotional, academic, and ethical education can help children reach the goals their parents and teachers have for them: learning to ‘read’ themselves and others, and learning to solve social, emotional, and ethical problems” (Cohen, 2006, p. 202). The call by Adelman and Taylor (2011) for sincere regard and purposeful implementation of learning supports in order to increase school improvement efforts and ultimately result in student academic and nonacademic achievements is echoed by studies reviewed and cited by Cohen (2006). Work by Beland, 2003; Cohen, 2001; Elias et al., 1997; and Zins, Weissberg, Wang, and Walberg, 2004 were cited by Cohen (2006) as supports for individuals who in adulthood are able to demonstrates competencies with both love and work; thus, social, emotional, and ethical components were established and solidified during the formative educational years later benefitting individuals as competent adults.

Further, similar to the learning supports referenced by Adelman and Taylor (2011), Cohen (2006) utilizes SEEAE to reflect “‘social, emotional, ethical, and academic education’ (SEEA) as shorthand for sustained preK-12 programmatic efforts
that integrate and coordinate these pedagogic and systemic dimensions” (p. 202).

Meaning, overall student health and success while in compulsory education is directly linked to programs and services supportive of students’ civic, interpersonal, and intrapersonal competencies, in addition to safe environments at home and school that care for and engage the students in the educational process.

**Community Collaboration for School Improvement**

*Whole community and whole child.* As reflected upon by Anderson-Butcher and Ashton (2004), in the 1990s it became more commonplace for education to be viewed in relationship to the child’s social and emotional needs, as well as their physical and family needs. As such, collaborative models emerged through which the various school support systems began to work together to support the student. Beyond supports offered directly by and through the school district, studies and reviews were completed to determine the applicability of a collaborative community approach to school improvement; thus, leading to increased educational outcomes for students. The resultant theories asserted student achievement was optimal when schools and community agencies enter into partnerships with student needs being at the center of mutual goals.

Studies have occurred to assess community ability to support children throughout their growth and development. As Sahlberg (2010) and Turgut (2013) asserted, communities must take responsibility for the education and development of society’s youth, a responsibility charged not just to schools. As such, reform must not occur in isolation in the school setting; rather, reform has to be collaboratively based with other community and government agencies supportive of children and family needs (Turgut, 2013).
Furthering the idea of community collaboration in relation to student success was the work completed by Khanlou and Wray in 2014. Khanlou and Wray (2014) reviewed resilience literature to assess the impact resilience initiatives and interventions have on health (physical and psychological) and social welfare, as well as how resilience initiatives and interventions might better social and economic health disparities. Khanlou and Wray (2014) noted the definition of resilience has evolved four times through research following the influence of its more widespread use across various disciplines. Resilience was first researched to define and operationalize the term. Later, resilience research expanded to substantiate the long-term factors comprising resilience as well as the processes impacting resilience. Next, research focused on programming yielding the greatest positive impacts on resilience. The current, and fourth evolution of resilience by definition and through research focused on the biological evolution impacting resilience behaviors. Online searches in addition to personal interviews were used to identify related publications from the year 2000 to 2014, with the information then analyzed from an eco-system approach. Khanlou and Wray (2014) noted resilience was impacted by social position and environmental factors. The authors further stated resilience was merely one piece of the puzzle to reduce vulnerability to social and health disparities for at-risk populations (Khanlou & Wray, 2014).

Protective factors associated with resilience interventions were impacted by a person’s environment and social position. If a person was exposed to greater environmental and social risk factors, their response to resilience interventions was reduced as compared to individuals in more supportive and stable environments maintaining greater social positioning (Khanlou & Wray, 2014). In order to overcome
risk factors, it was asserted by the authors, resilience programs and interventions must be paired with public health and social health policies; otherwise, success with resilience programming was stifled. As such, resilience programs in schools must not occur in isolation of community programs to address the overall needs presented by students (Khanlou & Wray, 2014). Rather, a whole community approach including community collaboration was necessary when fostering student resilience (Khanlou & Wray, 2014).

The need for a multidimensional approach to education supportive of input and suggestions from educators and families, not just the beliefs of policy makers, was the resultant suggestion by Turgut (2013) following review of the political and historical basis of educational policies in the United States, as well as review the educational policies and goals in other nations. In order to create positive trends, educational reforms must also embody a collaborative approach with the community thereby supporting all student needs (Turgut, 2013).

As researchers have concluded in Ohio, Nebraska and Illinois, academic achievement is not mutually exclusive of student health. In his article, Cohen (2006) asserts all aspects of the child require thoughtful, purposeful development and care in order to, upon high school graduation, render an educated member of the community. The resultant graduate demonstrates the ability to form and maintain loving and lasting personal and work relationships, as well as contribute responsibly to the community. Therefore, the author contends all aspects of the child, including social, emotional, ethical, and intellectual, must be formally developed through education (Cohen, 2006).

As noted by Khanlou and Wray (2014), Sahlberg (2014), and Turgut (2013), students are most successful educationally when there is a collaboration between
community and school jointly focusing on the support of all presented student needs. Through political and historical review, Slade and Griffith (2013) assessed the whole child approach to school improvement. Overall, the authors pointed to studies indicating academic curriculum and development will not create students who are generally well-developed; thus, academics alone leave individual student needs unfulfilled (Slade & Griffith, 2013). Furthermore, singular academics programming reduced student creativity and resulted in decreased graduation rates, as well as instruction for the sake of testing, as opposed to instruction for the sake of learning. The authors quoted the definition given to whole child education by the ASCD (2007), “‘the development of children who are healthy, safe, engaged, supported, and challenged within a sustainable approach to education and community engagement’” (Slade & Griffith, 2013, p. 22).

Slade and Griffith (2013) further attested whole child education must be embedded within school and community improvement initiatives, as the physiological basis of child development must be fulfilled before educational acquisition and overall functional success may occur. The authors reviewed the five tenets of whole child education, which included health, safety, engagement, support, and academic fortitude. Promoting the artist, right-brain skills in children supported the development of creativity. By embedding the five whole child tenets into collaborative school and community improvement initiatives, students were supported on a primitive, as well as functional level to become healthy, successful members of the larger global community (Slade & Griffith, 2013). Thus, the review of specific school improvement initiatives is pertinent to the continued discussion of increased student educational outcomes.
Ohio Community Collaboration Model for School Improvement. Anderson-Butcher and Ashton (2004) reviewed various collaborative approaches through which school and community organizations may work together to support the needs of the whole child, including their family, so students might prosper educationally. Interagency collaboration supported the student when common goals were established toward which collaborating agencies progressed in order to support the child (Anderson-Butcher & Ashton, 2004). Furthermore, interprofessional collaboration supported the needs of the student and the family by facilitating and communicating between multiple agencies in order to fulfill the needs of the family, and thus the student, both in the context of school as well as in the community, such as with mental health needs. Additionally, family-centered collaboration supports recognized the needs of the family unit as the basis on which the student is supported and is able to thrive. As such, the opinions and needs of the family must be sought and valued by the school if long-term family success is to be obtained (Anderson-Butcher & Ashton, 2004).

Moreover, the converse is true; when students succeed academically, the family became stronger (Anderson-Butcher & Ashton, 2004). Family-centered collaboration was mutually beneficial for the family and for the school as one helped the other. The last collaboration model reviewed by Anderson-Butcher and Ashton (2004), community collaboration, noted pairing individual, successful citizens in a designated locality with social planning initiatives having targeted community priorities, resulted in supported student health and development. Consequently, Anderson-Butcher and Ashton (2004) indicated the positive interconnectedness of community and agency supports of students and families, to overall student success.
In order to attain educational purpose, life-long learning, social and ethical responsibility, the partnership between schools, families, and communities is imperative. Cohen (2006) traced historical roots of education to Greece, Egypt, and India where student socialization was the primary purpose of education. Further, the author bridged historical educational roots to modern American educational goals by recounting a Rose and Gallup Poll conducted in 2000. The pole affirmed modern Americans assign civic responsibility as the main purpose of public education (Cohen, 2006). Cohen (2006) reviewed various reports, policies, and approaches thought impactful to student academic and nonacademic develop. Mathematical and literacy skill development in isolation of nonacademic skill development will not result in cultivated democratic citizens (Cohen, 2006). Rather, prerequisite skills for fruitful democratic citizenship include those of social, emotional, and ethical proficiencies, in addition to academic intelligences (Cohen, 2006). As such, the partnerships and programs ascribed by schools must be based in theories assessed as having the most impact. Furthermore, in order to sufficiently attend to student needs across nonacademic domains, partnerships with community services are indispensible.

In 2008, Anderson-Butcher et al. analyzed the Ohio Community Collaboration Model for School Improvement (OCCMSI), an educational improvement policy developed in partnership with the Ohio Department of Education (ODE) and the authors of the article who were from The Ohio State University, College of Social Work. Anderson-Butcher et al. (2008) referred to the logic model of OCCMSI as a more modern, multi-directional, supportive education improvement model targeted at not just increased quantitative test scores, but also targeting all presented potential barriers for
learning. The learning barriers were presented through five domains: academic learning, youth development, parent/family engagement and support, health and social services, and community partnership (Anderson-Butcher et al., 2008).

Anderson-Butcher et al. (2008) criticized the conventional model of school improvement as being “walled-in,” meaning, school improvement was isolated to prescribed mandates coming from the state and district level, in isolation of local community resources and family needs. Thus, academic achievement was viewed as mutually exclusive of other learning, developmental, and health factors. The Ohio Community Collaboration Model for School Improvement expanded other improvement models by actively seeking and engaging the assistance and collaboration of community agencies in order to increase the time schools have access to students (Anderson-Butcher et al., 2008). Thereby, schools may influence overall student development by reducing “nonacademic barriers to learning,” a term credited to Adelman & Taylor (2005) (Anderson-Butcher et al., 2008).

By looking outside the walls of a school for stakeholders, schools gained increased support and resources from the student’s family and community stakeholders as well. Per Anderson-Butcher et al. (2008), this also helped to reduce expenses to all stakeholders by decreasing service overlap. The model worked by first identifying student needs (conditions) in addition to resources from the student’s family and community, then conducting a gap analysis (Anderson-Butcher et al., 2008). From the gap analysis, a collaborative program encompassing the community-unique concerns and resources may be developed and implemented to target the five domains (Anderson-Butcher et al., 2008). Following, short-term outcomes for the student, parent/family,
school, and community were gained, leading to increased academic outcomes and the culminating result of successful young adults prepared for independent community functioning (Anderson-Butcher et al., 2008).

The Ohio Community Collaboration Model for School Improvement may be approached from either direction, gap analysis to adult independence, or vice versa. Through this model, multiple benefits by all stakeholders were obtained (Anderson-Butcher et al., 2008, 2010a, 2010b). Per the authors, OCCMSI has been successfully implemented in twelve districts in Ohio chosen to allow for diversity in region and student population (Anderson-Butcher et al., 2008).

**Student Achievement and Standardized Assessment**

Motivation and support networks impact student achievement on standardized assessments, although these are but two known variables. Research regarding use of student metrics to predict student outcomes and pass judgment on district and student achievement has been conducted. Results indicated need for greater diversity in assessment in order to increase predictability of results to student lifelong success (Corrigan, Higgins-D’Alessandro, & Brown, 2013). Furthermore, employment of caution is necessary when generalizing results for the basis of decision-making between unlike populations (Paulson and Marchant, 2009) as abbreviated positive student impact occurs when data is improperly utilized for decision-making (Jennings & Sohn, 2014). Consequently, in order for student metrics to not become a negative variable impacting student achievement, accurate and appropriate use of data driven decision-making is imperative.
**Impact of preventative interventions on standardized assessments.** Through a mixed method, longitudinal study, Fleming et al. (2005) tested the correlation of predictive problem behavior risk factors for middle school students in the seventh grade, to high school academic achievement in the tenth grade. From the total participant population of one thousand forty Washington State public school children from the Raising Healthy Children (RHC) Project, five hundred seventy-six students who maintained attendance in the public schools between seventh and tenth grades were identified as the sample population (Fleming et al., 2005). The sample population was also limited by family income and structure. Regarding the students meeting study design requirement, they were assessed with the Washington Assessment of Student Learning (WASL). Furthermore, teachers, students and parents were assessed annually with surveys relative to risk and protective factors for academic success (Fleming et al., 2005). The risk and protective factors included: attention and depression, skills (i.e., social, emotional, and decision making), substance use (i.e., alcohol, marijuana, and cigarettes), antisocial behavior (i.e., bullying/relational aggression, general antisocial behavior and aggression, and antisocial behavior in the classroom), school bonding (i.e., bonding to school and commitment to school), and peers (i.e., negative peers).

Although Fleming et al. (2005) identified limitations of the study, including the inability to determine which risk factors aligned most strongly with academic outcomes, and the utilization of participants from only one school district in Washington State, the study yielded positive results. The authors concluded their study supported previous studies, with the presence of social and behavioral supports, students demonstrated greater long-term academic outcomes per standardized assessments in reading and math.
Identified risk factor for problem behaviors most strongly predictive of high school academic success was that of peer behaviors, specially, antisocial behavior (Fleming et al., 2005).

Corrigan, Higgins-D’Alessandro, and Brown (2013) extended the point that standardized assessments must be viewed in context with other factors so students are supported not just for academic success, but also for lifelong success. Corrigan, Higgins-D’Alessandro, and Brown (2013) reported in order to prosper in life, students had to have an academic capacity, but also social and civic mindedness. Therefore, academic only goals and policy do not offer the breadth of education necessary to create a flourishing and globally competitive society (Corrigan, Higgins-D’Alessandro, & Brown, 2013).

Similarly, as Sahlberg (2014) suggested, it was necessary for education to be targeted at producing a “knowledge society,” focused not on instilling competitive practices and ideas in youth; but rather, education needs to increase a global sense of caring for one another, and thus, cooperatively supporting our planet.

**Standardized assessments as predictors.** As previously reviewed, Turgut (2013) emphasized current standardized assessments were not the best means through which to compare groups of dissimilar demographics or educational goals. Turgut (2013) voiced need for a multidimensional approach to education supportive of input and suggestions from educations and families, not just the beliefs of policy makers. Paulson and Marchant (2009) demonstrated the applicability of the need.

Through quantitative study utilizing SAT and the Indiana State Test of Educational Progress (ISTEP+), Paulson and Marchant (2009) investigated the sufficiency of current standardized assessment practices by which students, teachers,
schools, and states were measured and determined proficient. The authors scrutinized the validity of test scores aggravated at various levels, and whether or not scores decreased in validity the further removed they became from the original source (Paulson & Marchant, 2009). Student demographic factors within Indiana, as well as across states, were assessed regarding level of impact attributable to demographic variations in relation to scores obtained on the standardized assessments (Paulson & Marchant, 2009). The highest achieving and lowest achieving student groups were compared by demographic factors. Results overwhelmingly indicated demographic factors, such as parent education, family income, race, cognitive abilities, and special education identification, for which schools had no control significantly impacted standardized assessment scores (Paulson & Marchant, 2009).

Further, Paulson and Marchant (2009) declared the scores utilized to assess the closing of the achievement gap from one year to the next were invalid and insensitive to student demographic factors. Of all the states including the District of Columbia, students from states with greater levels of disadvantage were assessed to have lower SAT scores than those from states projecting lesser disadvantage factors (Paulson & Marchant, 2009). Through their study, the authors asserted it was invalid and unethical to judge educational quality by district or school through quantitative test scores alone. Student demographic factors could not be controlled for sufficiently enough to mitigate their influence on standardized assessments (Paulson & Marchant, 2009). Finally, the authors demanded the ceasing of invalid accountability systems to weigh educational fortitude and pass judgment (Paulson & Marchant, 2009).
The 2014 study by Jennings and Sohn also emphasized the negative impacts student metrics had on educational decision-making. The authors of the study looked at the impact educational triage and instructional triage had on standardized assessment results. The study assessed the impact triage practices had on low-achieving and high-achieving students in both high-stakes accountability situations as well as low-stakes testing. Furthermore, the authors assessed the degree high performing and low performing schools were impacted by the intervention practice.

Jennings and Sohn (2014) completed a longitudinal study of an inner city district, Houston Independent School District. Demographics for the district were primarily minority populations, with Caucasians comprising 10 percent of the student population (Jennings & Sohn, 2014). Further, 80 percent of the students were disadvantaged while Limited English students (27 percent) and special education students (11 percent) were also represented (Jennings & Sohn, 2014). The study ensued using data from the 2001 through 2004 school years in an attempt to represent pre- and post- No Child Left Behind testing impacts. The authors reported the student population was given reading and math high-stakes assessments and reading and math low-stakes assessments. Overall, the impact of intensive application of intervention services on the at-risk student population most likely to pass the assessment had the greatest impact on the math assessments, as opposed to the reading assessments (Jennings & Sohn, 2014). In addition, the greatest positive impact was felt for students closest to the proficiency level, whereas the lowest performing students were most negatively impacted by the educational triage in math (Jennings & Sohn, 2014). Finally, the lowest performing schools experienced the greatest impacts from educational triage (Jennings & Sohn, 2014).
To conclude the review relevant to standardized assessment predictability, the 2014 Starr and Spellings article was examined. Starr and Spellings (2014) wrote the article from two competing perspectives: there should be a moratorium on state testing to give educational systems a chance to align curriculum, instruction, and training with the Common Core (Starr); and testing should continue as educators cannot use ill preparedness as an excuse to stop trying to make changes and better systems (Spellings). Starr argued state tests were not aligned with the Common Core State Standards (CCSS), such that the state tests did not require the rigor reflected of the CCSS (Starr & Spellings, 2014). Further, Starr argued the goal of CCSS was to prepare American students for global competition through education requiring creative thinking and problem solving (Starr & Spellings, 2014). However, teachers and students were being held to standards that did not match current educational goals (Starr & Spellings, 2014). Starr furthered this by indicating tests should be employed at milestones to assess a student’s preparedness to proceed to the next stage (Starr & Spellings, 2014). Additionally, efforts occurring between the milestones should focus on preparing students with the necessary competencies needed for success at the next stage (Starr & Spellings, 2014). Since time is needed for students to grow and develop, time should be given between milestone assessments (Starr & Spellings, 2014).

Whereas Spellings asserted, when test scores do not yield a number with which we are comfortable, we should not ask for a moratorium; rather, when educators do not have scores they desire, they should reassess their resources and align them more appropriately to meet the needs of their students (Starr & Spellings, 2014). Spellings recanted, since No Child Left Behind (NCLB) was enacted in 2001, minority subgroups
increased reading and math scores nationwide (Starr & Spellings, 2014). Spellings warned, if there is a cry from educators for a moratorium on testing, we would be reverting back to pre-NCLB race and income discrimination, and decreased associated educational expectations (Starr & Spellings, 2014). Spelling asserted tests are a tool for change, not a prescribed endpoint (Starr & Spellings, 2014). Both authors agreed reading and math achievement was not a be-all end-all for global competitiveness; however, they disagreed on the path by which American students would be prepared with problem-solving skills and creative thinking skills so they would be globally competitive (Starr & Spellings, 2014).

**Retention determination.** Various external forces impact student achievement as measured by standardized assessments (Fleming et al., 2005; Khanlou & Wray, 2014; Lee et al., 1999; Paulson & Marchant, 2009), thus rendering quantitative data insufficient from which sole determination of student aptitude may be made. Therefore, when retention is the decision at hand, an expansive analysis should be conducted prior to final determination.

Huddleston (2014) reviewed much literature to determine student impacts from retention, either retention following teacher recommendation or retention as a result of standardized assessment failure. The results indicated overall, the benefits of retention were outweighed by the costs (Huddleston, 2014). Particularly, the negative impacts of retention were most strongly felt by students of low socioeconomic status and by minority students (Huddleston, 2014). Some studies reviewed by Huddleston (2014) found short-term gains from retention; however, largely, the positive impacts of retention waned over years to the point where positive impacts eventually disappeared.
Additionally, the identification of student patterns of strengths and weaknesses, as well as increased student and teacher performance motivation were found as a result of retention (Huddleston, 2014). For retention to have the greatest impact, interventions to address teacher and student deficits were needed (Huddleston, 2014). Negative impacts resulting from retention included teaching to the test, increased multiple choice tests, stress, cheating, ineffective practices by educators to pour extra resources in a small time period in order to increase test scores for those students most likely to pass, increased student drop-out rates, decreased post secondary education, and lower lifetime incomes (Huddleston, 2014). Positives of retention reported by the authors were most notable in Caucasian students within middle-class households (Huddleston, 2014). However, studies reviewed by Huddleston (2014) reflected a weakness in qualitative research approaches, as most studies on the topic were highly quantitative. Furthermore, the population studied impacted results: comparing students to others their same age, or comparing students to others of the same grade (Huddleston, 2014).

**Summary**

The review of literature relative to the sufficiency of quantitative student metrics for high-stakes decisions supported several variables impact student performance on standardized assessments. Results overwhelmingly indicated demographic factors, such as parent education, family income, race, cognitive abilities, and special education identification, for which schools had no control significantly impacted standardized assessment scores (Paulson & Marchant, 2009). Demographics impacted a student’s performance, as did motivation (Bandura, 1977), self-efficacy (Solheim, 2011), perception of supports available (Lapan, Wells, Peterson, McCann, 2014; Wethington &
Kessler, 1986), teacher expectations and student involvement in educational decisions (Wentzel & Wigfield, 1998); and the collaborative network of school, community, and family support systems (Anderson-Butcher & Ashton, 2004; Anderson-Butcher et al., 2008, 2010a, 2010b; Corrigan, Higgins-D’Alessandro, & Brown, 2013). Social support in tandem with academic press was significant in order to gain optimal student academic achievement (Lee et al., 1999), as was the presence of social and behavioral supports (Adelman & Taylor, 2011; Fleming et al., 2005). Therefore, the determination of student, in addition to teacher, district, and state educational merit, based on standardized assessments alone is questionable.

The resultant theories asserted student achievement was optimal when schools and community agencies entered into partnerships with student needs being at the center of collaborative goals (Anderson-Butcher & Ashton, 2004; Anderson-Butcher et al., 2008, 2010a, 2010b). Studies supported the appropriateness of community collaboration to address student needs, needs resulting from a culmination of factors, education fortitude being just one factor impacting student success. As such, resilience programs in schools must not occur in isolation of community programs to address the overall needs presented by students (Khanlou & Wray, 2014). Rather, a whole community approach (Khanlou & Wray, 2014; Sahlberg, 2010; Slade & Griffith, 2013; Turgut, 2013) including community collaboration was necessary when fostering student resilience (Khanlou & Wray, 2014).

Due to the relevancy of the topic, continued study of standardized assessment sufficiency in student-based decision making is necessary. Academic only goals and policy do not offer the breadth of education necessary to create a flourishing and globally
competitive society (Corrigan, Higgins-D’Alessandro, & Brown, 2013; Slade & Griffith, 2013). Paulson and Marchant (2009) further alleged it was invalid and unethical to judge educational quality by district or school through quantitative test scores alone. Student demographic factors could not be controlled for sufficiently enough to mitigate their influence on standardized assessments (Paulson & Marchant, 2009). Finally, the authors demanded the ceasing of invalid accountability systems to weigh educational fortitude and pass judgment (Paulson & Marchant, 2009). Despite the call for action made by Paulson and Marchant (2009), Starr and Spellings (2014) debated what action should occur. Starr asserted there should be a moratorium on state testing to give educational systems a chance to align curriculum, instruction, and training with the Common Core (Starr); whereas Spellings retorted testing should continue as educators cannot use lack of preparedness as an excuse to stop trying to make changes and better systems (Starr & Spellings, 2014).
CHAPTER III. METHODOLOGY

At the Federal and State levels when applying rules and standards by which school districts must demonstrate alignment to Federal law, collaboration amongst stakeholders is not only incorporated into legal terminology, but also mandated for action, as with the Every Student Succeeds Act (ESSA). However, at the student level there is little legal reference necessitating collaboration. Rather, student-level decisions are based on attainment of state level assessment criteria, such as with the Third Grade Reading Guarantee (TGRG). Absence of team collaboration and review exist regarding applicability and/or appropriateness of the assessment result to overall student functioning. Although denied to individual students, states garner a multidisciplinary, collaborative approach. Thus, stringent standards apply to students who are minors yet to develop into fully matured adults, unable to legally speak on their own behalf. The high stakes consequences imposed on students reflect higher student imposition than the imposition imposed by laws on states.

The ESSA requires states to utilize multidisciplinary teams to determine student-level decisions. Therefore, the determination to deny students multidisciplinary demonstration of skills in order to display sufficient skill mastery seems nonsensical. Imposition of high stakes standards rests on Ohio public school students. The high stake standards echo more punitive outcomes on the student than the outcomes imposed on Ohio by the Federal Government. “[T]he NCLB-defined sanctions and prescribed interventions … are eliminated” (Smith, Ash, & Shaner, electronic mailing list message, December 11, 2015, para. 9) for the State of Ohio by ESSA. Consequently, the appropriateness of student-level sanctions necessitates reevaluation as well.
The whole child education approach reflects belief that student-learning outcomes hinge on the identification of and support of all factors impacting a student. As such, in addition to academic supports, students require nonacademic supports. Available supports may come directly from the district, such as with nutritious school lunches. However, collaborative community efforts from various organizations and public agencies may provide supports to students as well. Supports must meet student needs for health and safety as well as engagement in learning, supported learning, and a challenging educational curriculum leading to successful post-secondary outcomes. Students have optimal potential to maximize learning within the educational setting following implementation of varied academic and nonacademic support systems.

As policy makers and educators work to develop systems of educational assessment and accountability, utilization should reflect thorough, valid, appropriate and optimal systems. Assessment of student achievement should reflect all needs impacting student learning, not just testable academic needs. The impact nonacademic student needs have on student learning outcomes necessitates sufficient regard. As such, the results of this study lend to the conversation regarding the relationship of academic and nonacademic supports to student achievement. Further, the research lends voice to educators’ perceptions of student needs. The research demonstrates the precision of educators’ intuition regarding the impact academic and nonacademic student needs have on student standardized assessments scores. Consequently, the research lends to conversations regarding educational accountability through the use of standardized assessments. The study provides basis as to whether educator intuition may be
appropriately substituted for less student testing, or educator intuition given merit in high-stakes educational decisions.

Consequently, a cross-sectional, quantitative research design was necessitated. Educators’ perspectives regarding the influence of whole child learning factors on elementary student achievement, the presence of academic and nonacademic supports available, and state-level student quantitative data was needed to demonstrate district supports essential for student academic success. This chapter delineates the research design and procedures necessary to determine factors impacting success of third grade students on the Ohio Achievement Assessment (OAA) reading test. Success is defined as a student meeting “the promotion score on the grade 3 English language arts test” (Ohio Department of Education, 2016, p. 12) set by the State of Ohio. By meeting the delineated score, the student advances from third grade to fourth grade with their age level peers.

**Research Design**

In order to determine the impact of academic and nonacademic supports on student reading achievement according to OAA results, a quantitative design is apropos. Accomplished through a cross-sectional research design, differences are identified in two demographically similar urban, public Ohio school districts within geographical proximity. As such the design incorporated a nonrandom convenience sample reflected as District 1 and District 2. An identified district employee with access to district historical data completed a historical data collection instrument. The historical data collection instrument sought to identify supports available during the 2013-2014 school year, in District 1 and District 2 elementary buildings. Historical third grade reading
results for the 2013-2014 school year accessed from the Ohio Department of Education (ODE) website reflect the data collection method of third grade student reading achievement scores by district and building. Student achievement on the third grade reading OAA was juxtaposed to historical 2013-2014 nonacademic supports within elementary buildings. The availability of academic and nonacademic supports, including physical, social, and emotional supports in the district characterized the independent variable.

Furthermore, a nonrandom convenience sample allowed for the obtainment of educators’ perceptions regarding the level of influence various academic and nonacademic supports have on student educational achievement. A cross-sectional design identified educator opinions in District 1 and District 2. All employed staff in District 1 and District 2 comprised the recruited sample to complete the rank order instrument. Although all employees were asked to complete the rank order instrument in order to minimize stress on any grade level educator, the sample merely consisted of kindergarten through third grade teachers and principals. Kindergarten through third grade teachers and principals reflect the individuals educating third grade students who were assessed by the third grade OAA. The teachers and principals individually completed a rank order instrument. The rank order instrument presented nine academic and nonacademic supports, and the educators ranked the supports from most influential to least influential on elementary student achievement. The rank order instrument explored the perceptions of educators.
Participants

Education is afforded to all students of all socioeconomic levels in all American communities regardless of student level of need or ability. When students fail to acquire, develop, or maintain academic skills, districts seek to identify antecedents for lacking success. Following identification of the antecedent, districts then create structures and commit resources to support the educational needs of their learning community. As such, school districts implement interventions, offer support services and personnel, and structure both academic and nonacademic systems to meet the unique needs of communities and children. The cross-sectional design lends nicely to the participant population utilized for this research study.

In order to identify district and student needs, districts refer to achievement data. Standardized assessments measure student academic success and merit. Furthermore, district academic merit hinges on the academic achievements of students on standardized state and local assessments. Districts possess a level of awareness and consideration to the impact on student academic achievement created by both academic and nonacademic student needs. Consequently, districts employ varying levels and types of interventions and supports to address needs, and facilitate student ability to concentrate on academics.

Therefore, in order to study the impacts academic and nonacademic supports have on student achievement, demographically similar districts were identified in a geographically proximal location, thus, a convenience sample. Kindergarten through third grade teachers along with the associated building principals composed the study participants. The identified educators directly impact student success at the third grade level. Furthermore, kindergarten through third grade teachers and principals observe
firsthand the impacts of services and supports on student successes. Participants able to directly discuss student academic and nonacademic needs are paramount to response applicability on associated study instruments. Further, participants chosen directly from the districts of study ensure congruency between responses given on instruments and observations made regarding student needs. In addition to the adult participants, the 2013-2014 third grade students who took the Ohio Achievement Assessment in reading in either District 1 or District 2 participated as well.

Furthermore, since the State of Ohio specifically identified third grade as critical for reading skill acquisition, the third grade student population in Ohio public schools was chosen. As reported by ODE (2015) in an online resource, “[t]he ability to read is the foundation of learning. Research shows that children who are not reading at a third-grade level by the end of grade 3 are likely to have trouble learning in all classroom subjects in higher grades” (para. 1). Therefore legal mandates impose, without passage of the identified State assessment by meeting the minimum reading threshold, third grade students in the State of Ohio shall not be promoted to the fourth grade. Thus, making the third grade evaluation a high stakes assessment. Consequently, the student and educator populations chosen for the study represent a population exposed to high-stakes quantitative student metrics.

The identification of school districts to participate in the study hinged on preexisting differences between student achievement results. According to District 1’s website (Confidential. Please contact the author.), the district is comprised of five elementary schools, three traditional elementary schools, one Spanish immersion school, and a STEM elementary building. Additionally, there is one intermediate school for
grades four through six, a middle school serving seventh and eighth grade students, and a high school as well as one alternative school. The district has approximately 504 staff members. The total average daily membership for the district in grades preschool through twelve was 5135.76, and a district year-end enrollment of 3339.37 was reported for fiscal year (FY) 2014 (ODE, [District Profile Report FY14], 2015). Furthermore, District 1 reflects a district kindergarten through grade twelve regular education pupil teacher ratio of 17.58 for FY08, a district average income for tax year 2012 of $36,129.70, and district total expenditure per pupil of $15,375.26 for FY14 (ODE, [District Profile Report FY14], 2015). During fiscal year 2014, there were 0.36% of students identified as limited English proficient, 24.38% students with disabilities, and 84.49% of students in poverty (ODE, [District Profile Report FY14], 2015). Regarding the ethnic composition of students in FY14, 0.56% were identified as Asian or Pacific Islander, 29.91% black, 0.03% American Indian or Alaskan native, 2.66% Hispanic, 12.73% Multiracial, and 54.11% white (ODE, [District Profile Report FY14], 2015). As defined by the non-Caucasian (non-white) population, the minority population is calculated as 45.82%. According to ODE, during the 2013-2014 school year 2525 students without disabilities attended District 1, and 814 students identified with disabilities (ODE, [2013-2014 Performance Data], 2015) attended. Therefore, a total of 3339 students attended District 1 in 2013-2014, with 24.38% of the total student population identified with a disability.

District 2’s website (Confidential. Please contact the author.) reflected six elementary schools one of which is for students identified as gifted, one middle school, one traditional high school and one alternative high school; with over 300 certified staff
members, 260 of whom are teachers. Approximately 3400 students currently attend the District 2. The fiscal year (FY) 2014 total average daily membership for District 2 grades preschool through twelve was 3843.85, and year-end enrollment was 3152.59 (ODE, [District Profile Report FY14], 2015). Furthermore, District 2 purports a FY08 kindergarten through grade twelve regular education pupil teacher ratio of 16.71, a district average income for tax year 2012 of $38,047.92, and district total expenditure per pupil of $12,660.79 for FY14 (ODE, [District Profile Report FY14], 2015). During fiscal year 2014, there were 0.81% of students identified as limited English proficient, 14.63% students with disabilities, and 78.17% of students in poverty (ODE, [District Profile Report FY14], 2015). Regarding the ethnic composition of students in FY14, 0.33% identified as Asian or Pacific Islander, 37.55% black, 0.17% American Indian or Alaskan native, 2.5% Hispanic, 17.84% Multiracial, and 41.61% white (ODE, [District Profile Report FY14], 2016). As defined by the non-Caucasian (non-white) population, the minority population was calculated as 58.39%. According to the Ohio Department of Education, during the 2013-2014 school year District 2 had 2691 students without disabilities, and 461 students identified with disabilities (ODE, [2013-2014 Performance Data], 2015). Therefore, a total of 3152 students attended District 2 in 2013-2014, with 14.6% of the total student population identified with a disability.
Table 1

*District 1 and District 2 Data*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>District 1</th>
<th>District 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Intermediate</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Fiscal Year 2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil teacher ratio (grades kindergarten-12)</td>
<td>17.58</td>
<td>16.71</td>
</tr>
<tr>
<td>Fiscal Year 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per pupil expenditure</td>
<td>15,375.26</td>
<td>12,660.79</td>
</tr>
<tr>
<td>Average daily membership (grades preschool-12)</td>
<td>5135.76</td>
<td>3843.85</td>
</tr>
<tr>
<td>% Limited English proficient</td>
<td>0.36</td>
<td>0.81</td>
</tr>
<tr>
<td>% Students with disabilities</td>
<td>24.38</td>
<td>14.63</td>
</tr>
<tr>
<td>% Poverty</td>
<td>84.49</td>
<td>78.17</td>
</tr>
<tr>
<td>% Asian/Pacific Islander</td>
<td>0.56</td>
<td>0.33</td>
</tr>
<tr>
<td>% Black</td>
<td>29.91</td>
<td>37.55</td>
</tr>
<tr>
<td>% American Indian or Alaskan native</td>
<td>0.03</td>
<td>0.17</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>2.66</td>
<td>2.5</td>
</tr>
<tr>
<td>% Multiracial</td>
<td>12.73</td>
<td>17.84</td>
</tr>
<tr>
<td>% White</td>
<td>54.11</td>
<td>41.61</td>
</tr>
<tr>
<td>% Non-white</td>
<td>45.82</td>
<td>58.39</td>
</tr>
<tr>
<td><strong>2013-2014 School Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students without disabilities</td>
<td>2525</td>
<td>2691</td>
</tr>
<tr>
<td>Students with disabilities</td>
<td>814</td>
<td>461</td>
</tr>
<tr>
<td>Total students</td>
<td>3339</td>
<td>3152</td>
</tr>
<tr>
<td>% Students with disabilities</td>
<td>24.38</td>
<td>14.6</td>
</tr>
</tbody>
</table>

The quantitative student metrics obtainable from the Ohio Department of Education represent student participation in mandated state standardized assessments, the third grade reading OAA. Students assessed previously by the 2013-2014 OAA comprised the study subjects. Name, identification number, or other demographically isolating features do not identify individual students. Consequently, student identification is protected from identification following participation.
Instrumentation & Data Sources

Collection of sufficient information for the study required multiple data sources. Data collection included the following sources: the State of Ohio, Department of Education, district databases for both District 1 and District 2, and individual employees in both District 1 and District 2. As such, description of the instruments and data sources relate to ODE, the districts, and individual respondents.

The “2013-2014 Third Grade Reading Guarantee Results” (ODE, 2015) Excel document provided third grade student performance by district and elementary building. The database was accessed from the Ohio Department of Education website as a document link. Within the database district level data was arranged by: district name and IRN code, county, number of third graders enrolled at the end of the 2013-2014 school year and accountable to the district, percentage of students exempt from the Third Grade Reading Guarantee (TGRG) promotion threshold, number of students subject to TGRG promotion threshold, the percentage of students who met the promotion threshold, and the percentage of students who did not meet the promotion threshold. At the individual building-level schools were identified by: school IRN, school name, district IRN, district name, county, organization type, grade span, whether the building remained open for the 2014-2015 school year, the number of third graders enrolled at the end of the 2013-2014 school year and accountable to the school, the percentage exempt from TGRG promotion threshold, number subject to TGRG promotion threshold, percentage who met promotion threshold, and the percentage who did not meet the promotion threshold.

At the district level, the superintendent or designee provided historical data regarding elementary supports available during the 2013-2014 school year (see Appendix
C). The supports reflect areas aligning with the Whole Child Approach to education, and the Whole School, Whole Community, Whole Child approaches (ASCD, 2014). The tenets of the approach reflect healthy, safe, engaged, supported and challenged students. Thus, implementation of the five tenets provides students with the best supports for life long success. Additionally, study attention further focused on supports for which districts could provide building-specific data. To ascertain 2013-2014 supports, the “Educational Services and Supports: Availability in the District” historical data collection instrument (see Appendix C) was sent to both districts.

The “Educational Services and Supports: Availability in the District” (see Appendix C) historical data collection instrument included a table of supports as well as related definitions. The table arrangement necessitated report of each historical support by elementary building. The percentage of yearly attendance in before and after school programs was collected. Next identified was the percentage of students who participated in designated elementary sports. Inclusion in the section required sport availability in whole or in part to kindergarten through third grade students. The elementary sports included: basketball, cheer, (flag) football, soccer, swim, track and field, volleyball, and wrestling. Thereafter, the instrument elicited the number of days per week the guidance/school counselor served each elementary building. Following, parent/family engagement was reported as the number of times the parent-teacher organization met during the 2013-2014 school year. Next reported was the number of times the student assistance team met during the 2013-2014 school year. Finally, school volunteers were identified by category including: religious organizations, healthcare fields, family
members, retired educators, high school or college students, and other volunteers not otherwise reflected.

As represented by Appendix D, all staff in District 1 and District 2 was recruited to complete a rank order instrument entitled, “Educational Services and Supports”. All district personnel were invited to complete the rank order instrument between August 2016 and January 2017 staff meetings. The participants anonymously completed the rank order instrument during the meeting. Participants identified themselves by the building through which they have student contact: bus garage/maintenance central office, elementary school, high school, juvenile detention center, middle school, and other. Additionally, the participant was identified by classification as certified employee, classified employee, administrator, and other. The target population of kindergarten through third grade teachers was also identified on the rank order instrument. Included in the dissemination and data gathering procedure, the employees were read prescribed, written directions by an unrelated third party (see Appendix E). Within the prescribed directions was notice of informed, voluntary consent to participate in the rank order instrument (see Appendix D) and corresponding study. Prior to study publication, participant responses were not shared with district level staff or administration. Rank order instruments were completed and gathered anonymously; therefore, confidentiality was ensured and maintained.

Data Collection Procedures

Data utilized for the study derived from a historical database compiled by the Ohio Department of Education, and made public via the ODE website. The ODE website presents the database as an Excel document link entitled “2013-2014 Third Grade
Reading Guarantee Results” (ODE, 2015). The publicly accessible database was last modified on November 9, 2015, and downloaded for inclusion in the study from ODE on February 21, 2016.

The Central Offices of District 1 and District 2 received the “Educational Services and Supports: Availability in the District” historical data collection instrument (see Appendix C) on August 5, 2016. The Central Office secretary obtained the historical data collection instrument, with attention to the corresponding superintendent noted on the envelope. The cover letter attached instructed the respondent to mail to the researcher the completed instrument in the provided postage-paid envelope by September 1, 2016. The researcher had no contact with the district respondent.

All staff in Districts 1 and 2 were asked to complete the “Educational Services and Supports” rank order instrument (see Appendix D) during a building staff meeting between September 1, 2016 and January 6, 2017. The corresponding building principals disseminated and collected the completed rank order instruments. As part of the dissemination procedure, the principal read prescribed written directions (see Appendix E) to staff. Within the prescribed directions was notice of informed, voluntary consent to participate in the rank order instrument and corresponding study. During the staff meeting, staff returned the completed rank order instruments to a secure and confidential box labeled, “Completed Instruments”. The principal took the box of collected instruments to the district central office, and stored the box in a secure office until retrieved by the researcher on October 12, 2016 in District 1 and January 6, 2017 in District 2. The researcher made no direct contact with the respondents.
Research Questions

1. Do the presence of academic supports, such as student assistance teams and nonacademic supports, such as physical, social, and emotional supports relate to student reading achievement as identified by the third grade reading Ohio Achievement Assessment (OAA)?

2. How do educators perceive the influence of various academic and nonacademic supports in terms of student achievement?

3. Do the correlational results of research question one align with the rank order perceptions of educators in research question two?

Data Analysis

Data obtained from the two instruments and one database were analyzed in order to answer the three research questions, and generate study results. Descriptive statistics used include correlations and percentages. According to Salkind (2014), “[d]escriptive statistics are used to organize and describe the characteristics of a collection of data” (p. 8). As defined, descriptive statistics appropriately analyze study generated data.

The first research question seeks to assess the degree to which academic and nonacademic services and supports relate to student achievement on the third grade reading Ohio Achievement Assessment (OAA). “A correlation reflects the dynamic quality of the relationship between variables… allow[ing] us to understand whether variables tend to move in the same or opposite directions when they change” (Salkind, 2014, p. 82). A bivariate correlational analysis explored the relationships between OAA scores and the six historical data collection instrument items: before/after school program attendance, student participation in elementary athletics, days of
school/guidance counselor service, number of parent organization meetings, number of student assistance team meetings, and presence of volunteers. The bivariate correlation expresses the relationship between the academic and nonacademic supports and student OAA reading achievement as direct or indirect, positive or negative.

The second research question explored educator perceptions regarding the influence of various academic and nonacademic supports on student achievement. The rank order instrument presented a list of nine nonacademic supports aligning with the tenets of the Whole Child Approach to education, and the Whole School, Whole Community, Whole Child approaches (ASCD, 2014). The tenets of these approaches reflect healthy, safe, engaged, supported, and challenged students. Alphabetically listed, the academic and nonacademic supports offered for rank ordering are: before/after school programs, behavior specialist, elementary athletics, guidance/school counselor, nutrition program, parent/family involvement, school social worker, student assistance team, and volunteers in the school. Descriptive analyses depict educators’ perceptions regarding the influence of various nonacademic supports on student achievement. By building, a mean rank order for each of the nine supports was calculated. The lower the mean rank order, the more important the item was according to educator perception.

The third research question assessed the relationship of research question one and research question two. The research question was analyzed through descriptive analysis utilizing a slope graph. The impacts of academic and nonacademic supports on student third grade OAA results were juxtaposed on a slope graph to educator perceptions regarding the academic and nonacademic supports to visually demonstrate the relative relationship. The demonstration represents the variables of correlations and teacher
rankings. The correlational rank ordering appears on the left side of the graph and organized from strongest to weakest, with most points assigned for the support having greatest impact. The support demonstrating the least impact on OAA scores received the least points, and appears at the bottom of the slope graph. On the right side of the graph perceptions of educators regarding support impact are presented with highest educator regard at the top of the slope graph, leading to least educator regard at the bottom of the slope graph. Lines are drawn to show the relative difference between the correlation and the rank order.
Table 2

Statistical Tests Associated With Research Questions and Variables

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impact of academic and nonacademic supports on OAA</td>
<td>Availability of nonacademic support</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>Before/after school program</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>Elementary athletics</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>School/guidance counselor</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>Parent organization meetings</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>Student assistance team meetings</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td></td>
<td>Volunteers in schools</td>
<td>OAA scores (per elementary)</td>
</tr>
<tr>
<td>2. Perceptions of educators</td>
<td>Educator Perception</td>
<td>Before/after school program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Behavior Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elementary Athletics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guidance/school counselor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nutrition program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parent/family involvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School social worker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student assistance teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Volunteers in school</td>
</tr>
<tr>
<td>3. Alignment between the impact of academic and nonacademic supports on OAA to perceptions of educators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assumptions

Assumptions exist within the research study related to responses received and data collected. Overall, the researcher assumed cooperative participation by all individual and district level participants. More, the researcher assumed all survey participants responded honestly to questions and items posed. The researcher assumed obtainability of the requested information for the “Educational Services and Supports: Availability in the District”. Furthermore, the researcher assumed both districts could supply all information requested. The researcher additionally assumed the obtainment of an accurate list reflecting supports available during the 2013-2014 school year. Likewise, the researcher assumed District 1 and District 2 would supply information regarding the correct school year, not data related to other school years. The researcher also assumed expediential provision from districts of requested data, without multiple requests needed.

In addition to assumptions regarding the historical data collection instrument, assumptions existed relative to the “Educational Services and Supports” rank order instrument as well. Respondents assumingly participated voluntarily and honestly with sufficient effort and attention to the rank order instrument. An additional assumption required respondents to answer the rank order instrument independently and without influence by those simultaneously answering the instrument. Respondents assumingly completed the rank order instrument willingly, and not as a result of district request or associated pressure. Furthermore, respondents assumingly understood the questions asked, and the terminology used within the rank order instrument. If needed, the respondents utilized the attached definitions in order to gain further clarification regarding the supports listed on the rank order instrument. Assumably, respondents
possessed sufficient English reading proficiency, and the respondents held no ulterior motives for answering.

Assumptions exist relative to the Ohio Achievement Assessment. Ohio assessed third grade students’ reading achievement with the OAA during the 2013-2014 school year. The researcher assumed appropriate validation of the OAA to assess third grade reading achievement according to national age and grade norms. Furthermore, the researcher assumed the State of Ohio chose the OAA for 2013-2014 reading assessment because the test reflected the most appropriate reading assessment available at the time. Additionally, the researcher assumed sufficient alignment of the Third Grade Reading Guarantee (TGRG) to the OAA. Presumably, the OAA produced normative data in areas reflected by laws associated with TGRG. Moreover, political pressures and financial gains associated with OAA utilization assumingly did not impact State of Ohio determinations to use the OAA.
CHAPTER IV. RESULTS

The purpose of this dissertation was to assess the impact academic and nonacademic support structures have on student academic achievement as gauged by third grade reading performance on a standardized assessment. This study addresses the contradiction existing between the legislative move toward the use of standardized assessments as the basis of educational decision-making, and a multifactored approach to educational decision-making. In addition, this study addresses the definition of a successful learner according to the whole child approach attesting educational success cannot be measured by standardized assessments alone. Whole child learning factors encompass components more difficult to quantify than traditional reading, writing, and math assessments. This study evaluates the relationship between student supports, both academic and nonacademic, and standardized assessment results. Additionally obtained and analyzed were perceptions of elementary educators regarding educational supports and services most impactful on student educational performance. Factors reflect whole child tenets as defined by the ASCD (formally, the Association for Supervision and Curriculum Development), students who are healthy, safe, engaged, supported, and challenged.

Student Ohio Achievement Assessment (OAA) data from the 2013-2014 school year was obtained from the Ohio Department of Education (ODE). The first school year during which the Ohio Department of Education mandated student retention in the third grade for students not obtaining an established reading OAA score was the 2013-2014 school year. As such, 2013-2014 data was sought from ODE, 2013-2014 historical district data regarding academic and nonacademic supports available, and individual
educator opinions in the corresponding school districts were ascertained. With the collected data, attempt was made to determine the impact academic and nonacademic support structures have on student achievement. In addition, educator perceptions were sought in order to determine a correlation between educator opinions regarding support impact and actual student achievement. If a correlation were attributable, local opinion regarding high stakes educational student decisions may be admissible. Furthermore, conversation regarding the appropriateness of a multifactored approach to all high stakes educational decisions would be established.

**Characteristics of the Sample**

Data collection utilized two instruments provided to two demographically similar school districts in Ohio within geographic proximity to one another, and one publicly accessible database. First, a historical data collection instrument was utilized. Data was collected from the superintendent or designee in District 1 and District 2, with the inclusion of specified academic and nonacademic supports and services available during the 2013-2014 school year. Exclusion of nonacademic supports and services from school years before and after 2013-2014 was noted on the document. The second instrument disseminated to staff in the same districts was a rank order instrument. The rank order instrument was utilized to collect data from all staff members in the District 1 and District 2, with inclusion of kindergarten through third grade teachers and administrators within the districts, and exclusion of all other staff members. The third means to collect data was via a publically accessible ODE database of historical third grade reading Ohio Achievement Assessment results from the 2013-2014 school year. District 1 and District 2 historical data was collected from the public database with inclusion of passage
percentage in District 1 elementary schools and District 2 elementary schools. All other school districts in Ohio reflected in the database were excluded from study.

A historical data collection instrument was provided to each District 1 and District 2. Several written and verbal communications were made to each district attempting to collect historical data. Following the multiple and varied requests, historical data was obtainable for District 2; however, District 1 did not respond to the requests and failed to provide data. Consequently, research questions and results relative to the historical data collection instrument from District 1 were excluded from study results.

Individual rank order instruments were provided to each school district. A total of 550 paper rank order instruments were provided to each district, an amount sufficient for each certified and classified staff member in the entire district to complete an instrument. District 1 reported 504 rank order instruments were disseminated to certified and classified staff throughout the district. Of the 103 completed rank order instruments returned, 72 were unusable. Instruments were deemed unusable for one of two reasons: first, completed by a district employee other than a kindergarten through third grade teacher or building principal, or second, the instrument was not completed in accordance with written directions. Consequently, 31 instruments met the necessary inclusion requirements for the study.

District two received 550 rank order instruments. Although District 2 did not provide a total number of disseminated instruments, 53 were returned. Of the 53 instruments, 14 were unusable. Instruments were deemed unusable either because a district employee other than a kindergarten through third grade teacher or principal completed the instrument, or the instrument was not completed in accordance with
directions. Consequently, 39 instruments met the necessary inclusion requirements for the study. Table 3 reflects instruments disseminated and returned.

Table 3

*Rank Order Instrument Dissemination*

<table>
<thead>
<tr>
<th>Instruments</th>
<th>District 1</th>
<th>District 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disseminated</td>
<td>504</td>
<td>-</td>
</tr>
<tr>
<td>Total returned</td>
<td>103</td>
<td>53</td>
</tr>
<tr>
<td>Usable</td>
<td>72</td>
<td>39</td>
</tr>
<tr>
<td>Unusable</td>
<td>31</td>
<td>14</td>
</tr>
</tbody>
</table>

The third data collection instruction was gained from the Ohio Department of Education. According to the Ohio Department of Education, 2013-2014 Third Grade Reading Guarantee (TGRG) results, 254 students took the third grade reading Ohio Achievement Assessment (OAA) in District 1. The Ohio Department of Education (2015) reported 222 total students in District 1 as subject to TGRG retention requirements during 2013-2014 since the students did not obtain the pre-established score on the ELA portion of the OAA (ODE, online resource page, November 25, 2014). As such, TGRG exemptions in District 1 equaled 12.6% of the third grade student population. Furthermore, students promoted to the fourth grade in 2014-2015 totaled 93.7% of the population (ODE, 2015). Consequently, 2013-2014 third grade retentions equaled 6.3% of the third grade students remaining in third grade for the 2014-2015 school year (ODE, 2015). Regarding District 2, 252 enrolled third grade students took the third grade reading OAA (ODE, 2015). Of the assessed District 2 population, retention requirements per TGRG applied to 241 students (ODE, 2015). As such, TGRG exemptions in District 2 equaled 4.4% of the third grade student population (ODE, 2015). Fourth grade promotions for the 2014-2015 school year reflected 96.3% of the
population, while third grade retentions equaled 3.7% of the 2013-2014 third grade student population in District 2 (ODE, 2015). Table 4 demonstrates 2013-2014 District 1 and 2 student promotions and retentions.

Table 4

2013-2014 Third Grade Reading Promotions and Retentions

<table>
<thead>
<tr>
<th>Students</th>
<th>District 1</th>
<th>District 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessed</td>
<td>254</td>
<td>252</td>
</tr>
<tr>
<td>Subject to retention</td>
<td>222</td>
<td>241</td>
</tr>
<tr>
<td>% Third Grade Reading Guarantee exempted</td>
<td>12.6</td>
<td>4.4</td>
</tr>
<tr>
<td>% Promoted</td>
<td>93.7</td>
<td>96.3</td>
</tr>
<tr>
<td>% Retained</td>
<td>6.3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

**Instrument Validity and Reliability**

Three separate instruments were utilized in the study. Two of the instruments were researcher created, the Historical Data Collection Instrument and the Rank Order Instrument. The third instrument was the Ohio Achievement Assessment, results of which were retrieved from the Ohio Department of Education. Due to the varying nature of instrumentation, validity and reliability also varied.

According to Fraenkel, Wallen, and Hyun (2014), “validity revolves around the defensibility of the inferences researchers make from the data collected through the use of an instrument” (p.113). As such, instrument validity is whether or not the instrument actually measures the item purported for measurement. With regards to the Historical Data Collection Instrument, the instrument was designed to collect district level historical data relative to academic and nonacademic supports. Consequently, the instrument reliably reflects data desired to support this research. Likewise, the Rank Order Instrument was designed by the researcher to collect educator perception of academic and
nonacademic supports having greatest impact on student academic achievement. Finally, the third grade reading OAA assessment is assumed a valid reading assessment for students in the third grade. However, specific assessment validity measures were not found on the ODE webpage.

Despite lacking concrete OAA validity reports, ODE did publish a resource to reflect OAA reliability. Per Fraenkel, Wallen, and Hyun (2014), a reliable instrument is an instrument “giving consistent results” (p.113). The Ohio Achievement Assessment May 2014 reading data was reported by ODE to reflect a Cronbach alpha of 0.87 (ODE, online resource page, July 2014, p. 1). Further, the Cronbach alpha is used to “check the internal consistency of an instrument” (Fraenkel, Wallen, & Hyun, 2014, p. 158). As such, the Cronbach alpha calculates “the reliability of items that are not scored right versus wrong” (Fraenkel, Wallen, & Hyun, 2014, p. 159). The Cronbach alpha 0.87 suggests a strong level of test reliability. Ohio Achievement Assessment results were reported to districts and families as scaled scores. Scaled scores in May 2014 ranged from 260 to 496, with 423.35 as mean. The scaled score standard error of measurement was reported as 10.34 by ODE, meaning a score varying plus or minus 10.34 from the original scaled score was considered a predictable occurrence should the assessment be given to the student again. Furthermore, scores within one standard deviation (28.73) of the mean scaled score (423.35) were considered within the range of the student majority on a normal curve (ODE, Online Resource, 2014, p. 1). Table 5 represents the parameters ODE established from the May 2014 administration of the third grade reading OAA.
Table 5

*Summary of Parameters From the May 2014 Administration of the Third Grade OAA*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students tested</td>
<td>122,802</td>
</tr>
<tr>
<td>Max raw score</td>
<td>49</td>
</tr>
<tr>
<td>Max scaled score</td>
<td>496</td>
</tr>
<tr>
<td>Min scaled score</td>
<td>260</td>
</tr>
<tr>
<td>Raw score mean</td>
<td>38.50</td>
</tr>
<tr>
<td>Raw score std. deviation</td>
<td>8.31</td>
</tr>
<tr>
<td>Raw score SEM</td>
<td>2.99</td>
</tr>
<tr>
<td>Scaled score mean</td>
<td>423.35</td>
</tr>
<tr>
<td>Scaled score std. deviation</td>
<td>28.73</td>
</tr>
<tr>
<td>Scaled score SEM</td>
<td>10.34</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.87</td>
</tr>
</tbody>
</table>


The standardized assessment utilized by ODE to assess student-reading achievement at the third grade level lends well to concrete reliability quotients. However, the researcher created Historical Data Collection Instrument and Rank Order Instrument were not standardized. As such, reliability takes a different form. If asked again to complete the instrument, the degree to which respondents would relate the same information on the Historical Data Collection Instrument is likely since the data was based on concrete figures derived from the district. As such, a test-retest assessment expectedly yields identical results in the case of the historical instrument. However, since the Rank Order Instrument was based on educator perspective, respondents may answer differently should they complete the assessment an additional time. Nevertheless, the items presented for ranking remain the same. Consequentially, perspectives of educators regarding the influence academic and nonacademic factors have on student academic achievement were assessed reliably each time.
Research Question 1

Research question one reads: Do the presence of academic supports such as student assistance teams, and nonacademic supports such as physical, social, and emotional supports, relate to student reading achievement as identified by the third grade reading Ohio Achievement Assessment (OAA)? To assess the degree to which academic and nonacademic services and supports relate to student achievement on the third grade reading Ohio Achievement Assessment (OAA), bivariate correlational analysis explored relationships between OAA scores and items (i.e., before/after school program attendance, student participation in elementary athletics, days of guidance counselor service, number of parent organization meetings, number of student assistance team meetings, and presence of volunteers) on the historical data collection instrument.

Data for District 1 was not provided. Results from District 2 reflect data obtained from 6 elementary buildings. Student assistance teams in District 2 had a strong negative correlation (-0.75) to student achievement on the third grade reading OAA. Meaning, as meetings increased in frequency student academic achievement on the third grade OAA decreased. Second, a strong negative correlation was calculated between student participation in elementary athletics (-0.69) and OAA results. Therefore, as the number of students participating in elementary athletics increased, the students’ scores decreased on the 2013-2014 third grade reading OAA. The presence of a guidance counselor (0.08), parent participation in parent organization (-0.26), and the presence of volunteers in schools (-0.02) all failed to demonstrate a significant impact on student reading OAA results.
In summary of research question one, strong negative correlations existed between the number of student assistance team meetings and third grade reading OAA results, in addition to the percentage of students who participated in kindergarten-third grade athletics and third grade reading OAA results. However, weak correlations existed between the days per week guidance counselors were available to students and third grade reading OAA results. No relationship was suggested between the number of parents/family involvement events and third grade reading OAA results, or the presence of volunteers in schools and third grade reading OAA results. Finally, a correlation was lacking between the number of days guidance counselors were in elementary buildings and the OAA results. Results are summarized in Table 6.

Table 6

Correlation of Supports by Building to Student Percentage Meeting Third Grade Promotion Threshold

<table>
<thead>
<tr>
<th>District 2</th>
<th>% K-3 athletic participation</th>
<th>Guidance counselor, days/week</th>
<th>PTO, times met/year</th>
<th>SAT, times met/year</th>
<th>Volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>-0.69</td>
<td>0.08</td>
<td>-0.26</td>
<td>-0.75</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Research Question 2

Research question two evaluates: How do educators perceive the influence of various academic and nonacademic supports in terms of student achievement? Educator perception response mean was calculated for each of the nine rank order items and viewable in Table 7. Respondents were asked to rank-order nine academic and nonacademic supports according to their perception of the support having the greatest positive influence on elementary student achievement. The supports were: before and after school program, behavior specialist, elementary athletics, guidance counselor,
nutrition program, parent/family involvement, school social worker, student assistance team, and volunteers in the school. Before and after school program was ranked 0% as item one most impactful on student academic achievement. Eleven percent of respondents ranked before and after school programs number two in importance. The third place ranking was denoted 0%, while before and after school programming ranked fourth 11% and 0% as fifth place ranking. Twenty-two percent of respondents identified before and after school programming sixth, 33% listed it seventh ranking, 22% eighth, and 0% of respondents ranked the support as ninth relative to the support’s influence on student reading achievement.

Behavior specialist impact on student reading achievement was the next support listed for ranking. Twenty-two percent of respondents indicated behavior specialist most impactful on student achievement, second in importance 33%, 22% as third, and 11% as a fourth ranking. The later half of rankings were less represented by behavior specialists with 0% of respondents listing behavior specialists in fifth and sixth positions relative to student reading success. Eleven percent of respondents noted behavior specialists seven of nine, while 0% noted eighth and ninth place rankings.

Opposite to the higher importance level respondents gave behavior specialists, elementary athletics was given 0% placement in ranks of first through seventh. However, 22% of respondents indicated student involvement in elementary athletics as eighth place relative to student reading achievement, while 78% of remaining respondents ranked elementary athletics as ninth of nine supports regarding influence on student academic success.
As with behavior specialists, guidance counselors populated the higher priority position ranking with 67% of respondents placing the support in first place. This was the highest percentage of all first place rankings received; and thus, signifies a priority placement relative to student academic achievement. In a second ranked position, guidance counselors were noted by 22% of respondents as significantly linked to student achievement. The remaining 11% of responses reflected guidance counselors as fourth of nine supports impactful to student achievement. Guidance counselors were not reflected in the remaining six positions: third and fifth through ninth positions.

The nutrition program support was relatively evenly distributed across the nine rank placements. Eleven percent of respondents placed nutrition programming in ranks of one, two, three, six, and eight. Twenty-two percent of respondents indicated a pattern reflecting nutrition programs in fourth and seventh places, while rankings of four and nine were not filled with responses for nutrition program impact on academic achievement.

Parent and family involvement was unrepresented in rank placements of one, seven and nine. However, 11% of respondents indicated parent and family involvement as rank two, three, five, and eight. In rank placement four, 22% of respondents found parent and family involvement impactful on student academic achievement. A rank of six was given by 33% of respondents, while zero responses were given for parent and family involvement for rank one, seven and nine.

Social worker importance populated the medial ranking positions. Twenty-two percent of respondents placed social worker impact on elementary student achievement as third of nine ranking positions, while 11% ranked the support fourth. An
overwhelming 56% of respondents indicated social workers ranked five of nine. Finally, 11% indicated social workers seventh in ranking. The remaining positions of one, two, six, eight, and nine reflect zero respondents.

The next support, student assistance teams (SAT), also populated the medial elements of rank options. Zero respondents place SAT as rank order one, two, five, seven or nine. However, 33% indicated SAT impactful on student achievement at the rank of three and four. Further, 22% of elementary educators who completed the rank order instrument placed SAT in a sixth spot of nine. Finally, 11% placed SAT at eight in rank order.

The remaining support structure, volunteers in the school, was distributed as 11% in rank position two, five, six, and nine. Twenty-two percent of the individuals who responded placed volunteers in rank position seven, while 33% reported volunteers ranked eighth relative to student achievement. The rank positions one, three, and four had no favorable responses for volunteers.
Table 7

*Percentage Rank Order by Support Reflected of Nine Buildings*

<table>
<thead>
<tr>
<th>Support</th>
<th>% Rank order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Before/after school program</td>
<td>0</td>
</tr>
<tr>
<td>Behavior specialist</td>
<td>22</td>
</tr>
<tr>
<td>Elementary athletics</td>
<td>0</td>
</tr>
<tr>
<td>Guidance counselor</td>
<td>67</td>
</tr>
<tr>
<td>Nutrition program</td>
<td>11</td>
</tr>
<tr>
<td>Parent/family involvement</td>
<td>0</td>
</tr>
<tr>
<td>School social worker</td>
<td>0</td>
</tr>
<tr>
<td>Student Assistance Team</td>
<td>0</td>
</tr>
<tr>
<td>Volunteers</td>
<td>0</td>
</tr>
</tbody>
</table>

By building a mean rank order for each of the nine supports was calculated. The lower the mean rank order, the more important educators perceived the item. By combining all nine elementary buildings in Districts 1 and 2, mean rank ordering conclusions revealed guidance counselors held rank position of one with a mean rank of 3.24. As such, the elementary educators surveyed perceive the guidance counselor as the most impactful support leading to increased academic success for elementary students. Second, the behavior specialists assumed the next rank position for support impact at 3.93. Student assistance teams (SAT) were third (4.36), social workers fourth (4.44), and
parent and family involvement was fifth with a mean rank order of 4.8. Nutrition programs obtained a rank order of six due to mean rank of 4.83. Before and after school programs earned a mean rank of 5.8 while elementary athletics earned a 7.63, thereby, the supports were eight and nine accordingly.

Results from District 1 reflect schools identified as Schools 6, 7, and 8. As revealed by Table 8, overall District 1 results reflected mean rank orders placing the guidance counselor (3.48) in the first position with greatest impact on student achievement per educator perception. Second rank was nutrition program (3.81), followed by behavior specialist (4.45) and parent and family involvement (4.61). Positions five and six were tied with a mean rank order 4.81 by before and after school program and SAT. Due to the tied mean rank order, the supports were placed alphabetically into the resultant positions. Rank of seven went to school social worker (4.84), eight to volunteers (6.13), and the mean rank order of 7.71 was occupied by elementary athletics according to the overall rankings by District 1 elementary educators.

Within District 1, School 6 educators reported rank results placing guidance counselor in mean rank position one with a mean rank order 2.64. Nutrition program was position two (3.82), SAT third (4.09), while behavior specialists ranked fourth (4.55), and school social workers fifth (4.64). Parent and family involvement reflected mean rank order 5 placing it sixth in ranking, followed by before and after school programs (5.27) in seventh position, volunteers in eighth position (7.09), and finally elementary athletics (7.45) in the ninth rank order position. School 7 indicated a nutrition program most impactful on student achievement with mean rank order 3.11. Behavior specialist was next (3.67), parent and family involvement (4.22) and guidance counselor (4.33) were in
mean rank orders three and four accordingly. With a mean rank order 4.78, volunteers were fifth, before and after school programs sixth (5.11), while school social workers and SAT both received a 5.44 mean rank order. The final mean rank order was held by elementary athletics at 8.22. The last elementary school in District 1, School 8, concluded through mean rank order guidance counselors (3.64) as highly impactful on elementary student academic success. Before and after school program was second (4.09), and nutrition program was third (4.36). Positions four and five were tied with mean rank order 4.55 by parent and family involvement and school social workers, while six and seven tied with mean rank order 5 by SAT and behavior specialists. Volunteers (6.27) and elementary athletics (7.55) concluded the mean rank orders of School 8 in positions eight and nine.

Overall, District 2 mean rank ordering followed in step with District 1 such that the guidance counselor (3.05) populated rank position one. The mean rank 3.51 by behavior specialist resulted in rank order two, followed by SAT with mean rank 4. School social worker yielded 4.13; parent and family involvement earned a mean rank 4.95, and volunteers was sixth with mean rank order 5.44. Additionally, nutrition program was seventh (5.64), before and after school program eighth (6.59), and elementary athletics (7.56) ninth in mean rank position.

Educators in School 1 within District 2 conclude behavior specialists the support most impactful on student academic achievement with mean rank 2.75. Following with mean rank 3.25, the guidance counselor earned position two. Student assistance team (3.25), before and after school program (4.5), and school social worker (5.5) placed in positions three, four, and five. With mean rank 5.75, nutrition program and volunteers
were positions six and seven. Finally, parent and family involvement (7.5) ranked eight while elementary athletics was nine (7.75). School 2 concluded similarly as School 1 such that the behavior specialist was identified as the most influential support (3.7). The guidance counselor was two (3.9), school social worker three (4), and SAT four (4.4). Mean rank order 4.5 placed nutrition program in position five. Parent and family involvement was sixth position (4.9), before and after school program was seventh (6), volunteers were eighth (6.2), and elementary athletics was ninth (7.4).

School 3 identified guidance counselor as the most impactful of the nine supports presented for ranking with a mean rank order 3. Behavior specialist was 3.14, thus in second position. The school social worker was rank three (3.43), and SAT was four (4), while nutrition program was rank five (4.86), parent and family involvement followed in position six (5.29), and volunteers were in position seven (5.86). Position eight was held by before and after school program (7.7) and elementary athletics was nine (7.71).

School 4, like School 3, concluded the guidance counselor most impactful to elementary student achievement of the nine supports with a mean rank order 4. The behavior specialist was in position two (3.45), SAT position three (3.55), school social worker four (3.73), and with a mean rank order of 4.55 parent and family involvement and volunteers fell into positions five and six. Nutrition program was seventh in ranking (6.73), before and after school program was next (7.36), and elementary athletics concluded the rankings for School 4 with a mean rank 8.09.

School 5 educators indicated the guidance counselor to be rank order place one with a mean rank order 2, while volunteers were next with a mean rank order 3.5. Behavior specialist and parent and family engagement both earned mean rank orders
4.25. Furthermore, school social worker and SAT both earned a mean rank order 5, while both before and after school program and nutrition program earned 6.25. The final mean rank order, 7.25, was elementary athletics.

The final elementary building in District 2, School 9, deemed guidance counselor position one with mean rank order 1.67. Parent and family involvement was in position two (3.33). Behavior specialist and SAT both earned a mean rank order 4, while school social worker was 4.67 in mean rank. Before and after school program and nutrition program earned 6.33. Finally, elementary athletics and volunteers both resulted in mean rank 7.33.
Table 8

*Academic and Nonacademic Support Mean Rank Order*

<table>
<thead>
<tr>
<th>Support</th>
<th>Total</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>D1</th>
<th>D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidance counselor</td>
<td>3.24</td>
<td>4.5</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2.64</td>
<td>4.33</td>
<td>3.64</td>
<td>1.67</td>
<td>3.48</td>
<td>3.05</td>
</tr>
<tr>
<td>Behavior specialist</td>
<td>3.93</td>
<td>4.5</td>
<td>6</td>
<td>3.14</td>
<td>3.45</td>
<td>4.25</td>
<td>4.55</td>
<td>3.67</td>
<td>5</td>
<td>4</td>
<td>4.45</td>
<td>3.51</td>
</tr>
<tr>
<td>Student assistance team</td>
<td>4.36</td>
<td>4.5</td>
<td>6</td>
<td>4</td>
<td>3.55</td>
<td>5</td>
<td>4.09</td>
<td>5.44</td>
<td>5</td>
<td>4</td>
<td>4.81</td>
<td>4</td>
</tr>
<tr>
<td>School social worker</td>
<td>4.44</td>
<td>4.5</td>
<td>6</td>
<td>3.43</td>
<td>3.73</td>
<td>5</td>
<td>4.64</td>
<td>5.44</td>
<td>4.55</td>
<td>4.67</td>
<td>4.84</td>
<td>4.13</td>
</tr>
<tr>
<td>Parent/family involvement</td>
<td>4.8</td>
<td>4.5</td>
<td>6</td>
<td>5.29</td>
<td>4.55</td>
<td>4.25</td>
<td>5</td>
<td>4.22</td>
<td>4.55</td>
<td>3.33</td>
<td>4.61</td>
<td>4.95</td>
</tr>
<tr>
<td>Nutrition program</td>
<td>4.83</td>
<td>4.5</td>
<td>6</td>
<td>4.48</td>
<td>6.73</td>
<td>6.25</td>
<td>3.82</td>
<td>3.11</td>
<td>4.36</td>
<td>6.33</td>
<td>3.81</td>
<td>5.64</td>
</tr>
<tr>
<td>Volunteers</td>
<td>5.74</td>
<td>4.5</td>
<td>6</td>
<td>5.86</td>
<td>4.55</td>
<td>3.5</td>
<td>7.09</td>
<td>4.78</td>
<td>6.27</td>
<td>7.33</td>
<td>6.13</td>
<td>5.44</td>
</tr>
<tr>
<td>Before/After School</td>
<td>5.8</td>
<td>4.5</td>
<td>6</td>
<td>7.7</td>
<td>7.36</td>
<td>6.25</td>
<td>5.27</td>
<td>5.11</td>
<td>4.09</td>
<td>6.33</td>
<td>4.81</td>
<td>6.59</td>
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<tr>
<td>Program</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary athletics</td>
<td>7.63</td>
<td>4.5</td>
<td>6</td>
<td>7.71</td>
<td>8.09</td>
<td>7.25</td>
<td>7.45</td>
<td>8.22</td>
<td>7.55</td>
<td>7.33</td>
<td>7.71</td>
<td>7.56</td>
</tr>
</tbody>
</table>

Note: D1=District 1, D2=District 2
Consistent with mean rank order data reflected through Table 8, Table 9 presents academic and nonacademic supports visually by school and corresponding rank order placements, one through nine. Through the visual exposition, patterns for rank order position one, and rank order position nine are obvious. While the medial ranking supports are somewhat distributed, position one is overwhelmingly filled by the guidance counselor. Likewise, position nine is overwhelmingly populated by elementary athletics. Therefore, of the nine supports provided a majority of elementary educators perceive guidance counselors most impactful on elementary student achievement. However, the responding elementary educators failed to view elementary athletics as impactful on student academic achievement.

Table 9

*Academic and Nonacademic Supports by School and Corresponding Rank Order: Highest (1) to Lowest (9)*

<table>
<thead>
<tr>
<th>School</th>
<th>Rank order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B D H A G E I F C</td>
</tr>
<tr>
<td>2</td>
<td>B D G H E F A I C</td>
</tr>
<tr>
<td>3</td>
<td>D B G H E F I A C</td>
</tr>
<tr>
<td>4</td>
<td>D B H G F I E A C</td>
</tr>
<tr>
<td>5</td>
<td>D I B F G H A E C</td>
</tr>
<tr>
<td>6</td>
<td>D E H B G F A I C</td>
</tr>
<tr>
<td>7</td>
<td>E B F D I A G H C</td>
</tr>
<tr>
<td>8</td>
<td>D A E F G H B I C</td>
</tr>
<tr>
<td>9</td>
<td>D F B H G A E C I</td>
</tr>
<tr>
<td>District 1</td>
<td>D B H G F I E A C</td>
</tr>
<tr>
<td>District 2</td>
<td>D E B F A H G I C</td>
</tr>
<tr>
<td>Overall</td>
<td>D B H G F E I A C</td>
</tr>
</tbody>
</table>

Note: A= Before/after school program, B= Behavior specialist, C=Elementary athletics, D=Guidance counselor, E=Nutrition program, F=Parent/family involvement, G=School social worker, H=Student Assistance Team, and I=Volunteers.
Summarizing the second research question, elementary educators in nine buildings across two districts perceived guidance counselors to be the nonacademic support most positively impactful on elementary student academic success. The support of a behavior specialist was second in perceived impact, while student assistance team and a school social worker were perceived impactful accordingly in rank order. Parent and family involvement held the middle point with regards to perceived academic impact. Nutrition programs were sixth in overall perceived ranking of support importance on student academic achievement, while volunteers were seventh in rank order. The final two supports, before/after school program and elementary athletics ranked accordingly as eighth and ninth. As such, the final two supports were perceived as having the least impact on student academic achievement from the provided list of nine supports.

**Research Questions 3**

As assessed, the third research question asked: Do the correlational results of research question one align with the rank order perceptions of educators in research question two? The final research question was analyzed through correlational rank ordering from strongest to weakest. Juxtaposed in Table 10 are the five academic and nonacademic supports for which both historical data and teacher perception ranks were available. Per each support, the lowest correlated support to student reading achievement on the third grade Ohio Achievement Assessment was assigned a value of one point, with each additional support a cardinal increase corresponding to correlation received to student OAA results. As such, the support having the greatest positive correlation to student reading achievement on the third grade OAA was given a score of five. Consequently, SAT meeting correlation to student OAA results was ascribed a rank of 1
as with the increase of SAT meetings in a building, the student OAA results decreased.

Elementary athletics was assigned a 2 due to the strong negative correlation elementary athletics had with OAA results. Further, parent and family engagement was assigned a 3, while volunteers were allocated score 4. A 5 was attributed to guidance counselors as results indicated increasing guidance counselor days per week led to increased student achievement on the third grade OAA.

Relative to teacher rank, the highest points (5) were attributed to the support educators credited greatest impact on elementary student academic achievement, guidance counselors. Following, 4 points were given to the support perceived as second most impactful on student achievement. In addition, 3 points were allotted to parent and family involvement, with 2 points for volunteers. Therefore, elementary athletics was assigned 1 point since educators attributed elementary athletics as minimally impactful on elementary student achievement.

Table 10

*Comparison of Correlation With Teacher Perception of Supports: Greatest Impact 5, Least Impact 1*

<table>
<thead>
<tr>
<th>Support</th>
<th>Correlation</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary athletics</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Guidance counselor days</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Parent/family involvement</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>SAT meeting</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Volunteers</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

From the data represented in Table 10, Figure 1 formed. A side-by-side slope graph visually compares correlation of the support presence to OAA result, to the educator perception of support impact on elementary student achievement. The left side of the slope graph reflects correlations in order from highest to lowest, while the right
side denotes perceptions ranked in order from highest to lowest, with lines drawn to show the relative difference.

As reflected in Figure 1, from the list of academic and nonacademic supports present in District 2 the presence of guidance counselors was most highly correlated with increased student reading achievement at the third grade level. The slope graph visually summarizes research question 3 findings. The slope graph demonstrates the relationship of the correlation to the perception of elementary educators. Of the supports for which both historical data and educator perceptions were available, elementary educators perceived guidance counselors as most impactful on student reading achievement at the third grade level. Per the correlation on the left side of the slope graph, volunteers were assessed to have the second highest correlation to student OAA reading score. However, teacher perception of volunteer impact placed it in position four of five regarding teacher impact. On the contrary, parent and family involvement was third of five on both sides of the graph. As such, educator perception aligns with the correlation between support and score. Elementary athletic impact on third grade student reading OAA was suggested by both score correlation as well as educator perception to have low positive impact on student achievement. Nevertheless, perceptions were relatively consistent with regards to level of impact. The final support correlated to achievement was the student assistance team. Student assistance teams were not highly correlated with increased reading achievement at the third grade level. However, educators perceive SAT to be highly correlated to third grade student reading achievement.
Summary

Following legislative emphasis on increased state accountability for student academic achievement, a shift toward data driven decision-making occurred. The resultant, increased emphasis on decisions based on standardized test results. In turn, a de-emphasis occurred whereby local teams of professionals and parents no longer made high-stakes student decisions. Further ramification of the educational and political decisions to increase emphasis on standardized, testable academic areas resulted in decreased importance on non-tested academic areas and student skills. Consequently, a move in compulsory academia befell. The subsequent structure presented in contrast to the Whole Child Approach to education which stressed student achievement through an interlocking system reassuring of a healthy, safe, supported, engaged and challenged student.
The purpose of this research is to assess the impact academic and nonacademic support structures have on student academic achievement on a standardized assessment of third grade reading. The impact of academic and nonacademic supports on third grade reading achievement according to OAA results was assessed in reference to presence of support and educator perception of support impact. Finally, correlational results were juxtaposed to educator perception to ascertain alignment.

Through the first research question, the correlation between student reading achievement at the third grade level and an academic/nonacademic support structure revealed a strong negative correlation between student assistance team as well as elementary athletics. Accordingly, as SAT increased student achievement on the third grade OAA decreased. Likewise, as elementary student involvement increased in school-sponsored athletics student third grade reading OAA results decreased.

Second, research results reveal educator perception of academic and nonacademic student supports on student reading achievement. Educators from two districts rated nine support structures according to support impact on elementary achievement. Overall, educators in nine elementary buildings within the two districts reported the mean rank order as follows, one through nine with one showing the greatest impact and nine showing the least impact: (1) guidance counselor, (2) behavior specialist, (3) SAT, (4) school social worker, (5) parent and family involvement, (6) nutrition program, (7) volunteers, (8) before and after school program, and (9) elementary athletics.

The final of the three research questions compared results from the first two questions to determine if an alignment existed between support/OAA score and educator perception. As a result the correlation of score to support appeared at a commensurate
level to educator ranking for both guidance counselor and parent and family involvement.
The remaining three support structures for which historical data existed and for which educator perception was gathered did not reveal a clear alignment. Student assistance team was not strongly correlated with student achievement, nevertheless educators perceived SAT to be highly impactful on reading achievement. Furthermore, the correlation of volunteers to achievement was depreciated by teacher perception. Finally, although to a lesser degree of misalignment, a strongly positive correlation was unobserved between elementary athletics and student achievement. Likewise, educators attributed little regard to the impact elementary athletics have on student elementary achievement.
CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

The final chapter of this dissertation links the identified problem with the problem significance as framed through research and practice. Following identified problem importance, the research questions assessed are presented, as is the data collected charted by data analysis procedures, and resultant findings derived from the research. The applicability of the findings to prior research is discussed. Finally, the chapter concludes with recommendations for further study and policy suggestions.

Review of the Study

At the core of the whole child approach to education is the conviction “the purpose of schooling [is to develop] future citizens and providing the basis for each child to fulfill their potential” (Slade & Griffin, 2013, Abstract). The purpose of education is to produce well rounded, knowledgeable, contributing members of society able to support themselves and their families, as well as positively impact society as a whole. Interdependent in nature, the system of education is porous and reciprocating, impacting and impacted by all aspects of a community and nation. As societal factors change so too must educational systems shift and adjust such that students within the educational structure continue to be supported, enriched and prepared for life within the constantly changing surrounding environment. Consequently, education cannot occur in isolation of other societal influences and systems (Turgut, 2013). Rather, schools must work collaboratively with communities and families to meet the individual academic and nonacademic needs of students (Anderson-Butcher & Ashton, 2004).

Akin to variables impacting the overarching educational system are variables impacting individual students. School systems are not equally impacted by societal
factors and neither are individual students impacted equally by nonacademic factors. Regardless of the variable configuration, in order for a student to attain educational and life potentials a student’s needs must be satiated according to Maslow’s hierarchy of needs. Needs are not mutually exclusive; rather, needs are prepotent and emerge when less prepotent needs are sufficiently satisfied (Maslow, 1943). Subsequently, basic human needs remaining unsatisfied may impact immediate student achievement in addition to life long student potentials.

Policy makers and educators work to employ systems embedded with accountability in an attempt to optimize educational programming for all publically educated students in the United States of America. Quantitative accountability systems arose over the last decade as the most reasonably clear, concrete, and equitable method to assess student achievement across student subgroups nationwide. However in opposition to strict quantitative evaluations, evaluation systems exist for the assessment of unique learners.

Public Law (PL) 94-142 was passed in 1975 to protect the educational rights of students with unique learning needs. As stipulated by PL 94-142 (1975), student needs must be evaluated through a multifactored process. The multifactored process necessitates special education determinations occur following a process by which persons most knowledgeable about a student possess equal voice in the evaluation and decision-making process. Furthermore, innate in the multifactored process is data collection from various sources, such as interviews, observations, classroom data, record review, and standardized assessments. Following collection of data through various sources, a group
of qualified individuals including the parent determine by consensus student special education eligibility, and resultant services.

In staunch opposition to PL 94-142 is the Third Grade Reading Guarantee in the State of Ohio. The Third Grade Reading Guarantee requires a student read at the third grade level prior to promotion to the fourth grade (ODE, online resource page, November 2016). Standardized assessment is the sole determinant of student reading achievement. Furthermore, parents and teachers have no ability to dispute the retention of general education students who have not previously been retained in grades kindergarten through third (ODE, online resource page, November 2016). Consequently, TGRG becomes high-stakes at the third grade level and provisions mandated in federal laws such as PL 94-194 are unreciprocated by state laws. Thus contradictory laws exist, yet both dictate student educational outcomes with serious risk of consequence for the students at the nucleus of discussion.

Federal law, PL 94-142, and state law, TGRG, approach critical student decisions differently. The federal law utilizes a multifactored evaluation while the state law reflects a strict quantitative approach to information gathering. Through the multifactored approach various individuals and data, academic and nonacademic, lead to educational determination. However, quantitative accountability systems may not lend easily to nonacademic learning factors and student needs. Therefore, this study evolved to assess the current largely isolated view of student achievement through standardized test results against a multifactored approach to educational decision-making.

The theoretical lens applied to this study is the Whole Child Approach to Education as developed by the ASCD. Through a Whole Child lens the impact of
academic and nonacademic support structures were evaluated in reference to student reading achievement on the third grade Ohio Achievement Assessment. A cross-sectional, quantitative research design emerged to evaluate approaches to educational decision-making through the lens of the Whole Child Approach to Education. Two demographically similar public school districts within geographical proximity in Ohio were involved in the study. The nonrandom convenience sample of two districts utilized perceptions of elementary educators regarding academic and nonacademic supports relative to student achievement, in addition to central office administration’s completion of a historical data collection instrument. Furthermore, a database of third grade assessment results from ODE was incorporated into the study.

A bivariate correlational analysis explored the relationship of OAA scores and support structures in place for the 2013-2014 school year. Further, a percentage response was calculated for each of the nine rank order items as positioned by elementary educators in the two districts. Educator perception was deemed higher for items having a lower mean rank. Finally, correlational rank order from strongest to weakest depicts analysis of the third research question. A side-by-side slope graph visually compared the correlation to the perception. From highest to lowest, the left side of the slope graph presents the correlations. The right side of the slope graph illustrates perceptions ranked in order from highest to lowest. Lines are drawn to demonstrate the relative difference between correlation and perception. The three research questions evaluated were:

1. Do the presence of academic supports, such as student assistance teams and nonacademic supports, such as physical, social, and emotional supports relate
to student reading achievement as identified by the third grade reading Ohio
Achievement Assessment (OAA)?

2. How do educators perceive the influence of various academic and
nonacademic supports in terms of student achievement?

3. Do the correlational results of research question one align with the rank order
perceptions of educators in research question two?

Discussion

School leaders and policymakers seek to make educational decisions from
student-based data. Catalyzing initiatives such as ESEA, NCLB, and ESSA, push toward
the use of quantitative student data to measure student success. However, educators
receive criticism for their overreliance on untrained personnel to analyze and interpret
data for the purpose of change (Gobin, Teeroovengadum, Becceea, & Teeroovengadum,
2012). Furthermore, reliance on test scores as the basis of educational decisions may or
may not focus educators on all critical areas of student development leading to optimal
student achievement. Traditional student assessments do not readily embrace or
recognize less tangible human needs also contributing to student success. As asserted by
Slade and Griffith (2013), the whole child approach to education seeks to make relevant
traditional student academic development with a 21st century definition of student success
by marrying all aspects of development in order to produce students who upon high
school graduation are capable of competent contribution to overall society.

Consequently, the whole child education initiative brings full circle all areas traditionally
held paramount to education along with more current data driven education trends to
foster the development of self-actualized learners.
To establish the relationship of student academic and nonacademic learning factors to overall educational success, the three research questions were developed. Additionally, the questions sought to ascertain if the perceptions of elementary educators regarding the application of support structures accurately reflected the associated link between support structure and student achievement on an assessment of third grade reading.

**Research Question 1.**

The first research question evaluated was: Do the presence of academic supports, such as student assistance teams and nonacademic supports, such as physical, social, and emotional supports relate to student reading achievement as identified by the third grade reading Ohio Achievement Assessment (OAA)? The findings within indicate no positive correlation of academic and nonacademic support structures to student reading achievement. Rather with the exception of student assistance teams and elementary athletics, a correlation was invisible between supports and achievement. However, it must be stated the data associated with research question one was derived from a singular school district. Comparison to the second demographically similar district was not possible due to lacking data. According to the District Profile report available from ODE (2016) reflective of fiscal year 2014, approximately 58% of students in the district of study were non-white and approximately 78% were from poverty. Fiscal year 2014 is also the year for which achievement scores were calculated for this study.

Students in this study represented a diverse population faced with high poverty, but supported by strong financial and academic support systems. In particular, the district professed strong student assistance teams utilizing data driven decision-making
for behavioral and academic needs. Student demographics of the district indicate factors negatively impactful to resilience are apparent for this student body. As such, stressors to resilience will impact student academic performance. Fluctuating student resilience impacting academic wellness cannot be assumed static over time (Doll et al., 2011). Therefore, academic impacts may vary from one year to the next.

Assumedly, participation rates in district elementary athletic programs mirrored student demographics for poverty and minority representation. Therefore, less opportunity existed to study the impact of high socioeconomic status in relationship to activity participation in this study, as was assessed by Dumais (2006). A strong negative correlation was revealed between athletic participation and student reading achievement at the third grade level by this study. Hence, the students did not demonstrate higher levels of reading achievement as participation increased in athletics. The current findings are counter to Dumais (2006) who found more activities kindergarten students participated in led to higher levels of reading achievement between grades first and third. Further, the positive correlation was highest for students with greater poverty (Dumais, 2006); however, this study found the students from a high poverty population did not reap academic gains when involved with elementary athletics. The small sample size of this study reflected approximately 32% of the kindergarten to third grade population participated in elementary athletics (n=390). Conversely, Dumais (2006) claimed a drastically larger sample size (n=5696). As such, relative impact may be skewed by the small sample size of the current study.

Rich with a minority population, the district in this study had about 32% participation in elementary athletics kindergarten through third grade. The level of
participation suggests cultural and/or family regard for athletics. Asserted by Wentzel and Wigfield (1998), minorities face competing cultural expectations for education, to societal education expectations. Thus, compliance to expectations of cultural standards directly opposed compliance to societal expectations for educational success. Therefore, for a minority student to be accepted by a social group the minority student might be expected to depreciate educational values of society at large. Consequently, as cultural regard increased for athletics in the minority population, cultural regard for academic achievement would decline. Accordingly, the negative correlation to actual student achievement existing in the current study is supported by prior research (Wentzel & Wigfield, 1998).

The strong negative correlation between athletic participation and student success at the elementary level indicates lacking correlation between physical fitness and academic achievement, counter to the findings by Blad (2014). Blad (2014) referenced a longitudinal study by Lincoln Public School conducted by Rauner in which a correlation between physical fitness and academic achievement was found. The current study revealed physical fitness was not impactful to reading success for students in District 2.

Results of this study indicated the presence of a guidance counselor, parent participation in parent organizations, and the presence of volunteers in schools all failed to demonstrate a significant impact on student reading OAA results at the third grade level. Possibly, the impact on student reading achievement at the third grade level was limited due to the limited sample size. Furthermore, it is conceivable that should the frequency of support presence increase a more powerful impact on student achievement would have resulted in this study.
The current study found the presence of a guidance counselor had no real impact on student reading achievement at the third grade level, unlike the findings of Lapan et al. (2014). This study also revealed the high poverty student population assessed presumably exposed to environmental and social risk factors did not perform better on standardized assessments when provided academic and nonacademic supports. Having been exposed to environmental and social risk factors, resilience is believed reduced as compared to individuals in more supportive and stable environments. The correlation of academic success to resilience is supported by the resilience research of Khanlou and Wray (2014). If the current population of students in poverty was impacted by environmental and social risk factors, the impact indicated by the guidance counselor, parent/family involvement, and volunteers relative to increased resilience might be dulled due to environmental and social risk factors. In turn, academic impact would also be muted.

Research Question 2.

The second research question evaluated the following: How do educators perceive the influence of various academic and nonacademic supports in terms of student achievement? Overall, the current study found elementary educators perceived supports that theoretically directly address student social-emotional and behavioral needs (i.e., guidance counselor, behavior specialist, SAT, and social worker) to be most impactful to elementary student success. The remaining supports (i.e., parent/family involvement, nutrition program, volunteers, before/after school program, and elementary athletics) had less academic impact as perceived by the educators completing the rank order instrument.
Therefore, Murray et al. (2007) supported the current research as social skills training impacted student academic achievement.

This study reflected educators’ perceptions of community programs to be less impactful on academic success (i.e., parent/family involvement, nutrition program, volunteers, before/after school program, and elementary athletics) than direct social-emotional and behavioral services. The study did not allow for any support to be rated equivalent to another support. Consequently, a hierarchy of supports relative to achievement was created, with one support rising above others comparative to student success. Due to research methodology and unlike Lee et al. (1999), academic impact was only assessed with reference to educator perception of support impact and not academic press. Lee et al. (1999) concluded greater academic impact was found when both social support and academic press were simultaneously present.

Furthermore, this study reflected educators’ perceptions of community programs to be less impactful on academic success (i.e., parent/family involvement, nutrition program, volunteers, before/after school program, and elementary athletics) than direct social-emotional and behavioral services. Community-based providers did implement resilience programming in the district of study during 2013-2014, such as life skills programs. However, the educators who completed the rank order instrument reflected lesser regard for community programs than direct student supports provided by district personnel, such as the guidance counselor. Khanlou and Wray (2014) claimed resilience programs in schools must not occur in isolation of other community programs supportive of student development. This research study indicates educators did not perceive the
The current study assessed educator perception of support impact on student achievement. Educators in this study were asked to assess student achievement via their support rankings as a holistic level of achievement, as opposed to ranking reading and math achievement separately per support. Furthermore, the educators completing the rank order instrument were employed in districts with high student poverty rates. The participants in this study ranked student involvement in elementary athletics as least positively impactful on student achievement from the list of supports provided. The responding educators did not hold extracurricular participation in physical activities sponsored by the district in high esteem. Therefore, this study asserts a weak correlation will be found between student achievement and athletic participation. Dumais (2006) suggested teacher acuity of academic impact following extra curricular participation was inconsistent across academic subjects. Teacher perception of impact was more accurate for math achievement than it was for reading achievement. Furthermore, teachers viewed student achievement higher for students with greater socioeconomic status, than students from lesser status (Dumais, 2006).

**Research Questions 3.**

The final research question asked: Do the correlational results of research question one align with the rank order perceptions of educators in research question two? Alignment was found in this study for guidance counselors. This study incorporated the OAA results of a racially diverse student population and perceptions of educators in racially diverse districts. This study supported the correlational results aligned with
educator perceptions of guidance counselor impact on student achievement at the elementary level. Current research findings support conclusions of Wethington and Kellser (1986) such that a person’s perception of support availability was more positively impactful to future resilience than was the actual receipt of support during the stressful event. Students in the current study reasonably performed better on the OAA knowing the guidance counselor was available should the support be needed. Furthermore, the relative level and impact guidance counselors had on student achievement as well as educator perception of guidance counselor impact in this study suggest guidance counselors did have ample relationships with students in the districts of study. Thus, academic success was reported for the student population having a relationship with the guidance counselor, a finding also noted by Lapan et al. (2014). Furthermore, as found by Fleming et al. (2005) social and behavioral supports positively impacted long-term academic successes according to standardized assessments in reading and math.

The current study suggested following guidance counselors, volunteers were most highly related to student achievement at the elementary level, a point previously made by Anderson-Butcher and Ashton (2004). Nevertheless, the educators involved in the study perceived the impact of volunteers on elementary student achievement to be relatively low. A disconnect in alignment was therefore found between actual volunteer impact on academic achievement to perceived impact of volunteers on academic achievement. Although educators in the current study did not regard volunteers at a level commensurate with actual assessed impact, Sahlberg (2010) and Turgut (2013) corroborated the importance of community involvement to student achievement reported by Anderson-Butcher and Ashton (2004). The current study reflected although
volunteers were the support second most impactful on academic achievement of those presented by this study, educators’ perceived volunteers as one of the least impactful supports offered within this study. As such, this study reports findings counter to those of Lee et al. (1999), Turgut (2013), Khanlou and Wray (2014), and Sahlberg (2014) who reported community collaboration jointly with schools all supporting student development led to increased academic achievement.

Conversely, SAT demonstrated the least positive impact on reading achievement at the third grade level. However, elementary educators perceived SAT to be rather impactful on achievement. Therefore, educators in the current study share a perception supported by previous research; educators held in high esteem the positive impact student assistance teams had on elementary student academic success (Wentzel & Wigfield, 1998). Nevertheless, the current study failed to demonstrate the actual existence of SAT had a positive impact on student reading success.

The current results demonstrate Maslow’s hierarchy of needs. Maslow (1943) reported a hierarchy of student needs exists, with most basic needs requiring satiation prior to more cognitively driven needs. As such, educator perception of SAT impact on achievement may be accurate, though the true academic impact of SAT may be stymied by lacking support of basic needs. As reported, “most behavior is multi-motivated. Within the sphere of motivational determinants any behavior tends to be determined by several or all of the basic needs simultaneously rather than by only one of them” (Maslow, 1943, p. 390). As such, students in the high poverty school district of study (78%) likely present with multiple needs remaining to be met prior to the student’s ability to reach a level on which academic achievement would be optimized. Consequently,
hindrance to academic success reflected through the SAT correlation to reading
achievement is asserted related to high levels of student poverty in the district of study. Student demographics in the district of study were not controlled for sufficiently enough by the supports in place to mitigate demographic influence on standardized assessments, a point supported by the findings of Paulson and Marchant (2009).

Results of the current study relative to parent and family involvement indicated a fairly neutral position regarding impact on student achievement. In addition, parent and family involvement was comparatively neutral as reflected by educator perception of the impact family involvement had on student achievement. The opinions and needs of the family must be pursued and valued by the school for long-term family success to be obtainable. The respondents to this research regarded family involvement, and academic achievement relative to family involvement to a commensurate degree. As such, this research indicates a current level of impact and regard as it relates to parent and family involvement. However, full academic impact demonstrated through OAA success is not visible because parent and family involvement are not yet ideal in the district. The importance of family involvement to student achievement is reiterated by the findings of Anderson-Butcher and Ashton (2004).

The relative placement of elementary athletics to student achievement, as well as educator regard was consistent in this study. Students in this study did not demonstrate a positive correlation between athletic involvement and academic achievement. Educators did not view athletics to be positively impactful on student academic achievement. The students in the current study were from primarily minority populations (58%) and from high poverty (78%). Current research findings are supported by prior research by
Dumais (2006) who found students of highest socioeconomic status and white students were perceived by educators as the students best impacted by activity participation.

Conclusion

This research study evolved from the contradiction between the legislative move toward the use of quantitative data as the basis of educational decision-making, and a multifactored approach to educational decision-making. Following study analysis, assertion is made for the angulation of test scores and student achievement with educator perceptions and experiences. Apparent at the center then becomes the necessary academic and nonacademic supports indispensable to the student in order to gain optimal achievement. The insertion of educator perceptions allows the relationship of student to achievement to move from the linear to the three-dimensional view. As such, the quantitative score is just a piece of student achievement, and cannot be used as the epicenter from which student trajectories are plotted. Standardized assessments may cause haze. The common American goal for our youth to become proficient participants in the democratic society cannot occur with isolated math and language arts development (Cohen, 2006). Rather, strong emotional intelligences paired with academic intelligences lead to prosperous democratic citizenship (Cohen, 2006).

Results of the current research suggest a strong negative correlation between student assistance teams and reading achievement on the third grade OAA, in addition to elementary athletics and third grade reading OAA results. With regards to educator perceptions, this research indicated a relatively strong relationship between guidance counselor impact on student achievement per the OAA and educator perception of guidance counselor impact on student achievement. A similar relationship was observed
with parent and family involvement. However relatively speaking, educators underappreciated volunteer impact, while SAT was over-appreciated with reference to student reading achievement on the third grade OAA. The final support for which data was available related to elementary athletics. Elementary athletics appeared relatively slightly more impactful to student OAA achievement than what was perceived by elementary educators.

Specific to findings associated with SAT, student reading achievement had a strong negative correlation to SAT. Therefore, decisions made through the SAT process were not accurately focused on student need, or decisions were never made. Rather, educators might have erroneously admired problems and made determinations on factors other than the data collected. Furthermore, a misapplication of resources might have occurred if educators were not versed in the appropriate uses of services and supports to presented student needs. An additional conclusion derived from the SAT correlation to student reading achievement in the high poverty school district is the basic needs identified by Maslow (1943) were not sufficiently satiated. Consequently, students were not optimally achieving academically because primary needs, less cognitively driven needs, were prepotent. Additionally, students in the high poverty school district of study (78%) present with multiple needs to be fulfilled prior to optimized academic achievement. Consequently, hindrance to academic success and resultant educational achievement is suggested to be a product of high levels of student poverty.

Subsequently, through visual slope graph presentation the third research question brought the assessment process into a three-dimensional view. The relationships demonstrated by the slope graph suggest basis to debate how educational decisions
should be made. Educational stakeholders should pull the linear conversation of student achievement into a three-dimensional conversation by asking people who know the student best what needs are perceived impactful to each individual student’s academic achievement. Thus, although a multifactored process to educational decision-making is not suggested critically necessary for every skill or need, sufficient basis exists to warrant application of multifactored processes to all educational decisions. In particular, we owe our students our best efforts and processes when making high-stakes educational decisions for which life long student outcomes are at stake. Consequently, a multifactored process should be applied to all high-stakes educational decisions. Through a multifactored process, educational teams most knowledgeable about a student utilize all pieces of student data and documentation, with appropriate weight and consideration, to derive decisions maximizing student benefit and achievement. Putatively, maximum student outcomes for life long success may be gifted to our greatest national treasure, our children.

Sahlberg (2014) emphasized educational systems must produce a knowledge rich population valuing of global care and mutual benefit, rather than a society competitive with others for the sole purpose of competition. According to the ASCD (2014), a Whole Child Approach to Education is the approach necessary to ensure collaborative programming supportive of healthy and academically challenged students. The path leading to student success may be as varied as the process by which success is evaluated and determined.

Despite disagreement, Starr and Spellings (2014) remained focused on a joint vision: American schoolchildren need appropriate preparedness through educational
systems so they become independent problem-solvers and creative thinkers, thus, demonstrate global competitiveness upon high school graduation. Stakeholders do not consistently agree on procedures, just as evaluation systems do not nicely marry reality and ideal. Legislators apparently prefer concrete, standardized assessments because assessments seemly remove the human factor and objectively result in a system fair to all. However, Paulson and Marchant (2009) found human factors could not be removed from educational decisions. The researchers reported demographic factors, such as parent education, family income, race, cognition, and innate predeterminations could not be sufficiently mitigated, and thus impact standardized assessment results. Paulson and Marchant (2009) found student demographics impactful on achievement just as Maslow asserted the satiation of primary needs impacted student educational access, Bandura (1977) found student motivation impactful, Solheim (2011) reported self-efficacy, and Lapan et al. (2014) and Wethington and Kessler (1986) indicated student knowledge of nonacademic support availability impacted achievement. To further the point, research by Wentzel and Wigfield (1998) noted teacher expectations and student involvement in decision making were correlated with achievement, while collaborative networks of school, community, and family supports were found impactful to student achievement by Anderson-Butcher and Ashton (2004), Anderson-Butcher et al. (2008, 2010a, 2010b), and Corrigan et al. (2013). Lee et al. (1999) corroborated social supports in tandem with academic press was significant for optimal student achievement in academics, a point furthered by Adelman and Taylor (2011) as well as Fleming et al. (2005) who reported correlations of social and behavioral supports to student achievement. Therefore, current research as well as prior research support a collaborate process between a community and
schools (Anderson-Butcher & Ashton, 2004; Anderson-Butcher et al., 2008, 2010a, 2010b; & Corrigan et al., 2013) leads to optimal student success, however, current evaluation systems in education do not reflect similar regard for collaboration. As such, collaborate approaches to decision-making should be assessed for value just as collaborative approaches leading to student achievement are valued.

**Recommendations**

There is no one truth for all students remaining forever applicable. Since there is no one truth for all students from which to anchor educational decisions, a multifactored approach is the best approach through which high stakes educational decisions should be made. As demonstrated by the findings of research question three, there is a misalignment between actual student achievement on standardized assessments having various school support structures available, and educator perceptions of the impact support structures have on student academic achievement. In isolation neither educators nor standardized assessments are unflawed in determining high stakes educational decisions; consequently, high stakes educational decisions should be made through a process sensitive to all factors and perspectives. A multifactored process allows for angulation of truths. A multifactored process also provides for a system of checks and balances to exist between quantitate and qualitative data.

Policymakers, district leaders, teachers, and families stand to gain greater awareness of student needs following the interpretation and analysis of student data through a multifactored process. Purposeful educational change at the district level may result from intentional and targeted data interpretation. Moreover, students stand to gain ultimate benefit from continued conversation regarding the relationship of academic and
nonacademic supports to student academic achievement. Further evaluation into the components impacting our educational decisions is critical if we desire to have students obtain and maintain life-long success. According to Corrigan, Higgins-D’Alessandro, and Brown (2013), a prosperous adult life requires academic preparedness, but also social and civic mindedness. Therefore, educational systems must practice in ways supportive of students beyond reading, writing, and math, then demonstrate regard for skills beyond core curricular instruction through inclusion of services and supports for all children demonstrating need. Not to be forgotten, all support structures require assessment in order to monitor impact. Supports easily assessable by data such as student progress following involvement with the student assistance team, in addition to support structures more nurturing to nonacademic factors like volunteers and parent and family involvement that are not data rich should be monitored and assessed for impact. However to assess all structures and supports, potentially new and more qualitative assessments may require consideration and development. Assessments might include student, parent, and family anecdotal report of student benefit following student involvement with various academic and nonacademic supports.

Should qualitative measures be added to high-stakes assessment systems, more localized control of decisions may be appropriate. Furthermore, involvement of a team knowledgeable about the specific child might be considered for all high-stakes educational decisions. More appropriate regard for the impact academic and nonacademic supports have on student achievement is recommended. For example, elementary educators did not translate the relative impact demonstrated by volunteer involvement on student reading OAA scores in this study to commensurate regard.
Consequently, data associated with each support should be accurately maintained and reviewed on at least a quarterly basis so changes in programming may be timely and based soundly on data.

Results from the study further indicate a mismatch of support application to student and overall district need. For example, significant positive impact of parent and family involvement on student academic achievement was not found in this study. Therefore, it is recommended all supports be applied in the district with purposeful consideration to school district goals and strategic plans. When all district activities, practices, and collaborative community supports are aligned on common goals, greater academic successes should be obtained. Further related to current findings is recommendation for increased family engagement activities. In addition to the absent correlation parent and family involvement was assessed to have to student achievement, educators placed parent and family involvement at a rank suggestive of null impact. Parents and families may be encouraged to become more involved through athletics and nonacademic activities. Parent-teacher conferences may be scheduled at coinciding times to student athletic and nonacademic activities. Moreover, educators should consider providing educational updates, academic assistance, and suggestions for families to increase engagement with the school/community and assist students with homework, in addition to family enrichment opportunities to families at sporting events, such as during half-time breaks at a basketball game. Items provided at the concession stand could reinforce students and/or family participation in these events.

The findings within indicated cultural regard for athletics is competing with societal regard for academics. Therefore, recommendation is made to incorporate
academic components into elementary athletic programs, such as elementary study tables. Educators should consider the development of intertwined athletic practice schedules with homework assistance, as well as adding a childcare component to athletic schedules. A liaison should be identified to communicate between traditional school programs and afterschool programs. The liaison would assist in ensuring open and accurate communication regarding student needs amongst vested parties. For example, a school social worker could meet with families at school sponsored athletic and nonacademic activities to discuss student strengths and needs. Following, the social worker would share relevant information with the SAT. The result, improved decisions and programming for students leading to increased academic outcomes.

Furthermore, districts, especially those with large minority populations, should embrace cultural differences and work collaboratively with demographic subgroups to define common goals and priorities for student achievement. Parent and family involvement events may evolve from commonly defined goals and priorities. Additionally, community collaboration opportunities may spark from common goals and priorities furthering student success through a collaborative process between schools and communities leading to maximized student outcomes. A leadership team comprised of members from each contributing group must collaboratively monitor the commonly identified goals and priorities.

Data relative to student achievement should be shared with educators regardless of the procedure used to collect data. Meaning, educators should be knowledgeable about their student needs and successes beyond those reflected by state or district report cards. In order for data to be meaningful to educators and used to influence positive
student changes, educators require more professional development in data driven decision making (DDDM). Development of DDDM skills in educators must begin in pre-service training programs. Training needs to continue once educators are employed in order to refine skills and maintain relevance of skills to decisions being made in the educational setting. Training and development should encompass all forms of data educators utilize, including but not limited to data derived from standardized assessments, observations, interview, criterion data, and work samples. Educators should be grown to the degree they are able to synthesize all forms of data thoroughly and succinctly in order to develop action steps beneficial to individual student developmental and academic success.

Furthermore, professional development should be provided to educators to develop team decision-making skills. Educators must become versed and comfortable working in collaborate groups. Educators must become focused on decision-making with an outcomes focus, rather than admiring problems. This study demonstrates outcomes divergent from other studies conducted in districts less diverse and having high socioeconomic student populations. Therefore, ongoing, high quality professional development is also needed to build capacity in educators working with students from poverty, trauma, and diversity. Based on the variability of educator perceptions regarding academic and nonacademic support impact to student achievement, findings from the current study indicate educators must have an increased awareness of supports and the impact each has on student achievement. They must also have confidence in the applicable application of each support, followed by the ability to monitor support effectiveness.
Consideration given to current assessment systems relative to the weight attributed to student achievement on a standardized assessment is recommended. Educational stakeholders should advocate for students to be valued for their civic mindedness, community involvement, and positive impact made on their school and greater community. As Corrigan, Higgins-D’Alessandro, and Brown (2013) report, successful adult lives are not created on academic aptitudes alone. Therefore, educational systems must actively develop the whole child and give praise for all successes attributing to later life successes. Furthermore, legislators should consider adding components to state report cards reflective of regard for community engagement and parent and family involvement in schools as these were indicated through current study to be relatively impactful to student achievement. Community supports assist development and nurture nonacademic needs of students impacting academic achievement.

The current study found no impact of guidance counselor involvement on student achievement. Therefore, nonacademic supports assisting with social and emotional student needs, such as guidance counselors, should increase in frequency and intensity especially for students at greatest risk for negative impact. Students from poverty are at a greater risk to social-emotional factors than are their more affluent peers. Khanlou and Wray (2014) speak of the impact student resilience has on social and health disparities impacting students immediately in addition to later in life. Resilience programming and interventions might be infused into educational systems through a collaborative community approach of student develop (Turgut, 2013).

If the adage is true and it does take a village to raise a child, communities should encircle a child, combine resources, support one another, and be rewarded accordingly.
The walled-in approach of conventional school improvement criticized by Anderson-Butcher et al. (2008) can be changed. However, the current legislative mandates isolating the needs of schools from local community resources and families require overhaul. Increased support and resources available outside the four walls of a school have helped to reduce expenses to multiple agencies while increasing support for students (Anderson-Butcher et al., 2008). Gap analysis between student needs and resources, and resources available from the community and family have resulted in collaborative programming reflective of local community characteristics and implementation of targeted programming (Anderson-Butcher et al., 2008). The process employed by Anderson-Butcher et al. (2008) resulted in increased academic outcomes, and supported proactive steps supportive of adult independence and community involvement. Consequently, for positively impactful school improvement initiatives to occur, educational stakeholders must work collaboratively to support the whole child, and base educational decisions following application of a multifactored process.

**Future Research Opportunities**

Implications of the current study influence student achievement and student demonstration of responsible citizenry upon graduation from high school. In order for a school district to produce an educated, prepared adult to the local community in addition to the global community, schools must be prepared to address student needs unique to each student, community, geographic region, nation, and the world. Therefore, assumption student preparation can be achieved within an isolated school district is naïve. A collaborative approach must be assumed, and all facets of a student must be recognized, valued, and developed. Anderson-Butcher et al. (2008, 2010a, 2010b) may
be expanded to include a collaborate approach to school improvement. The successes of the approach may be evaluated through a multifactored approach. Since student needs are not two-dimensional, neither should approaches to address needs be two-dimensional. Conventional educational reform must adjust to modern needs. American students do not live in isolation, rather are constantly globally connected.

Consequently, future research should evaluate educational assessment systems monitoring student achievement. As indicated by Corrigan, Higgins-D’Alessandro, and Brown (2013), greater diversity in assessment is appropriate to increase predictability of assessments to long-term student outcomes. Future research should evaluate quantitative assessment systems to qualitative and mixed-method systems. Furthermore, research should explore educator pulse on student achievement and student needs, and the appropriate extent educator perspectives should be applied to the high-stakes decision-making process. Perspectives of persons most vested in the lives of individual students should be valued for the insights they are reasonably equipped to offer. Therefore, future research should assess the effectiveness of a multifactored process to educational decision-making.

This study may be expanded to incorporate other districts with dissimilar demographics. The findings of this study should be compared to districts with different socioeconomic statuses. As cautioned by Paulson and Marchant (2009), restraint should be taken when generalizing results for the basis of decision-making between unlike populations; therefore, this study may also be replicated and expanded to incorporate subgroups, such as race, gender, and ethnicity, and the resultant impact demographic
subgroup has on achievement following the application of various academic and nonacademic supports.

Consistent with Fleming et al. (2005) who studied the predictability of problem behaviors over time to student achievement, a longitudinal study would also be suggested to track student development following the application of various academic and nonacademic supports to determine which supports have the greatest long-term effect on student life outcomes. Doll et al. (2011) found over time, students who had two or three indicators of academic distress were more likely to present long-term school distress than students demonstrating one indicator at any single grade level. Should a longitudinal study materialize, suggestion would be to study demographics individually as well as in total. The impact of resilience education incorporated into current academic and nonacademic supports would be an additional recommendation and would further Khanlou and Wray (2014).
REFERENCES


doi:10.1080/10474412.2010.500512


Freedman, M. K. (2001). *Testing students…and the law: Legal requirements for testing students that educators, parents and officials need to know...in plain English.* Boston, Massachusetts: Miriam Kurtzig Freedman.


Ohio Department of Education. (2016, November). Parents roadmaps to understanding the Third Grade Reading Guarantee [Online resource page]. Retrieved from


Institutional Review Board

Date:  June 24, 2016

To:  Natalie Abell

CC:  Megan Peugeot

RE:  Impact of Academic and Non Academic Support Structures on Third Grade Reading Achievement.

Project Expiration date:  June 24, 2017

The University of Findlay Institutional Review Board (IRB) has completed its review of your project utilizing human subjects and has granted authorization. This study has been approved for a period of one year only. The project has been assigned the number 1023.

In order to comply with UF policy and federal regulations, human subject research must be reviewed by the IRB on at least a yearly basis. If you have not completed your research within the year, it is the investigator’s responsibility to ensure that the Progress Report is completed and sent to the IRB in a timely fashion. The IRB needs to process the re-approval before the expiration date, which is printed above.

Understand that any proposed changes may not be implemented before IRB approval, in which case you must complete an Amendment/Modification Report.

Following the completion of the use of human subjects, the primary investigator must complete a Certificate of Compliance form indicating when and how many subjects were recruited for the study.

Please refer to the IRB guidelines for additional information. This packet can be obtained within blackboard under community section. Please note that if any changes are made to the present study, you must notify the IRB immediately. Please include that number on any other documentation or correspondence regarding the study.

Thank you very much for your cooperation. If you have any questions, please feel free to contact IRB at (419) 434-4640 or email irb@findlay.edu.

Sincerely,

Jennifer Fennema-Bloom, Ed.D.
Chair, Institutional Review Board
Cc:  IRB Office
APPENDIX B

August 1, 2016

Dear Participant:

You are invited to participate in a study regarding the sufficiency of standardized test scores as the basis of educational decisions resulting in students being promoted to the next grade, or retained in the current grade. I hope to learn without prejudice your opinions regarding which educational services and supports are most important for students to have in order to be educationally successful. If you decide to participate, please complete the enclosed survey. Your return of this survey is implied consent. The survey is designed to learn your opinion regarding which services or supports have the greatest positive influence on student educational success at the elementary level. It will take about three minutes to complete the survey. No benefits accrue to you for answering the survey, but your responses will be used to benefit research regarding appropriate processes to support student achievement, and assessment of student achievement through standardized tests. Any discomfort or inconvenience to you derives only from the amount of time taken to complete the survey.

Any information that is obtained with this study and that can be identified with you will remain confidential and will not be disclosed. Your decision whether or not to participate will not prejudice any future relationships with The University of Findlay. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any questions, please ask. If you have any additional question later, contact Dr. Natalie Abell at (419) 434-4867, or abell@findlay.edu.

Thank you for your time.

Sincerely,

Megan Peugeot
Doctoral Candidate
The University of Findlay
DIRECTIONS: Please identify the services/supports available in your district during the 2013-2014 school year. Please provide the following information/data regarding each elementary building in your district, as applicable. (Definitions on the reverse side.)

Please complete regarding 2013-2014 school year.

<table>
<thead>
<tr>
<th>Elementary Building (Specify)</th>
<th>Student % yearly attendance</th>
<th>Student participation % by building (MUST available to students in grades K, 1, 2, and/or 3)</th>
<th>Guidance Counselor</th>
<th>PTO/PTA</th>
<th>Student Assistance Team</th>
<th>Volunteers in the building (<em>X</em> to reflect organizational involvement)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Before School Program</td>
<td>After School Program</td>
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<td></td>
<td>Basketball</td>
<td>Cheer</td>
<td>Track and Field</td>
<td></td>
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<tr>
<td></td>
<td>Soccer</td>
<td>Flag Football</td>
<td>Wrestling</td>
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<tr>
<td></td>
<td>Swim</td>
<td>Soccer and Field</td>
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<td></td>
<td>Volleyball</td>
<td>Swimming</td>
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<tr>
<td></td>
<td>Wrestling</td>
<td>Day(s) per week in building</td>
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<td>7.</td>
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</tbody>
</table>
DEFINITION OF SERVICES/SUPPORTS

Before/After School Program: Childcare services for students before or after school located in a public school building. Might include nutrition services and/or academic assistance.

Elementary Athletics: School-sponsored elementary athletic programs.

Guidance/School Counselor: Counseling services for individual or groups of students to address academic, emotional, social, and/or personal needs.

Parent/Family Engagement: Parent/family organizations and activities intended to increase parental engagement in education, such as PTO, PTA.

Student Assistance Teams: Teams of educators and parents meeting to address the individual needs of students (academic, behavioral, or emotional) that are impacting overall student achievement.

Volunteers in the School: Volunteers who assist students. Volunteers might reflect family members of students, religious organizations, community organizations, retired educators, and/or high school/college students.
According to the ASCD website (2016), school improvement approaches leading to lifelong student success incorporate all needs of a child. Support structures include those that promote healthy, safe, engaged, supported, and challenged students (ASDC, 2016). Within the school setting, numerous and varied support structures are in place.

**Do NOT include your name.**

<table>
<thead>
<tr>
<th>Building Name:</th>
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<tbody>
<tr>
<td>K-3 Teacher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

“X” the box corresponding to your position.

<table>
<thead>
<tr>
<th>Certified</th>
<th>Classified</th>
<th>Administrator</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus Garage/Maintenance</td>
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<tr>
<td>Central Office</td>
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<td>Elementary School</td>
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<td>High School</td>
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<tr>
<td>Juvenile Detention Center</td>
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<td>Middle School</td>
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<tr>
<td>Other</td>
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</table>
Limit your response time to less than 5 minutes. Below is a list of educational services and supports that might be present in a school setting.

DIRECTIONS:
Please rank the following in order, from **1 - very influential, to 9 - not influential**, according to your opinion of the support having the greatest positive influence on elementary student achievement. Use each number only once.

**Use each number only once.**

<table>
<thead>
<tr>
<th></th>
<th>Very Influential</th>
<th>Moderately Influential</th>
<th>Not Influential</th>
</tr>
</thead>
</table>
| 1 | Before/After School Program
   | Childcare services for students before or after school located in a public school building. Might include nutrition services and/or academic assistance. |
| 2 | Behavior Specialist
   | Individual specialized in student behavioral needs. Works directly with students, or in collaboration with educators, to address student behaviors. |
| 3 | Elementary Athletics
   | School-sponsored elementary athletic programs. |
| 4 | Guidance/School Counselor
   | Counseling services for individual or groups of students to address academic, emotional, social, and/or personal needs. |
| 5 | Nutrition Program
   | Breakfast and lunch available to students at no charge to the family. |
| 6 | Parent/Family Involvement
   | Parent/family organizations and activities intended to increase parental engagement in education, such as PTO, PTA. |
| 7 | School Social Worker
   | “Through counseling, crisis intervention and prevention programs, they help young people overcome the difficulties in their lives, and as a result, give them a better chance at succeeding in school.” (http://www.naswde.org/pressroom/features/issue/school.asp) |
| 8 | Student Assistance Teams
   | Teams of educators and parents meeting to address the individual needs of students (academic, behavioral, or emotional) that are impacting overall student achievement. |
| 9 | Volunteers in the School
   | Volunteers who assist students. Volunteers might reflect family members of students, religious organizations, community organizations, retired educators, and/or high school/college students. |
APPENDIX E

Re: Directions for completion of “Educational Services and Supports” rank order instrument

[Read the following verbatim to the participants.]

You are being asked to participate in a university study. Your participation is voluntary and may be revoked at any time. Furthermore, you may refuse consent and associated participation in the study. By completing the “Educational Services and Supports” rank order instrument, you are implying consent to involvement in the research study. Your responses will be maintained in a secure manner and remain confidential. At no time will your name be associated with your responses. Additionally, at no time will individual responses be available for district-level review.

The instrument will take approximately three minutes to complete, but please do not spend more than five minutes on the instrument. Once you have completed the instrument, please return the completed survey to the box labeled “Completed Instrument” located by the door.

Your participation in the rank order instrument and resultant study are greatly appreciated. Thank you for your time and consideration.