The Impact of Middle School's Health on Dropout Rates

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Abstract

The article will address the relationship between middle school health/unhealthiness and dropout rates. Data was gathered using the Organizational Health Index for Middle Schools (OHI-M) and assessed using the descriptive method of research to describe the health of six feeder middle schools. This instrument was administered to ascertain teachers' perceptions, beliefs, and practices and to determine whether or not these findings had a direct impact on the projected dropout rates of their respective zoned high schools. The authors found the health of these selected middle schools did have a direct impact on the projected dropout rates of its zoned high school. According to the NCES 2011-2012 report, the dropout rate nationally has been at 8% since the mid-1980's for students in Public and Private schools and those who took the GED exam. This measure of 8% will be used as a gauge to determine dropout proficiency. However, the dropout rate for African-American and Hispanic male students hovers around 50% consistently in urban areas.

The purpose of this study was to find strategies to address the nation's abysmal high school dropout rate. The 2012 Schott Foundation for Public Education reported the dropout rate for the past decade has consistently surpassed the 50% mark annually for both black and Hispanic male students. Therefore, the researches sought to assess high school dropout rates in a Black Belt state. One school had over 20% of its population enrolled in special education classes, a 94% graduation rate, and an actual dropout rate of 8%. The school was classified as a high poverty school with a population consisting of 95% Black, 3% Hispanic, and 2% White. The faculty was composed of 54% untenured with 95% of teachers being middleclass and white. This same school's 2012 school report card indicated the following demographic data of 98% Black, 20% special education, over 45% actual dropout rate, and 57% passage of Graduation exam. Although the graduation rate of students in this particular region of the state is particularly low, the graduation rate for the state has been reported to be on the rise with a 62.1% graduation rate in 2002 and a 69.9% graduation rate in 2009 (Balfanz, Bridgeland, Bruce, & Fox, 2012).

There is a high rate of Blacks, Hispanics, and students with disabilities who are dropping out of school. These students are more than two to three times more likely to be suspended, expelled, and/or arrested than their White counterparts in the same school (Children's Defense Fund, 2011). In some instances, blame was placed on "zero tolerance policies" of the late 1990's, which in several cases has resulted in an increase in suspensions, expulsions, and arrests. Our nation, where 58% of the population lives in urban areas, consists of many individuals aged 16-24 who have not graduated from high school, posing severe consequences of high crime rates, teen pregnancy, incarcerations, and infantile mentality. These dropouts rarely catch up to high school graduates, are estimated to have shorter life expectancies, earn less money, and linger on state assistance programs.

Catching these potential dropouts in middle school may help to deter the lack of confidence some students experience upon entering high school.

Dropouts

Dorn (1996) states that governments, educators, and social critics have created rather than discovered the dropout rate problem in America's Public schools. In fact, some researchers (Goodman, Shannon, Goodman, & Rapoport, 2004) have suggested that current legislations and policies may actually have increased dropout rates over time. Cavanaugh (2004) reported that nationally forty-percent of all high school students drop out and nearly seventy-percent of Black males drop out annually.

So the question is why are students in large urban areas dropping out of school? Goals 2000 was a federally established program under which Alabama and other states were eligible to receive money for the purpose of improving their state's public education (Alabama State Board of Education (ASBE) v. E. B. McClain, 2001). The purpose of the Goals 2000: Educate America Act (1994) was to create a more learned and literate population by identifying world-class standards, measuring student progress, and providing the needed support for students to meet standards. However, since its adoption in 1996, several school officials, administrators, teachers, and State Department of Education representatives have noted the extreme difficulty of reaching the 90% graduation rate established by the policy. The Alabama State Department of Education

further exacerbated the situation in the 1999-2000 academic year by increasing the graduation requirement from an 8th grade equivalent Exit Examination to an 11th grade equivalent Graduation.

Middle School Dropout Prevention

The State Department of Education supports a 90% retention rate of students, which implies that a 10% dropout rate allowance for high school accountability is accurate. To meet this high standard of achievement, several schools in the Black Belt region have experienced a rise in cheating scandals by teachers and principals, resulting in employment termination and revocation of teaching certification. Three of the middle schools involved in this study were also involved in duplicitous SAT testing practices. Why do faculty and administrators feel the need to participate in such dishonest acts? Based on literature reviewed for minority youth, Roney, Coleman, and Schlichting (2007) determined that the reading and behavioral issues of students with learning disabilities and students for whom English is a second language (i.e., ESL learners) have become more profound in recent decades. The research focused heavily on the ability to read as a success indicator, which is also connected to other areas of academic success or failure, especially among African Americans, Latinos, and other ethnic social minorities in middle school.

A disproportionate number of African-American and Latino students in grade 12 read on an 8th grade level (Alliance for Excellent Education, 2008). Many researchers have attributed this occurrence to the cultural attitudes and behaviors of the students. A minority student may have poor (academic and social) skill, which may be derived from a lackadaisical cultural attitude about formal learning (Lee & Burkam, 2003). However, factors such as school organization and structure, the social and cultural background of students, or the economic condition of schools and students may also attribute to inadequate preparedness and consequently high dropout rates (Lee & Burkam, 2003). In a productive school at any given time, a visitor may discern whether or not administrators are determined to cultivate a structured nurturing environment in which faculty members enjoy teaching and working cooperatively during common planning times for the success of every student to meet standards. A school lacking production, in contrast, has succumbed to high teacher and Instructional Leadership (IL) turnover and unreasonable expectations of NCLB requirement of 2011(Lunenburg & Ornstein, 2004).

Relationships of the adults in the school setting are the single most important variable of a school (Barth, 2004). If the students are expected to consistently make annual yearly progress (AYP) toward 2014 NCLB standards, there must be a positive working relationship among all the adults in the building. The current Secretary of Education is allowing waivers to each State Department of Education upon request to allow for flexibility from some of the stipulations outlined in the NCLB Act (Sawchuk, 2011). However, relationships are an important factor in achieving student success. If the adult relationships are not genuine from the top down, then there may be little sincerity with stakeholders and teachers may lose confidence in administration. In such an environment, Hefling (2012) further asserts that it may be harder for middleclass teachers to perceive their students and parents as other than a hopeless criminal element. This perception can lead to isolation of teachers from student relationships because of perceived (1) lack of support, (2) lack of positive working relationships with colleagues, (3)

environments in which one's work was questioned, and (4) environments where untenured faculty receive little assistance from the district or the local Instructional Leader. Consequently, the educational environment suffers. In addition, student-achievement rates plummet and academic excellence becomes a bygone principle just as dropping out of school becomes as feasible an option for underperforming students as earning a traditional (conventional, regular, merit-based) high-school diploma. Middle school children are faced with many changes that affect various aspects of their lives (Eccles, 1999) During this period, children may be desperate to find belonging and make choices that negatively impact academic achievement as well as their ability to experience optimum success (Eccles, 1999).

Middle school teachers used the Organizational Health Inventory for Middle Schools (OHI-M) to assess the health of middle schools in a Black belt state and its effect on dropout rates. This OHI-M assessment is also a good predictor of how we maintain the educational integrity of school programs and academic success. This judgment is based on Hoy's inventory (Hoy, 2010).

Methods

Population

The potential population consisted of 353 teachers in 6 middle schools in a large school district of 66,000 students. The final sample size (N=301) was determined by the number of surveys returned. The OHI-M inventory was administered at the faculty meetings of these six middle schools during the 2007-2008 academic year. The faculty was given approximately 20 minutes to complete the survey instruments.

Furthermore, there was a high minority population who attended the six middle schools involved in the current study—Alba (AMS), Burns (BMS), Causey (CMS), Grand Bay (GBMS), Hankins (HMS), and Semmes (SMS). These middle schools serve as feeders for corresponding area high schools in the school district: AMS – Alma Bryant, BMS – Davidson, CMS – Baker, GBMS – Alma Bryant, HMS – Theodore, and SMS – Mary G. Montgomery.

Instrumentation

The Organizational Health Inventory for Middle Schools was created in 1998 to measure the harmony of middle schools at three levels: the teacher, the institution, and the administrator (Hoy, 2010). The instrument is best administered at a faculty meeting and teachers are not asked to provide any identifying markers. According to Hoy (2010), most teachers do not object to taking the instrument which usually takes less than ten minutes to complete. It is important to obtain candid responses from teachers and to collect the surveys in a nonthreatening manner; therefore, no administrators should be involved in the process. When scoring the OHI-M, responses varied along a four-point Likert scale defined by categories from 1-4 (1 – rarely occurs; 4 – very frequently occurs). The OHI-M assessment is reliable based on the Cronbach's Alpha reliability assessment (.93 to .94 for each subtest of the assessment). Each item is scored for each respondent and then an average school score for each item is computed by averaging the item responses across the school as the unit of analysis. Yearly examination of the research

instrument provides invaluable information about the Seven Dimensions Subtests (DS) of the OHI-M which are 1. Institutional Integrity - the school copes with its environment in a way that maintains educational integrity of its programs; 2. Collegial Leadership – the instructional leader's behavior is organized, friendly, supportive, open, and guided by norms of equality; 3. Consideration – the instructional leader's behavior is empathic; 4. Principal Influence - ability to influence the actions of superiors and proceed relatively unimpeded by the hierarchy; 5. Resource Support - classroom supplies and instructional materials are readily available; 6. Teacher Affiliation - a sense of friendliness and strong affiliation with the school; and 7. Academic Emphasis -   the school is driven by a quest for academic excellence and other factors that influence student learning outcomes (Hoy & Sabo, 1998). These aforementioned subtests are key to predicting the academic success of students. Such information is valuable to all school officials, but it is especially useful to educators who are tasked with teaching a considerable number of ethnic social minorities, financially poor students, or children with special needs since the information affects the student outputs and proficiencies that underlay the standards-based model of public education. These standards commenced in the early 1980s with The Nation at Risk Report and culminated in the creation of the federal No Child Left Behind Act's accountability standards for which public schools must meet to be considered healthy (Lee & Wong, 2004).

Variables

For the current study, the following variables were considered:

Variable 1- Initiating Structure and teacher affiliation
Variable 2- Consideration
Variable 3- Institutional integrity and academic emphasis
Variable 4- Principal influence and resources support

Data Collection

The researchers sent letters to the Human Resources Director and Principal of each middle school requesting permission to conduct research in their respective schools. Permission was granted and the appropriate faculty meeting for this activity was coordinated between the middle school principal and the researchers. Once at the faculty meeting, instructions were given by the researchers, and the faculties were given twenty minutes to complete the OHI-M survey. The completed instruments were returned to the researcher as teachers finished them.

Results

To assess the effects of the study variables on perceived teacher success and leadership on school environment, cross-tabulations were utilized to determine whether the Organizational Health Index for Middle (OHI-M) is a valuable tool in determining the overall well-being of a feeder middle- or junior-high school and the projected graduation and dropout rates of its corresponding high school.

The results are found in Tables 1 through 3 reflecting the health status of the middle schools and high schools; SMS and Mary G. Montgomery; AMS and Alma Bryant (ABHS); and GBMS and ABHS.

The responses vary along a four-point Likert scale defined by categories "rarely occurs," "sometimes occurs," often occurs," and "very frequently occurs" (1 through 4, respectively). Each item is scored for each respondent and then an average score for each item is computed based on the item responses across the school because the school is the unit of analysis. Following the health assessment instrument of each middle school under review, a numerical value was assigned based on the following scale, or ranges: 600-551=high; 551-525=above average; 524-511=slightly above average; 510-490=average; 489-476 (slightly below average; 475-450=below average; and 449-400=low.

The OHI-M indicated that SMS's overall health was 440, which is low, making SMS an unhealthy school (Table 1). The same OHI-M showed that AMS's overall health index is 556, or high (Table 2), and that GBMS is 574, also high, indicating a healthy school (Table 3). SMS is a feeder for MGM High School (MGMHS), whose projected dropout rate was 10%. AMS and GBMS are feeders for AB High School, whose projected dropout rate also was 10%.
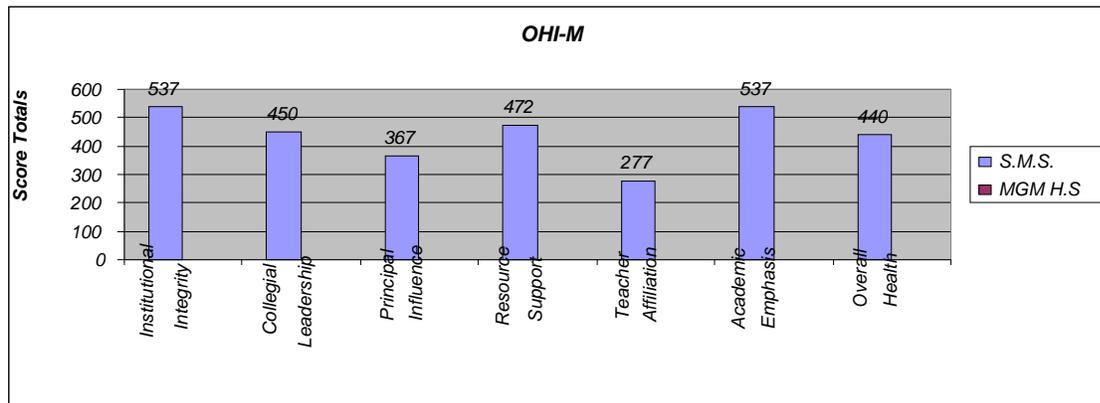
Table 1
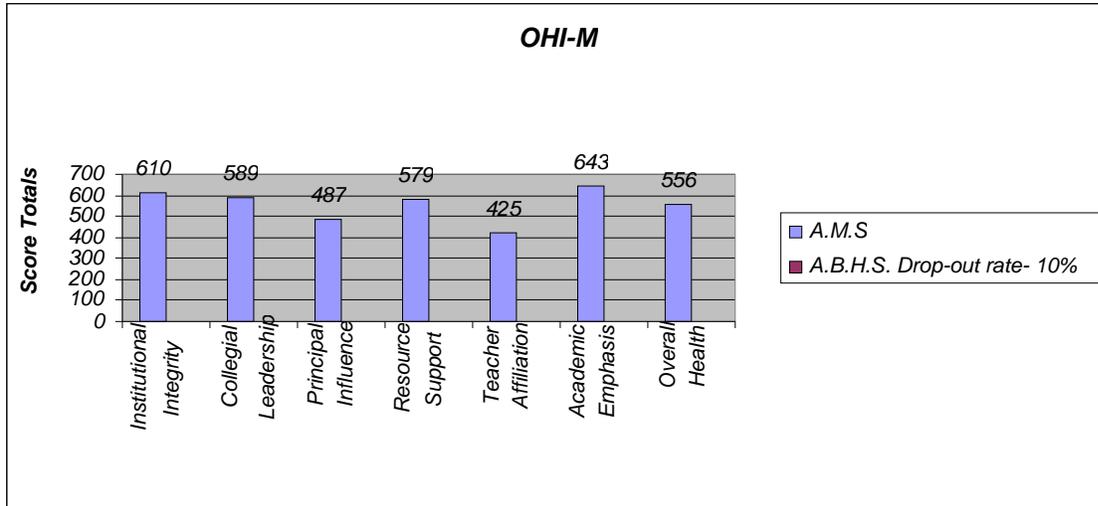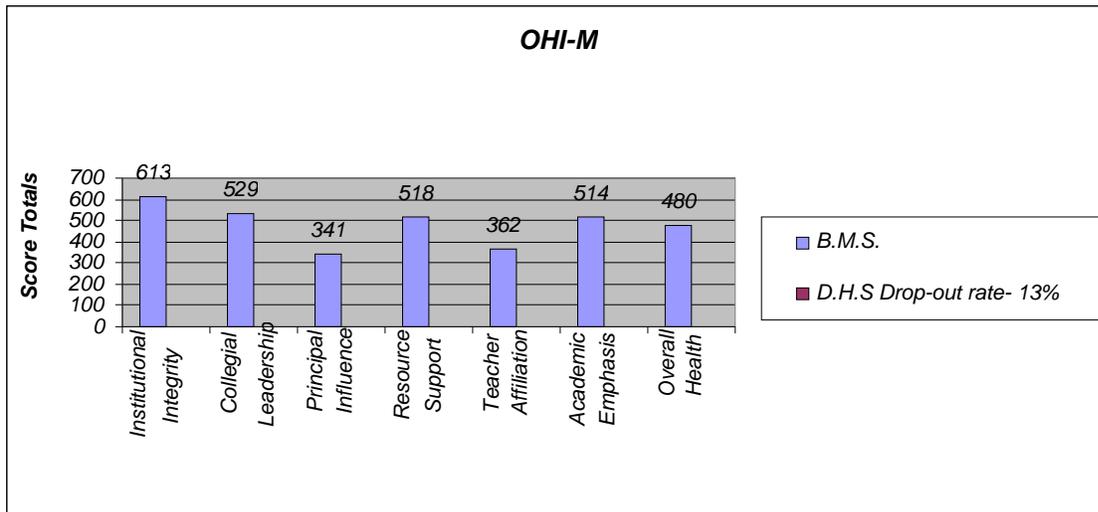
SMS Results

Table 2

AMS Results

Table 3

GBMS Results

Because the OHI-M is a perception-based measurement, the results *should* have indicated that SMS, with a low overall health rating, would cause a low projected dropout rate at MGMHS.   Barth (2004) declares that the rapport among faculty and administrators within a school influences student achievement and overall quality of the school environment. This perception has broad implications for educators as it lends support to the belief that a school's organization and structure, among other factors, can be just as vital to academic success as student expectations, behaviors, teaching & learning practices, and organizational structure. Data suggests that student ability alone does not account for the health of individual schools and, by inference, the school system. Based on the results of the OHI-M for the six feeder middle

schools utilized in this study, four were healthy (with a dropout rate of 8% or less) and two were sick (with a dropout rate above 8%); of the high schools, three were healthy and two were sick. Students attending the sick SMS, for example, went on to graduate from the healthy MGMHS. There seems to be a need for more professional development and a greater emphasis placed on maintaining interpersonal relationships between the administration, faculty, staff, and students at the feeder school (Table 4).

   The BMS OHI-M indicates that the principal's influence and teachers' affiliations were weak measuring scores of 341 and 356, respectively. The overall OHI-M score for BMS, 480, is an average school score.

   Students who complete BMS attend Davidson High School (DHS) – an LDSSSD – whose dropout rate is 13%, according to the state report card. This rate, being slightly above the 10% goal for the district, showed a correlation in the OHI-M to the dropout rate of the high school.
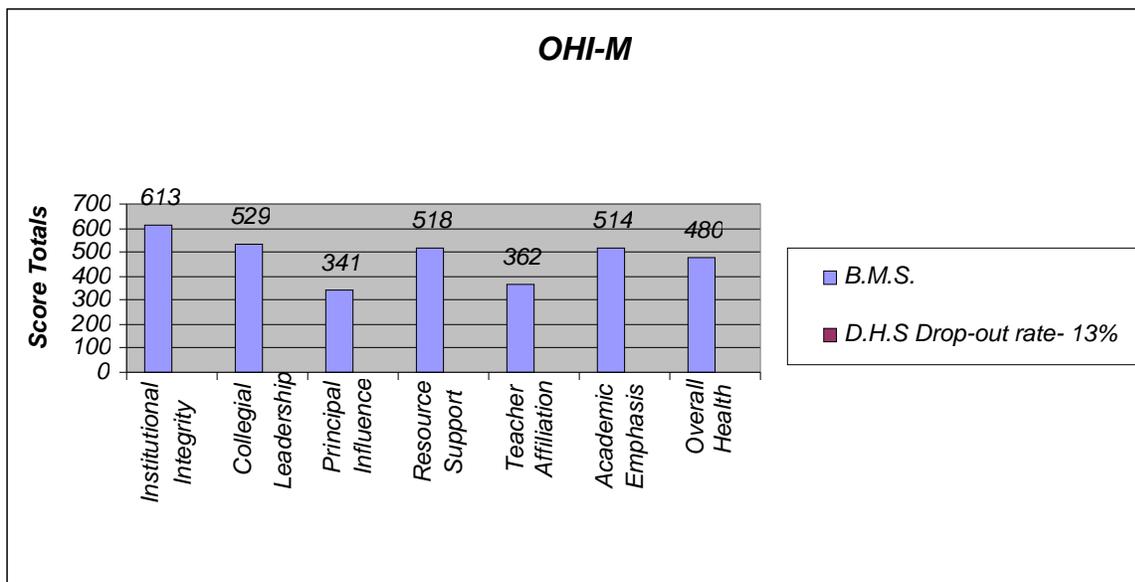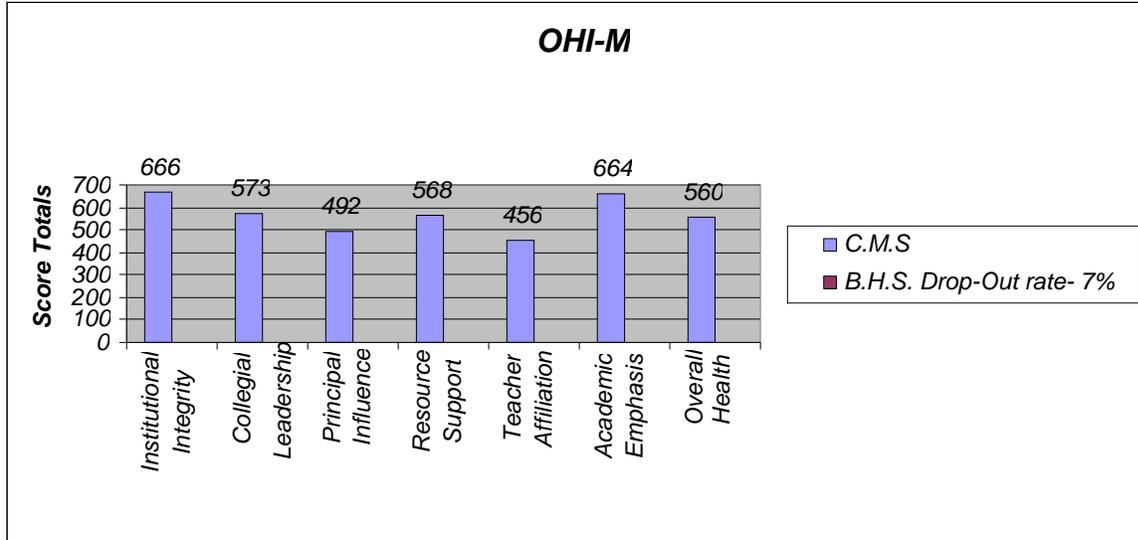
Table 4

BMS Results

Table 5

CMS Results

The CMS OHI-M indicated a weakness in teacher affiliation; the school's score in this area is 456, or below average. However, with a total health index of 560, or high, CMS is designated a healthy institution. Students who attended Baker High School (BHS) – its respective feeder being students from CMS – had a dropout rate of 7% or three percentage points lower than the maximum dropout/graduation rate that the state allows for a school that is to be considered healthy. In this instance, the dropout rate seemed to have a direct relationship to the OHI-M for Causey (Table 5).

Table 6

HMS results
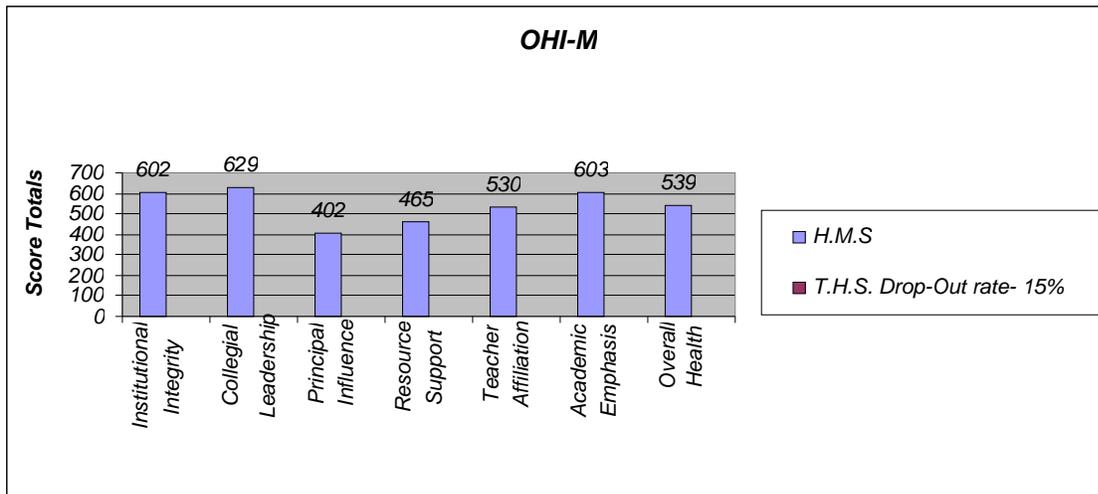
For HMS, the OHI-M survey indicated two weaknesses. The scores for principal's influence, 402, and resource support, 465, were low. The total health index for HMS is 539, which is above average. The dropout rate for Theodore, the high school for students who complete HMS, is 15%, or five percentage points higher than the a healthy school. Theodore's status does not seem to score with the healthy climate at HMS (Table 6).

With regard to this school district, the findings indicated that there is a difference in school health and dropout rates among some of the schools. The slightly below average health rating of BMS is correlative to the slightly higher dropout rate at DHS. Likewise, CMS's high health rating does not correlate with a below-average dropout rate. However, HMS has an above average health climate, but the dropout rate for the feeder high school is 7%.

Based upon the findings in this research, it is recommended that Education Administrators (EA) and professors pursue the following: 1. renew their energy and enthusiasm for the teaching and learning process; 2. make a complete paradigm shift from a single dimensional lens (test-taking) to one of three dimensional lenses (school safety, resources inertia, current curricula offerings); 3. become aware of low student achievement (reading) and motivation of eighth graders (sefatl.org, 2007); 4. become aware of poor school discipline that removes students from learning (sefatl.org, 2007); 5. set a goal for reducing the dropout rate by 8% annually; 6. create credit recovery programs to push students to graduate; 7. create freshmen academies which promote career pathways, test-taking skills, conflict resolutions skills, personal finance, health and wellness, and nutrition; 8. become trained on the use of the CAT Model of Instruction, where teachers are to coach, advise, and teach.

Conclusion

The authors undertook this study to determine whether there was a tautological correlation between feeder middle-school health or unhealthiness and public high-school projected dropout rates, as shown by the OHI-M. Only one of the six high schools in this study meet the national dropout rate of 8%. Students who attended a sick middle or junior-high school went on to graduate from a healthy high school while at other times, those attending a healthy middle or junior-high school later graduated from an unhealthy high school or dropped out before earning a regular diploma.

If this OHI-M index is precise, one would expect a direct correlation between a feeder middle school's health and a high school's projected dropout rate. The data obtained for this study suggests there is a direct correlation of the health of middle schools and the projected dropout rate of the respective high school. Because the OHI-M is not a precise method of determining the projected dropout rate of all high schools, the index should be used *only* to improve a school's health by making sure that the educational environment is conducive to learning for all students, especially ethnic social minorities, ESL learners and students with special needs (Hoy & Sabo, 1998). Some points worthy of consideration derived from the data collected in this school district of study are as follows: 66% of the middle schools were unhealthy along with 88% of the high schools. Our measure of a healthy high school is a dropout rate of 8% or less. That being the case, one might logically infer that students who finish unhealthy (3) middle or junior-high schools do not perform well once they are promoted to high

school. Conversely, three of the six middle schools scored below average or low on this instrument while only one of the high schools studied reached the dropout rate of 8%.

The authors suggest that further study will likely show that this school district's phenomenon discussed in this paper is not unique. Additional studies need to be conducted to explore posited relationships between administrative effectiveness, adult relationships in the school, poor teacher attendance, and student success. Many factors—socioeconomics, attendance, motivation, mentoring, personal decisions, school health—must be analyzed or implemented accordingly to move schools from being unhealthy to healthy or to prevent healthy schools from becoming unhealthy (Alford, & Nino, 2009). These conclusions are important as they may help lower the dropout rates of at-risk students who attend public schools in Alabama and other parts of the United States.

References

Alabama Department of Education. (2007-2009). *Reports*. Retrieved from
    http://www.alsde.edu/html/reports menu.asp
Alabama State Board of Education of Education v. E. B. McClain, 810 So. 2d 763 (Ala., 2001).
Alford, B., & Nino, M. (2009). Los principios los lideres escolares del cambio democratic:
    The principles and the principals of democratic change for culturally and linguistically
    diverse students. *The 2009 Yearbook of NCPEA,* 39-58.
Alliance for Excellent Education. (2008). *Fact sheet*. Retrieved from
    http://www.all4ed.org/files/AfAm_FactSheet.pdf
Balfanz, R., Bridgeland, J. M., Bruce, M., & Fox, J. H. (2012). *Building a grad nation: Progress
    and challenge in ending the dropout epidemic*. Retrieved from
    http://www.americaspromise.org/~/media/Files/Our%20Work/Grad%20Nation/Building
    %20a%20Grad%20Nation/BuildingAGradNation2012.ashx
Barth, R. (2004). *Learning by heart*. San Francisco, CA: Jossey-Bass.
Cavanaugh, S. (2004). Best programs empower students. *Education Week*, *21*(43), 46-49.
Children's Defense Fund. (2011). Portrait of inequality 2011. *Black Children in America*.
    Retrieved from http://www.childrensdefense.org/programs-campaigns/black-community-
    crusade-for-children-II/bccc-assets/portrait-of-inequality.pdf
Dorn, S. (1996). *Creating the dropout: An institutional and social history of school
    failure.* Praeger: Westport, CT.
Eccles, J. (1999). The development of children ages 6 to 14. *The Future of Children, 9*(2), 30-44.
    Retrieved from http://www.princeton.edu/futureofchildren/publications/docs/09_02_02.pdf
Goodman, K., Shannon, P., Goodman, Y., & Rapoport, R. (2004). *Saving our schools: The case
    for public education*. Berkley, CA: RDR Books.
Goals 2000: Educate America Act of 1994, Pub. L. No. 103-227, § 103d, 108 Stat. 125 (U.S.
    Department of Education, 1994).
Hefling, K. (2012, March 7). Report: Minority students face harsher punishments. *Montgomery
    Advertiser,* p. 3A.
Hoy, W. K. (2010). *Organizational Health Inventory for Middle Schools (OHI-M).* Retrieved
    from http://www.waynekhoy.com/ohi-m.html

Hoy, W. K., & Sabo, D. (1998). *Quality middle schools: Open and healthy*. Thousand Oaks, CA: Corwin Press.

Lee, J., & Wong, K. K. (2004). The impact of accountability on racial and socioeconomic equity: Considering both school resources and achievement outcomes. *American Educational Research Journal, 41*(4), 797-832.

Lee, V., & Burkam, D. T. (2003). Dropping out of high school: The role of school structure and organization. *American Educational Research Journal, 40*(2), 353-393.

Lunenburg, F. C., & Ornstein, A. C. (2004). *Educational administration: Concepts and practices* (4th ed.). Belmont, CA: Wadsworth Publishing Company.

Roney, K., Coleman, H., & Schlicting, K. (2007). Linking organizational health of middle grades schools to student achievement. *NAASP Bulletin*, *91*(4), 289-322.

Sawchuk, S. (2011, December 14). Teacher evaluations key to state chances for NCLB waivers. *Education Week, 31*(14). Retrieved from http://www.edweek.org/ew/articles/2011/12/14/14waive-bargain_ep.h31.html

Schott Foundation on Public Education. (2012). *Report: The Schott 50 State Report on Public Education and Black Males – 2012*. Retrieved from http://blackboysreport.org/urgency-of-now/index.html#/5/zoomed

Southern Education Foundation. (2007). *Reports*. Retrieved from http://www.sefatl.org/

U. S. Department of Education, National Center for Education. (2011). *The condition of Education 2011* (NCES 2011-033), Table A-20-1.