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RESEARCH ARTICLE

Academic Resiliency Among African-American Males in Secondary Schools

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In their effort to improve student achievement among low performing students, educators are implementing strategies that build resiliency and promote academic success. This study investigated the relationship between students' perception of resiliency-building factors, in schools and their levels of academic resilience and academic achievement. The study used a correlational research methodology with a self-report survey to collect data. The sample (n = 107) consisted of African-American male students attending four high schools in a school district located in the southwest region of North Carolina. The results of the analysis show that a significant and positive correlation exists between academic resiliency and GPA. Also, the findings reveal that there is a relationship between the perception of resiliency-building factors and academic resiliency. Subsequent discussions include literature related to academic resilience and resiliency-building strategies, implications of the study, and recommendations for educators.

Keywords: academic resilience, resiliency-building factors, academic achievement

In almost every city in the United States, disadvantaged African-American students grow up in urban communities plagued by joblessness, which leads to a host of other problems such as broken families, antisocial behavior, limited social networks, and a lack of informal social control (Borman & Overman, 2004; Toldson et al., 2009; Woodland, 2016). Similarly, schools located in these urban communities perpetuate these problems. Urban school districts and their schools often have limited financial resources, offer minimal academic opportunities, employ inexperienced or ineffective teachers, and are centered in low-income segregated neighborhoods (Borman & Overman, 2004).

The Supreme Court decision in the case of Brown v. Board of Education (1954) focused attention on the disparities that exist between the educational opportunities of Black and White students. Local, state and national assessment data show that African-American students enter kindergarten, on average, one year behind White kindergarten students, and fall further behind as they progress through school (Moore & Lewis, 2012). This fact is especially evident among African-American males who experience the lowest educational outcomes—i.e., grade-point average (GPA), reading and math assessment scores, graduation rates, dropout rate and attendance in post-secondary schools—of any other demographic group in the United States (Levin, Belfield, Muennig, & Rouse, 2007; Lewis et al., 2012; Toldson, Sutton, & Watkins, 2009). The lack of

academic success in school leads many African-American males to drop out before earning a high school diploma (McFarland et al., 2016; Woodland, 2016).

This growing problem, if not addressed, will leave an unacceptable number of African-American students unprepared to compete in a society that demands its citizens possess a higher level of intellectual capacities and educational training (Lewis et al., 2012). Taking this into account, the current study focused on academic resiliency among African-American males by examining three resiliency-building strategies—i.e., provide caring and support, set and communicate high expectations, and offer opportunities for meaningful participation—that researchers (Benard, 1993, 2004; Evans & Pinnock, 2007; Henderson & Milstein, 2003; Werner & Smith, 2001) suggest have an impact on academic achievement. Through quantitative analysis, this study determined whether the perceived existence of resiliency-building strategies, or factors, correlate with academic resilience and academic achievement of African-American male students.

The exploration of resiliency-building strategies includes examining the participants' perceptions as to whether teachers and school staff (a) provide caring and support, (b) set and communicate high expectations, and (c) offer opportunities for meaningful participation. The study also examines academic success—i.e., weighted and unweighted GPA—as it relates to students' perception of resiliency-building factors and their level of academic resiliency. The researcher will address two research questions: (a) To what extent does the students' perception of resiliency-building factors correlate with their level of academic resiliency, and (b) Is there a relationship between the students' level of academic resiliency and their level of academic achievement? The purpose of the study is to provide empirical evidence regarding potential relationships between (a) academic resiliency and academic performance, and (b) the perception of resiliency-building factors and academic resiliency.

LITERATURE REVIEW

In the United States, children from low socioeconomic backgrounds regularly face social and economic adversities that can have a negative impact on their lives. Lewis and his colleagues (2012) list a wide range of adversities outside of school—i.e., peer pressure, drugs, violence, mental and physical abuse, poverty, homelessness—that negatively influence the academic success of disadvantaged African-American students. This fact is too often the case among minority children living in poverty, who may encounter hardships daily (Floyd, 1996). The difficulties and challenges faced by many disadvantaged children hinder their academic performance in school and can ultimately lead to them dropping out (Jacob & Lefgren, 2009; Schargel & Smink, 2004; Wayman, 2002).

Minority students, especially African-American males, face additional issues in the classroom that affect their learning opportunities. McGee (2013) suggests that African-American male students regularly encounter racial bias, negative stereotypes, unfair disciplinary practices, and lower teacher expectations within the classroom. These issues combined with the educational inequalities that disadvantaged African-American males experience daily in inferior school settings—i.e., those lacking adequate academic resources and material, qualified teachers, and stable teacher and student populations—increase their risk of academic failure and compound the issues associated with poverty (Ladson-Billings, 2006).

Resilience

Most, if not all, children living in the worst of circumstances can develop positive coping mechanisms, overcome life challenges, and eventually make a decent life for themselves (Benard, 2004). This ability or capacity to overcome adversity and lead a healthy life is referred to as resilience (Henderson et al., 2007; Novotný, 2011). Resilience can strengthen protective skills in the face of external risk factors such as gangs, drugs, physical, verbal and sexual abuse, neglect, pregnancy, low teacher expectations and so forth (Winfield, 1994).

Early research studies (Benard, 2004; Bosworth & Earthman, 2002; Richardson et al., 1990) on resiliency found that some students facing extreme adversity in their lives were thriving despite their circumstances. Researchers (Benard, 1993; Ford, 1994; Wang et al., 1994; Werner & Smith, 1992; Wolin & Wolin, 1992) examined how students dealing with issues of abuse, neglect, homelessness, and other traumas associated with poverty were able to overcome their circumstances and succeed in school and life. These students, often referred to as resilient, overcome adversity as a result of "protective" factors that mitigate the harmful effects of risk factors (Thomsen, 2002; Werner & Smith, 2001; Wolin & Wolin, 1992).

Research has steadily moved beyond identifying and categorizing the individual, familial, and environmental protective factors of resiliency into the examination of resiliency as a dynamic developmental process (Constantine et al., 1999). As a result, Benard (2004) suggested schools can provide both environmental protective factors and suitable conditions for fostering individual resiliency traits in at-risk children. Additionally, Henderson and Milstein (2003) identified specific instructional strategies and practices—i.e., providing caring and support, setting and communicating high expectations, and offering opportunities for meaningful participation—which educators can use to build academic resiliency in students within the learning environment.

Academic Resilience

Research examining resilience and academic achievement in an educational environment led to the concept of "academic resilience" (Winfield, 1994). Wang, Haertel, and Walberg (1994) defined the phenomenon of academic resilience as "the heightened likelihood of success in school, and other life accomplishments despite environmental adversities brought about by early [adolescent] traits, conditions, and experiences" (p. 46). Whereas, Morales and Trotman (2004) define it as "the process and results that are part of the life story of an individual who has been academically successful, despite obstacles that prevent the majority of others with the same background from succeeding" (p. 8).

Although there has been substantial research done in the field of resilience as it relates to broader life events such as poverty, abuse, and violence (Cesarone, 1999; Evans & Pinnock, 2007; Luthar, 2006; Masten, 2001), there has been relatively little research focused on academic resiliency. Yet, researchers (Martin & Marsh, 2006, 2009; Morales & Trotman, 2004) have developed an academic resilience framework, which serves as an explanatory framework into why some students succeed while their peers from similar social and economic backgrounds do not. Through the academic resilience framework, researchers (Martin, 2002; Martin & Marsh, 2006) identify factors—i.e., valuing school, study management, engagement in school, class participation, and enjoyment of school—that are common among academically resilient students. Additionally, researchers (Benard, 2004; Henderson & Milstein, 2003) propose these and other

school-related factors—i.e., high expectations and caring relationships—mitigate risks and promote academic resiliency within the school environment. This assertion led to the exploration into which factors are most impactful in building academic resiliency in students who are subjected to risk, adversity, and negative environmental circumstances that often lead to academic failure (Evans & Pinnock, 2007; Henderson et al., 2007; Martin & Marsh, 2009; Morales, 2010).

Resiliency-Building Strategies

Building academic resiliency in students requires long-term strategies aimed at helping the child build social competence, develop problem-solving skills, understand him- or herself, and find a sense of purpose (Benard, 1993; Winfield, 1994). Adults can help children develop resilience throughout the developmental stages of their lives by creating protective processes that: (a) are long-term, (b) view children with strengths rather than with deficits, and (c) change systems, structures, and beliefs within the environment (Winfield, 1994). Three of the most notable ecological characteristics that promote the development of resilience are: (a) being caring and supportive, (b) setting positive expectations, and (c) providing meaningful opportunities for participation (Benard, 1993). By maintaining high academic standards, providing useful feedback with plenty of praise and opportunities for the students to share responsibility for their learning, schools are developing academically resilient students (Werner, 2007).

Being Caring and Supportive. A nurturing school environment contributes significantly to academic success, especially for struggling students in urban schools. This point is illustrated by the Kauai Longitudinal study, where Werner and Smith (2001) found that students, who overcome multiple adversities associated with poverty, perinatal stress, and family dysfunctions, credited teachers and school as their chief protective factors. Teachers and school personnel can have a motivational influence on the lives of students who seek academic excellence (Floyd, 1996; Morales & Trotman, 2004). In their role as educators and mentors, school staff provides the support needed for students to move beyond their current circumstances (Morales & Trotman, 2004). Furthermore, school administrators, teachers and support staff set clear and fair boundaries and structure, and give basic human respect and dignity that many children from impoverished communities do not see in their troubled homes (Benard, 2004; Theron & Engelbrecht, 2012; Thomsen, 2002).

Setting Positive Expectations. Henderson & Milstein (2003) suggest teachers can promote academic resilience by setting clear and realistic expectations for their students. Similarly, Weinstein (2002) proposes teachers can communicate high expectations and encourage academic resilience through (a) behaviors and attitudes that convey positive messages, (b) curriculum that is rich, varied, and provides opportunities to be successful; and (c) heterogeneous cooperative-learning groups. By establishing high expectations for students and giving them the tools needed to meet those expectations, teachers can increase the students' chances of academic success (Weinstein, 2002).

Providing Meaningful Opportunities for Participation. Meaningful participation is a fundamental human need (Benard, 1993). Therefore, students desire the opportunity to engage meaningfully in school (Henderson et al., 2007). To that end, teachers can provide students with

various opportunities to participate meaningfully in the classroom. For example, teachers can (a) give students more opportunities to answer questions and verbally participate in class, (b) seek student's opinions on issues, (c) ask higher-level questions, and (d) provide more hands-on activities (Henderson et al., 2007).

METHODS

This quantitative research study used a correlational research methodology to examine the relationship between resiliency-building factors, academic resilience, and academic achievement by focusing on the following research questions:

1. To what extent does the students' perception of resiliency-building factors correlate with their level of academic resiliency?
2. Is there a relationship between the students' level of academic resiliency and their level of academic achievement?

The researcher used an online self-report survey to collect data from the participants. The survey contained questions designed to gather demographic information from the participants, measure their levels of academic resilience, and quantify their perceptions of resiliency-building factors in the school. Using a correlational research method in conjunction with multiple linear regression data analysis, the researcher examined whether relationships exist between the variables—i.e., academic achievement, academic resilience and perceptions of resiliency-building factors.

School District and Participants Characteristics

The school district used in the study has approximately 42,000 students and is one of the largest in the southwestern region of North Carolina (North Carolina Department of Public Instruction (NCDPI), 2018a). The researcher recruited participants for the study from four traditional public high schools in the district. At the time of the study, the student population of the school district was 63.2% White, 17.1% Hispanic, 12.8% African-American and 6.9% Other (NCDPI, 2018a, 2018b). The combined student population of the four high schools from which the participants were recruited was 48.9% White, 25% Hispanic, 21.7% African-American and 4.4% Other (NCDPI, 2018a, 2018b). Additionally, 54.5% of the students attending the four high schools received free or reduced-price lunch (NCDPI, 2018a).

Participants. The researcher selected the participants using criterion sampling based on race, gender, and Grade-level classification—i.e., sophomore, junior, or senior. African-American male high school students in grades 10-12 were the target population for the research study. Each school used as a research site had an African-American male population of at least 7% (NCDPI, 2018b), which was higher than the district's African-American male high school population of 6.7% (NCDPI, 2018a, 2018b). Additionally, the four schools contained approximately 68% of the district's entire African-American male high school population (NCDPI, 2018a, 2018b). Table 1 illustrates the essential demographic characteristics—i.e., age, grade level, school site, and socioeconomic status—of the sample population. The mean age of the sample population (n = 107)

was 16.85 years old, with 11th graders making up the majority of the participants (41%, *n* = 44). The sample contained participants (54.2%, *n* = 58) who self-reported they were eligible for F/R priced lunch as well as those (45.8%, *n* = 49) that reported they were not.

TABLE 1

Number of Participants by Age, Grade, School, and F/R Lunch Status

Variable	*N*	%
Age in Years		
15	5	4.7
16	34	31.8
17	44	41.1
18	20	18.7
19	4	3.7
Grade		
10	33	30.8
11	44	41.1
12	30	28.1
School		
A	43	40.2
B	20	18.7
C	24	22.4
D	20	18.7
Eligible for F/R Lunch		
Yes	58	54.2
No	49	45.8

Data Collection

The researcher recruited the participants through information sessions held at their respective schools. All of the students, who attended the information sessions, were invited to participate in the study. Of the 267 students who attended the information sessions, 111 (42%) returned the required parental permission and consent forms. These students completed an online version of the survey or a paper copy. After the participants completed the surveys, the researcher gathered the academic achievement data—i.e., unweighted GPA and weighted GPA—from the participants' transcripts. The researcher removed four participants from the study primarily because of missing achievement data. The removal of these four participants left 107 participants in the sample population.

Instrument. The self-report survey used in the study is a compilation of questions taken from the Child and Youth Resilience Measure-12 (CYRM-12; Liebenberg et al., 2013) and the Healthy Kids Resilience Assessment (HKRA; Constantine et al., 1999). The survey was organized into three sections intended to (a) collect background information about the participants, (b)

measure their level of academic resiliency, and (c) gauge their perceptions of resiliency-building factors.

The first section of the survey collected demographic information such as age, grade-level, socioeconomic status, living situation, highest education level of the parent(s), number of times the student has been retained, and number of days absent from school. The demographic information about the participants was collected to gather a detailed profile of the participants.

The second section of the survey contained 12 questions (see Appendix A) adapted from the CYRM-12, which is explicitly designed to measure the academic resiliency of adolescents who face diverse forms of adversity (Liebenberg et al., 2013). The questions on the CYRM-12 are measured using a *Likert scale*—i.e., the most widely used approach to scaling responses in survey research (Gay et al., 2011)—to measure the participant's level of resilience. In each of the items—i.e., questions 1-12 of the survey—the participants had five responses from which to choose ranging from "1: not at all" to "5: a lot." The values—i.e., 1, 2, 3, 4 or 5—attached to each response option were averaged across all participants for all 12 items in the academic resiliency scale.

The third section of the survey consisted of nine items (see Appendix A) taken from the HKRA. The items asked the participants about their perceptions of three resiliency-building factors—i.e., caring relationships, high expectations, and opportunities for meaningful participation—commonly associated with the school environment (Constantine et al., 1999; Constantine & Benard, 2001; Hanson & Kim, 2007). The resiliency-building factors scale score was calculated by averaging the Likert scores for all nine items. Additionally, the researcher calculated subscales for participants' perception of (a) caring relationships, (b) high expectations, and (c) meaningful participation. For all the items used to compute these scale scores, the participants had four choices ranging from "1: Not at all true" to "4: Very much true." The scale score for resiliency-building factors consisted of all nine items—i.e., questions 13-21—whereas, the scale score for caring relationships was measured by items 13-15, high expectations were measured by items 16-18, and items 19-21 measured meaningful participation.

Before conducting the initial analysis, the researcher tested the reliability of the scales measured by the survey items with this sample using the Cronbach's alpha—the standard measure of internal consistency (Gay et al., 2011; Huck, 2008; Liebenberg et al., 2013). The Cronbach's alpha scores listed in Table 2 demonstrate an acceptable level of internal consistency (i.e., value of 0.7 or higher) for the scales and subscales: academic resiliency ($\alpha = .801$), resiliency-building factors ($\alpha = .814$), meaning participation ($\alpha = .756$), and high expectations ($\alpha = .777$). However, the scale for caring relationships ($\alpha = .635$) was below the suggested alpha value of 0.7. This can be explained by the fact that Cronbach's alpha analysis is sensitive to the number of items in the scale (Huck, 2008). As a result, Cronbach's alpha analysis can underestimate the internal consistency reliability of scales measured by a small number of items (Gay et al., 2011; Huck, 2008).

Measure of Academic Achievement. The participants' level of academic achievement was the dependent variable in the study. The researcher used the participants' GPAs to measure their level of academic achievement. The participants' unweighted and weighted GPAs were used because these measures of academic achievement are most commonly used in research and often serve as adequate indicators of a student's future academic success (York, Gibson, & Rankin, 2015).

TABLE 2
Cronbach's Alpha for Academic Resiliency and Resiliency-Building Factors Scales and Subscales

	Number of Items	Cronbach's Alpha	*M*	*SD*
Academic Resiliency	12	.801	4.19	.51
Resiliency-Building Factors	9	.814	3.15	.51
Perceptions of Caring Relationships	3	.635	3.31	.56
Perceptions of Meaningful Participation	3	.756	2.75	.80
Perceptions of High Expectations	3	.777	3.41	.55

Data Analysis

The participants' data were collected from the survey and scored. The researcher coded the data and conducted descriptive and inferential statistical data analysis. The descriptive statistics focused on the frequency and measures of central tendency—e.g., mean, mode, and median—within the data. Whereas, the inferential statistics conducted in the study helped identify relationships between the variables. Using the Pearson product-moment correlation, the researcher measured the strength and direction of the association between the variables—i.e., participants' perceptions, academic resiliency, and academic achievement—to determine whether relationships existed. Additionally, the researcher used multiple linear regression to further explain the relationship between the variables. This analysis allowed the researcher to determine the association between the independent variable and the dependent variable while holding all other variables constant (Gay et al., 2011; Huck, 2008).

RESULTS

Descriptive Statistics

The mean scores and standard deviation on the participants' perception of resiliency-building factors were as follows: (a) caring relationships ranged from 1 to 4 (M = 3.33, SD = .56); (b) high expectations ranged from 1.67 to 4 (M = 3.41, SD = .55); and (c) meaningful participation ranged from 1 to 4 (M = 2.75, SD = .80). The mean of the participants' perceptions of resiliency-building factors—i.e., an average of all nine items related to caring teachers, meaningful participation, and high expectations—ranged from 1.67 to 4 (M = 3.15, SD = .51). Table 3 provides a visual display of the descriptive statistics for academic resiliency, perceptions of resiliency-building factors, and academic performance.

TABLE 3
Descriptive Statistics

	n	Minimum	Maximum	*M*	*SD*
Academic Resiliency	107	2.83	5	4.19	.51
Resiliency-Building Factors	107	1.67	5	3.15	.51
Perceptions of Caring Relationships	107	1.00	4	3.31	.56
Perceptions of High Expectations	107	1.67	4	3.41	.55
Perceptions of Meaningful Participation	107	1.00	4	2.75	.80
GPA	107	1.06	3.81	2.46	.63
Weighted GPA	107	1.13	4.16	2.59	.74
Age	107	15	19	16.85	.91

Research Question 1

To what extent does the students' perception of resiliency-building factors correlate with their level of academic resiliency? The researcher used the Pearson product-moment correlation to determine whether there was a relationship between the participants' academic resiliency scale score and their resiliency-building factors scale score. Additionally, Pearson's correlation analysis was conducted to determine the correlation between academic resiliency and the subscale scores for caring relationships, opportunities for meaningful participation, and high expectations. The correlation coefficient, *r*, commonly used as the effect size when paired quantitative data are used, indicates the strength of the relationship based on the criteria of .1 = small or weak association, .3 = moderate correlation and .5 = strong or large correlation (Cohen, 2009; Huck, 2008). Also shown below is the related effect size, r^2, which is the proportion of the variance in the dependent variable that is predictable from the independent variable (Cohen, 2009; Gay et al., 2011). Pearson's correlation analysis revealed the following results:

1. Small positive correlations exist between: (a) academic resiliency and perception of caring relationship ($r(101) = .264$, $p < .01$; $r^2 = .07$); and academic resiliency and perception of high expectations ($r(101) = .296$, $p < .01$; $r^2 = .09$).
2. Moderate positive correlations exist between academic resiliency and perception of meaningful participation ($r(101) = .427$, $p < .01$; $r^2 = .18$); and academic resiliency and resiliency-building factors ($r(101) = .431$, $p < .01$; $r^2 = .19$).

The correlations between the participants' level of academic resiliency and their perceptions of resiliency-building factors are positive and statistically significant. These correlations are small in effect size where the r-squared value is .12 or below, but medium in size where the r-squared value is between .13 to .25 (Cohen, 2009).

The multiple linear regression analysis was calculated to predict academic resiliency based on the independent variables—i.e., perception of resiliency-building factors, age, and free and reduced lunch status. The results of the analysis showed that these variables statistically significantly predict academic resiliency, $F(3, 99) = 8.133$, $p < .001$, $R^2 = .198$. The participants' perception of resiliency-building factors (B = .390, $t(102) = 4.64$, $p < .001$) was a statistically significant predictor of academic resiliency, whereas free and reduced lunch status (B = -.002, $t(102) = -.020$, $p = .984$) and age (B = .057, $t(102) = 1.23$, $p = .244$) were not. The predictive model for the participant's level of academic resiliency was: academic resilience = 2.049 + (.390*perception of resiliency-building factors) – (.002*free and reduced lunch status) + (.057*age), where free and reduced lunch status is coded as 0 = no and 1 = yes, and age is measured in years.

Research Question 2

Is there a relationship between students' level of academic resilience and their level of academic achievement? Pearson's correlation analysis on academic resiliency and both measures of academic achievement—i.e., unweighted GPA and weighted GPA—found the following:

1. The correlation coefficient, *r*, for the relationship between academic resiliency and GPA indicated a statistically significant, small positive correlation, $r(105) = .227$, $p < .05$; $r^2 = .05$.
2. The correlation coefficient, *r*, for the relationship between academic resiliency and weighted GPA showed a statistically significant, small positive correlation, $r(105) = .228$, $p < .05$; $r^2 = .05$.

The results indicate there is a statistically significant and positive relationship between the participants' academic resilience and their academic achievement. These correlations are small in overall effect but are generally accepted for studies in the fields of social sciences, which attempt to predict human behavior (Cohen, 2009).

The multiple linear regression analysis was calculated to predict participant's GPA based on the independent variables—i.e., academic resiliency, age, and free and reduced lunch status. The results of the analysis revealed that the independent variables statistically significantly predict participant's GPA, $F(3, 103) = 7.468$, $p < .001$, $R^2 = .179$. The participant's level of academic resiliency (B = .242, $t(106) = 2.18$, $p < .05$) and free and reduced lunch status (B = -.438, $t(106) = -3.82$, $p < .001$) were statistically significant predictors of their GPA. However, age (B = -.034, $t(106) = -.53$, $p = .60$) was not statistically significantly to the prediction. The predictive model for the participant's GPA was: Predicted GPA = 2.246 + (.242*academic resiliency) – (.438*free and reduced lunch status) – (.034*age), where free and reduced lunch status is coded as 0 = no and 1 = yes, and age is measured in years.

DISCUSSION

The results of the study showed statistically significant correlations between the participants' level of academic resilience and their perceptions of resiliency-building factors—i.e., caring relationships, opportunities for meaningful participation and high expectations. These findings are consistent with an earlier study conducted by Corprew and Cunningham (2012) that suggested school staff, especially teachers, are influential in the development of adolescents. The point is even more relevant for African-American males because their perceptions of teacher support play a critical role in their academic achievement and future accomplishments in life (Corprew & Cunningham, 2012; Swanson et al., 2003). To this end, teachers and school staff can help students, particularly African-American males, develop the ability to overcome adversity by implementing resiliency-building strategies—i.e., developing positive relationships, setting high expectations, and providing meaningful opportunities for student participation.

The findings of the study revealed there was a small, positive correlation between the participants' level of academic resiliency and their academic achievement as measured by weighted and unweighted GPA. These findings are consistent with the results of other research studies (Stewart, 2007; Williams & Bryan, 2013) that propose academic resiliency contributes to the academic success of African-American males. There is a growing body of research (Borman & Overman, 2004; McGee, 2013; Morales & Trotman, 2004; Williams & Bryan, 2013) that show a connection between academic resilience and academic achievement of minority students, especially those who are at risk of academic failure due to their circumstances. With this in mind, educators can utilize instructional practices that foster academic resiliency to help students become more successful in school. Furthermore, educators who develop academic resiliency in their students are preparing them for success beyond the classroom (Borman & Overman, 2004; Padrón, Waxman, & Lee, 2014; Waxman & Huang, 1996; Winfield, 1994).

Limitations of the Study

Like any research study, the current study has limitations beyond the control of the researcher (Gay et al., 2011). Therefore, it is wise to evaluate the results of this study with its limitations in mind. The concise nature of the non-experimental quantitative research design used in the study is a limitation. This research design does not involve experimentation or applied treatment; therefore, there is no post-treatment data to gather or analyze (Gay et al., 2011). The non-experimental, correlational research methodology used in the study allowed the researcher to determine relationships between the variables. However, causal-comparative or experimental studies are needed to determine the nature of the relationship (Gay et al., 2011).

Another limitation of the study involved the delivery method for the survey. Initially, the researcher planned to administer all the surveys online. However, some participants did not have access to a computer on the day the researcher administered the surveys. As a result, those participants completed a paper copy of the survey. Using a mixed-mode approach—i.e., offering the option of completing an online and paper survey—allowed all the participants to complete the survey even when there was limited access to computers (Carini et al., 2003). However, the decision to use a mixed-mode method might have inadvertently influenced the participants' responses to the survey items, because research has shown that responses to online surveys are

often more favorable than responses to the same surveys given in the paper form (Carini et al., 2003).

The final limitation of the study was the small sample size. Out of 439 possible candidates for the study, only 107 students volunteered to participate in the study. The sample population in the study did not contain 50% of the available target population. As a result, one could argue that analysis using a more extensive sampling of the target population might have produced different results. In the future, similar studies on academic resiliency and resiliency-building strategies may benefit from a larger sampling of the target population.

Implications for Educators

Given the current concerns regarding the academic performance of African-American males, the findings of this study have several implications for educators. The correlation between academic resiliency and GPA supports the argument for implementing programs and interventions that utilize resiliency-building strategies to increase the students' levels of academic resiliency and eventually lead to better academic performance. Therefore, educators should expose students, especially African-American males, to resiliency-building factors, which can minimize the adverse effects of risk factors. This argument is supported by research findings (Levin et al., 2007; Livingston & Nahimana, 2006; McGee, 2013) that illustrate the need to create interventions, curriculum, and programs focused on improving academic resiliency and achievement among African-American males.

Aside from gaining a better understanding of academic resiliency and resiliency-building factors, educators should identify interventions and programs based on the philosophy of fostering academic resiliency with a proven record of success. Such interventions may be especially beneficial to African-American males, who are at the highest risk of academic failure and adverse life outcomes. Research (Jennings, 2003; Scales et al., 2006; Waxman & Huang, 1996) has shown that resiliency-building factors, such as caring relationships with adults, may mitigate the adversities facing many African-American males. Therefore, educators need to look for opportunities to develop caring and supportive relationships with African-American males, who often need more incentive to engage in school (Williams & Bryan, 2013).

Researchers (Henderson et al., 2007; Henderson & Milstein, 2003; Toldson et al., 2009) provide educators with practical ways to integrate resiliency-building strategies into their daily classroom routines and instructional practices. For example, teachers can incorporate the following resiliency-building strategies (Benard, 2004; Henderson et al., 2007; Henderson & Milstein, 2003):

1. Caring and supportive—Creating a positive and nurturing classroom where students feel a sense of belonging, and there is an emphasis on cooperation and caring, celebrations and rites of passages, and reaching out to get and give help when needed;
2. High expectations--Setting clear academic goals and expectations, providing opportunities for supportive and corrective feedback, facilitating cooperative learning opportunities and celebrating achievements; and
3. Meaningful participation—Creating opportunities for high levels of student involvement and responsibility in the classroom, diversifying effective teaching and learning strategies, encouraging involvement in extracurricular activities, and recognizing the value of participating and cooperating.

Teachers who want to remove the academic obstacles encountered by many African-American males can start by implementing these strategies as well as those outlined in the literature on academic resiliency.

Educational leaders and policymakers can support teachers in their efforts to improve academic achievement among students who face significant challenges in and outside of school. Based on the findings in this study, educational policymakers would be well advised to address educational reform through the framework of resiliency (Benard, 2004; Henderson et al., 2007). By developing educational reform policies aimed at promoting resiliency-building strategies, educational leaders can help teachers build resiliency in students who are at risk of academic failure because of the structural and systemic problems in America's education system. Moreover, by focusing on academic resiliency, policymakers can implement policy changes that address the barriers hindering the academic success of African-American males (Thompson, 2010).

RECOMMENDATION FOR FUTURE RESEARCH

Future research should utilize a longitudinal design model and focus on fostering academic resiliency over time using resiliency-building strategies. Longitudinal studies would allow researchers to measure the existence and impact of these strategies as well as risk factors at different stages of the student's academic career (Gay et al., 2011). Research (Rak & Patterson, 1996; Richardson et al., 1990; Werner, 2007) has shown that the development of academic resilience is a dynamic process influenced by both risk and protective factors, and is continuously changing over time. An individual's levels of academic resilience increase and decrease as he or she is exposed to different risk factors and protective factors associated with resiliency-building strategies (Martin & Marsh, 2009; Morales, 2010). As such, a longitudinal approach would be ideal for further investigation of the impact of resiliency-building strategies on academic resilience and academic achievement.

The current study can be expanded to include African-American females in the sample population. Research (Morales & Trotman, 2004; Sun & Stewart, 2007) shows that African-American females are plagued by similar adversities as African-American males especially living in urban communities, for example, racial biases, poverty, physical abuse, and homelessness. In some cases, African-American female students endure even greater hardships than males—i.e., sexual harassment and abuse, and racial and gender stereotypes (Smith-Evans & George, 2014). Future studies should aim to recruit African-American male and female students and examine academic resiliency, resiliency-building factors and academic achievement based on gender.

CONCLUSION

Mounting evidence related to academic resilience in African-American males is leading researchers and educators to believe that understanding how and why some students can overcome life's challenges and succeed in school can serve as a way of promoting academic success in all students, especially those of color. It is common to focus on the role that poverty, educational opportunity gaps, and funding disparities have played in the persistence of the achievement gap, but building-level educators—i.e., teachers, counselors, and administrators—have little to no

control over these issues. Therefore, it is better to invest time and energy in studying factors, which contribute to academic resilience, especially those over which educators have the most considerable influence. Continued research in this area would allow educational leaders to implement interventions and strategies that would ensure the ongoing development of resilience in students, especially those who, without these support mechanisms, would most likely succumb to the hardships they face daily.

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APPENDIX A

TABLE A1
Research Study Survey Constructs and Scales

Item	Scale	Variable
1	AR	I have people I look up to.
2	AR	Getting an education is important to me.
3	AR	My parent(s)/caregiver(s) know a lot about me.
4	AR	I try to finish what I start.
5	AR	I am able to solve problems without harming myself or others.
6	AR	I know where to go in my community to get help.
7	AR	I feel I belong at my school
8	AR	My family will stand by me during difficult times
9	AR	My friends stand by me during difficult times
10	AR	I am treated fairly in my community
11	AR	I have opportunities to develop skills that will be useful later in life
12	AR	I enjoy my cultural and family traditions
13	CR	There is a teacher or some adult who really cares about me.
14	CR	There is a teacher or some adult who tells me when I do a good job.
15	CR	There is a teacher or some adult who notices when I'm not there.
16	HE	There is a teacher or some adult who always wants me to do my best.
17	HE	There is a teacher…who listens to me when I have something to say.
18	HE	There is a teacher or some adult who believes that I will be a success.
19	MP	At school, I do interesting activities.
20	MP	At school, I help decide things like class activities or rules.
21	MP	At school, I do things that make a difference.

Note. AR = Academic Resiliency, CR = Caring Relationship, HE = High Expectations, MP = Meaningful Participation, and RS = Resiliency-Building Strategies (scale consists of items 13-21).