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ABSTRACT

Name: Pearl Lackner Major: Psychology & Neuroscience

TITLE

MERGINIG SOCIAL PSYCHOLOGY & A JESUIT EDUCATION

Advisor's Name: Dr. Brian Drwecki

Reader's Name: Dr. Rebecca Betjemann

This meta-analysis examines the correlation between self-esteem and academic achievement in African Americans across 27 separate studies (resulting in 41 measures of effect size) that included 9872 individuals in total. Statistical analysis indicates that overall, self-esteem accounted for 4% of the variation in academic achievement ($\bar{r} = .21$, n = 9872, Bayesian 95% CI = 0.14-0.27, p < .05). In line with the common research practice utilized in examining the relationship between self-esteem and academic achievement, the effects of global self-esteem measures and academic-specific self-esteem measures were examined separately (Bachman & O'Malley, 1986; Bouchey & Harter, 2005; Dusek, 2000; Fuligni, 1997; Harter, Waters, Whitesell, & Kastelic, 1998; Mann, Hosman, Schaalma, & de Vries, 2004; Scheier, Botvin, & Griffin, 2000; Tafarodi & Miline, 2002; Wigfield, Eccles, & Schiefele, 2007), and individual effect sizes were calculated for both global measures and academic specific measures of selfesteem. These analyses indicate that global measures of self-esteem account for less than 1% of the variation in academic achievement ($\bar{r} = .1$, n = 5808, k = 23, Bayesian 95% CI = 0.06-0.14, p< .05), whereas academic specific self-esteem accounts for almost 13% of the variation in academic achievement ($\bar{r} = .36$, n = 4046, k = 18, Bayesian 95% CI = 0.34-0.37, p < .05). These results are discussed in the context of reducing the academic achievement gap.

A META-ANALYSIS INVESTIGATING THE CORRELATION BETWEEN SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN AFRICAN AMERICANS: MERGING SOCIAL PSYCHOLOGY AND A JESUIT EDUCATAION

A thesis submitted to
Regis College
The Honors Program
in partial fulfillment of the requirements
for Graduation with Honors

by Pearl Lackner

May 2014

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Preface

One of the best pieces of advice that I think I've ever been given is to find the one thing – the one issue, injustice, or inequality – in this world that pisses you off most, and to dedicate your life to it. If it's as extensive and encompassing as so many of the major injustices in our world are, your passion will never diminish, and you'll always have something to fight for, and to work toward. In many ways, this seems to be in line with the premise of a Jesuit education: find what pisses you off, what sets your heart on fire, what allows you to serve the world's deepest hungers, and go enact change.

In order to understand where my thesis has taken me, I feel that it's important to understand where my thesis began. To give you a quick rundown of what you're in for, I'll first discuss the process of arriving at my current thesis topic, followed by an overview of my research method and results, and will conclude with a discussion as to why we – not only as humans existing in a global community, but specifically as humans existing in a Jesuit-oriented world – should be invested in the implications of this topic.

One of my primary endeavors throughout the thesis process has been to merge my passion for social psychology with the ideals of a Jesuit education in a way that provides meaning, not only in my life but hopefully in the lives of others. In many ways, social psychology and the Jesuit mission work toward similar ends; however, as I see it, there seems to be a disconnect between conducting research and putting this research into action in effective and relevant ways that will actually benefit real life human beings. In too many cases, the research that is conducted doesn't reach the general public, let alone those populations of people that are most likely to benefit from these studies. This disconnect encompasses one of my primary struggles with the field of psychology as it currently functions, and begins to describe what I had hoped to achieve through this thesis.

Based on these qualms, it likely isn't surprising that at the start of the thesis process, I was not investigating the correlation between self-esteem and academic achievement in African Americans, and I certainly was not conducting a meta-analysis, on that or any other topic.

Generally speaking, my passion was youth entrenched in or affected by gang culture, and my goal was to shape my thesis around immersing myself into this community in an attempt to discover and document the needs of these people. I had intentionally given myself very little structure in order to allow my thesis to take whatever shape it saw fit; I believed – and still do – that too much of our research on marginalized populations is tainted by the biases of White researchers because in some ways we are deaf and blind to the deepest needs of our society. We are unable, or possibly unwilling, to step outside the constraints of our theories and our hypotheses in order to truly see and hear what it is that our world desires. So, that was the dream: to step outside of myself, and to listen.

Needless to say, that didn't work out quite as I had intended. One of the most painful and disappointing experiences that I've had whilst at Regis, and probably the most difficult truth that Dr. D had to give me, was that I simply didn't have time to accomplish this goal. And of course I didn't. This proposed thesis was not the simple matter of having a few casual conversations with these communities about what they wanted, and needed; this was about forming relationships built on trust, and about showing that I – a privileged little White girl – truly wanted to learn from them, and to be in service with and for them. It could take years – if not a lifetime – to achieve that goal, a goal that I still have every intention of pursuing.

So, the question became how I could apply my passion in a way that was manageable in the time frame I had and in the scope of this project. Gang research is fairly limited, and generally focuses on an older population, with scattered research on current prevention and

intervention methods for school-aged children, but there wasn't really enough information to do any sort of review article or meta-analysis justice. And in reality, I had no desire to simply write an article for the sake of putting words on paper. However, compromises had to be made, and I ultimately had to make the choice between taking one small step – that being the acquisition of knowledge – toward my ultimate goal, or remaining in the same place. Ergo: a meta-analysis investigating the correlation between self-esteem and academic achievement in African Americans seemed like a pretty worthy endeavor.

As you'll find out later in this document, academic specific self-esteem plays a rather important role in the GPAs of African American students, and global measures of self-esteem are nearly negligible – as predicted. While these numbers are interesting, a more important question needs to be addressed, a question that the Honors program has taught me is critical in truly understanding the implications of what we are taught: so what? Why does it matter that global self-esteem accounts for less than 1% of the variation observed in GPA and that academic self-esteem accounts for about 13% of this variation? Out of context, I suppose it doesn't really matter much. When provided with some background information, maybe it starts to matter a little more.

There an entire body of literature that indicates the existence of an academic achievement gap between European American students and African American students in which African American students lag far behind European American students in terms of academic attainment. Results from the National Assessment of Educational Progress (NAEP) have been a main source of documentation of the evolution of the achievement gap since the early 1970s, generally showing that despite the slight narrowing that has been observed in achievement gap over the past decade, a significant disparity in academic achievement still exists, leaving a majority of

African Americans about 20 test-score points – or an average of two grade levels – behind the academic level of their same-age European American peers. Let me repeat that: Black students are, on average, two grade levels behind their White peers, due not to any fault of their own, but to severe flaws in our education system. Phrased another way, the education system is failing our Black youth.

More explicitly stated, these reports indicate that the reading achievement scores of the examined populations show that whereas 43% of 4th grade European American students scored at or above the *Proficient* level, only 14% of 4th grade African American students showed scores at or above this level; in fact, about 54% of African American students at the same grade level showed scores below the *Basic* achievement level. These trends continued in the 8th and 12th grades: 40% of European American students and 13% of African American students in the 8th grade, and 43% of European American students and 16% of African American students in the 12th grade scored at or above the *Proficient* level on these reading exams. Mathematics scores followed similar trends at all examined grade levels. To reiterate: our education system is failing our Black youth.

Now that we're addressed the existence of this failure, we must address the causes. According to the results of my study, academic specific measures of self-esteem could account for about 13% of this variation. So, what about the other 87% of this variation? What other factors could be at play in the disparity between the levels of achievement shown in European American students and those shown in African American students? When you look at the data, two unsettling realities are made highly apparent: poverty and institutional racism are undoubtedly involved. Two major areas of research on the achievement gap focus on the effects that educational institution differences, such as class size, teacher's competency, and low

resources might have on levels of academic performance, and the potential effects that home environment, such as poverty, education, income, family size, marital status, and number of books in the home, may have on academic attainment. The U.S. Department of Education's 2010 National Center for Educational Statistics report conveyed the following statistics related to poverty and institutional racism: the family demographics of the examined population showed that around 34% of African American children were living in poverty, compared to 10% of European American children. The school demographics of the examined population showed that about 25% of secondary mathematics teachers who taught in schools with at least a 50% African American student population had neither a certification nor a college major in mathematics in comparison to only about 8% of teachers with similar educational backgrounds teaching in schools with at least a 50% European American student population. This exemplifies the detrimental effects of institutional failures paired with poverty. What can we do to end such injustices?

As much as we may enjoy dwelling in the false ideation that our society is moving toward equality, these statistics are the sharp slap of solidarity showing us that we are far from existing in a world of racial equality. More importantly, these statistics are a call to action; an undeniable testimony to the forces of poverty and institutional racism that are leaving a primary facet of our society behind. This is an undeniable testimony to the injustices that a group of human beings who are wholly worthy of equality and respect are facing at the hands of our institutions, as we sit idly by and allow these people to suffer. To do nothing is to perpetuate these prejudices.

As I'm sure most of you have concluded at this stage, this is what pisses me off; it pisses me off that despite constantly touting our advances in social justice and equality, amidst claims

of declining racism and discrimination, our society is far from equal, and children are suffering. Minority children are suffering at the hands of *our* institutions, institutions that treat White children as if they're worth more solely based on the color of their skin. It pisses me off that these minority children aren't given the same educational opportunities as their White peers, which in many ways determines the trajectory of their entire lives. It pisses me off that our institutions, and our general majority culture, make minority members believe that they are unable to succeed. And it pisses me off that these minority children are so unable to connect with and belong to our White society that they feel forced to engage in periphery cultures, such as gang culture, just to feel some semblance of belonging, and that we then have the audacity to blame these children for "choosing" to become entrenched in a gang lifestyle.

This becomes my question: how can I use social psychology to empower people that exist feeling as if they don't have a voice? How can I use my voice to rectify one of our world's great injustices? This meta-analysis may not have allowed me to put my passion into action, but it provided me with knowledge, and as we all know, knowledge power. So, this is the war I choose to wage.

This may not be where your greatest passion intersects with one of the world's deepest hungers, but this is your war as much as it is mine. As a human in our global community, every person in this room is responsible for working to rectify these injustices. As a member of our Regis community, every person in this room has been instilled with the Jesuit mission, and the six core Jesuit values: finding God in all things, contemplatives in action, unity of heart and mind, Magis, care for the whole person, and men and women for and with others. Each of these values should remind us that the purpose of a Jesuit education is not simply to gather and regurgitate information, but to allow the information that we glean to transform our hearts and

minds into beings at the service of the world, in whatever facet we may choose. Therefore, we must take this knowledge of racism and poverty, allow it to transform our hearts and minds, and allow our hearts and minds to transform the world. We have the power to transform the world; we simply have to have the *courage* to do so.

Acknowledgements

I'd like to take a moment to thank some of the people that have been an absolutely crucial aspect of making this thesis a reality. So, to Martin Garnar and Drs. Bowie and Howe, thank you for the past year and a half of guidance in the dark time that was my thesis process, and more specifically to Drs. Bowie and Howe, for not allowing me to drop thesis like I so urgently tried to do. I'd also like to thank Dr. Betjemann, for her wonderful insight and careful precision, which ultimately led to a much more coherent and thoughtful thesis. And last – but most certainly not least – to Dr. Drwecki, for everything: for assisting me in discovering my passion, for never failing to tell me the hard truths – despite knowing that it was almost guaranteed to end in tears (on my part, not his), and for guiding me through the research process, one grueling step at a time, and for being the best mentor I could possibly have asked for, and the only one that I would want. Without each of these people, this document would not exist, so thanks a million.

A Meta-Analysis Investigating the Correlation between Self-Esteem and Academic Achievement in African Americans

Abstract

This meta-analysis examines the correlation between self-esteem and academic achievement in African Americans across 27 separate studies (resulting in 41 measures of effect size) that included 9872 individuals in total. Statistical analysis indicates that overall, self-esteem accounted for 4% of the variation in academic achievement ($\bar{r} = .21$, n = 9872, Bayesian 95% CI = 0.14-0.27, p < .05). In line with the common research practice utilized in examining the relationship between self-esteem and academic achievement, the effects of global self-esteem measures and academic-specific self-esteem measures were examined separately (Bachman & O'Malley, 1986; Bouchey & Harter, 2005; Dusek, 2000; Fuligni, 1997; Harter, Waters, Whitesell, & Kastelic, 1998; Mann, Hosman, Schaalma, & de Vries, 2004; Scheier, Botvin, & Griffin, 2000; Tafarodi & Miline, 2002; Wigfield, Eccles, & Schiefele, 2007), and individual effect sizes were calculated for both global measures and academic specific measures of selfesteem. These analyses indicate that global measures of self-esteem account for less than 1% of the variation in academic achievement ($\bar{r} = .1$, n = 5808, k = 23, Bayesian 95% CI = 0.06-0.14, p = .1< .05), whereas academic specific self-esteem accounts for almost 13% of the variation in academic achievement ($\bar{r} = .36$, n = 4046, k = 18, Bayesian 95% CI = 0.34-0.37, p < .05). These results are discussed in the context of reducing the academic achievement gap.

Introduction

Numerous research studies highlight the existence of a racial academic achievement gap in which African American students lag far behind European American students in terms of

educational attainment and success (Aunola, Stattin, & Nurmi, 2000; Bali & Alvarez, 2003; Davis-Kean & Jager, 2014; DuBois & Hirsch, 2000; Farkas, 2006; Flores-Fahs, Lorion, & Jakob, 1997; Fryer & Levitt, 2004; Itzhaky & Lipschitz-Elhawi, 2004; Jencks & Phillips, 1998). Results from the National Assessment of Educational Progress (NAEP) have been a main source of documentation of the evolution of the achievement gap since the early 1970s, generally showing that despite slight fluctuation in the size of the gap observed between African American and European Americans students (McNeil, 2000; Miller 1995), this gap has remained significantly large and virtually unchanged (Brown-Jeffy, 2009; Harris & Herrington, 2006; U.S. Department of Education, 2001), clearly highlighting the need for a deeper understanding of the achievement gap if necessary social changes are to be made.

The Extent of the African American and Caucasian Achievement Gap

Despite the slight narrowing that has been observed in achievement gap, a significant disparity still exists. In comparison to their same grade-level European American peers, African American students show, on average, a two grade level deficit in both mathematics and reading (Bali & Alvarez, 2003; Brown & Lee, 2005; NAEP, 2009, 2011; NCES, 2009, 2011; Oates, 2009; Wilson, 1998), a disparity that undoubtedly maintains the potential for the achievement gap to proliferate (Fryer & Levitt, 2004; Heubert & Hauser, 1999; Irvine, 1990; Jencks & Phillips, 1998; McNeil, 2000; Miller, 1995; Viadero, 2000). For example, reading achievement scores from the National Assessment of Educational Progress's 2011 education report showed that whereas 43% of 4th grade European American students scored at or above the *Proficient* level, only 14% of 4th grade African American students attain this status. These data also indicate that 54% of 4th grade African American students scored below the *Basic* achievement level. These trends in reading proficiency continued in the 8th grade, where 40% of European

Americans and 13% of African Americans attain proficiency, and 12th grade, where 43% of European Americans and 16% of African Americans obtain proficiency (NAEP, 2011). Furthermore, it is important to note that these trends are eerily similar to trends observed for mathematics (NAEP, 2011). Overall, this research indicates that the achievement gap (a) becomes apparent in early elementary education, and (b) remains stable across primary and secondary education. However, we must begin to ask the most important question: *why does this gap exist?*

One major area of research on the potential causes of the achievement gap indicates different characteristics of schools, such as class size, teacher's competency, and financial resources, substantially contribute to levels of academic performance, and therefore to the achievement gap (Bali & Alvarez, 2003; Duncan, Brooks-Gunn, & Klebanov, 1994; Farkas, 2006; Jacobson et al., 2001; Oates, 2009). In this same vein of research, data from the NAEP 2011 report indicates that teachers in predominantly African American schools are highly underqualified for their positions. For example, 25% of secondary mathematics teachers employed in schools with a predominantly African American student population did not have the proper credentials to be teaching elementary mathematics. In contrast, only 8% of teachers with similar educational backgrounds were teaching in schools with a predominantly European American student population (NAEP, 2011). Likewise, localized family characteristics, such as parenting style, parental education, family income, family size, parental warmth, and parental education, are all known to contribute to the achievement gap (Bali & Alvarez, 2003; Burkam, Ready, Lee, & LoGerfo, 2004; Duncan, Brooks-Gunn, & Klebanov, 1994; Guo & Harris, 2000; Jencks & Phillips, 1998; Johnston & Viadero, 2000; Lee & Burkam, 2002; Oates, 2009). The most likely family-level variable that precipitates this gap is family socioeconomic status (SES).

For example, the U.S. Department of Education's 2010 National Center for Educational Statistics report that around 34% of African American children were living in poverty, compared to 10% of European American children. Likewise, only 17% of African American children had at least one parent with a bachelor's degree, compared to 36% of European American children. The issue is undoubtedly complex; however, eliminating racial disparities in socioeconomic status and school characteristics is a herculean task that will require collaboration across many different fields and agencies. Nonetheless, I propose that one psychological variable, self-esteem, may provide a method for reducing this gap.

Self-Esteem

Self-esteem is a key construct in mental, emotional, psychological, and educational research (Shavelson & Bolus, 1982). Much research considers self-esteem to be a global, all-ornothing construct with no separate domain (Blascovich, & Tomaka, 1991; Hattie, 1992; Marsh, 2007; Rosenberg, 1965), indicating that one's self-esteem is their global attitude in regard to their general self-worth or self-value. More specifically, self-esteem reflects the way in which individuals evaluate their self-worth (Branden, 1995; Leeson, Ciarrochi, & Heaven, 2008), generally referring to any and all emotion-based thoughts and feelings that an individual attributes to the self, in every facet that the individual finds to be essential to their being (Coopersmith, 1959, 1967; Dusek, 2000; Rosenberg, 1985; Scheier, Botvin, Griffin, & Diaz, 2000). Clearly, self-esteem is a highly affectively laden cognition about one's own "self-regard," "self-worth," or "self-competence" (Harter, Waters, Whitesell, & Kastelic, 1998; Shavelson et al., 1976). Finally, a discussion of self-esteem would be incomplete without the theorizing of Rosenberg (1965), who described the construct as a favorable or unfavorable attitude toward the self.

However, not all research agrees that self-esteem is such a monolithic construct. Other researchers have moved toward a multidimensional view of self-esteem (Marsh & Craven, 2006; Shavelson et al., 1976), where self-esteem is not simply one general attitude about the self, but rather numerous, domain-specific attitudes about the self (Hatcher, 2007; Marsh, Trautwein, Ludtke, Koller, & Baumert, 2006). For example, an individual can have high self-regard in terms of their aptitude in social situations, but low regard in terms of their aptitude in academic situations. In terms of this investigation, the most relevant dimensions of self-esteem are focused on one's academic self-worth. Interestingly, recent research suggests that academic-specific self-esteem measures (e.g., academic self-esteem, academic self-concept) have greater predictive validity for academic achievement than do global measures (Marsh & O'Mara, 2008). To further clarify this point, it is important to understand exactly what is meant by academic self-concept. Academic self-concept is traditionally conceived as one's cognitive representation of the self in the academic domain, and it likely developed through a broad range of interactions with the environment. For example, it is likely that academic self-esteem is, in part, developed through interactions within academic settings. For example, a recent meta-analysis estimates the correlation between academic self-concept and GPA to be approximately r = .20-.27 (Huang, 2011), indicating that academic self-concept in part measures one's knowledge of their own academic ability. However, research additionally indicates that academic self-concept is malleable for some African American students, particularly those that are highly susceptible and vulnerable to stereotypes (Aronson & Inzlicht, 2004). Thus, it appears that academic self-concept is not a simple awareness of one's academic ability and worth, but rather is a perception of one's self-worth that is affected by both cultural belief systems and personal resilience to these stereotypes.

Self-esteem and academic performance. Research indicates that measures of self-esteem (i.e., self-competence, self-worth, etc.) are associated with academic achievement (Brookover & Lezotte, 1979; Chamorro-Premuzic & Furnham, 2006; Fuligni, 1997; Marsh, 2007). This effect remains when self-esteem is measured globally (Bachman & O'Malley, 1986; Shapka & Keating, 2005) or with academic-specific measures (Marsh, 1989; Skaalvik & Hagtvet, 1990). However, research comparing the efficacy of these two types of self-esteem measures in predicting academic achievement generally indicates that academic-specific measures of self-esteem are stronger predictors (Marsh and Craven, 2006; Marsh, Trautwein, et al., 2006; Byrne, 1996; Marsh, 1993). While self-esteem is clearly associated with academic achievement, is it possible that self-esteem may account for part of the achievement gap as previously described?

Self-esteem and race. Interestingly global self-esteem functions differently for African American and European American individuals, making it a potential candidate for further investigation. For example, African Americans consistently report higher levels of global self-esteem than European Americans, despite substantial stigmas and cultural stereotypes that permeate American culture (Crocker & Lawrence, 1999; Crocker, Luhtanen, Blaine, & Broadnax, 1994; Demo & Hughes, 1990; Graham, 1994; Gray-Little & Hafdahl, 2000; Hughes and Demo, 1989; Porter & Washington, 1979, 1989; Taylor & Walsh, 1979; Twenge & Crocker, 2002; Wylie, 1979). This pattern is often referred to as the African American self-esteem advantage because African American individuals consistently report the highest levels of global self-esteem of any racial group in the United States (Zeigler-Hill, Wallace, & Myers, 2012). This suggests that membership in a stigmatized group may not necessarily lead to lower levels of global self-esteem but may actually protect or enhance self-esteem to the extent that it allows

individuals to make external attributions to explain their failures, rather than finding fault in their own characteristics or behavior (Abramson et al., 1978; 1989; Crocker & Major, 1989; Dion and Earn, 1975; McFarland & Ross, 1982; Oyserman et al., 1995; Weiner, 1986; Weiner, 1979). However, this self-protective mechanism may actually cause African Americans to do worse in school. Self-esteem is in many ways a sociometer. That is, is serves as a sign that one is in potential danger of losing status. If one's global self-esteem remains high in the face of threats, it is possible that specific threats to academic specific self-esteem are simply ignored. However, while self-esteem processes clearly differ between White and Black individuals, this does not necessarily mean that these processes are affecting the racial achievement gap.

Self-esteem, academic performance, and race. Two recent interventions aimed at reducing the achievement gap have been developed, and both of these interventions target variables associated with self-esteem and suggest that self-esteem may in fact contribute to the achievement gap. First, Walton (2011) substantially reduced the achievement gap via a social belongingness intervention. Furthermore, this intervention did not increase the academic success of European American students to the same rate as it did for African American students.

Important for the current investigation is the fact that social rejection consistently reduces self-esteem (Gerber & Wheeler, 2009). Taken together, these two studies suggest a potential role for self-esteem and the achievement gap given that belongingness affects both self-esteem and the achievement gap. Similarly, research from Geoffrey Cohen's laboratory indicates that a simple self-affirmation intervention can reduce the racial achievement gap by nearly 50% (Cohen, Garcia, Apfel, and Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009). This is relevant for this discussion because Self-Affirmation is conceived as a coping mechanism of self-esteem maintenance (Steele, 1988). Clearly, these two efficacious interventions suggest

that further examination of the relationship between self-esteem and academic performance for African American students is warranted. Additionally, these studies provide evidence that supports that possibility of self-esteem functioning differently in African American individuals than it does in European American individuals, within academic contexts, and therefore contributing to the achievement gap.

The Current Meta-Analysis

A relatively small, but substantial body of research has investigated this question.

However, no research has examined the average or aggregate effect of self-esteem on academic performance for African American students. This study aims to calculate that effect via meta-analytic techniques.

In regards to a hypothesis, I am predicting that global measures of self-esteem will be rather weak predictors of academic performance because, as stated earlier, high global self-esteem may actually lead African Americans to do either worse on academic tasks (because it buffers against academic failures) or better on academic tasks (because it provides general confidence that one can succeed). Thus, I predict that these two competing effects will wash each other out. Additionally, I predict that academic specific measures of self-esteem will be much stronger predictors of African Americans' academic performance because (a) previous research described above indicates a similar pattern for White students and (b) the global self-esteem bump is unlikely to transfer to domain specific measures. Furthermore, this investigation is also explorative. The aforementioned achievement gap interventions suggest that self-esteem works differently in an academic context for African American students, and comparing the observed results from the current meta-analysis to other meta-analyses in the field may provide a better understanding of not only why these self-esteem relevant interventions work at reducing the

racial achievement gap, but also how and if self-esteem may help contribute to the gap in the first place.

Method

General Search and Inclusion Criteria

All articles for this analysis were obtained from the PsycInfo database. The keywords African Americans OR Africans OR Blacks, AND self-esteem OR self-concept, AND academic* OR GPA were used in order to find articles matching the criteria of this metaanalysis. Publication status (published journal articles vs. unpublished dissertations) was an exclusion factor in which sources were utilized in this meta-analysis, wherein only those that had been published and peer-reviewed were included; only journal articles published between the year 2000 and 2014 were included in order to effectively examine current populations of students. Books, dissertations, and electronic collections were also excluded from this study, in an attempt to only include peer-reviewed journal articles¹. Studies examining populations outside of typical schooling ages (e.g. children under age 7 and adults over age 30) as well as those examining racial groups other than African Americans were also excluded due to the current prevalence and relevance of the African American-Caucasian disparity in education. Studies examining nonstandard populations (e.g. pregnant women, gifted or disabled students, or psychiatric and hospital patients) were also excluded, in order for this study to be most effectively generalizable to the typical educational population.

Within the aforementioned search parameters, studies were included if they included a measure of correlation between at least one measure of self-esteem and GPA. Self-esteem

¹ The exclusion of unpublished sources could suggest that the observed effect size is a product of publication biases (Twenge & Crocker, 2002), and indicates that further research including these unpublished sources may be needed in order to obtain the true effects of self-esteem on academic achievement.

measures were the only moderating variable in this study. Both global measures of self-esteem, including the Rosenberg Self-Esteem Scale (Rosenberg, 1985) and Harter's Global Self-Worth Scale (Harter, 1982), and academic-specific measures of self-esteem, including the Piers-Harris Children's Self-Concept Scale (Piers, 1969), the Self-Perception Profile for Children (Harter, 1985), and HARE Self-Esteem Scale (Hare, 1985), Bachman's School Ability Self-Concept Index (Bachman, 1970), Eccles and Wigfield's (1995) Self-Perception Questionnaire, the Patterns of Adaptive Learning Survey (PALS) Academic Self-Efficacy survey (Midgley et al., 1997), and the Self-Perception Profile for Adolescents (SPPA; Harter, 1988) were included in this study. GPA, either semester or year long, was the only measure of academic achievement utilized in the present study; studies were excluded if the sole assessment of academic performance was based on narrow academic achievement, such as only observing students' English and Math scores.

These methods yielded 27 separate studies with 41 viable estimates of correlation between self-esteem and GPA, examining 9872 individuals; 18 studies examining 4046 individuals utilized academic specific measures of self-esteem and 23 studies examining 5808 individuals utilized global measures of self-esteem (See Appendix, Table 1).

Statistical Analysis

For the purposes of this meta-analysis, Hunter and Schmidt's (2004) random effects model was used in these analyses. Unlike a fixed effects method, a random effects model assumes variance between the studied populations, and therefore across sample effect sizes, and estimates the total variance by correcting for variance in individual sample effect sizes; since each of the included studies examined a different population of individuals (e.g. high schoolers vs. undergraduate students), it is likely that these effects are random, and therefore a random

effects model is a more appropriate measure. Three random effects analyses were conducted: total correlation of self-esteem measures and academic achievement, global measures of self-esteem and academic achievement, and academic specific measures of self-esteem and academic achievement.

Results

All 27 studies reported correlation coefficients between self-esteem measures and academic achievement (GPA). Three separate sets of analyses were undertaken in this metaanalysis: the first analysis assessed the relation between all measures of self-esteem (i.e. both global and academic domain-specific) and academic achievement (assessed through GPA), the second analysis assessed the relation between global measures of self-esteem and academic achievement, and the third analysis assessed the relation between academic domain-specific measures of self-esteem and academic achievement. These results indicate that 4% of the variance observed in GPA can be accounted for by the combination of global and academicspecific measures of self-esteem ($\bar{r} = .21$, n = 9872, Bayesian 95% CI = 0.14-0.27, p < .05). Consistent with previous research (Bachman & O'Malley, 1986; Bouchey & Harter, 2005; Coopersmith, 1967; Dusek, 2000; Fuligni, 1997; Harter, 1999; Harter, Waters, Whitesell, & Kastelic, 1998; Scheier, Botvin, Griffin, & Diaz, 2000), studies were then split into those utilizing academic specific self-esteem measures (Piers-Harris Children's Self-Concept Scale, Piers, 1969; the Self-Perception Profile for Children, Harter, 1985; HARE Self-Esteem Scale, Hare, 1977, 1996; Bachman's School Ability Self-Concept Index, Bachman, 1970; Eccles and Wigfield's (1995) Self-Perception Questionnaire; the Patterns of Adaptive Learning Survey (PALS) Academic Self-Efficacy survey, Midgley et al., 1997; and the Self-Perception Profile for Adolescents, SPPA; Harter, 1988) and those utilizing global self-esteem measures (Rosenberg

Self-Esteem Scale, Rosenberg, 1985; Harter's Global Self-Worth Scale, Harter, 1982). Academic self-esteem accounted for about 13% of the variation in GPA (\bar{r} = .36, n = 4046, k = 18, Bayesian 95% CI = 0.34-0.37, p < .05), whereas global self-esteem accounted for less than 1% of the variation in GPA (\bar{r} = .1, n = 5808, k = 23, Bayesian 95% CI = 0.06-0.14, p < .05), suggesting that academic measures of self-esteem are much more effective in investigating the correlation between a student's self-esteem and their academic achievement, as indicated by the fact that the 95% confidence intervals do not overlap (Cumming & Finch, 2005).

Discussion

Consistent with previous literature, we found that global measures of self-esteem are weakly correlated to academic performance in African American students, and therefore appear to be a weak indicator of academic achievement in these students (Awad, 2007; Cokley, 2002; Elion, Wang, Slaney, & French, 2012; Killeya, 2001; Sommer & Dumont, 2011). Academic-specific measures of self-esteem, on the other hand, are moderately correlated with academic performance, and by comparison were much better indicators of academic achievement in African American students. A substantial difference between global self-esteem and academic self-esteem is indicated by these data, given that the confidence intervals for these correlations do not overlap (Cumming & Finch, 2005).

While our hypothesis as to the general relation between global self-esteem and academic achievement, and between academic self-esteem and academic achievement, was supported by our data, this data does not support the idea that self-esteem functions differently in African American students and European American students. According to this data, the process of self-esteem – whether global or academic-specific – appears to function identically in African

Americans as it does in European Americans (Marsh & Craven, 2006), wherein an individual's perception of their academic self is much more influential in academic performance than is an individual's overall perception of their self.

Contrary to our original belief, self-esteem may not be as largely involved in the academic deficit seen in the American educational system as we previously believed. While this meta-analysis did not directly investigate the academic achievement gap that exists between European American and African American students, these results suggest that self-esteem interventions may be moderately helpful, at best, in reducing the extent of this gap, and also suggests that a mechanism other than self-esteem is likely at play in the work of Cohen, Walton, and colleagues (Cohen, Garcia, Apfel, and Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; Walton, 2011). We must not forget that the racial achievement gap is strong and consistent. More research is clearly needed to understand the psychological nuances of the achievement gap; however, if the main cause of this gap is institutionalized poverty and institutionalized bias in the administration of public education, we will likely need to move away from psychological examinations of these phenomena and move toward efforts of restorative justice. We must ask ourselves this question: are we willing to make the changes to our society that are necessary to bring about justice and equality for all?

Conclusion

Overall, the results of this meta-analysis lead to several important conclusions. First, academic-specific measures of self-esteem appear to be better predictors of academic achievement in African American students than are global measures. Second, these results suggest that global measures of self-esteem may be highly ineffective in predicting levels of academic attainment due to the weak correlation observed between these two concepts. However, this meta-analysis also highlights the substantial percentage of academic achievement that cannot be explained by either measure of self-esteem, that the academic performance of African Americans and the resulting achievement gap is much more complex than self-esteem alone, and likely requires a multifaceted approach for both research and intervention. Most importantly, this research demonstrates that European Americans and African Americans are one and the same; while they may experience differential effects due to self-esteem, whether global or academic, these psychological processes function to the same ends in both groups. Ultimately, we must stop dividing ourselves as different entities, and realize that we are all part of one greater humanity.

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Appendix

Table 1
Studies Included in the Meta-Analysis

Study	SE Measure	r	n	Global	Academic
Awad (2007)	Rosenberg Self-Esteem Scale	01	313	X	
	Academic Self-Concept Scale	.23	313		X
Bean, Bush, McKenry, & Wilson (2003)	Rosenberg Self-Esteem Scale	.45	75	X	
Cedeno, Elias, Kelly, & Chu (2010)	Piers-Harris Children's Self-Concept Scale	.47	64		X
	Piers-Harris Children's Self-Concept Scale	.3	67		X
Chapell & Overton (2002)	Rosenberg Self-Esteem Scale	.27	330	X	
Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn (2008)	ASCS, Eccles & Wigfield (1995)	.44	206		X
	ASCS, Eccles & Wigfield (1995)	.4	204		X
Cogburn, Chavous, & Griffin (2011)	Self-Perception Profile for Children	.12	202	X	
	Self-Perception Profile for Children	.03	211	X	
Cokley (2000)	Academic Self-Concept Scale	.46	206		X
Cokley (2002)	Academic Self-Concept Scale	.47	101		X
	Academic Self-Concept Scale	.33	250		X
	Rosenberg Self-Esteem Scale	.14	101	X	
	Rosenberg Self-Esteem Scale	008	250	X	
Cokley (2003)	Academic Self-Concept Scale	.36	687		X
	Rosenberg Self-Esteem Scale	.1	687	X	
Cokley & Moore (2007)	Academic Self-Concept Scale	.47	58		X

	Academia Salf Concent Scale	17	216		
C 11 0 Cl (2000)	Academic Self-Concept Scale	.47	216		X
Cokley & Chapman (2008)	Academic Self-Concept Scale	.47	253		X
Cunningham, Hurley, Foney, & Hayes (2002)	HARE Self-Esteem Scale	.26	84	X	
	HARE Self-Esteem Scale	.35	84		X
Dotterer, McHale, & Crouter (2007)	HARE Self-Esteem Scale	.32	140		X
Elion, Wang, Slaney, & French (2012)	Rosenberg Self-Esteem Scale	.05	219	X	
Gutman & Midgley (2000)	Patterns of Adaptive Learning Survey	.41	62		X
Hope, Chavous, Jagers, & Sellers (2013)	Rosenberg Self-Esteem Scale	.16	324	X	
,	Contingencies of Self-Worth	.08	324		X
Killeya (2001)	Rosenberg Self-Esteem Scale	52	219	X	
Lockett & Harrell (2003)	Rosenberg Self-Esteem Scale	.32	128	X	
Mobley, Slaney, & Rice (2005)	Rosenberg Self-Esteem Scale	.17	251	X	
Okeke, Howard, Kurtz-Costes, & Rowley (2009)	Academic Self-Concept Scale	.4	237		X
• ()	Academic Self-Concept Scale	.34	290		X
Patton, Woolley, & Sung Hong (2012)	Global Self-Esteem Scale	.12	612	X	
Petersen, Louw, & Dumont (2009)	Rosenberg Self-Esteem Scale	.17	465	X	
Rust, Jackson, Ponterotto, & Blumberg (2011)	Self-Perception Profile for Adolescents- Scholastic Competence	.38	190		X
Saunders, Davis, Williams, and Williams (2004)	Bachman's School Ability Self-Concept Index	.42	243		X
` '	Rosenberg Self-Esteem Scale	04	243	X	
Sirin & Sirin (2004)	Rosenberg Self-Esteem Scale	.14	336	X	
Sommer & Dumont (2011)	Rosenberg Self-Esteem Scale	25	101	X	
Wong, Eccles, & Sameroff (2003)	Harter's Global Self-Worth Scale	.16	336	X	