EXAMINING CULTURAL DIFFERENCES IN OVEREXCITABILITIES IN COLLEGE WOMEN

By

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(Under the direction of BONNIE L. CRAMOND)

ABSTRACT

Overexcitabilities (OEs) have been hypothesized as indicators of emotional developmental potential and equally, giftedness. Correspondingly, research efforts in this area have consistently shown differences in OEs in gifted and non-gifted populations. Yet there is a paucity of research focusing on minority populations. This study explored the presence OEs using the Overexcitability Questionnaire II in college-age African American and White female students in order to form a clearer understanding of the affective development and experience of minority students. Overall, gifted students scored significantly higher than non-gifted students on the intellectual OE and there was a significant interaction of race and giftedness for this overexcitability. The emotional OE was significantly higher in the White participants, and there were no differences between gifted and non-gifted African American students. Results were discussed in terms of recruitment, retention, and counseling of African American students.

INDEX WORDS: Overexcitability, College Students, African Americans, Cultural Styles, Multivariate Analysis
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To my fiancé, Michael Howard Landis and my parents Terry and Randy Nordin
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CHAPTER 1
INTRODUCTION

Despite sustained efforts to promote the inclusion of minority students in gifted programs, White students still overwhelmingly dominate these programs (Ford, 2006). For example, in Georgia, the number of minorities in gifted programs has grown substantially, with gains of 400% over eight years; yet African American students are still underrepresented by about 50% (Krisel, 2005). According to Frasier, Garcia and Passow (1995), minority students are the most likely to be overlooked for gifted identification and go underserved. In light of a persistent belief that minority students are inherently intellectually inferior to White students (Morris, 2002; Oakes, Wells, Jones, & Datnow, 1997), and their disproportionate representation among the ranks of drop outs and in special education classes, (Eitle, 2002; National Center for Education Statistics, 2001), African American students warrant special attention in research on gifted students.

Students who do not receive services commensurate with their abilities may suffer a number of negative consequences. If they are not challenged in school, students can become bored and unmotivated (Kanevsky & Keighley, 2003). In response to their boredom they may cease to perform well academically. Indeed, in a qualitative study of gifted students who were underachieving, Kanevsky and Keighley (2003) found that students “felt the honorable action in response to an inappropriate curriculum was to disengage from it and quit producing” (p. 20). Underachievement may lead to school dropout, and it may also reduce the likelihood that students will be recognized for their strengths in the future. Students who underachieve and/or
dropout limit their own future prospects and represent a great loss of potential (Renzulli & Park, 2002). They may limit their occupational options and future social class by not having a high school diploma. Advancing the opportunities of minority students may begin with intervening in the cycle of underachievement.

Seeley (2004) noted that one reason that students underachieve is that the school environment is poorly matched with their academic needs. For example, Rayneri, Gerber, and Wiley (2006) found that achievement in gifted students was linked to being in a classroom environment where their preferred style of learning was used. In addition, one teacher found that when he gave two of his bright but underachieving students self-directed and teacher-directed projects, the students responded with increased motivation and interest to the projects they chose (Hargrove, 2005). Thus, student achievement and performance is linked to how well their needs are served in the classroom.

Ingrained in students’ academic and cognitive needs are their affective needs. Indeed, Silverman (1993) has asserted that the cognitive and affective cannot be extricated, as they underlie one another. Silverman (1993) and Cross (2005) have posited that gifted students have affective experiences that are different from those of other children. Silverman (1993) also has said that a sense of being different, or “out of sync,” from one’s peers and environment can make the classroom an unwelcoming place for gifted students. One type of affective experience that some gifted students have been said to experience is overexcitabilities (OEs), or the intense experience of the world (Davis & Rimm, 2004; Piechowski, 2006; Silverman, 1993). OEs have been studied in various settings among gifted and non-gifted individuals, and a number of studies have confirmed a link between OEs and giftedness (Ackerman, 1997; Bouchet & Falk, 2001; Piechowski & Colangelo, 1984; Schiever, 1985). Despite a fair amount of research on using OEs
for identification purposes (Ackerman, 1997; Bouchard, 2004; Breard, 1995) and a call to
develop broader, more inclusive definitions of giftedness (Passow & Frasier, 1996), there is very
limited research on the OEs in minority students. Differing cultural values may construct a
different internal experience for some African American students and consequently, a different
OE profile than that typically found in primarily White samples.

Thus, the purpose of this study was to examine OEs in gifted and non-gifted African
American students. White students also were studied in this research for comparison purposes, as
they are considered the majority group. Understanding the OE experiences of African American
students may give educators and researchers a better understanding of the internal experiences of
this group and how to appropriately serve them. Bonner (2000) and Graybill (1997) have both
pointed out that teachers are not always able to recognize gifted behaviors in African American
students because of a difference in cultural norms and because they have not been properly
trained to do so. Moreover, Piechowski (2006) said that the behavioral manifestations of OEs
may appear to be negative, particularly to individuals who are not familiar with them. Thus,
African American students exhibiting OEs may be at risk for going unidentified and even
punished for their behaviors. This research can inform the identification process, teacher
training, and the creation of classroom environments. Helping students become identified for
gifted programming strengthens their chance of receiving appropriate services and may mitigate
underachievement. Moreover, creating a classroom environment that is sensitive to learning
styles may impact achievement (Rayneri et al.). Subsequently, this research has vast implications
for the representation of African American students in gifted programs.
CHAPTER 2
REVIEW OF THE LITERATURE

The purpose of this literature review is to build a case for the following set of assumptions: African American students are underrepresented in gifted education programs. This under-representation can be traced in part as a function teacher perceptions and student cultural styles. Psychological factors are also relevant to school experiences. All of these factors impact personal experiences of the world and correspondingly, may impact OEs. To build this argument, this review will include literature regarding African American under-representation, psychological factors relevant to this group, and literature regarding OEs.

African American Under-representation

The under-representation of African American students in gifted programs is a well-documented and persistent concern of many researchers (i.e. Ford, 2006; Ford & Grantham, 2003; Frasier, et al., 1995; Grantham, Frasier, Roberts, & Bridges, 2005). In general, a number of separate, but related themes have emerged from this work as potential sources of under-representation. For example, Frasier and colleagues (1995) identified three central reasons that minority students are underrepresented in gifted programs, including test bias, the referral process, and a deficit perspective. Because OEs relate to students’ experiences, this review will focus on some factors related to these experiences, including teacher perceptions, a deficit perspective, and cultural context.
Teacher perceptions Many advocates for African American students have argued that teachers may fail to fully understand these students. In part, this difficulty can be traced to teacher perceptions. Morris (2002) stated “Who gets selected for gifted education programs is rooted in enduring perceptions, whether conscious or unconscious, that African American people might be intellectually inferior to White people” (p. 59). How teachers perceive their students is related to who they nominate for programs and the type of classroom environment they create. Moreover, teacher perceptions influence how teachers treat students (Nieto, 2004) and how students perceive and respond to school. Nieto (2004) suggested that student perceptions of their teachers’ expectations could create a vicious cycle of low expectations and poor performance through a self-fulfilling prophecy.

There is empirical evidence in support of the notion that teachers’ perceptions and differential treatment impact African American students. In a study of gifted African American students who were bussed to desegregate a predominantly White school, Harmon (2002) interviewed six elementary school gifted African American students and three teachers. The students were interviewed about a number of issues surrounding their schooling experiences through busing and changing schools, and the teachers were interviewed regarding their attitudes related to education. The students described ineffective teachers as those who viewed them negatively, did not understand their culture, and treated them differently than White students (Harmon, 2002). Conversely, they described effective teachers as those who had high expectations and treated them accordingly, evidenced an understanding of African American culture through curriculum and teaching, and did not allow unfair treatment in the classroom (Harmon, 2002). Moreover, interview data from those teachers who had been named by the students as effective showed that all valued multicultural education and had a sincere interest in
the future of minority students (Harmon, 2002). Clearly, teacher expectations and actions were evident to students, and an understanding of their culture was highly valued.

In addition to demonstrating the impact of teachers on minority students, Harmon (2002) stressed that culturally competent teachers are well-suited to effectively educate minority students. Similarly, Irvine (1999) discussed the phenomenon of cultural discontinuity, which occurs when the classroom behaviors of minority students are unfamiliar to White teachers. According to Irvine (1999), “When there is a cultural conflict between the student and the school, the inevitable occurs: miscommunications and confrontation...hostility; alienation; ...and eventual school failure” (p. 247). Bonner (2000) suggested that the school environment, too, is incongruent with African American students’ learning styles. Coupled with persistent assumptions of inferiority, teachers and the school environment fail to accommodate the needs of African American students, making it unlikely that their gifted behaviors will be recognized.

**Deficit perspective** Teacher perceptions will inevitably be guided by how students are viewed. Frasier and colleagues (1995) posited that minority under-representation occurs in part because of an enduring focus on the weaknesses of minority students rather than their strengths. They traced this deficit-based view to the desegregation of schools in the United States, claiming that what began as a movement to advance the education of minority students has become a tradition of viewing minority students as students needing remediation rather than students with abilities to be nurtured (Frasier et al., 1995). Similarly, Ford and Grantham (2003) advanced the argument that under-representation of minority students in gifted education programs results from educators viewing their minority students with a **deficit perspective**. A deficit perspective, or deficit thinking, occurs “when educators hold negative, stereotypic and counterproductive views about culturally diverse students and lower their expectations of these students
accordingly” (p. 217). They presented several areas, including testing, policies, teacher preparation, and so on, and demonstrated how a deficit perspective affected these areas in contrast with a dynamic perspective. For example, they argued that teachers who have not been exposed to training in multicultural education do not understand cultural differences in behavior and may view certain culturally specific behavior as negative. This approach takes a deficit perspective. A teacher with a dynamic view would be culturally knowledgeable, and think about his or her own biases and misunderstandings about groups so as to better understand behavior (Ford & Grantham, 2003). In general, a deficit perspective informs many aspects of minority student education and may inhibit their participation in gifted programs.

*Cultural styles* A deficit perspective and teacher perceptions can be considered factors directly related to the school. Ogbu and Simons (1998) said, “Structural barriers and school factors affect minority school performance; however, minorities are also autonomous human beings who actively interpret and respond to their situation” (p. 158). There may be behaviors and perspectives rooted in culture that affect how African American students perceive, interpret, and choose to respond to their environments. It is important to note that although this section will refer to tendencies discussed in the literature regarding cultural styles, it is not meant to perpetuate stereotypes or imply that African American students are not a heterogeneous and diverse group (Nuby & Oxford, 1998).

Ogbu and Simons (1998) and Ogbu (2004) said that one’s minority status impacts perceptions of the school environment and consequently school performance. Minorities that can be categorized as *involuntary* are those that originally became part of a society unwillingly as opposed to choosing to immigrate. African Americans are considered an involuntary minority (Ogbu & Simons, 1998). They may have negative attitudes toward social structures considered
“White,” and feel their identity is partially tied to rejecting White customs. They may also lack faith in schools and feel that the “requirements for school success… [are] white society’s requirements designed to deprive [them] of their identities” (Ogbu & Simons, 1998, p. 178). Thus, African American students’ experiences in the school environment may be a source of confusion and conflict. Moreover, their behaviors may be driven by this confusion, as well as doubt in the school (Ogbu & Simons, 1998). In general, African American students, along with other involuntary minorities may underachieve in school, and consequently be overlooked for gifted programs, in an effort to avoid engaging in behaviors that are considered “White” (Fordham & Ogbu, 1986; Ogbu, 2004, Ogbu & Simons, 1998).

In addition to historically rooted perspectives, culturally valued behaviors have been proposed as a potential barrier to achievement and gifted identification for African American students. A framework conceived by Boykin (1983), and adapted by both Helms (1992) and Ford (2003), includes a list of certain characteristics and tendencies that have been referred to as “cultural styles” (Ford, 2003, p. 507) and “dimensions of African culture” (Helms, 1992, p. 1096). Some of the cultural styles include affect, movement, and verve. Ford (2003) described the affect component as an emotional responsiveness, the movement component as an emphasis on physical movement, and the verve component as “a propensity for relatively high levels of stimulation” (p. 508). Helms (1992) discussed how these components, along with others described in the original framework, might be disadvantageous in a standardized testing situation. Helms (1992) gave the example of how the affect component may make a testing situation seem impersonal and confusing. Ford (2003) further expanded on this proposition by examining how these styles could be negatively misconstrued in the classroom. For example, she
pointed out that that a student exhibiting the movement tendency could be seen as “hyperactive, out of control, aggressive, [and a] behavioral problem” (Ford, 2003, p. 510).

In general, it may be that a deficit-based view drives a misunderstanding of minority students and their behaviors or that a lack of cultural awareness drives deficit-based thinking. There is a clear contention in the literature that teachers fail to understand their minority students and they hold low expectations of these students. Low expectations and misinterpretations of behaviors of minority students have been implicated in the under-referral and under-identification of these students in gifted programs (Frasier, et al., 1995; Morris, 2002). Moreover, it has also been suggested that behaviors inherent to African American culture can contribute to underachievement, misunderstanding, and under-identification. In order to ameliorate this problem, it can be informative to try to gain a deeper understanding of the internal experiences that may underlie behaviors.

Psychological Experiences of African American Students

In addition to issues related to the under-representation of African American students in gifted education classes, certain psychological experiences have been suggested to be implicated in the school experiences and learning processes of African American students. Though these experiences are related to under-representation, they also are important in terms of how they psychologically impact students. Specifically, stereotype threat and the burden of “acting White” are relevant experiences that African American students may face in school.

Stereotype threat Steele and Aronson (1995) defined stereotype threat as “being at risk of confirming, as self-characteristic, a negative stereotype about one’s group” (p. 797). They claimed that stereotype threat may negatively impact African American students in particular in an ability-testing situation. In a series of related studies they assigned African American and
White students to “diagnostic” and “non-diagnostic” conditions. In the diagnostic condition, students were made to think they were taking a test of mental abilities. In all conditions students took a modified form of the verbal GRE (Steele & Aronson, 1995). They found that (a) African American students in the diagnostic situation scored significantly lower on a than White students in the same situation and other African American students in the non-diagnostic situation; (b) African American and White students scored similarly when they were in the non-diagnostic condition; (c) being in the diagnostic condition primed more thoughts about negative stereotypes and self-doubt and led to more distancing from known stereotypes in African American students than any other students in either condition; and (d) even without a diagnostic condition, just reporting race led to lower scores in African American students than White students (Steele & Aronson, 1995). Their results demonstrated that being exposed to or primed for stereotype threat resulted in poorer performance for African American students (Steele & Aronson, 1995).

Because negative stereotypes are so pervasive, it is likely that most African American students are at risk for experiencing stereotype threat and its negative effects which can affect their experiences in the school environment and their performance.

“Acting White” As mentioned above, involuntary minorities, such as African Americans, may derive their identity in part by distinguishing themselves and their behavior from White society (Ogbu & Simons, 1998). Fordham and Ogbu (1986) discussed the avoidance of acting White as a contributor low academic performance in African American students. Ogbu (2004) specified this argument, claiming that it is the behaviors associated with high achievement in schools, not the high achievement itself, that are considered acting White. Although there has been some disagreement about how accusations of acting White affect achievement (i.e. Bergin & Cooks, 2002; Horvat & Lewis, 2003), there is evidence that high-achieving African American
students do experience accusations of acting White related to their choice of dress, speech, friends, and achievement. These experiences were memorable and stood out for students (Bergin & Cooks, 2002; Horvat & Lewis, 2003). It is reasonable to assume that these accusations also exerted some influence on how students felt about their school experiences.

In sum, it is clear that African American students may have unique classroom experiences related to how they are perceived and treated in the classroom, their own cultural styles, and psychological factors that stem from their race. These factors in their lives may influence how they experience the world, and correspondingly, how they experience and express OEs. In order to clarify this relationship, it is important to review the literature and theory related to OEs.

Theory of Positive Disintegration

In his Theory of Positive Disintegration, Dabrowski (1964) suggested that individuals have developmental potential that will determine the extent to which they progress through levels of emotional development. Central to this theory is the idea that emotional development is the most important aspect of human development and that human emotions exist at different levels (O’Connor, 2002). At the lowest levels emotions are focused on oneself and one’s own needs, and at the higher levels emotions are focused on others and global issues (Nelson, 1989).

Dabrowski’s theory includes 5 levels of development. At the lowest level of development, individuals are egocentric and unconcerned with their connection and influence on others in the world. The higher levels of development are characterized by altruism, self-actualization, empathy, and humanitarian efforts (O’Connor, 2002; Silverman). The individuals at the higher levels have reached a “personality ideal,” in that they have recognized their values and live in concert with them (Silverman, 1993). The progression to the highest levels includes
what has been termed a breakdown within the individual. This is a period during which the individual is bringing to terms what s/he knows to be right and the way s/he lives his/her life. It is positive, in that it may help him/her to progress in development, but it is also a disintegration of who s/he has been, and may manifest as depression, anxiety, and conflict (Silverman, 1993). The process of emotional development is not necessarily linear. It is a lifelong process, and few attain the highest levels (O’ Connor, 2002; Silverman, 1993).

Developmental potential refers to a person’s ability to advance to higher levels of emotional development, and depends on certain inherent aptitudes, including “intelligence, special talents and abilities, will to develop, and …OEs” (O’Connor, 2002, p. 54). Specifically, OEs are a way of experiencing one’s environment (O’Connor, 2002; Piechowski, 2006). Piechowski (2006) said they could also be described as heightened intensity and sensitivity and has described their origin as a tension in the nervous system. How this tension is channeled determines the manifestation of the OE (Piechowski, 1979). Dabrowski suggested five domains of OEs (O’Connor, 2002; Piechowski, 1979, 2006; Silverman 1993). These five domains are psychomotor, sensual, imaginative, intellectual, and emotional. The psychomotor OE refers to an excess of energy and a “love of movement for its own sake” (Piechowski, 2006, p.38). The sensual OE involves a heightening of the five senses (touch, smell, sight, hearing, and taste) and extreme pleasure or displeasure in stimuli that rouse the senses. The imaginative OE refers to intense imagination and an involvement in a fantasy world. The intellectual OE involves an intense curiosity and a fervent need for understanding. Finally, the emotional OE is an intense experience of emotions; the highs being higher and the lows being lower (O’Connor, 2002; Piechowski, 2006; Silverman, 1993).
Theoretically, the OEs are inherent (Piechowski, 1979) and are present throughout life (O’Connor, 2002). Piechowski (1979) has asserted that the OEs most prevalent in a person will determine how s/he responds to his/her surroundings. Accordingly, “[t]hese ‘channels’ can be wide open, narrow or operating at a bare minimum” (Piechowski, 1979, p. 29). That is, OEs are experienced to different degrees, and any individual may experience any or all of the OEs at varying degrees of intensity (Piechowski, 1979).

*Research in Overexcitabilities*

Dabrowski originally conceptualized his theory based on his own clinical observations. He noticed that his gifted and creative clients tended to possess certain characteristics that he later linked to more advanced emotional development, such as empathy, ethical concern, and self-awareness, among others (Nelson, 1989). Thus, the theory was formulated around gifted individuals. As others within the field have recognized the theory, a number of researchers have acknowledged it as a useful paradigm for conceptualizing the development of the gifted.

Piechowski (2006) has also asserted that the experience of the OEs is intricately intertwined with giftedness, suggesting that gifted individuals will experience the OEs more intensely than others. Research regarding the relationship between OEs and giftedness can be loosely grouped in two categories: (a) examining group differences and support of theory, and (b) identification.

The majority of the research discussed here used the Overexcitability Questionnaire, or the OEQ, unless otherwise indicated. The OEQ is an instrument that generally provokes essay format answers. Using responses from the OEQ, a researcher can gauge expression and intensity of the five OEs (Piechowski & Colangelo, 1984). It has been revised over several studies, and consists of 21 open-ended items that ask about the various OE experiences (Piechowski, 2006). Typically, raters are trained to judge degree of OE (i.e. Ackerman, 1997; Breard, 1995; Miller,
Interrater reliability has been reported for the separate OEs as .91, .92, .97, .92, and .91 for the psychomotor, sensual, imaginational, intellectual, and emotional, respectively (Ackerman, 1997). Schiever (1985) reported an overall interrater reliability of .75. Ackerman (1997) and Miller and colleagues (1994) reported internal consistencies of .57 and .66, .42 and .72, .63 and .84, .72 and .78, and .77 and .86 for the psychomotor, sensual, imaginational, intellectual, and emotional. Test-retest reliability for the overall scale is was found to be .65. (Ammirato, 1987 as cited in Breard, 1995). Validity has been reported by other authors as the degree to which OEs can predict giftedness, which will be discussed below, and the degree to which OEs are related to Dabrowski’s notion of the developmental potential (Breard, 1995; Falk, Manzanero, & Miller, 1997) Miller and colleagues (1994) found that the emotional and intellectual OEs significantly predicted degree of developmental potential, which supports predictive validity.

Group differences/support of theory Empirical research has consistently supported quantitative differences between gifted and non-gifted samples on degrees of experiencing OEs in adolescents and adults (Ackerman, 1997; Bouchet & Falk, 2001; Piechowski & Colangelo, 1984; Schiever, 1985). For example, in one study, Piechowski and Colangelo (1984) compared mean OE scores of gifted adolescents, gifted adults, and non-gifted adults in a confluence of data from several different ongoing studies. They found that both the gifted adolescents and adults scored significantly higher than the non-gifted adults on the emotional, intellectual, and imaginational OEs. They interpreted their findings to indicate that these traits typify gifted individuals, and also noted the implications of their findings for the idea that developmental potential is “original equipment” (p. 87). That is, because the gifted adolescents and adults scored similarly in terms of the emotional, intellectual, and imaginational OEs, this study
supports Dabrowski’s theory that developmental potential is inherent and remains relatively constant over the lifespan. Tucker and Lu Hafenstein’s (1997) qualitative study of very young gifted children lends further credence to this notion of constancy, in that these researchers found evidence of OEs in children as young as four years old.

To further support the notion that OEs are characteristics of giftedness, Ackerman (1997) studied OEs in a group of 79 gifted and non-gifted high school students. Ackerman (1997) found that the gifted participants showed higher scores on all of the OEs. Moreover, higher scores in the psychomotor, intellectual, and emotional OEs differentiated the gifted participants from the non-gifted participants (Ackerman, 1997). Although Ackerman (1997) drew conclusions with regard to identification, which will be discussed later, her research also provides support for the strong experience of OEs as a characteristic that is generally unique to the gifted.

Whereas Piechowski and Colangelo (1984) defined giftedness as participation in a gifted education program, standardized test scores, and/or membership in a prestigious intelligence group, giftedness can also be understood as creative potential. Research has supported a link between creativity and overexcitability. For example, Piechowski (1979) summarized work that looked for patterns in OE profiles of creative and non-creative individuals and concluded that the emotional, imaginative, and intellectual OEs were essential to creativity.

In a more recent study, Schiever (1985) administered measures of creative personality and OEs to middle school students to assess the relationship between the two. The highest and lowest thirds of the group made up the “high creative group” and the “low creative group” (Schiever, 1985). Schiever (1985) compared the OE profiles of the two groups. Her results demonstrated that the individuals in the high creative group had significantly higher scores in the imaginative, emotional, and intellectual realms than those in the low creative group. Schiever
(1985) concluded from her research that “the level of OE is a promising indicator of creative ability” (p. 226).

Group differences on OEs also have been studied with regard to gender. Miller, and colleagues (1994) suggested that socially expected gender roles might contribute to certain OEs being stronger in males than females, and vice versa. Although their discussion of socialization suggested that men would be more socialized to in the intellectual domain and women would be socialized in the emotional domain, they hypothesized that there would be no differences. In their study of gifted adults and graduate students, Miller and colleagues (1994) found that women overall scored higher in the emotional domain, while men scored higher in the intellectual domain. Bouchet and Falk (2001) found similar results in undergraduate students using the Overexcitability Questionnaire II (OEQII), which consists of Likert-scale questions, and was designed to reflect characteristic experiences associated with the OEs (Falk, Lind, Miller, Piechowski, & Silverman, 1999; O’Connor, 2002). In their study, Bouchet and Falk (2001) also found that the sensual and emotional OEs were stronger in females, while the intellectual, imaginational and psychomotor were stronger in males. Their study not only reinforced the notion that males and females differ on OEs (Miller et al., 1994), but it also revealed different information about gender differences in this area.

Similar to Bouchet and Falk (2001), Treat (2006) examined college-age students and found the same pattern of OEs across genders using the OEQII. However, when she analyzed her data further, she found that participants varied within their gender groups according to their sexual preference. Non-heterosexual females showed OEs profiles more concurrent with the typical male OE profile (higher psychomotor and intellectual) when compared to their heterosexual female counterparts, and non-heterosexual males had more typically female OE
profiles (higher emotional) than their heterosexual counterparts (Treat, 2006). Taken together, the research indicates that OEs differ across groups.

Identification OE research has also focused on gifted identification. Researchers distribute OE measures to students and determine how accurate high OE scores are at correctly grouping identified gifted students. For example, the study by Ackerman (1997) discussed above demonstrated that scores in the psychomotor, intellectual, and emotional OEs differentiated between pre-determined divisions of gifted and non-gifted high school participants with a 70.9% success rate. Moreover, using an OE profile, about a third of the non-gifted students could have been identified as gifted. Ackerman (1997) concluded that OEs could be used to identify gifted students, and increase the number of students identified.

Whereas Ackerman (1997) focused on high school students, Bouchard (2004) developed the ElemenOE, a checklist for teachers of elementary school students. The instrument was given to teachers to evaluate 96 identified gifted students and 75 students who had not been identified as gifted. The mean OE scores for the intellectual and psychomotor categories were significantly different between the gifted and non-gifted group, with the non-gifted having higher psychomotor and the gifted having higher intellectual scores. When these two OE scores were used as predictors, they correctly grouped pre-determined gifted and non-gifted students 76% of the time. Close to half of the non-identified group had an OE profile like that of the gifted group with high intellectual scores and low psychomotor scores. The psychomotor OE score did the best job of correctly classifying gifted and non-gifted students (Bouchard, 2004). These results should be taken with caution because this is the only study utilizing the ElemenOE, and Bouchard (2004) acknowledged that more work was needed on the scale.
Finally, Breard (1995) examined the use of the OEQ in identifying gifted African American fourth and fifth-grade students. In Breard’s (1995) study, African American students scored higher on the sensual, imaginational, and intellectual OEs than Caucasian students. These results were duplicated when looking only at the gifted populations of African American and Caucasian students. In terms of identification, Breard (1995) used a predictive discriminate analysis to determine whether OEs could correctly sort students into academic groups, gifted, “near-gifted,” and non-gifted. She found that the emotional and intellectual OEs were the best predictors, and more African American students could be identified as gifted using the OEQ than with traditional identification. When compared to the traditional means of identification, the OEQ identified more students overall as gifted, and most of the OEQ-identified students were African American. Further, African American males were identified more using the OEQ than White males (Breard, 1995). As Breard (1995) noted, her results have critical implications for identification, particularly for African American students.

Need for the Current Study

Despite research linking OEs to giftedness and gifted identification and a general acceptance that they may be indicators giftedness (O’Connor, 2002; Silverman, 1993), the behavioral manifestations of OEs are not always readily apparent as giftedness. Indeed, Piechowski (2006) has pointed out that OEs can be misinterpreted and given a negative appraisal, much like the unfamiliar behaviors of minority students (i.e. Graybill, 1997). Flint (2001) discussed how OEs may appear to be attention-deficit/hyperactivity disorder, overreacting, or misbehavior. Moreover, the behaviors associated with OEs that can be misconstrued, such as physical activity, are similar to the behaviors others have claimed to be
culturally relevant to African American students, but incompatible with traditional teaching and the school environment (Bonner, 2000; Flint, 2001; Ford, 2003; Graybill, 1997; Helms, 1992).

Given that differences can be found among individuals of different ability levels, genders, and even sexual orientation, inherent personal characteristics and socialization may play a role in an individual’s experience of the world. To this end, culture also plays a role in the life experiences of individuals. Because every culture holds its own set of values and sets its own standard for eminence, it follows that the emphases of the culture stand to contribute tremendously to the individual’s perception of the world. Falk and colleagues (1997) said, “Although OE is theoretically innate, its expression undoubtedly is influenced by culture” (p. 204). They found that American artists had significantly higher psychomotor scores than the Venezuelan artists, and noted the American tendency to emphasize athleticism. However, their study was one of the few studies regarding culture and OEs. A number of searches of major educational and psychological databases (PsycINFO and ERIC) for research regarding OEs and African Americans yielded only two dissertation studies, and no other published work.

Two dissertation studies have been conducted regarding the OEs and African American students. In the first study, Ackerman (1998) analyzed 13 studies that used the OEQ in order to assess the qualities of the OEQ and to determine how well OEs correctly differentiated gifted and non-gifted students. Her findings that are relevant here were that White students had the highest OE scores, and that OEs did not differentiate between gifted and non-gifted African American students. Breard’s (1995) dissertation also examined the utility of the OEQ, but Breard specifically examined the use of the OEQ in identifying young African American students. Breard’s (1995) findings were somewhat different from Ackerman’s (1998), which may be a function of the differing focuses of the two studies. As mentioned above, Breard (1995) found
that African American students scored higher on certain OEs than their White counterparts, and that more African American students were identified as gifted when using the OEQ. Given the paucity of research, the lack of current research, and conflicting findings of extant research, more information is necessary regarding OEs in African American students.

The present study was an attempt to add to this research base. It differed from prior research in this area in a couple of ways. First, in this study I examined college students who are likely to be more advanced in their emotional development than the elementary students studied by Breard (1995). Moreover, the instrumentation of this study was different. Breard (1995) and Ackerman (1998) used the OEQ, a questionnaire that uses essay format and must be subjectively scored. In this study I used a more recent instrument, the Overexcitability Questionnaire II (OEQII), which utilizes a Likert scale (Falk et al., 1999).

In addition to advancing the research literature, research of OEs in African American students has practical implications. Harmon (2002) found that gifted African American students identified culturally competent teachers as most effective in teaching. Also, Graybill (1997), Bonner (2000), Ford and Grantham (2003), and Ford and Harris (1999) have all stressed multicultural training and education as key ingredients to changing negative perceptions about African American students. Research regarding psychological experiences demonstrates that African American students may have unique classroom experiences as well (Steele & Aronson, 1995; Bergin & Cooks, 2002; Horvat & Lewis, 2003). Advancing our understanding of these students, how they experience the classroom, and how they learn increases the potential of having culturally competent educators who can effectively identify, serve, and retain gifted African American students.
Research Questions

Thus, the present research was guided by the following questions:

1. Do gifted and non-gifted African American students differ on OE scores?

2. If gifted and non-gifted African American students do differ on OE scores, how do those differences compare to findings in previous research with predominantly White samples?

3. Do OEs in African American students differ from those of White students?

Past research has demonstrated conflicting findings on the first question and third question, so I sought to clarify these differences. For the second question, although there have been variations in the research, the emotional and intellectual OEs have consistently emerged as higher in gifted students than non-gifted students (Ackerman, 1997; Bouchet & Falk, 2001; Bouchard, 2004; Piechowski & Colangelo, 1984; Schiever, 1985) and a goal of this study was to determine if the same differences are found in African American students. To answer these questions, I examined OEs in undergraduate students. Recruitment efforts targeted African American students in order to focus on within group differences.
CHAPTER 3

METHOD

Participants

The participants of the study were 99 students from a large southeastern university, 88 were female and 11 were male. In terms of race, approximately 52% identified themselves as African American or Black, 40% were White, 3% Hispanic, 1% Pacific Islander, 2% Asian, and 2% Multiracial. The average age of the participants was 19.68 years with a range of 18 to 35. Participants were classified as gifted or not gifted based on past gifted identification. Students were asked specifically during the study whether they had been identified as gifted during their kindergarten through 12th grade schooling. Approximately 75% indicated that they had been identified as gifted.

Participants were selected using convenience sampling (Creswell, 2005) from various undergraduate courses, groups, and programs. As mentioned above, African American students specifically targeted in recruitment. Advisors, presidents, professors, and groups contacts of undergraduate courses, groups, and programs were contacted via e-mail or telephone by the researcher. The researcher explained the study and its purpose, and in some cases sent the study’s materials to these individuals if they requested to review them. Students were recruited from the groups that responded. Table 1 shows the frequencies of students recruited from different areas.
Because of the low numbers of males and racial groups other than African American and White, all cases that were not female and White or African American were excluded from the analysis. Additionally, graduate students and students without complete information were excluded from analysis. Once these cases were excluded, there were 80 participants. About 56% of the students were African American, 44% were White, 75% were gifted, and all were female.

**Materials**

The materials for this study consisted of a Demographics Questionnaire (please see Appendix A), the Overexcitability Questionnaire-Two (OEQII), the Overexcitability Explanation sheet (please see Appendix B), and in some cases, a recruitment letter (please see Appendix C). The OEQII manual, scoring system, questionnaire (Falk et al., 1999) was purchased from the Gifted Development Center. Questions on the Demographics Questionnaire were developed in
part based on information collected in similar studies (Bouchet & Falk, 2001; Treat, 2006) and in part based on suggestions from faculty advisors.

The OEQII is a 50-item instrument with Likert scale items. Participants answer on a scale from 1 to 5 to rate how much statements are or are not like them. The OEQII has 5 scales representing each of the 5 overexcitabilities, with internal consistencies of .86, .89, .85, .89, and .84 for the psychomotor, sensual, imaginational, intellectual, and emotional scales, respectively (Falk et al., 1999). Each of the scales is made up of 10 items that reflect the corresponding OE. To obtain a final score, the responses to the 10 items are added together and divided by 10 (Falk et al., 1999). The following are examples of items for each of the OEs:

1. Psychomotor: “I love to be in motion.”
2. Sensual: “I get great joy from the artwork of others.”
3. Imaginational: “I enjoy exaggerating reality.”
5. Emotional: “I take everything to heart” (Falk et al., 1999, p. 7-8).

Procedure

The participants were administered the research packet, which consisted of two informed consent forms, the Demographics Questionnaire, and the OEQII. In most cases, I explained the purpose and briefly reviewed the consent form with participants. In cases when the informed consent was not reviewed, I was available for any questions. In a previous study, participants were given the opportunity to participate online (Treat, 2006). For purposes of simplicity, I administered all questionnaires myself. Participants then filled out the Demographics Questionnaire and the OEQII. When they had completed the questionnaires, they were offered the Overexcitability Explanation sheet, which explained OEs and provided them resources for
further information. Students were also given a copy of the informed consent to keep. In some cases, students were given a recruitment letter by me or a professor prior to the study, and the students were given the opportunity to contact me if they were interested in participating.

I hand-scored all OEQIIs. In cases where students did not answer an item, that item was left out of scoring and the final OE scale sum was divided by 9 instead of 10. I also entered all data into SPSS and analyzed the data using a multivariate analysis of variance (MANOVA). This analysis was chosen because there were multiple dependent variables (Keppel & Wickens, 2004), and based on prior research (Bouchet & Falk, 2001; Treat, 2006). Race and gifted identification were entered as independent variables, and the 5 OEs were entered as dependent variables. The descriptive statistics for these variables can be found in Table 2. Age and parent education were entered as covariates based on past research (Bouchet & Falk, 2001). Wilks’ Lambda also was used based in past research (Bouchet & Falk, 2001; Treat, 2006).

Table 2

Descriptive Statistics for OEs across Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Subscale</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
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<td>Gifted African</td>
<td>Psychomotor</td>
<td>35</td>
<td>3.154</td>
<td>.596</td>
</tr>
<tr>
<td>American</td>
<td>Sensual</td>
<td>35</td>
<td>3.220</td>
<td>.876</td>
</tr>
<tr>
<td></td>
<td>Imaginational</td>
<td>35</td>
<td>2.527</td>
<td>.742</td>
</tr>
<tr>
<td></td>
<td>Intellectual</td>
<td>35</td>
<td>3.633</td>
<td>.769</td>
</tr>
<tr>
<td></td>
<td>Emotional</td>
<td>35</td>
<td>3.623</td>
<td>.692</td>
</tr>
<tr>
<td>Non-African</td>
<td>Psychomotor</td>
<td>10</td>
<td>3.173</td>
<td>.664</td>
</tr>
<tr>
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<td>Sensual</td>
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<td>3.408</td>
<td>.923</td>
</tr>
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<td>Gifted</td>
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<tr>
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<td>---------------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Emotional</td>
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<td>3.454</td>
</tr>
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<td>Psychomotor</td>
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</tr>
<tr>
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<td>3.601</td>
</tr>
<tr>
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<td></td>
<td>Imaginational</td>
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<td>2.954</td>
</tr>
<tr>
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<td></td>
<td>Intellectual</td>
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<td>3.940</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional</td>
<td>25</td>
<td>4.032</td>
</tr>
<tr>
<td>Non-</td>
<td>White</td>
<td>Psychomotor</td>
<td>10</td>
<td>3.430</td>
</tr>
<tr>
<td>Gifted</td>
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<td>Sensual</td>
<td>10</td>
<td>3.820</td>
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<tr>
<td></td>
<td></td>
<td>Imaginational</td>
<td>10</td>
<td>2.820</td>
</tr>
<tr>
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<td></td>
<td>Intellectual</td>
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<td>3.180</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional</td>
<td>10</td>
<td>3.910</td>
</tr>
</tbody>
</table>

*Note.* S.D. stands for standard deviation, n stands for number of participants.
Do Gifted and Non-gifted African American Students Differ on OE Scores?

The first research question guiding this study was: Do gifted and non-gifted African American students differ on OE scores? To address this question, the African American sub-sample was analyzed independently of the whole sample, with giftedness as the independent variable and OEs as the dependent variables. Age and parent education were entered as covariates. The MANOVA was not significant, $\Lambda = .975$, $F (5, 37) = .188$, $p = .965$, with a small effect, $\eta^2 = .025$. These results are shown in Table 3.

Table 3

MANOVA Results for Giftedness on OEs in African American Participants

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilks’ Lambda</th>
<th>Df</th>
<th>F</th>
<th>P</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Effect</td>
<td></td>
</tr>
<tr>
<td>Covariate, Age</td>
<td>.815</td>
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<td>37</td>
<td>1.677</td>
</tr>
<tr>
<td>Covariate, Parent</td>
<td>.913</td>
<td>5</td>
<td>37</td>
<td>.709</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giftedness</td>
<td>.975</td>
<td>5</td>
<td>37</td>
<td>.188</td>
</tr>
</tbody>
</table>

*Note.* df presents degrees of freedom.
For the univariate effects, there were no significant differences between gifted and non-gifted African American participants. Age, the covariate, was significant for the psychomotor OE, $F(1, 41) = 5.262, p = .027$, and approached significance for the intellectual OE, $F(1, 41) = 3.061, p = .088$. Finally, Levene’s Test approached significance, for the emotional OE, $p = .058$, indicating that the assumption of homogeneity of variance was in jeopardy for the African American sub-sample.

Do OEs in African American Students Differ from Those of White Students?

The third research question for this study was: Do OEs in African American students differ from those of White students? To answer this question, analyses were run on the group data. Variables were entered as indicated in the procedure section. The multivariate interaction of race and gifted identification was not significant, $\Lambda = .894, F(5, 70) = 1.664, p = .155$. However, the multivariate main effect of race was significant, $\Lambda = .807 F(5, 70) = 3.341, p = .009$, and approached significance for gifted identification, $\Lambda = .873, F(5, 70) = 2.042, p = .083$. The main effect of race also had a large effect size of .193. The covariates, age and parent education were not significant. Box’s $M$ was not significant, indicating covariance was equal across groups.

These results are shown in Table 4.

**Table 4**

*MANOVA Results for Race and Giftedness on OEs*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilks’ Lambda</th>
<th>Df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate, Age</td>
<td>.889</td>
<td>5</td>
<td>1.739</td>
<td>.137</td>
</tr>
<tr>
<td>Covariate, Parent</td>
<td>.967</td>
<td>5</td>
<td>.470</td>
<td>.797</td>
</tr>
</tbody>
</table>
The univariate analyses revealed some interesting results. First of all, one of the covariates, age, was significant for the psychomotor OE, $F(1, 74) = 4.900, p = .030$, partial $\eta^2 = .062$ and approached significance for the intellectual OE, $F(1, 74) = 3.604, p = .062$, partial $\eta^2 = .046$ indicating that the effects of race and giftedness have significantly different effects on the psychomotor OE after age has been taken into account. However, the effect sizes are small to medium, so these results should be regarded with caution. There was a significant interaction of race and gifted identification for the intellectual OE with a medium effect, $F(1, 74) = 6.503, p = .013$, $\eta^2 = .081$. For gifted students, White students scored higher than African American students, but for non-gifted students, African American students scored higher than White students. This result is illustrated in Figure 1, modified from Bouchet and Falk (2001). For the main effect of race, White students scored significantly higher on the emotional OE than African American students, with a medium effect, $F(1, 74) = 6.706, p = .012$, partial $\eta^2 = .083$. The same difference also approached significance for the sensual OE with a small effect, $F(1, 74) = 3.502, p = .065$. $\eta^2 = .045$. For the main effect of giftedness, gifted students scored significantly higher than non-gifted students on the intellectual OE, with a medium effect, $F(1, 74) = 5.789, p =$
.019, \( \eta^2 = .073 \). All other results were not significant. These results are shown in Table 5. All effect size interpretations are based on Cohen’s (1988 as cited in Keppel & Wickens, 2004) guidelines. An important caveat for the univariate results is that Levene’s Test was significant for the emotional OE, \( p = .003 \), so the homogeneity assumptions of the univariate test was violated for the emotional OE.

Figure 1. Mean Intellectual OE Scores by Gifted Identification and Race
### Table 5

*Univariate Effects for Race and Giftedness on OEs*

<table>
<thead>
<tr>
<th>Source</th>
<th>OEs</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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<td>4.900</td>
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<td>1.248</td>
<td>.268</td>
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<tr>
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<td>.519</td>
<td>.881</td>
<td>.351</td>
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<td>3.604</td>
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<td>.042</td>
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</tr>
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<td>.012*</td>
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<td>.064</td>
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<td>.334</td>
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<td>Imaginational</td>
<td>Intellectual</td>
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<tr>
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<td>---------</td>
<td>---------------</td>
<td>-------------</td>
<td>-----------</td>
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<td>43.591</td>
<td>33.508</td>
<td>29.377</td>
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</tr>
<tr>
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<td>55.413</td>
<td>39.788</td>
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<td>Total</td>
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<td>Sensual</td>
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Note. * represents results significant at the .05 level, † represents results that approached significance, or .05 < p < .100. SS represents sum of squares, df represents degrees of freedom, and MS represents mean square.

Summary

To summarize, the first two research questions of this study were about within-group differences between gifted and non-gifted African American students. With regard to the first question, the analyses revealed no significant differences between these two groups of African
American students. The second research question was: If gifted and non-gifted African American students do differ on OE scores, how do those differences compare to findings in previous research with predominantly White samples? Previous research with predominantly White participants have revealed significantly higher emotional and intellectual OEs in gifted students (Ackerman, 1997; Bouchet & Falk, 2001; Bouchard, 2004; Piechowski & Colangelo, 1984; Schiever, 1985), however this study did not show such differences between the two ability groups of African Americans. Finally, the third research question was about differences between White students and African American students. The analyses revealed that White students scored significantly higher on the emotional OE than the African American students, and that there was an interaction between race and giftedness for the intellectual OE.
CHAPTER 5

DISCUSSION

Through this study, I sought to add to the overexcitability literature by examining a group that is underrepresented both in gifted programs and in the overexcitability literature. By examining OEs in African American and White female students, this research allowed for a greater focus on African American females than has been allowed in most previous studies that used predominantly White participants.

*Differences in Gifted and Non-gifted African American Females*

From the data, there were no significant differences between African American females who had been identified as gifted when compared to those who had not been identified as gifted. There are several reasons that these results might have occurred. The first possibility is that unlike results with predominantly White samples (Ackerman, 1997; Piechowski & Colangelo, 1984, etc.) OEs do not differentiate between gifted and non-gifted African American females. These results would correspond with Ackerman’s (1998) findings, but contradict Breard’s (1995). Another explanation is that the sample in this study is more homogenous in terms of ability than the population it represents. Out of the 45 African American females, almost 80% were in gifted programs, and almost 96% took honors, advanced placement, or international baccalaureate courses in their kindergarten through 12th grade schooling. In addition, all are students at a competitive university, and most were either participating in a summer research program or were members of an extracurricular group. Grade point averages between those who had and had not been identified as gifted did not differ significantly for the total sample, $F (1,$
that, grade-wise, participants were achieving similarly in college, regardless of gifted identification prior to college. Overall, the participants were a motivated, high-achieving group, and the lack of variation in their ability is the most likely explanation of the homogeneous OE scores.

**OEs and Giftedness**

Only the intellectual OE was significantly different in the gifted and non-gifted females. This is both consistent and inconsistent with other studies regarding OEs and giftedness. In most past OE studies (i.e. Ackerman, 1997; Bouchet, 2001; Piechowski & Colangelo, 1984; Schiever, 1985, etc.), the intellectual OE was higher in gifted, which was the case in this study. However, these past studies also identified more than one OE as higher in the gifted group, which was not the case in this study. Again, because the ability level of the group was similar, it is not surprising that differences found in prior research were not bourn out here.

**Differences Across Races**

**Emotional OE** An interesting result of this research was that as a group, the White participants had significantly higher emotional OE scores than their African American counterparts. This result was also found in Ackerman’s (1998) study, but in Breard’s (1995) study, the two groups were almost equal, with White participants scoring slightly higher. One reason that the findings in the study differed from those of Bread (1995) may be due to the age of the participants, because the participants in this study were college-age students, whereas those in Breard’s (1995) study were elementary-age. Another potential interpretation of this result may be reflected in a discussion the researcher was able to observe while collecting data from an African American women’s group. The group was discussing why mental health issues have a
stigma in the African American community, and one of the members pointed out that African American women are seen as strong and White women are seen as weak. This was a stereotype unfamiliar to the researcher, but if it is value widely known and held among African American women, this stereotype might influence how African American women answer questions in the emotional domain, such as “My strong emotions move me to tears” (Falk et al., 1999, p. 8).

In conjunction with the stereotype regarding emotional strength are issues of social power/position, distrust, and self-concealment. Merriam, Johnson-Bailey, Lee, Kee, Ntseane, and Muhamad (2001) said that one’s power and position as a researcher may impact the research process. In this study, I was graduate student researching undergraduate students. In some cases I was introduced by a teaching assistant or group officer, linking me to authority. In addition, I was a White woman asking African American women to share their experiences and feelings. My race may have injected issues of social power (Kendall, 2006) as well as making me an outsider to these participants (Merriam et al., 2001). For the White participants, my race should not have prompted these issues. Power and position may have impacted how different participants responded and the information they were willing to share.

Issues of trust may be imbedded in the impact of power and position. In a study of participant attitudes to research, Farmer, Jackson, Camacho, and Hall (2007) asked members of groups that are underrepresented in medical research how they felt about participating in research. The target groups were African American women and White women with a low socioeconomic status. The findings of the study revealed that in a White researcher/African American participant dynamic, these women displayed an overall sense of distrust and believed that White researchers are not honest with African American participants (Farmer et al., 2007).
Although this study concerned feelings about medical research, there may be similar feelings about research in general. A distrust of the researcher could impact participant responses.

Finally, the results with regard to the emotional OE may be understood in the context of attitudes about mental health services, which also ties in to the stereotype about emotional strength in African American versus White women. Although the OEs are not indicators of psychological health, items on the OEQ-II do tap feelings that individuals might associate with psychological health such as, “I feel other people’s feelings,” “I worry a lot,” and “I have strong feelings of joy, anger, excitement, and despair” (Falk et al., 1999, p. 7-8). Wallace and Constantine (2005) surveyed 251 African American undergraduate and graduate students about their attitudes about mental health services, perception of the stigma associated with mental health, degree of “self-concealment,” and degree of agreement with an “Africentric worldview.” They defined self-concealment as the “tendency to conceal personal information that is negative or distressing,” and an Africentric worldview as the practice of and belief in cultural values rooted in African traditions and history (Wallace & Constantine, 2005, p. 375). They found that the more strongly participants subscribed to an Africentric worldview, the more strongly they felt stigma was associated with mental health and the more they reported self-concealment.

Taken together, the findings of the research mentioned above could inform the interpretation of the lower emotional OE scores in the African American participants. Power and position of the researcher may have prompted feelings of distrust and/or caution that the researcher was withholding information (Farmer, et al., 2007; Merriam et al., 2001), and led the participants to answer conservatively. Moreover, if participants associated the emotional items with psychological constructs, they may have associated the items with stigma and tended toward self-concealment.
Perhaps the most interesting result of this research is the significant interaction between race and giftedness for the intellectual OE. Although gifted White females scored higher than their gifted African American counterparts, non-gifted White females scored lower than their non-gifted African American counterparts. This result can be attributed in part to the fact that OEs overall did not differ among gifted and non-gifted African American females. However, another explanation can be linked back to the under-representation of African American students in gifted programs. Because many identification practices favor White students (Ford, 1998; Frasier et al., 1995), it may be that the non-gifted African American women in this study are more likely to be unidentified gifted students than the non-gifted White women. For example, Frasier and colleagues (1995) claimed that test bias and referrals systematically lead to under-identification of minority students for gifted programs. McBee (2006) found that both teachers and standardized tests refer more White and Asian students than African American students. Thus, it would make sense that African American gifted and non-gifted students would have similar scores and “non-gifted” African American students would have higher scores than non-gifted White students. In fact, the problem of under-identification of African American students may explain the non-significant differences between gifted and non-gifted African American participants in this study and in past research (Ackerman, 1998).

Another potential explanation for the interaction has to do with the characteristics of high-achieving African American women. Again, although characteristics of this group that have been found in research will be discussed, it is important to remember that African American women are a diverse group, and this information is not meant to promote stereotypes (Nuby & Oxford, 1998). The young women in this study can certainly be considered high-achieving. As mentioned above, the majority had taken some advanced coursework prior to college, were
attending a competitive university, and about 58% expressed ambitions that included graduate work. In the research literature both Freeman and Walberg (1999) and Kitano (1998) have studied high-achieving African American women. Freeman and Walberg (1999) did a biographical analysis of 256 women who were known for great accomplishments in various fields, and explored the characteristics of these women. They compared the characteristics of the African American women to those of other women in the sample, and found that the African American women manifested significantly more independence and “single-mindedness” than other women. Also, in interviews with 15 prominent African American women, Kitano (1998) found that a characteristic that most of the interviewees manifested in childhood and adolescence was a love of reading. The traits found in these studies of high-achieving African American women are also characteristic of the intellectual OE (Piechowski, 2006). Thus, the interaction of race and giftedness may have occurred because the traits and behaviors associated with the intellectual OE have been found in high-achieving African American women.

**Limitations**

There were several limitations in this study. Although the sample was a good size, once it was divided by race and gifted identification, the groups became small, making it difficult to find significant differences or draw generalizations. In addition, in some cases, assumptions garnering the statistics were violated and covariates had significant effects. All of the results of this study must be regarded with caution for these reasons. Moreover, any interpretation of the results can only apply to females. Grantham (2004) and Whiting (2006) have suggested that the educational needs and experiences of African American males are unique. Breard (1995) found that African American males had higher psychomotor OE scores than African American females. Moreover, Miller and colleagues (1994), Bouchet and Falk (2001), and Treat (2006) found that males and
females differed significantly on OEs. Thus, including males in the sample may have resulted in different findings.

As mentioned above, a final limitation of this research is that the ability level of the sample was homogeneous. The majority had been identified as gifted, and those who had not were achieving at a similar level and had had similar educational experiences to those who had. In addition, the study was situated in the field of gifted education. Because individuals tend to be interested in topics they can relate to, the study and researcher’s connection to gifted education may have drawn very bright if not gifted participants. In fact, one participant wrote on her Demographic Questionnaire that she had been tested, but not identified. It is reasonable to assume that some of the participants not identified had been tested and exhibited the some of the traits and aptitudes of giftedness, giving them an interest in this study. Finally, all students were attending a competitive university of good standing, indicating they were of high ability, regardless of gifted status in elementary and secondary school.

Future Directions

Given the results and limitations of the current study, there are many outlets for future research in this area. Future researchers should use a much larger sample with more average-ability participants and sufficient numbers of males and females to look at within and between group differences. Separate studies with only male African American students and only female African American students should also be conducted to fully understand the impact gender and ethnicity on OEs. It may be useful to examine high school students or post-college adults, as these populations are likely to be more heterogeneous in ability. Because college students are selected based on test scores and grades, among other things, it is likely that they are more homogeneous in terms of academic abilities than the general population. Moreover, because it
has been suggested that both OEs and cultural styles of African American students are misunderstood in the classroom, the presence of OEs in younger students should be researched, as younger students spend more time with one teacher and are more susceptible to the negative impact of being misunderstood by teachers. Future studies in this vein might use the ElemenOE (Bouchard, 2004) to examine both differences in OEs across racial groups and teacher attitudes toward OE-related behaviors.

Finally, the experience of OEs can have a very meaningful impact in lives of students. For example, one participant wrote a note to the researcher about how learning that these experiences were tied to her giftedness had made her think about them differently. The experiences of this young woman, and others, may hold valuable information regarding overexcitability and the educational experiences of high-achieving African American women. Thus, qualitative interviews that situate the OE experiences within the school context are an essential route for future research.

**Implications for Practice**

A number of implications can be drawn from this study. First, there are implications for gifted identification and screening. Although the instrument used in this study, the OEQII, is not an identification instrument, other OE instruments that can be used more diagnostically are available. In terms of identification and screening, this is the second study that has failed to differentiate between gifted and non-gifted African American students. It may be that OEs are not a characteristic of all gifted students. Conversely, it may be that OEs can reveal unidentified gifted African American students when they fail to differentiate. An important way to determine the underlying cause of these results is to draw finer distinctions between groups. For example, Bouchet and Falk (2001) examined differences in scores between students in gifted courses,
advanced courses, and “standard” courses (p. 260). Breard (1995) also distinguished between
gifted, near-gifted, and non-gifted. In this way, high-achieving students not identified as gifted
are not lumped into the non-gifted group, and more differences might be discernible. It is
possible that OEs could serve as a net for high-ability African American students not identified
by traditional identification procedures (i.e. standardized tests). If students show promise in OEs,
they could require further testing. In fact, several studies have found that when OEs are used as a
differentiating factor, more students are classified as gifted (Ackerman, 1997; Bouchard, 2004;
Breard, 1995).

Moreover, implications may be drawn from this study regarding counseling and retaining
gifted African American students in gifted programs. Ford and Moore (2004) said “educators
who understand culture, are familiar with the functions of culture, and are aware of the
dimensions of culture are less likely to experience…conflicts” (p. 38). Moreover, Constantine,
Hage, Kindaichi, & Bryant (2007) identified several skills counselors working with minorities
should have, including an ability to understand and reflect upon the experiences of their clients.
This study may speak directly to the needs and experiences of African American females. Ford
(1994/1995) said that gifted African American females may experience a “triple quandary” (p. 165),
as gifted students, female students, and African American students each have their own
sets of needs. That is, the needs of this group as a whole are unique. Miller and colleagues
(1994), Bouchet and Falk (2001), and Treat (2006) all found that females scored higher than
males on the emotional OE, and tied their hypotheses and results to socialization. Yet, this study
demonstrated significantly lower emotional OEs in African American women than White
women. This finding may indicate that African American females channel excess emotional
energy differently than White females. This characteristic may be one that can be taken into
account in classroom and counseling practice. The better students are understood, the more effectively teachers and other school personnel can serve them (Ford & Harris, 1999; Ford & Moore, 2004).

Although it is not directly related to OEs, another implication that can be drawn from this study is the need for the recruitment of culturally diverse teachers. Many individuals (i.e. Ford & Moore, 2004; Irvine, 1989) have pointed out that the United States population, and hence the student population, is becoming increasingly diverse, yet White teachers dominate the teaching profession. Gay and Kirkland (2003) described the demographics of the current teaching population: “They are overwhelmingly European American, middle class, monolingual, White females who have had little sustained and substantive interactions with people of color” (p. 182). Part of this assertion was supported in this study. From the original sample, of the 48 students recruited from education courses, a little over 80% were White and close to 90% were female. Only four were African American. Irvine (1989) said that African American teachers have a teaching style that is conducive to the learning styles of African American students, and they can correctly interpret and understand cultural styles of African American students. The low numbers of African American students in this study from education courses supports contention that more African American individuals should be recruited into the teaching profession (Ford, Grantham, & Harris, 1997; Irvine, 1989).

Conclusion

Through this study, I sought to examine cultural differences in overexcitabilities in order to add to the OE and under-representation literature. Although there were few significant differences, this research can hopefully serve as an impetus for future research regarding OEs in African American students and African American females. I hope that future work will build on
this study and overcome its limitations. Results may have implications for how characteristics of
giftedness and African American students are understood and for classroom practice.
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APPENDICES
Appendix A

Demographic Questionnaire

Please fill in information to the following items. Thank you!

1. Age_____________

2. Year in school (please check one): ______Freshman  ______Sophomore  ______Junior
   ______Senior  ______Graduate student

2. Gender (please check one): ______Male  ______Female

3. Race (please check one):
   ______ Black or African American  ______ Pacific Islander
   ______ White/Caucasian  ______ Asian
   ______ Hispanic  ______ Multiracial
   ______ Other

4. Major of study (if undecided, please write “undecided”):
   ________________________________________________

5. Grade point average: _____________

6. Were you identified as gifted anytime during your K-12 schooling? (please check one)
   _____Yes  _____No

7. Did you take any AP, IB, or advanced/honors course in middle or high school? (please check one):
   _____Yes  _____No

8. Please briefly describe your post-college plans (if undecided, please write “undecided”).
   ________________________________________________
   ________________________________________________
9. Please briefly describe any extracurricular involvement

______________________________________________________________________________

______________________________________________________________________________

10. Parent education (please check the highest degree earned by either parent):

_____Some high school   _____High school diploma   _____Some college
_____College degree      _____Some graduate school  _____Graduate degree
Appendix B

Overexcitability Explanation Sheet

This study used the Overexcitability Questionnaire II to assess overexcitability. Below is a brief explanation of what overexcitabilities are to help you better understanding the research in which you have taken part.

Overexcitabilities (or OEs) refer to a way of experiencing the world. Those who experience OEs have heightened response to the world around them. Theirs is a more intense and sensitive way of being. OEs may also be referred to as heightened intensity or sensitivity (Piechowski, 2006; Silverman, 1993).

OEs were originally recognized by a psychologist named Kazimierz Dabrowski, and they are part of his larger theory of emotional development (Silverman, 1993). Basically, the presence of OEs may be an indicator of emotional developmental potential, and often accompany giftedness (Piechowski, 2006). Gifted individuals tend to have a stronger experience of the OEs than others (O’Connor, 2002; Silverman, 1993).

The 5 Types

According to Dabrowski, there are 5 areas of overexcitability (O’Connor, 2002; Piechowski, 2006; Silverman, 1993). Any or all of the OEs may be experienced by a person.

Psychomotor

The child experiencing psychomotor OEs loves to be in motion, and have a “love of movement for its own sake” (Piechowski, 2006, p. 38). Constant movement of any kind, a tendency toward athleticism, and unrelenting energy are all characteristic of the psychomotor OE (Piechowski, 2006).

Sensual

The child with sensual OEs is particularly responsive to things that rouse the senses (sight, smell, touch, taste, and sound). The senses are heightened, and the child may take particular delight or displeasure to certain sights, sounds, smells, fabrics, etc. Some experts say that this OE may develop more with age (Piechowski, 2006).

Imaginational

The child with imaginational OEs loves the world of fantasy. S/he has imaginary friends and imaginary worlds, often complete with elaborate details. Frequent daydreaming is very common (Piechowski, 2006).

Intellectual

The intellectually intense child loves to know and takes great pleasure in learning about his/her interests. S/he may become completely fixated on a topic of interest, and parents and teachers may have difficulty tearing him/her away to do other things This child is highly curious and constantly questioning (Piechowski, 2006).

Emotional

The child with emotional OEs may experience his/her emotions to a stronger degree. S/he may also be exceptionally sensitive and aware of his/her own feelings and those of others. Some
characteristics include empathy, anxiety, shyness, tendency to form attachments, and a deep concern for others and the world (Piechowski, 2006).

These OE’s may be noticeable even in infancy and are present throughout life. For more information, please ask the researcher, contact her at rebeccan@uga.edu or (404) 405-7322 or see the below references.

References

O’Connor, K. J. (2002). The application of Dabrowski’s theory to the gifted. In M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.) The social and emotional development of gifted children: What do we know? (pp. 51-60). Waco, TX: Prufrock Press, Inc.


Appendix C

Recruitment Letter

Dear Student,

My name is Rebecca Nordin, and I am from the Department of Educational Psychology and Instructional Technology in the College of Education at the University of Georgia. I would like to invite you to participate in my study, “Examining Cultural Differences in Emotional Potential.” The purpose of this study is to examine potential cultural differences on an indicator of emotional development. Your participation would involve filling out a demographics questionnaire that asks you simple questions about yourself and your background, and filling out the Overexcitabilities Questionnaire II, which is a two-page questionnaire that will assess indicators of emotional developmental potential. Your participation will take approximately 30 minutes.

If you are interested in participating in this study, please contact me at rebeccan@uga.edu or (404) 405-7322.

Thank you for your consideration.

Sincerely,

Rebecca G. Nordin
Doctoral Student