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EXPLORING PRESERVICE TEACHERS' PRACTICES AND PERSPECTIVES ON WHITENESS: DEVELOPMENT AND INITIAL VALIDATION OF THE WHITENESS COMPONENTS SCALE

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EXPLORING PRESERVICE TEACHERS' PRACTICES AND PERSPECTIVES ON WHITENESS: DEVELOPMENT AND INITIAL VALIDATION OF THE WHITENESS COMPONENTS SCALE

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College Education
at the University of Kentucky

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ABSTRACT OF DISSERTATION

EXPLORING PRESERVICE TEACHERS' PRACTICES AND PERSPECTIVES ON WHITENESS: DEVELOPMENT AND INITIAL VALIDATION OF THE WHITENESS COMPONENTS SCALE

For decades, educational scholars have considered and investigated a number of factors (e.g., teacher beliefs and expectations, racism, and inadequate school resources) that maintain the negative schooling experiences of Black students. Recently, scholars have identified components of whiteness as factors informing the adverse educational experiences of these students. To date, however, few researchers have empirically examined attitudes, behaviors, and perspectives of whiteness in educational settings and among educational stakeholders. In addition, no study has explored an association between whiteness components and Black students' overall educational experiences. The dearth of these studies in the educational and psychological literatures is due in part to limited instrumentation assessing the cultural and psychological elements of whiteness.

The purpose of this study was to develop and explore the factor structure of the Whiteness Components Scale (WCS) with a sample of White preservice teachers and a sample of White psychology students. In Study 1, exploratory factor analysis (EFA) was employed on a set of items with 184 White preservice teachers. Results indicated a 2-Factor solution with 6 items for the Whiteness Components Scale: White Emotionality (WCS-WE) (n = 3) and White Standardization (WCS-WS) (n = 3). A review of the confirmatory factor analysis (CFA) results on a sample of 160 participants enrolled in psychology courses showed exact fit for the 2-Factor model. Convergent validity was evident between WCS-WE and WCS-WS and three factors representing the White Privilege Attitudes Scale (WPAS) (i.e., Willingness to Confront White Privilege, White Privilege Awareness, and White Privilege Remorse) except Anticipated Costs of Addressing White Privilege (Pinterits et al., 2009). Specifically, results indicated a negative and high relationship between WCS-WE and WCS-WS and three of the factors on WPAS, but a low and positive association with Anticipated Costs of Addressing White Privilege.

Furthermore, WCS-WE and WCS-WS demonstrated a nonsignificant relationship with Multigroup Ethnic Identity—Exploration (ME), a subscale on the Multigroup Ethnic Identity Measure-Revised (MEIM-R) (Phinney & Ong, 2007). This nonsignificant association showed evidence of discriminant validity between the two whiteness

subscales and ME. However, the two whiteness factors showed a moderate to high and positive association with Multigroup Ethnic Identity— Commitment (MC) (Phinney & Ong, 2007), which was not anticipated. This study provides a preliminary psychometric assessment of the newly developed Whiteness Components Scale. Study limitations, future research directions, and brief implications for teacher education are provided.

KEYWORDS: Whiteness, White Preservice Teachers, White Psychology Students, Scale Development, Survey and Item Validation

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DEDICATION

To my mommy, who is the embodiment of resilience, kindness, and love.
To mom (great-grandma Essie), who is the embodiment of faith and strength.
To Marvin, who is the embodiment of a father who provides security and care.
To my dad, who is the embodiment of the male version of me and the most interesting man on earth.
To the Liang family, who is the embodiment of the love of God.

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CHAPTER 1 INTRODUCTION

Education scholars continue to address the educational disparities (e.g., low standardized test scores and underrepresentation in gifted and talented programs) between students of color, particularly Black students, and their White counterparts in primary and secondary education (Anyon et al., 2018; Fernandes et al., 2016). In particular, a report from the National Center for Education Statistics (NCES, 2016) showed that Black students in Grades 4, 8, and 12 scored lower than their peers (i.e., White, Asian, Hispanic, and Pacific Islander) on standardized reading assessments.

In addition to academic performance outcomes, Black students also experience significant disparities in school discipline between themselves and their White counterparts (Milner, 2013; Okonofua & Eberhardt, 2015; Rocque, 2010). Some examples of school disciplinary actions include office referrals and exclusionary discipline (i.e., suspension, detention, expulsion, and alternative school placement). In particular, though Black students constitute 16% of the student population in public schools, they make up 32% of students who have had an in-school suspension, 33% who were given an out-of-school suspension, and 42% who experienced multiple out-of-school suspensions in 2011-2012 (OCR, 2014). The rate of suspension for Black male students in particular is exacerbated when considering those in special education programs (OCR, 2014). Specifically, Black boys in special education composed of 25% of the students who received at least one out-of-school suspension in the schoolyear 2013-2014, compared to just 10% of their White counterparts receiving out-of-school suspensions (OCR, 2014). Even preschool students are not exempt from the racially disparate disciplinary practices at schools. In fact, the OCR reported that in the 2011-

2012 schoolyear, 18% of all preschool students were Black, but 48% of them received multiple out-of-school suspensions. In contrast, their White counterparts comprised 43% of preschool students, but accounted for just 26% of students with multiple out-of-school suspensions.

Several scholars infer the presence and impact of multiple forms of racism on the adverse school experiences of students of color, and Black students in particular (Chapman, 2013; Ford, 2014; Kohli et al., 2017). These scholars believe that, although the various types of racism have not been empirically identified as contributors to the educational difficulties of Black students, they should not be eliminated in explaining such outcomes (i.e., racism can exist in school policies and practices). However, given the difficulty in proving that racism is an observable factor in the schooling outcomes of this population, it is important to examine additional racism-related factors to explain such phenomena (Bonilla-Silva et al., 2004). Thus, a discussion on racism, followed by an interdisciplinary description of whiteness, and an outline of the purpose of the study will be provided in the next chapter.

CHAPTER 2 LITERATURE REVIEW

2.1 Different Forms of Racism and Schooling

Racism "refers to the belief in racial superiority and also the structures of society, which create racial inequalities in social and political institutions; thus, racism consists of both ideological (belief) and structural (institutional) components" (Neville et al., 2000, p. 61). Though there are many concepts of racism (e.g., nativist and colonial racism), I will focus on four types (i.e., individual, environmental, cultural, and institutional racism) as described by Jones (1997) and Thompson and Neville (1999). The next section will provide a description of each form of racism and its purported role in contributing to the adverse school experiences of students of color in general and Black students in particular.

2.1.1 Individual Racism

According to Hilario and colleagues (2018), "individual racism is the most widely known form, which is expressed from one individual to another based on the perceived belief of racial superiority" (p. 2). For example, a White store clerk following a Black person in the store or telling a Chinese American she speaks English well are racial microaggressions that reflect individual racism (Sue, 2004). In the first example, racism is demonstrated by the White store clerk adhering to a belief in the inferior status of the Black patron, assigning him/her/them criminal intent while in the store. In the second example, individual racism is shown through the articulation that the Chinese American is viewed as an exception to her race, thereby reducing her ethnic group to inferiority status (i.e., inability to speak English well). With respect to how individual racism can be

exemplified in the classroom, a White teacher could ignore Black students in class because of the negative beliefs she might hold about that particular group's intellect.

2.1.2 Cultural Racism

This aspect of racism refers to the practice of discriminating against a person of a different culture based on the beliefs and attitudes that one's own cultural values and expressions are superior while other groups' cultural artifacts and behaviors are inferior (Jones, 1997; Thompson & Neville, 1999). Thompson and Neville (1999) illustrate that cultural racism can lead to "limiting, pathologizing, exoticizing, or entirely omitting the cultural practices or values and contributions of racial minorities" (pp. 167-168). An example of this practice in schools is referring Black students to special education simply based on the way they walk (Neal et al., 2003). For example, Neal and colleagues (2003) assessed 136 middle school teachers' perceptions of Black male students' aggression, achievement, and need for special education services based on their cultural movement style (i.e., walk versus stroll). After teachers viewed four videos of a White male student walking and strolling and a Black male student walking and strolling, the teachers reported that the White and Black male students who were strolling (a Black cultural style movement) needed special education services, had lower levels of achievement, and manifested higher levels of aggression. This study manifests cultural racism by illuminating teachers' preference for student-based behaviors aligned with mainstream or White cultural values.

2.1.3 Environmental Racism

This type of racism is related to governmental sanctions, laws, and policies that place persons of color into contexts that threaten their social-emotional wellbeing as well as their physical health (Thompson & Neville, 1999). An example of this form of racism can include local officials authorizing companies to dispose of poisons and pollutants on the land and water of poverty-stricken areas, occupied predominantly by Black people. In addition to government officials discarding toxins in such areas, they ignore the harmful effects the contaminants have on the health and overall wellbeing of the residents, who are predominantly Black (Mohai & Saha, 2015; Taylor, 2014; Thompson & Neville, 1999). With respect to environmental racism and school, it is reported that schools with a significant number of students of color are frequently located near land polluted with toxic chemicals (Fischbach, 2005). Chiles (2015) reported that destitute Black children are eight times more likely to be exposed to lead contamination than their White counterparts, which has been associated with cognitive learning disabilities.

2.1.4 Institutional Racism

"Institutional racism generally refers to the policies, practices, and norms that incidentally, but inevitably, perpetuate inequality (i.e., restrict life opportunities of people of color)" (Thompson & Neville, 1999, p. 167). Furthermore, institutional racism is the lack of collective effort made by institutions in providing adequate and efficient services to people of color (MacPherson, 1999). Institutional racism is manifested in our society through unfair job wages, unequal employment opportunities, mass incarceration, denial of access to certain neighborhoods, and limited access to effective healthcare (Alexander,

2012; Jones, 1997; Robinson-Wood, 2015; Sue, 2004). Some scholars have described ways in which institutional racism manifests in schools: teachers with little to no support and limited diversity/anti-bias training; inadequate school resources; and disproportionate Black representation in special education programs (Blanchett, 2006; Shealey & Lue, 2006). Ladson-Billings and Tate (1995) asserted:

> While some might argue that poor children, regardless of race, do worse in school, and that the high proportion of African American poor contributes to their dismal school performance, we argue that the cause of their poverty in conjunction with the condition of their schools and schooling is institutional and structural racism. (p. 55)

These forms of racism lead to the negative school experiences of students of color in general and Black students in particular. More recently, in explaining racial inequality and social injustice in education, some scholars have identified whiteness as a significant contextual and interpersonal factor present throughout the educational lives of Black school-age children (Battey & Leyva, 2016; Lewis, 2006; Picower, 2009). Specifically, through the emergence and proliferation of critical whiteness studies, which focuses on the social construction of whiteness and its impact on persons of color, whiteness has become an important factor in examining the schooling difficulties of Black students in particular and the overall psychological well-being of Black persons generally (Matias, 2016; Yancy, 2005).

2.1.5 Whiteness Studies

Critical whiteness studies are described as a "body of knowledge" (Jeyasingham, 2012, p. 670) that consists of whiteness literature within history, law, education, social work, philosophy, and psychology. Within critical whiteness studies, various components of whiteness have been identified, defined, and empirically linked to racism, White supremacy, and White privilege. The following paragraphs will discuss how whiteness has been described and conceptualized in the literature.

2.2 Conceptual Components of Whiteness

2.2.1 Whiteness as an Ideology

The concept of whiteness has been defined in various ways across academic disciplines. Yoon (2016) described whiteness as "a social construction of policy, law, popular culture, and discourse; that is, whiteness is not biologically meaningful but is socially, materially, and politically so" (p. 5). She also described whiteness as an ideology that views White as always right, moral, valuable, proper, normal, middle-class, hardworking, intelligent, innocent, etc. She argues that the ideology of whiteness is vital in producing White supremacy, White privilege, and racism in media, the economy, language, politics, and education. While this ideology places White people in a positive light, it automatically positions persons of color in a negative light that employs disparaging characteristics (e.g., violent, lazy, suspicious, etc.) to devalue, discredit, and dehumanize them in those same social systems (Fanon, 2008).

2.2.2 Whiteness as a Psychosis

Andrews (2016) conceptualized whiteness as a psychosis, a psychological defect that is manifested when the realities of a historic or contemporary situation are morphed into falsity. This psychosis creates a narrative of distorted truths to deliberately mask the negative realities of a society predominated by White persons. Andrews specifically used two movies about slavery to underscore 1) the existence of whiteness in general and whiteness as psychosis specifically in the media, 2) the wide acceptance of irrational and unrealistic accounts of slavery, and 3) the proliferation of distorted and delusional ideologies produced by whiteness. Specifically, Andrews (2016) reviews two big, budgeted slave movies (i.e., *Amazing Grace* and *Belle*) and their representation of whiteness in Britain. In his critique of the two films, the Transatlantic Slave Trade is grossly distorted in the movies. Specifically, he argued that the main White historic figures in the movies were portrayed as the 'savior' and heroes who contributed to the ending of the slave trade and overall termination of slavery in Britain. In addition, one of the films, although a movie about slavery, avoided showing scenes of slavery and its violence (Andrews, 2016). Andrews (2016) argued that these portrayals are untrue and reinforce the psychosis of whiteness. Andrews noted that whiteness as psychosis displayed in these movies produced ideologies and frames such as minimizing or ignoring the importance of institutionalized racism and its requisite dehumanization of Black people.

While these previous works have offered conceptual descriptions of whiteness, the components of whiteness have been more critically distilled and offered in the social sciences and humanities literature (DiAngelo, 2011, 2012; Harris, 1995; Matias, 2016;

Mills, 1997; 2007; Sue, 2004; Sullivan, 2004, 2006). According to Ruth Frankenberg (1993), whiteness is multidimensional (i.e., structural advantages, perspective, and cultural practices). There are components of whiteness that ostensibly represent each dimension. It is even possible that some of these whiteness components represent more than one dimension identified by Frankenberg (1993). Some whiteness components as proposed in the literature include *valued identity/property*, *representation/visibility*, *White standardization*, *representation/visibility*, *White gaze*, *colorblindness*, *ontological expansiveness*, *White emotionality, ignorance, colorblindness*, *surveillance, White silence,* and *White fragility* (Applebaum, 2008; den Heyer & Conrad, 2011; DiAngelo, 2012; Harris, 1995; Jeyasingham, 2012; Matias, 2016; Neville et al., 2006; Sue, 2001, 2004; Sullivan, 2004, 2006; Yancy, 2016; Yoon, 2016).

2.3 Components of Whiteness

2.3.1 Ignorance

Researchers assert that ignorance, particularly White ignorance preserves whiteness (Applebaum, 2008; Sue, 2004). The ignorance of White individuals can appear in two forms—1) the unawareness of the racial injustices and inequities experienced by individuals of color and 2) the unawareness of the social privileges and racial hegemony that White individuals possess (Applebaum, 2008; Mills, 2007; Sullivan & Tuana, 2007). May (2006) called ignorance in this context "carefully crafted methods of not-knowing" (p. 109), because "Whites are trained not to know and encouraged to not see" (p. 109). Ignorance can reinforce White privilege, as White persons are oftentimes oblivious to 1) the various social and racial inequities experienced by marginalized communities and 2) their ability to benefit from such inequities. In addition, they are likely to convince

themselves that the problem of unequal social advantages lies within the marginalized groups themselves. Sullivan and Tuana (2007) assert that ignorance, therefore, "includes both false belief *and* the absence of true belief about people of color" (Sullivan & Tuana, 2007, p. 3). Therefore, the knowledge regarding White privilege and White racism is dual, wherein White people can 'know' they hold no responsibility and benefit in the historical and contemporary social oppression of people of color and also 'know' that people of color experience social and economic hardship due to their laziness and low educational attainment. The authors argue that these types of 'knowing' about people of color reinforce White people's beliefs in their racial superiority. Furthermore, Applebaum (2008) stated that ignorance privileges White persons by freeing them from considering their own participation in and perpetuation of systemic injustice. Scholars suggest that when White people claim to be obtuse about White privilege and racial injustice of people of color, negative racial disparities between persons of color and White persons will remain an issue (DiAngelo, 2012, 2018).

2.3.2 Colorblindness

Scholars suggest that White persons' ignorance to the racial challenges faced by persons of color could be a result of adhering to a colorblind orientation (Bonilla-Silva, 2006; Desai, 2010; Neville et al., 2006; Sleeter, 2017). Neville and colleagues (2006) define colorblindness as "the denial, distortion and/or minimization of race and racism" by White persons (p. 276). Furthermore, Leonardo (2007) asserts that those who adhere to a colorblind orientation are likely to believe that 1) people live in a post-racial society, 2) race does not matter, 3) everyone is the same, and 4) the racial injustices that people of color experience is solely due to their own wrong doings rather than institutionalized

racism. Such colorblind beliefs absolve White people of any responsibility for perpetuating and preserving the systematic racism their Black counterparts experience. Moreover, it denies the significance of race and detaches their social experiences from their race—to 'not see race' is to not see racial inequality and inequities associated with race. In addition, many White persons are actively taught that it is noble to be colorblind because the professed inability to 'see color' is interpreted as not being a racist (Applebaum, 2007). Therefore, colorblindness permits White people to 'see color' as a means of indicting Black people for contributing to their own social plight (Leonardo, 2007).

Some research has demonstrated that colorblindness occurs within formal educational settings. Amos (2010) conducted a study on 54 White teacher candidates enrolled in a multicultural course at a predominantly White institution (PWI). She sought to assess their beliefs about race and ethnicity through written reflections and observation notes she recorded in a journal. A few beliefs concerning colorblindness surfaced in her study. She found statements such as,

> Race does not matter because I have never had any problem with the issue of race before. I spent over a hundred hours in the classrooms and race has never been an issue for me. Being that I want to teach third grade the thoughts of having to deal with issues of race have not really come to mind. (Amos, 2010, p. 488)

These statements show evidence of prospective teachers endorsing a colorblind orientation, which could be detrimental to students of color. Since colorblindness involves the belief that race is unimportant, and that all people are the same, teachers who espouse a colorblind orientation 1) may not acknowledge race-based oppression

experienced by their students, 2) may be unaware of their own racial biases, and 3) may evade discussions about race.

2.3.3 White Emotionality

Matias (2016) describes the emotions that arise among White teacher candidates, particularly White women, when confronted with or in dialogue about racial issues. These emotions include guilt, frustration, dismissal, and disgust (Matias, 2016; Matias et al., 2014). Such emotions can be manifested through outbursts, denial of race and privilege, and verbal accusations of people of color for social failures. These types of White emotions are often used by White individuals as a way to project their feelings of despair onto people of color for having to face an acknowledgement of racial injustice and privilege (Matias & Allen, 2013; Matias et al., 2016).

Furthermore, within the concept of White emotionality, positive emotions are also exhibited in discussions pertaining to race and racism. Matias (2016) has described this type of White emotionality as a strategy for White individuals to disguise their disgust for people of color. Specifically, Matias (2016) describes White emotionality as emotions deemed socioemotionally appropriate (e.g., care, compassion, and love). She explicates that these positive emotions displayed by White people while being confronted with dialogue about racism are inauthentic, as they are used specifically to conceal true feelings of disgust. Matias and Zembylas (2014) also argue that White teacher candidate students express pity, love, sympathy, and care for students of color, but their true feelings reflect disgust. For instance, a White female preservice teacher could express compassion for students of color and a passion for caring for their needs, yet hold cultural deficit beliefs (e.g., “Black parents don’t care about their kids’ education”) about them

and adhere to colorblind ideologies (e.g., “Race is not important”) (Matias & Zembylas, 2014). Such an emotional expression centralizes whiteness and reduces the focus of addressing racial injustice and inequality.

2.3.4 White Fragility

Another element of whiteness purported to emerge during discussions on racial inequality is White fragility. White fragility is defined as “a state in which even a minimum amount of racial stress becomes intolerable, triggering a range of defensive moves” (DiAngelo, 2012, p. 183). DiAngelo describes White fragility as behaviors and emotions that include guilt, anger, silence, flight, dismissal, fear, and aggression. Themes similar to White fragility exist in educational literature. For example, McIntyre (1997) defined White talk as “talk that serves to insulate White people from examining their/our individual and collective role(s) in the perpetuation of racism” (p. 45). She asserts that this type of discourse occurs in discussions among White people with one another and with people of color. Comparable to DiAngelo’s (2011, 2012, 2018) White fragility, McIntyre (1997) described White talk as “derailing the conversation, evading questions, dismissing counterarguments, withdrawing from the discussion, interrupting speakers and topics, and colluding with each other in creating a ‘culture of niceness’, all of which were used as tactics to evade responsibility for racism” (p. 46). DiAngelo (2011) focuses on various interpersonal transactions that could instigate White fragility, such as 1) being placed in a position to talk openly about race, 2) an unwillingness by persons of color to participate in conversations about race with them, 3) being told that White persons are not racially objective, but promote the racialization of others, 4) persons of color being in a leadership role leading the discussion, 5) hearing that White people contribute to the

racial inequality of persons of color, 6) being told that race matters in the allocation of opportunities and resources, 7) experiencing dissenting views from other White people, 8) being told that institutionalized racism exists, and 9) hearing persons of color talk about their negative racial experiences.

2.3.5 White Silence

Centrally related to the notion of White fragility is White silence (DiAngelo, 2012; Tochluk, 2010). White silence is described as the absence of speaking in discussions pertaining to race (DiAngelo, 2012). Although some individuals might believe that hostile and racist speaking in race-based discussions can impede the advancement of any social change, others would argue that White silence can lead to the same outcome. Specifically, DiAngelo asserts that White silence restricts two foundational antiracist practices—1) "the need to continually educate oneself", and 2) "the need to build cross-racial relationships" (DiAngelo, 2012, p. 244). For DiAngelo (2012), the impact of White silence on the development and execution of social justice initiatives—particularly White ally development—is destructive.

Furthermore, DiAngelo (2012) offers reasons White individuals might not participate in discussions on race in cross-racial settings. According to DiAngelo, White silence is a result of the need to 'save face' and remain comfortable. Those who exercise their ability and privilege to remain silent in such discussions may believe they are appearing neutral when, in reality, their silence demonstrates an inadvertent or perhaps, intentional support for racist attitudes and behaviors in particular, and of the maintenance of whiteness in general. Specifically, White silence confers power and authority to White persons particularly by their omission of a challenge to racially insensitive or egregious

acts. Furthermore, persons of color often construe this White silence as indifference with regards to their experiences with the multiple forms of racism (DiAngelo, 2012).

2.3.6 White Standardization

Whiteness studies suggest that whiteness does not only function as a system that racializes (i.e., the act of imposing a race) persons of color, but it also 'others' them whilst helping White people maintain their status as being the standard (Sue, 2015). With standardization comes baseline ideas for behavior, beauty, and intelligence that are highly represented and visible. These ideas are also defined by White persons and are imposed onto people of color. Therefore, whiteness presents White persons as *the* model in which others are to emulate. Although White people see themselves as raceless humans, they maintain a high level of visibility in all institutions (e.g., politics, education, media, etc.) by the disempowered. Jeyasingham (2012) calls this phenomenon a contradiction because although White persons are 'just people/human,' their racial group's representation is prevalent and packaged with positive symbolism. Whiteness allows both White persons and persons of color to perceive White individuals as the norm and thus, reinforces the idea that all persons, particularly persons of color, should gravitate towards White/Eurocentric values, customs, beliefs, and practices.

2.3.7 Representation/Visibility

Representation/visibility focuses on the sheer ubiquity of White persons' visibility in all institutions. For example, in 2011, DiAngelo (2012) showed that 82% of the House of Representatives and 96% of the Senate were White persons. DiAngelo also identified some of the most successful television shows and movies in our era that were either

exclusively or almost exclusively White—(e.g., *Friends* and *Lord of the Rings*). She even highlighted that some of the films and television shows were based in highly diverse settings like New York City, yet they still solely displayed White actors and actresses as the norm and in the majority of the shows, were presented positively (e.g., without affliction, negative stereotype, etc.). In addition, DiAngelo also argued that media and pop culture perpetuate whiteness by portraying people of color, particularly Black people, as poor and animal-like in features, lazy, unintelligent, violent, drug addicted, gang-affiliated, etc. She identified and described several popular movies and a *Vogue* magazine cover that depicted Black persons in racist, stereotypical roles. One of the movies is *The Blind Side*, which DiAngelo argued the main Black actor is depicted as a,

> … big, dumb, gentle giant who lives in such abject poverty that he has never even had a bed; his drug-addicted single mother with multiple children from unknown fathers; the incompetent welfare worker; the uppity lawyer; and the mincing gang members in his drug-infested and crime-ridden neighborhood. (DiAngelo, 2012, p. 145)

While the main Black character exhibited these negative stereotypical portrayals, the main White character was depicted as the loving 'savior' who was courageous enough to go to the 'ghetto' and confront the gang members who were pressuring the Black kid to join their gang (DiAngelo, 2012). Scholars like DiAngelo and Tochluk (2010) believe that these positive messages of White individuals are ubiquitous in the media, while being simultaneously invisible to White people.

2.3.8 Valued Identity/Property

Legal scholar Cheryl Harris (1995) explains how whiteness is deemed valuable with inherited, exclusive rights and privileges. The value associated with being White is high, as evidenced in White persons' positive and pervasive representation throughout institutions such as mainstream media, government, education, religion, justice, and the economy. With these institutions being pillars of U.S. society, it is inevitable that the racial group with majority representation and visibility, in turn, is deemed not only superior but consequently, highly valued.

In Harris's (1995) seminal work published in *Harvard Law Review*, she asserted that, since the beginning of colonialism and race-based slavery, having White skin legally granted people ownership of various types of property. Therefore, possession of White skin (i.e., valued property) conferred them the legalized and thus, inherent right to freedom and opportunities for wealth accumulation through the enslavement of Africans and land ownership (i.e., property).

Harris (1995) refers to whiteness as valued property in four aspects—*rights to disposition*, *rights to use and enjoy*, *reputation and status property*, and *the absolute right to exclude*. *Whiteness as rights to disposition* is the ability to transfer rights and privileges associated with being White to other White racial members (Bondi, 2012). Current examples of this include an overwhelming propensity among some White law enforcement officers to effectively detain and arrest White male terrorists as a result of the White racial assignment of the perpetrator and inherent value associated with it (e.g., innocent). *Whiteness as a right to use and enjoy* is the privilege to freely enjoy and benefit from being White. An example of this can be the privilege to dictate Black

people's protest of the American flag because of its meaning (e.g., patriotism) while wholly disregarding the reason for protesting it. In this case, cultural value of patriotism and national identity is viewed exclusive to White individuals while the same notion of patriotism is not extended to the Black protesters despite their American citizenry (Devos & Banaji, 2005).

Whiteness as reputation and status is the right to have and the need to maintain a good and moral reputation and status as a member of the White racial group. In addition, in this frame, value is placed on the White racial identity. Historically, this value, by law, has established reputation and status of the White identity (Lopez, 2006). Harris illustrated this aspect of whiteness as property through the legal system in the U.S. where White people could sue other White persons for being called Black. At the time, the law considered such an act as defamation (i.e., damaging someone's character and reputation). However, Black persons were not afforded the legal right to sue someone for calling them White or any other race (Harris, 1995).

Contemporarily, the claim to a good reputation and status still lies within our judicial system, in particular, through the lens of White innocence (Annamma, 2014; Cacho, 2014; Orozco & Diaz, 2016). Annamma (2014) purports that innocence is a subtle and invisible advantage of whiteness as property. Cacho (2014) illustrates this claim to White innocence by highlighting the difference between the George Zimmerman's and Marissa Alexander's trials in Florida. One case involved a Black woman who fired warning shots with a gun. Although no one was hurt, she was convicted and sentenced to 20 years in prison. The other case, involving a Peruvian and White man who followed and killed Trayvon Martin, an unarmed Black teenage boy, yet was found not guilty.

Both shooters claimed self-defense. According to Cacho, in the Zimmerman case, the victim, a Black teenage boy, and in the Alexander case, the perpetrator, a Black woman, were both criminalized and not afforded the presumption of innocence. Conversely, since Zimmerman was not arrested the day of his violent crime, he was presumed innocent from the beginning of interaction to the end of his trial. Beyond his innocence, for many, he has stood as a hero for protecting his community (Cacho, 2014).

Finally, *the absolute right to exclude* is the psychological and physical right to exclude persons of color from possessing and experiencing social, economic, educational, and political privileges associated with whiteness. This frame is accomplished through laws and regulations. An example of this can entail the mass incarceration of Black persons via racial-profiling and excessive sentencing for the 'war on drugs,' as well as felony disfranchisement for this population (Alexander, 2012).

2.3.9 Ontological Expansiveness and Surveillance

Ontology involves the nature of being and existing and the interpersonal connection one has to others. Sullivan (2004) cogently argued that ontological expansiveness is a subconscious belief that grants White persons the self-perceived right to occupy any and all forms of space (e.g., language, locality, cultural, spiritual, etc.) (Sullivan, 2004, 2006). Ontological expansiveness gives White persons the right to freely move in and out of all spaces, while also penalizing people of color for doing so (Sullivan, 2006). Sullivan (2004) suggested that ontological expansiveness of White persons is protected by surveillance of Black people and other people of color.

In describing how surveillance cameras are used to control, gain knowledge of, and contain the spaces of particularly Black men, Fiske (1998) detailed surveillance as, "… a technology of whiteness that racially zones city space by drawing lines that Blacks cannot cross and Whites cannot see" (p. 69). Fiske explained that "… power needs to be able to see what it has categorized as abnormal, for the abnormal is where the threat to the established order originates; it is, therefore, where social change originates" (p. 82). Thus, those who are the 'norm' not only hold the power to dictate who and what is normal, but also possess the lens of surveillance, which patrols the actions of the 'othered.'

2.4 Importance of Study

Despite an expansive conceptualization and representation of whiteness within the literatures reviewed above, to date, there has been no empirical study examining the salience and/or impact of these whiteness components. A primary reason for this is the absence of an instrument that effectively conceptualizes and assesses multiple factors within the construct of whiteness. Thus, the purpose of the study was to develop a scale on the whiteness components and validate its items with a sample of undergraduate students. In the literature, several examples of the exhibition of whiteness occurred within academic spaces, particularly among K-12 educational settings with teachers, administrators, and students. Given that the teaching force is predominantly composed of White teachers and that most may not fully consider what it means to be White (DiAngelo, 2011), it is important to assess the salience and impact of whiteness on individuals looking to become K-12 classroom instructors, as they have been identified as

having a significant impact on how White students and students of color learn to explore (or not explore) issues of race (Flynn, 2018). An obliviousness to the meaning of being White by pre-service and eventual teachers could sustain whiteness in schools (Sue, 2004). For example, if a White teacher is in a school where 98% of the students in gifted programs are White, she may be less likely to question the reasons for the lack of racial diversity in those programs. Not questioning the lack of racial diversity in gifted programs maintains whiteness as a status marker that privileges White students enrolled in these programs. Typically, within the global context of White supremacy where there is a premium place on being racially and culturally identified as White, the components of whiteness (e.g., possessing white skin) provide White persons with access to advantages that are exclusive to them (e.g., being viewed as intelligent, innocent, etc.). The exclusion of persons of color from these unnamed advantages can prove harmful (Ford, 2012; Leonardo & Broderick, 2011), as their cultural values and behaviors along with their bodies, dispositions, and features are considered inferior. Given these issues, it is important to develop a scale on whiteness to more expertly assess the scope and frequency of its components.

2.5 Research Questions

The research questions guiding the current study:

1. What is the dimensionality of the whiteness components scale (WCS)?
2. Does the factor structure fit the data?
3. Is there evidence of convergent validity between WCS and the White Privilege Attitudes Scale (WPAS; Willingness to Confront White Privilege, Anticipated

Costs of Addressing White Privilege, White Privilege Awareness, and White Privilege Remorse)?

4. Is there evidence of discriminant validity between WCS and the Multigroup Ethnic Identity Measure-Revised (MEIM-R—Exploration and Commitment)?

CHAPTER 3 METHOD

3.1 Overview

The purpose of the study was to develop and explore the factor structure of the Whiteness Components Scale (WCS) using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). In addition, the study aimed to investigate evidence of convergent and discriminant validity by examining the relationship between WCS and White privilege attitudes and multigroup ethnic identity. This research was conducted in two phases—scale development and validation. The next section will offer details on the development of items.

3.2 Phase One: Scale Development

3.2.1 Item Generation

Items were generated through a review of the literature on whiteness in fields such as education, sociology, counseling psychology, law, and philosophy. Items were constructed with the intention to measure the attitudes, behaviors, values, and ideologies that reflect various components of whiteness discussed in the previous chapter.

3.2.2 Expert Review

According to Kumar's (2015) scale development guide, a couple of preliminary procedures are needed to produce optimal scale development. One of these preliminary procedures include consulting with experts in the field. Experts' review of the items prior to data collection should ensure that the items represent the scale and are devoid of redundancy and vagueness. Two graduate students involved in a whiteness studies

research lab and two professors who specialize in whiteness literature and research served as experts to review the initial pool of items (n = 84) that were posited to represent 12 components of whiteness (i.e., White silence, surveillance, ontological expansiveness, innocence, White standardization, ignorance, White fragility, meritocracy, White emotionality, bureaucracy, valued identity/property, and representation/visibility). Items were rephrased and others deleted based on feedback from the expert reviewers. Furthermore, some whiteness components were removed because they either displayed items that mimicked existing scales (e.g., colorblindness), or the items were based on indisputable fact rather than subjectivity (e.g., representation/visibility; "Most of my professors are White"). As a result of the deletion of items, 58 items purported to measure innocence, White emotionality, surveillance, ontological expansiveness, and White standardization were retained and employed in a pilot study.

3.2.3 Pilot Studies Procedure

The research study gained University's Institutional Review Board (IRB) approval to ensure research ethics and anonymity. Data were first collected through a pilot study in Spring 2020. The initial 58-item survey was administered to two departments (i.e., Special Education and Curriculum and Instruction) at the College of Education (COE) at a university located at the Southeastern region of the U.S. Initially, two pilot studies were solely launched to obtain an idea of how the participants would respond to the survey items proposed to measure components of whiteness. Specifically, the two pilot studies were intended to explore the degree to which participants would be forthcoming on items with the terminology "Black" as opposed to items with the term "People of Color." Pilot Study A consisted of a set of items with the term "Black" and

Pilot Study B used the term “People of Color.” The online survey for Pilot Study A was sent to the Department of Curriculum and Instruction and the online survey for Pilot Study B was sent to the Department of Special Education.

3.2.3.1 Participants and Sampling for Pilot Study

After emailing several professors within the two Departments at COE, 45 participants (42 Caucasian and 3 African American; 44 women; 38 juniors and 7 seniors) completed the survey with the term “Black.” One respondent did not report demographics (i.e., race/ethnicity, schoolyear, and gender). One survey had completely missing data for the Whiteness Components Scale items. Data were only collected from one class at the Department of Curriculum and Instruction due to bonus points conferred by the course instructor. Given that data were collected from Pilot Study A in one class, the researcher decided to use the term “Black” for the main studies.

3.2.4 Second Round of Expert Review of Items

The item pool for the pilot studies consisted of 58 items that were thought to measure five components of whiteness (i.e., ontological expansiveness, White standardization, surveillance, innocence, and White emotionality). Once the pilot studies were completed, after further review of the literature on item development, the researcher deleted a number of items due to redundancy, vagueness, objective facts, and negative phrasing. Subsequently, another round of expert review was conducted by a faculty member who is well-versed in the whiteness literature. Based on further knowledge on item development and a second round of expert review, additional items that were

perceived to reflect innocence and surveillance were dropped. Examples of these items particularly showed redundancy and were fact-based, respectively, (surveillance; “I have a habit of paying more attention to my surroundings when Black people are in my neighborhood” and “I have a habit of paying less attention to my surroundings when Black people are in my neighborhood”) and (innocence; “It is possible that teens of my racial background commit crimes because they have a mental health issue”). A total of 21 items that were posited to reflect ontological expansiveness (n = 4), standardization (n = 4), and emotionality (n = 13) were retained in the Whiteness Components Scale to be used for the main studies.

3.2.5 Exploratory Factor Analysis (EFA)

An EFA was employed on the proposed Whiteness Components Scale (WCS) to detect the number of latent variables (i.e., factors) among a group of correlated indicators (i.e., items) (Muthén & Muthén, 1998-2012). This analysis was used to show the degree to which the indicators represent the common factors. In an EFA, the number of factors determine the relationship among the indicators. Methodologists assert that EFA is best used when the researcher has no prior knowledge of the factor structure and is recommended to be used prior to other psychometric analyses (e.g., confirmatory factor analysis, bifactor analysis, item response theory, etc.) (Costello & Osborne, 2005; Matsunaga, 2010; Yong & Pearce, 2013). Thus, because there is no known quantitative study on the items and the factors that may represent WCS, an EFA was first used to establish a tenable factor structure for the scale. Therefore, a software had to be used to generate possible factor solutions based on an EFA, instead of specifying the factor structure like in a CFA.

Mplus (Muthén & Muthén, 1998-2010) was used to conduct an EFA for the first study with 184 White preservice teachers. Thus, this software was used in the current study because 1) it is able to handle ordinal data, 2) it uses syntax data, 3) it is made specially for latent models (i.e., models composed of unobservable variables), and 4) it has easier syntax language than R and SAS for simpler interpretation (Dueber & Toland, 2016).

Given that the factor structure for the Whiteness Components Scale (WCS) is unknown, an EFA can help to explore the structure with the 21 items that emerged from a review of the literature and initial item development process (e.g., Whit emotionality, ontological expansiveness, and White standardization). Therefore, because WCS is newly developed and is not an existing scale in the literature, an EFA was employed to identify a factor structure for it. An EFA was performed on data with 184 Education students to examine the dimensionality of WCS, using an oblique rotation (i.e., Geomin). An oblique rotation was applied, as it assumes the factors correlate. Given that the factors in this study are theoretically interrelated, this type of technique offered more accurate and valuable results for the model (Costello & Osborne, 2005). Thus, correlations between the factors appeared in the statistical output in Mplus.

3.3 Phase Two: Validation

3.3.1 Confirmatory Factor Analysis (CFA)

After conducting an exploratory factor analysis (EFA), a confirmatory factor analysis (CFA) was conducted to examine model fit of the data using a different sample with students from the Department of Psychology. This technique is often used to examine an existing theory or hypothesis of a model. Thus, given that the EFA has

generated a factor structure, a CFA was employed to assess and validate the model. It is argued that a factor structure that has not been established prior to performing a CFA can lead to significant model misfit of the data (Hancock et al., 2010). Therefore, establishing a tenable factor structure in an EFA can help to ensure the specification of a model with adequate fit in a CFA.

Model fit indices and residual correlations were used to investigate how well the model fits the data on a different sample. Mplus was also used in this phase of the research study, as it is able to test a number of fit indices simultaneously to provide an extensive analysis of statistical model fit for continuous and categorical data. Asparouhov & Muthén (2018) suggest using the *p*-value of Chi-square (x^2) statistics to assess exact fit, or Standardized Root Mean Square Residual (SRMR) statistics coupled with residual correlations to examine approximate fit. Exact fit was determined if x^2 was nonsignificant ($p > .05$). Approximate fit was determined if SRMR was ≤ .08 and if the residuals were small (i.e., < .10; Goodboy & Kline, 2017). Means and Variance Adjusted Weighted Least Squares (WLSMV) estimation was used to estimate model fit for the ordinal data (i.e., Likert-type scales) in the present study, as WLSMV estimation gives more accurate results for categorical/ordinal data (Beauducel & Herzberg, 2006). Additionally, this particular estimation does not assume the items are normally distributed.

3.3.2 Convergent and Discriminant Validity

Evidence of convergent and discriminant validity between the Whiteness Components Scale (WCS) and other variables were examined using a structural equation modeling (SEM) framework, specifically confirmatory factor analysis (CFA). Mplus was used to investigate the polychoric correlations of latent variables, which account for

measurement error. To note, the correlation estimates derived from the standardized model results in the output of Mplus. Evidence of convergent validity shows that scores on a given scale are significantly correlated with scores on another scale, which suggest that the items that represent each measure consist of similar concepts (Mertens, 2005). The subscales on the White Privilege Attitudes Scale (WPAS) (Pinterits et al., 2009) were used to examine evidence of convergent validity because scholars have purported that White privilege is highly associated with various components of whiteness (Neville et al., 2000; Putman, 2017). Discriminant validity demonstrates that a given scale is dissimilar to another scale by showing a lower magnitude of correlations. The subscales from the Multigroup Ethnic Identity Measure-Revised (MEIM-R) (Phinney & Ong, 2007) were employed to assess evidence of discriminant validity, as it has been purported that White individuals who adhere to whiteness, generally do not consider their racial and ethnic identity (DiAngelo, 2011). Evidence of convergent validity was achieved when the correlations between the Whiteness Components subscales and the subscales on WPAS were $r > .50$. A criterion of $r > .50$ for convergent validity was used, as Abma and colleagues (2016) describe it as a criterion frequently deployed in research. In addition, it was hypothesized that the association between the whiteness subscales and the factors on the MEIM-R will be near-zero to low. Evidence of discriminant validity was established if correlations between the whiteness subscales and the factors on MEIM-R were $r < .50$.

3.4 Measures

3.4.1 White Privilege Attitudes Scale (WPAS)

This construct was used to provide evidence for convergent validity. The WPAS has 28 items that measure White privilege in four dimensions—1) Willingness to

Confront White Privilege (12 items), 2) Anticipated Costs of Addressing White Privilege (six items), 3) White Privilege Awareness (four items), and 4) White Privilege Remorse (six items) (see Appendix C). Pinterits and colleagues (2009) validated the WPAS on a sample of 501 White undergraduate and graduate students. Specifically, WPAS was validated on two separate college samples using exploratory factor analysis (EFA) (n = 250) and confirmatory factor analysis (CFA) (n = 251). In addition, the authors also conducted test-retest reliability analysis on a sample of 40 college students. WPAS is on a 6-point Likert scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The internal consistency reliability coefficient for the subscales included, Willingness to Confront White Privilege (α = .95), Anticipated Costs of Addressing White Privilege (α = .81), White Privilege Awareness (α = .84), and White Privilege Remorse (α = .91). Given that Robinson-Wood (2015), and other scholars indicate a relationship between whiteness and White privilege, in that whiteness includes privileges conferred to White persons who are also oblivious to it, I hypothesized that there will be a moderate to high correlation between White Emotionality and White Standardization and the WPAS factors.

3.4.2 Multigroup Ethnic Identity Measure-Revised (MEIM-R)

Like convergent validity, discriminant validity was investigated using correlations of the scores from the Whiteness Components Scale (WCS) and the Multigroup Ethnic Identity Measure-Revised (MEIM-R) by Phinney and Ong (2007) (see Appendix B). The initial measure, MEIM, was developed by Phinney (1992) to measure ethnic identity using the 14-item Ethnic Identity Scale as well as a 6-item scale employed to measure

Other-Group Orientation. All items were rated on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The MEIM was validated on a sample of 417 high school students (134 Asian, 131 Black, 89 Latino, 41 mixed-race, 12 White, and 10 other) and 136 college students (58 Latino, 35 Asian, 23 White, 11 Black, 8 mixed-race, and 1 Native American). Reliability coefficients for the 14-item MEIM was $\alpha = .81$ for the high school students and $\alpha = .90$ for the college students. Although a factor analysis from the original study suggested a unidimensional structure for the 14-item Ethnic Identity Scale, Phinney identified a few aspects of ethnic identity provided from the literature. These components of ethnic identity and their corresponding reliability coefficients for high school and college students included: Affirmation/Belonging (5 items) $\alpha = .75$ and $\alpha = .86$, Ethnic Identity and Achievement (7 items) $\alpha = .69$ and $\alpha = .80$, respectively. One of the hypothesized components of ethnic identity, Ethnic Behaviors (2 items), had no reliability coefficient since it was measured using only two items. The 6-item Other-Group Orientation scale remained a distinct measure from the Ethnic Identity scale, and yielded reliability coefficients of $\alpha = .71$ and $\alpha = .74$ for high school and college students, respectively (Phinney, 1992). However, a number of researchers have shown some inconsistencies in the number of factors for the Ethnic Identity scale (e.g., Lee & Yoo, 2004; Roberts et al., 1999; Spencer et al., 2000).

The researchers later conducted a number of studies (e.g., pilot study, interviews, focus groups) on a sample of 93 high school students (35 African Americans, 26 Mexican Americans, 16 Vietnamese Americans, and 16 Armenian Americans) to address the discrepancies regarding the dimensionality of the Ethnic Identity scale from the MEIM. Phinney and Ong (2007) deleted two of the behavioral items because they were

"conceptually distinct from ethnic identity" (p. 275). They also deleted items that yielded a low factor loading ($\lambda < .40$). Based on the factor analysis, 6 items were retained. The results showed a two-factor model—Exploration and Commitment (3 items each). Exploration is defined as exploring or understanding an individual's ethnic identity, and Commitment is described as having a sense of commitment or belonging to an individual's ethnic identity. The researchers then conducted a confirmatory factor analysis (CFA) to examine the fit of the two-factor model on a sample of 241 university students (51% Latino, 26% Asian American, 9% White, 14% mixed-race or other). The results showed that the two-factor model of the 6-item MEIM-R (i.e., Exploration and Commitment) had appropriate fit. The measure is rated on a 5-point Likert scale, from 1 (*strongly disagree)* to 5 (*strongly agree*). The internal consistency reliability coefficient for the combined 6-item scale ($\alpha = .81$), and subscales Exploration ($\alpha = .76$) and Commitment ($\alpha = .78$). Considering that whiteness promotes 1) an unawareness of ethnic and racial identity, 2) colorblindness, and 3) individualism, it is likely that participants who endorse these components of whiteness will be less likely to explore their collective identity, be less likely to have a sense of group identity and lack a commitment to their own ethnic identity. Thus, it was predicted that scores from the Whiteness Components Scale and MEIM-R would show a near-zero or nonsignificant correlation.

3.5 Main Studies' Procedure and Recruitment

Subsequent to receiving IRB approval to collect data for the two main studies, three samples of participants were recruited from three disciplines/majors (i.e., education, agriculture, and psychology). Purposive sampling technique was used in this study. The

participants were recruited in fall 2020 and the first six weeks of the semester in spring 2021. The researcher contacted a number of professors who then forwarded a recruitment email about the study to their students. Data were collected through Qualtrics, an online survey system. All participants received a brief description of the study via an email with a Qualtrics link to the informed consent form and survey. A demographic survey and three other surveys (i.e., Whiteness Components Scale [WCS], White Privilege Attitudes Scale [WPAS], and Multigroup Ethnic Identity Scale-Revised [MEIM-R]) were used in the main studies. In addition, the studies were sponsored by the Center for Equity and Social Justice (CESJ), and a separate survey was used for those who indicated an interest in winning a $20 Amazon eGift card through a drawing. This separate survey asked participants to report their email only for the purpose of participating in the drawing for a chance to win the eGift card. SPSS was used to randomly select 50 winners for the gift card. No identifiable information was associated with any of the responses. This incentive was only offered to participants in fall 2020. The next sections provide additional details regarding the recruitment of the three samples.

3.5.1 Education Participant Recruitment

The main study with education students was advertised to multiple professors to recruit participants at seven universities in Ohio, Michigan, Kentucky, and Texas. In Kentucky, department chairs, professors, a director of graduate studies, and a dean at four universities were contacted. Recruitment emails were sent to several professors across six education departments from one of the universities in Kentucky. The researcher also met with a couple of department chairs via Zoom at that university to solicit support for recruiting participants. A professor and a department chair at two separate universities in

Michigan, and a professor in Ohio were contacted about the study to recruit additional participants. In addition, one professor and department chair at a university in Texas were contacted via email to recruit education students. As a result, department chairs and professors from one university in Kentucky, Michigan, and Texas facilitated participant recruitment. Thus, data were collected from three universities in fall 2020 and spring 2021.

3.5.2 Psychology Participant Recruitment

Several professors from the Department of Psychology at one university in Kentucky were contacted. The Department Chair granted the approval for data collection with psychology undergraduates through SONA, a participant recruitment system. Participants in this sample received SONA credit towards a psychology course. This sample was not offered a chance to win the $20 Amazon eGift card. Data were collected for this sample only in fall 2020.

3.5.3 Agriculture Participant Recruitment

One professor from the College of Agriculture (COA) was contacted at a university in Kentucky. The professor then forwarded the recruitment email to her students. Participants were recruited in fall 2020 and were provided a chance to win a $20 Amazon eGift card. Because the researcher inadvertently did not distribute a different survey link to COA participants, their data were combined with data from COE after October 18, 2020. Therefore, to avoid misidentifying data and possibly affecting the reliability of the results, data from the dataset with COE and COA participants after October 18, 2020, were not included in any of the analyses. Therefore, only data from the

Department of Psychology and the (identified) data from the colleges and departments of education were analyzed.

3.6 Education and Psychology Participants in the Studies

A total of three hundred and forty-four (344) White participants from education and psychology departments were included in the studies. Preservice teachers were enrolled in courses across several education programs at three universities in the Southeast and Midwest regions of the U.S. Given that the aim of the study was to examine the endorsement of whiteness components among White individuals, the participants' self-reported demographics played a key role in the analyses for this study. Therefore, data with those who identified as persons of color were not included in the analyses. There was a total of 199 White preservice teachers enrolled in the study. All completely missing data were removed from the analyses. Pairwise deletion was used to handle the remaining missing data. As a result, data from 184 White education students were used in the analyses. The majority of the White participants self-identified as women (n = 166, 90.2%), and 18 (9.8%) were men. Of the 184 participants, there were n = 5 (2.7%) Freshman, n = 20 (10.9%) Sophomore, n = 103 (56%) Junior, n = 44 (23.9%) Senior, and n = 12 (6.5%) Graduate students.

There was a total of 161 White psychology students enrolled in the second study. The one completely missing datum was deleted. None of the randomly missing data were imputed in any of the analyses. Pairwise deletion was used to handle the remaining missing data. As a result, a total of 160 White college students who were enrolled in psychology courses at one university were employed in the analyses. Of the White

students in this sample, there were 113 (70.6%) Freshmen, 33 (20.6%) Sophomore, 11 (6.9%) Juniors, and 3 (1.9%) Seniors. There were 136 (85%) women and 24 (15%) White participants who identified as men.

CHAPTER 4 RESULTS

4.1 Study One: Exploratory Factor Analysis (EFA)

Factor loadings were examined using the pattern coefficient matrix in Mplus 8.0 to determine which items were to be retained for further analysis. Items with at least a primary loading of ≥ .50 in conjunction with a secondary loading of ≤ .20 were retained (Costello & Osborne, 2005). Items were considered low- or cross-loading and were subsequently dropped from further analysis if this criterion was not met (Costello & Osborne, 2005; de Winter et al., 2009). Additionally, a scree plot was used to help determine the number of factors to extract. Scree plots are visual illustrations of eigenvalues that display the number of factors. The points that are on a scree plot show the number of factors on a given scale, which are based on the number of items on the scale. Points that are above 1 suggests the number of factors to extract.

It was hypothesized that the Whiteness Components Scale (WCS) would be multidimensional, specifically showing three factors (i.e., White Emotionality, Ontological Expansiveness, and White Standardization). However, after a close inspection of the scree plot and factor pattern loadings on a sample of 183 White education students (as Mplus software excluded one case), the results suggested that the best factor solution for the scale was a 2-Factor structure. The factors are White Emotionality (WE) and White Standardization (WS), or Whiteness Components Scale-White Emotionality (WCS-WE) and Whiteness Components Scale-White Standardization (WCS-WS). The 2-Factor solution was concluded after first specifying four factors in the input as the number of latent variables (i.e., factor solutions from 1 to 4) to be examined in the output. After reviewing the factor loadings of all four solutions,

the first factor solutions that were disregarded were Factors 1 and 4. The one factor solution was not considered because the scree plot showed that the scale had multiple factors and the four-factor solution was not considered because it showed several overlapping and low loading items (i.e., $\lambda < .50$ and $\lambda < .50$). The three-factor solution was closely examined and showed several items that either overlapped or had low loadings. After determining that the 1-, 3-, and 4-Factor solutions were not tenable, the pattern loadings in the 2-Factor structure were closely inspected and items with extremely low loadings on each factor (i.e., $\lambda < .50$ and $\lambda < .50$) were removed. One by one, items were removed until the structure showed sets of items with loadings that met the criterion (i.e., $\lambda > .50$ and $\lambda < .20$). Thus, from a total of 21 items, 8 items (i.e., Items 1, 3, 6, 16 on WCS-WE and items 4, 8, 9, and 19 on WCS-WS) were retained, which consisted of primary loadings at the .50 level or above and did not exceed .20 on the secondary loading for each factor—WCS-WE (i.e., 4 items) and WCS-WS (i.e., 4 items). The primary loadings on the 8-item scale, WCS-WE and WCS-WS ranged between $\lambda = .77$-.91, and $\lambda = .58$-.68, respectively. The 2-Factor solution was ideal compared to the 1, 3, and 4 solutions because 1) the 2-Factor solution generated at least 3 items on each factor with loadings that met the $\lambda > .50$ and $\lambda < .20$ criterion and 2) a review of the scree plot visually illustrated that there were 2 factors (see Figure 4.1).

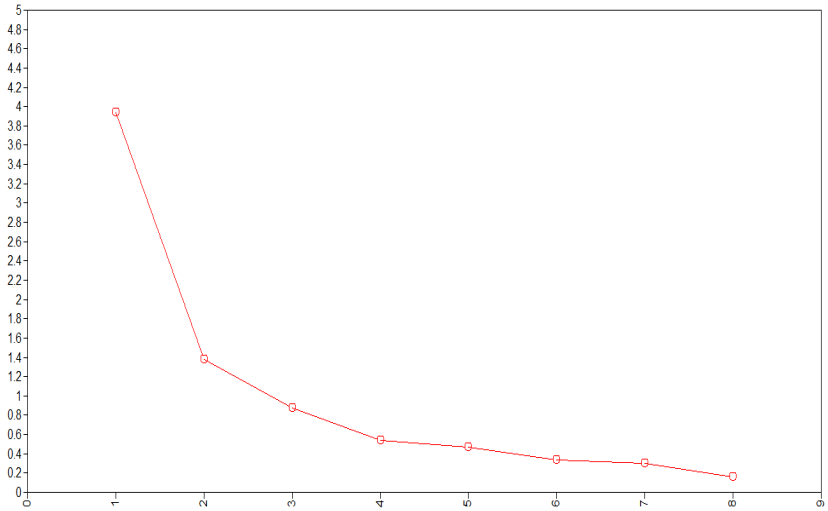

Figure 4. 1 *Scree Plot of the Whiteness Components Scale With 8 Items (Education Students n* = 183)

4.2 Study Two: Confirmatory Factor Analysis (CFA)

In using Asparouhov and Muthén's criteria for exact and approximate fit for the 8 items (i.e., 1, 3, 6, and 16 on WCS-WE and 4, 9, 18, and 19 on WCS-WS) that yielded strong loadings in the EFA, results from CFA showed approximate fit based on global model fit statistics from SRMR, .05, which meets the < .08 criterion. However, upon reviewing the residual correlations, a few item pairs showed high residual correlations above .10 (Items 3 and 4 = .12, items 3 and 9 = .12, and Items 9 and 16 = .14). The item pair that was most alarming was 9 and 18 = .29. It could be argued that the model shows approximate fit, as only four of 28 item pairs exceeded the maximum criterion for residual correlations. However, determining approximate fit was debatable because the residual correlations for Items 9 ("It is okay for me to adopt the cultural behaviors of Black people.") and 18 ("I rightfully have unlimited access to cultural objects that are unique to Black people.") were extremely high, and it was revealed that Item 9 was a part of the majority of the item pairs with high residual correlations. After closely reviewing

the statements and theoretical meaning of the items with the highest residual correlation, another EFA was performed by first removing Item 9. Once Item 9 was removed, as expected, Item 18 showed low loadings. After removing Item 18, Item 19 was negatively affected, showing low loadings. What was first a 2-Factor structure with 8 items with strong loadings became an 'nonexistent' 2-Factor structure, as the number of items dwindled and only one item loaded on the second factor. Therefore, another EFA was restarted using all 21 items to closely inspect the factor structures to find the most defensible solution. After closely examining the loadings on each factor solution (i.e., 1 to 4), the 2-Factor structure again demonstrated evidence of being the most tenable solution based on the number of items that did not cross-load. In investigating all the loadings in the Factor 2 structure, 6 items (i.e., items 1, 3, and 6 on WCS-WE and 4, 11, and 19 on WCS-WS) showed strong primary factor pattern loadings and met the loading criterion ($\lambda > .50$ and $\lambda < .20$). Their primary loadings were between .78 and .86 for WCS-WE and .50 and .83 for WCS-WS (see Table 4.2). In addition, a principal components analysis in SPSS showed that the variance explained in the 2-Factor 6-item structure was 64.04%. Although the new factor solution provided less items than the one before, a CFA was conducted on the 2-Factor, 6-item structure using the psychology student sample to assess model fit. In conducting a CFA on this model of the Whiteness Components Scale, results showed exact fit, $x^2(8) = 9.530$, $p = .30$.

Table 4. 1
Factor Loadings for 6-Item Scale with Education Students (*n* = 183)

Item #	Item	Factor	
		1	2
WE1.	Black people try to make me feel like a racist when they talk about racism.	**0.79**	0.09
WE3.	I believe that Black people become bitter when they talk about racial injustice.	**0.78**	0.01
WE6.	I feel blamed for racism while discussing it with Black people.	**0.86**	-0.07
WS4.	English is rightfully a recognized global language.	-0.05	**0.64**
WS11.	I believe that ethnic hairstyles are professional.	0.14	**0.50**
WS19.	I believe that speaking Standard American English is necessary in a professional setting.	0.00	**0.83**

Note. R = reverse coded

4.3 Means, Skewness, and Kurtosis for the Whiteness Components Scale (WCS)

Upon completing the factor analyses on WCS, means, skewness, and kurtosis of all the items for both samples were assessed (see Table 4.2). The item means for both samples were low, ranging from 1.41 to 2.98 and 1.63 to 2.90 for education and psychology college students, respectively. Using George and Mallery's (2003) acceptable range for kurtosis and skewness (i.e., $\pm$1.00 for one or both), two items (items 7 and 10) were found to be positively skewed (1.29-1.03), and item 7 was kurtotic (1.46) (see Table 2). These results show evidence of a non-normal distribution of scores.

Table 4. 2

Means, Standard Deviations, Skewness and Kurtosis for 21 items on WCS

	Education (N = 184)			Psychology (N = 160)		
Item	N	M(SD)	Skewness/Kurtosis	N	M(SD)	Skewness/Kurtosis
W1	184	1.82 (.751)	.464/-.587	160	1.91 (.812)	.448/-.616
W2	183	2.98 (.805)	-.535/-.057	160	2.94 (.787)	-.605/.256
W3	184	2.20 (.788)	.102/-.558	160	2.28 (.824)	.133/-.543
W4	183	2.80 (.707)	-.550/.525	160	2.90 (.702)	-.631/.853
W5	184	1.82 (.738)	.638/.139	160	1.85 (.779)	.593/-.192
W6	184	2.10 (.793)	.212/-.568	160	2.17 (.746)	.268/-.145
W7	184	1.41 (.594)	1.29/1.46	160	1.68 (.827)	1.13/.695
W8	183	2.65 (.797)	-.141/-.399	160	2.74 (.754)	-.070/-.400
W9	184	2.10 (.670)	-.006/-.495	160	2.09 (.796)	.220/-.598
W10	184	1.74 (.962)	1.03/-.146	158	2.03 (1.07)	.573/-.997
W11	183	1.69 (.714)	.892/.785	160	1.81 (.696)	.509/.015
W12	183	2.64 (.712)	-.272/-.052	160	2.53 (.752)	-.041/-.301
W13	184	1.96 (.738)	.234/-.654	160	2.06 (.774)	.385/-.176
W14	184	1.49 (.582)	.862/.697	160	1.54 (.633)	.889/.487
W15	184	2.41 (.777)	-.077/-.438	160	2.34 (.823)	.122/-.502
W16	184	2.06 (.748)	.140/-.626	160	2.14 (.748)	.318/-.088
W17	184	1.61(.651)	.588/-.633	160	1.64(.608)	.368/-.651
W18	184	1.91(.616)	.056/-.370	158	1.97(.769)	.480/-.092
W19	183	2.43(.822)	-.229/-.600	159	2.53(.786)	-.076/-.385
W20	184	1.89(.784)	.685/.194	159	1.98(.783)	.433/.277
W21	184	2.24(.766)	.226/-.251	160	2.26(.756)	.316/-.083
WCS	180	44.106(8.43)	.174/-.219	156	45.42(9.242)	.116/-.671

Note. WCS = Whiteness Components Scale. See Appendix A for the list of items.

4.4 A Posteriori Investigation of Dimensionality of WCS: Measurement Invariance

The objective for this analysis was to further assess whether the White Emotionality and White Standardization subscales generated using EFA and assessed in the CFA had invariance/equivalence in meaning across the education and psychology samples (i.e., the same construct is being measured for both samples). Thus, this analysis is important and useful, for it provides an assessment of the factor structure for both samples simultaneously, while showing if the groups perceive the subscales and their associated items similarly. Another important reason for assessing evidence of measurement invariance was to determine if it would be appropriate to combine the education and psychology samples for further analyses, given their homogenous demographic backgrounds (i.e., White/Caucasian, majority women, and college students). Examining measurement invariance in this study could show if group comparisons will be deemed acceptable, as group comparisons of means and correlations can only be accurately made by ensuring a certain level of measurement invariance (i.e., metric and scalar invariance) (Putnick & Bornstein, 2016; Van de Schoot et al., 2015). Therefore, scholars suggest that a measurement invariance test be employed for newly developed scales to further assess and establish the reliability and validity of the measures (Boateng et al., 2018). Results from this technique will show if the model parameters (e.g., the factor structure, item means, item thresholds [e.g., points on a scale]) are stable across the two samples.

Measurement invariance consists of a sequence of various levels of assessment. The three most common measurement invariance levels are configural, metric, and scalar, which were used in this study. Configural invariance shows whether the factor structure

(i.e., 3 items load on each subscale, White Emotionality and White Standardization) is equivalent for both samples, psychology and education. Metric invariance demonstrates that all the items on the subscales have similar loadings across the samples (i.e., if item 1 on the White Emotionality subscale has a factor loading of .79 for the education sample, it should have a similar factor loading for the psychology sample). Scalar invariance suggests equivalence in item means for each subscale across the two samples. Establishing this level of invariance would allow the researcher to compare the factor means of the two samples in this study (Lee, 2018).

Measurement invariance was examined using multigroup confirmatory factor analysis (MGCFA). Measurement invariance is determined by using a number of model fit indices. The model indices that were used in this study include Chi-square (x^2), RMSEA, and CFI. Acceptable model fit consists of x^2 p value > .05, RMSEA < .06, and CFI > .95. Model fit indices in each level were compared with the prior level (i.e., the model fit indices at the metric level [2nd level model] were compared with the model fit indices at the configural level [1st level model]). When models in each level were compared, the criteria for each index were x^2 DIFFTEST p > .05, ΔRMSEA ≥ .015, ΔCFI ≤ - .01 to determine invariance (Chen, 2007). Plainly speaking, for example, in regard to model comparisons between metric and configural invariance, x^2 DIIFFTEST for the metric level should have a nonsignificant p-value or a p-value that is greater than the p-value that was shown in the configural model. In addition, when comparing two models, the change in RMSEA should be equal to .015 or .015 greater than the previous model. Finally, the change in CFI should be equal to .01 or be less than .01 when comparing two models. If invariance is not established (i.e., non-invariance) at any of the levels, it is

recommended to investigate and identify the items with non-invariant parameters. Typically, the sources of non-invariance are shown in the modification indices of the output. Once a non-invariant item has been identified and addressed (e.g., allowing the item with a non-invariant parameter to vary across the groups) the model can be retested to examine model fit. If model fit is improved, partial invariance (i.e., a model that includes some invariant parameters of items) is achieved.

To assess measurement invariance for the two-factor Whiteness Components Scale (WCS), a 3-level (i.e., configural, metric, and scalar) multigroup confirmatory factor analysis (MGCFA) was performed using Mplus with two samples of psychology (n = 159) and education (n = 183) college students (Mplus excluded 2 cases). Before testing for configural invariance, a CFA was conducted on the education sample to establish acceptable measurement model fit for both samples, as CFA was already performed on the psychology sample. The model fit results for both samples, separately, suggested acceptable fit, $x^2(8) = 9.53$, $p = .30$ and RMSEA = .04 for the psychology sample and $x^2(8) = 15.53$, $p = .05$ and RMSEA = .07 for the education sample. Although the model fit for the education sample barely demonstrated acceptable fit based on a few of the model fit indices, measurement invariance was still assessed, as the results demonstrated approximate fit (SRMR = .03 and low residual correlations, $r < .10$ for this sample) as suggested by Asparouhov and Muthén (2018) and reasonable fit (RMSEA < .08) according to Marsh and colleagues' (2004) criterion. Once acceptable model fit was established for each sample, a configural model for the MGCFA was specified in Mplus with both samples, education and psychology. Education participants were treated as the reference group in the model for which the psychology participants were to be compared.

Regarding the configural level of the MGCFA model with both samples, a review of global model fit statistics showed exact fit $x^2(16) = 18.86$ $p = .28$, RMSEA = .03 and CFI = .998, which demonstrated that the same factor structure is evident across both samples. Because adequate model fit was established at the configural level, metric invariance was then assessed. In comparing the model fit at the metric level with the model fit at the configural level, results showed that the metric model fit was significantly worse than the configural model, $\Delta x^2 = 10.805$, $p = .08$, ΔRMSEA = .06 (i.e., change of .03 which is greater than .015), and ΔCFI = .989 (change of - .009 which is less than -.01) (see Table 4.3). Although the change in CFI met the criterion, the change in RMSEA did not. This demonstrated that constraining the factor loadings on each item to be equivalent across the psychology and education samples worsen the model fit considerably. Given that the results showed metric non-invariance, a review of the modification indices revealed that item 11 had a non-variant factor loading. Also, in reviewing the standardized loadings in the CFA diagram, the loading on item 11 for the education sample was .53, while the item loading for sample the psychology sample was .48, which is a weaker loading and does not meet the criterion (i.e., > .50). Therefore, the loading on this item was free to vary across both samples in the model while the other item loadings were constrained to be equal across the samples. In making the modification, partial metric invariance was achieved, $\Delta x^2 (3) = 1.27$, $p = .74$, ΔRMSEA = .00 (change of -.03), and ΔCFI = 1.00 (change of .002). After ascertaining partial metric invariance, evidence of scalar invariance was examined. The model improved even more, $\Delta x^2(13) = 4.61$, p = .98, ΔRMSEA = .00 (no change), and ΔCFI = 1.00 (no change). These results showed evidence of partial scalar invariance.

Overall, only evidence of configural invariance was shown for the 6-item, 2-Factor Whiteness Components Scale across the psychology and education samples (i.e., the same 3 items load on the same factors for both samples). In examining evidence of metric invariance, a review of model fit indices showed metric non-invariance for the two samples, and an inspection of the modification indices revealed that the factor loading on item 11 was causing the lack of equivalence. This finding suggests that respondents from the two samples were not interpreting the item on the White Standardization subscale the same way, for the magnitude of the factor loading for the samples varied (Putnick & Bornstein, 2016). Additionally, this metric non-invariant finding, as explained by Putnick and Bornstein, could be showing that Item 11 is more related to White Standardization for one sample more than the other. Therefore, the loading on Item 11 was freed to vary across the samples and metric invariance was reassessed. Partial metric and scalar invariance were ascertained only when the loading on item 11 was freed to varied in the measurement model. Because full metric and scalar invariance was not established with all 6 items, the samples were not combined for any analyses, nor were mean and correlation comparisons made in this study.

Table 4. 3

Measurement Invariance Across the Education and Psychology Samples (N = 342)

Model	x^2 (df)	Δx^2 (df)	p-value (Δp)	RMSEA (ΔRMSEA)	CFI (ΔCFI)
CFA Psy	9.53(8)		.30	.04	.998
CFA Ed	15.53*(8)		.05	.07	.986
Configural	18.86(16)		.28	.03	.998
Metric		10.805(4)	(.08)	(.06)	(.989)
Partial Invariance (item 11 varied)					
Metric		1.27(3)	(.74)	(.00)	(1.00)
Scalar		4.61(13)	(.98)	(.00)	(1.00)

Note. * p < .05, df is degrees of freedom. Ed = Education Sample, Psy = Psychology Sample

4.5 Convergent Validity for the Psychology Sample

White Privilege Attitudes Scale (WPAS) was used to assess convergent validity between its factors and the factors on the Whiteness Components Scale (WCS). Confirmatory Factor Analysis (CFA) using WLSMV estimator was conducted in Mplus to examine the polychoric correlations of all the factors simultaneously. As hypothesized, results yielded moderate to high validity correlations between the factors on WCS and three factors on WPAS. Specifically, there was a significant and negative relationship among WCS-WE and WCS-WS and WPAS (Willingness to Confront White Privilege, White Privilege Awareness, and White Privilege Remorse). The negative correlations ranged between r = - .54 to - .68 (p < .001) and r = -.61 to -.70 (p < .001) for WCS-WE and WCS-WS, respectively. The moderate to high correlations between WCS—WE and WS and WPAS— Willingness to Confront White Privilege, White Privilege Awareness,

and White Privilege Remorse showed evidence of convergent validity. Specifically, these negative relationships suggest that as White Emotionality and White Standardization increases, the willingness to confront White privilege, awareness of White privilege, and White privilege remorse decreases. However, weaker and positive validity correlations were detected between WCS-WE and WCS-WS and Anticipated Costs of Addressing White Privilege, ranging from $r = .23$ and $r = .24$ ($p = .01$ and $p < .01$), respectively. Because Anticipated Costs of Addressing White Privilege provided weaker associations with the WCS factors and did not meet the convergent validity criterion (> .50), this relationship was considered to be evidence of discriminant validity.

4.6 Discriminant Validity for the Psychology Sample

Discriminant validity was assessed between the factors in the Whiteness Components Scale and the two factors (i.e., Exploration [ME] and Commitment [MC]) from the Multigroup Ethnic Identity Measure-Revised (MEIM-R) with a sample of 160 college students within the Department of Psychology. As hypothesized, a near-zero and nonsignificant relationship was found between WCS-WE and WCS-WS and ME ($r = .05$) and $r = .12$), respectively. Surprisingly, there was a positive and moderate to high validity correlation between WCS-WE and WCS-WS and MC ($r = .39$, $p < .001$ and $r = .62$, $p < .001$), respectively. A near-zero correlation was expected. However, based on the criterion for achieving adequate discriminant validity ($r < .50$), the relationship between White Emotionality and Commitment demonstrated evidence of discriminant validity, but the association between Commitment and White Standardization displayed convergent validity. Theoretically, these findings illustrate that respondents who endorsed White

Emotionality and White Standardization were more likely to have ethnic group membership commitment.

Table 4. 4
Polychoric Correlations of the Latent Variables for Both Samples

	Psychology (n = 160)		Education (n = 183)	
	WE	WS	WE	WS
ME	.05	.12	-.08	-.08
MC	.39***	.62***	.39***	.54***
WP	- .61***	-.68***	-.62***	-.80***
PA	-.68***	-.70***	-.67***	-.77***
PR	- .54***	-.61***	-.51***	-.63***
CP	.23**	.24**	.30***	.15*
WE		.74***		.56***
WS	.74***		.56***	

Note. WE = White Emotionality, WS = White Standardization, ME =Multiethnic Identity -Exploration, MC = Multiethnic Identity-Commitment, WP = Willingness to Confront White Privilege, CP = Anticipated Costs of Addressing White Privilege, PA = White Privilege Awareness, PR = White Privilege Remorse. *p <. 05 **p < .01 *** < .001.

4.7 Internal Consistency Reliability

Cronbach's Alpha (α) was used to test the reliability (i.e., internal consistency) of White Emotionality (WCS-WE) and White Standardization (WCS-WS). Mplus software was employed to examine the reliability of each whiteness factor. Cronbach's alpha was

examined for the education and psychology samples using WLSMV estimator for ordinal data in Mplus. The alpha levels for WCS-WE and WCS-WS for the psychology participants were α = .84 and α = .66, respectively. WCS-WE demonstrated a strong level of reliability, but WCS-WS items intercorrelated less. A generally acceptable alpha level is above .70, however, as stated by Ursachi and colleagues (2015), an acceptable reliability range can be .60-.70, especially for exploratory scales (Hair et al., 2010). Thus, the reliability for the Whiteness Components subscales displayed adequate internal consistency for the psychology sample. The alpha levels for the education sample were α = .86 and α = .54 for WCS-WE and WCS-WS, respectively. The alpha level for WCS-WE was consistently acceptable for both samples; however, WCS-WS in the study with education participants demonstrated poor internal consistency (see Table 4.5).

There was also an assessment of internal consistency for the existing scales for the psychology students. The MEIM-R factors showed high reliability (ME α = .85 and MC α = .80). Alpha levels for WPAS were all high, (Willingness to Confront White Privilege, α = .99; Anticipated Costs of Addressing White Privilege, α = .82; White Privilege Awareness, α = .93; and White Privilege Remorse, α = .95). With regard to the education sample, the alpha levels for the theory-related subscales on WPAS included: Willingness to Confront White Privilege, α = 1.01, Anticipated Costs of Addressing White Privilege, α = .88; and White Privilege Remorse, α = .95, White Privilege Awareness, α = .93. The alpha levels for MEIM-R of the education sample were .77 for Multigroup Commitment (MC) and .85 for Multigroup Exploration (ME) (see Table 4.5).

Table 4. 5

Latent Variable Means, SD, and Cronbach's Alphas for Both Samples

	Education (N = 184)			Psychology (N = 160)		
Subscale	N	M(SD)	Cronbach's α	N	M(SD)	Cronbach's α
WE	184	6.13 (1.96)	.86	160	6.36 (1.99)	.84
WS	182	6.93 (1.70)	.54	159	7.23 (1.62)	.66
ME	183	9.43 (2.45)	.85	159	9.01 (2.44)	.85
MC	184	9.23 (2.08)	.77	160	9.13 (2.01)	.80
WP	175	51.26 (11.80)	1.01	158	49.43 (11.54)	.99
CP	176	15.44 (5.48)	.88	159	16.11 (4.99)	.82
PA	178	18.15 (4.88)	.93	159	17.04 (5.28)	.93
PR	176	21.69 (7.52)	.95	157	21.80 (7.69)	.95

Note. White Emotionality (scores range from 3 to 12), WS = White Standardization (scores range from 3 to 12), ME =Multiethnic Identity-Exploration (scores range from 3 to 15), MC = Multiethnic Identity-Commitment (scores range from 3 to 15), WP = Willingness to Confront White Privilege (scores range from 12 to 72), CP = Anticipated Costs of Addressing White Privilege (scores range from 6 to 36), PA = White Privilege Awareness (scores range from 4 to 24), PR = White Privilege Remorse (scores range from 6 to 36).

CHAPTER 5 DISCUSSION

The purpose of the current study was to develop and examine the factor structure and validity of the new Whiteness Components Scale (WCS). Prior to this study, there has not been a literature-situated instrument that operationalized and empirically examined themes relevant to the robust construct of whiteness. Some components of whiteness are discussed in the literature as being prevalent among preservice teachers and could lead to harmful educational experiences among children of color (Matias, 2016). Thus, this study offers a preliminary quantitative investigation of these components of whiteness among 344 White college students majored in education (n =184) and psychology (n = 160). This study adds to the literature on whiteness by 1) constructing a scale on components of whiteness that have not been developed as an instrument in existing literature, 2) validating the items using two samples, and 3) assessing evidence of convergent and discriminant validity between WCS and two existing scales, the White Privilege Attitudes Scale (WPAS) and the Multiethnic Identity Scale Ethnicity-Revised (MEIM-R), respectively.

5.1 Exploratory and Confirmatory Factor Analyses

Subsequent to developing and reducing a 58-item survey to 21 items based on a review of the literature on item development and expert reviews, it was hypothesized that three factors would show to be tenable, White emotionality, White standardization, and ontological expansiveness. However, an EFA and CFA on a sample of preservice teachers and psychology students did not support this claim. An EFA and subsequent CFA showed that the most tenable factor structure for the Scale is a 2-Factor, 6-item

solution, White Emotionality (WCS-WE) and White Standardization (WCS-WS). The White Emotionality factor represents White individuals' psychological and emotional response to race-related discourse with Black persons. White Standardization indicates the beliefs and attitudes that reflect mainstream (i.e., White) cultural norms and values. It is possible that with a larger sample size, more tenable factors would have emerged. Perhaps, a larger sample size would have at least yielded a third factor with more items displaying strong loadings. It is even possible that the third factor would have been appropriately named Ontological Expansiveness (OE). In fact, two items that were purported to represent OE contained high loadings on the White Standardization factor, but were later not retained, as the pair displayed high residual correlations compared to the other item pairs. Thus, likely with more statistical power via an adequate sample size, those items, and others like them, would have been retained to represent OE.

5.2 Measurement Invariance

Results from this analysis showed there was configural invariance between the psychology and education samples for the 6-item, 2-Factor Whiteness Components Scale (WCS). Partial metric and scalar invariance were achieved when the loading for Item 11 was free to vary in the models using multigroup confirmatory factor analysis (MGCFA). This item states, "I believe that ethnic hairstyles are professional" (Reverse coded). The results from the non-invariant item loading suggested that this item was more related to the White Standardization subscale for the education sample than the psychology sample. This finding also infers that the samples had a different interpretation of the item. Perhaps the phrase "ethnic hairstyles" was not clearly understood by many of the students in the

psychology sample. It may be important to note that one of the institutions where education students were recruited is a Hispanic and minority serving institution, and the psychology students were recruited only from one predominantly White institution (PWI). Therefore, it is possible the White psychology students in this study lack clarity on the term ethnic hairstyles due to less cultural exposure. Furthermore, it is also possible that this phrase is vague, as it could encompass a range of hairstyles that are culturally perceived as 'ethnic' yet deemed by many as professional, while others in this category are seen as unprofessional. It is recommended to delete this item or rephrase it to be specific to one ethnic hairstyle to avoid any vagueness and confounding variables. It can also be assumed that the possible vagueness of this item adversely influenced the internal consistency (i.e., reliability) of the White Standardization subscale.

5.3 Convergent Validity Between WCS and WPAS: Psychology Students

The high validity correlations suggested evidence for convergence between the Whiteness Components subscales and three of the factors on the White Privilege Attitudes Scale (WPAS) (i.e., Willingness to Confront White Privilege [WP], White Privilege Awareness [PA], and White Privilege Remorse [PR]). In particular, the high correlations among WP, PA, and PR, showed a negative relationship with White Emotionality (WCS-WE) and White Standardization (WCS-WS), but a low and positive association emerged between the whiteness subscales and Anticipated Costs of Addressing White Privilege (CP). The negative relationship corroborates with what whiteness scholars have posited in the literature, specifically providing the notion that attitudes about and awareness of White privilege is associated with components of

whiteness (Putman, 2017; Todd et al., 2010). Overall, the findings suggest that White psychology college students who endorse White Emotionality and White Standardization are significantly less likely to be willing to confront White privilege, have less remorse for possessing White privilege, have low White privilege awareness, and are likely to anticipate costs for addressing it. These particular findings are believed to be associated with ignorance, particularly in the context of White privilege unawareness. Scholars postulate that the unwillingness to acknowledge one's own White privilege is a form of ignorance (i.e., a lack of awareness regarding realities of being White or of possessing a marginalized racial identity) (Milazzo, 2017; Mills, 2007; Sullivan & Tuana, 2007).

The association between White Emotionality and White privilege awareness shows that White college students who adhere to this kind of practice are likely to do so to avoid confronting White privilege, particularly in race-related dialogue with Black individuals. In addition, this study demonstrated that individuals who endorse White Emotionality items have less remorse for White privilege. This lack of remorse or feeling towards racial injustice and racialized privilege is a type of White Emotionality, as the feeling of remorse is not afforded to the oppressed but is diverted to those who possess the privilege and power (Matias & DiAngelo, 2013).

In this study, the relationship between White Standardization and the factors on the White Privilege Attitudes Scale (WPAS) was also significant. Specifically, like White Emotionality, it was found that the psychology participants who subscribe to White Standardization are likely to be unaware of White privilege, have little White privilege remorse, and are unwilling to confront White privilege. Sue (2015) describes that White cultural standards are embedded in the fabric of our society that it is often invisible to

White individuals. The invisibility of White cultural dominance is likened to ignorance, which in this case involves the unrecognition of White privilege (Ullucci, 2011). Whiteness as the default or standard is used to measure and judge ways of thinking, speaking, and behaving, which privileges White cultural norms. Therefore, students in the psychology sample who ascribed to White standardization in this study do not see the inherent advantages they experience in contexts that normalize White privilege.

In explaining the low and positive relationship between Anticipated Costs of Addressing White Privilege and White Standardization, it is possible that individuals who subscribe to White Standardization expect the negative consequences of addressing their own or others' White privilege. Given that standardization involves the perception and operation of White culture as valuable, members of this dominant cultural group may believe that addressing their privilege in anyway would preclude them from enjoying the benefits and opportunities that come with being a member of a racial group to which other racial groups are downwardly compared (Sue, 2015).

5.4 Discriminant Validity Between WCS and MEIM-R: Psychology Students

As expected, there was no correlation between White Emotionality and White Standardization and Exploration (ME) of the Multigroup Ethnic Identity Measure-Revised (MEIM-R). Yet, surprisingly, there was a near moderate to high significant relationship between the WCS-WS and WCS-WE and Commitment (MC), respectively. Whiteness scholars like DiAngelo (2011) assert that generally, White individuals, especially those who adhere to a colorblind orientation and other whiteness components like meritocracy and individualism, do not view themselves as belonging to a

racial/ethnic or cultural group, instead they see themselves as individuals. However, results from this study revealed that White college students who endorse components of whiteness do see themselves as members of a racial group, specifically an ethnic group, and are also committed to belonging in the group. In addition, the moderate to high correlations between the whiteness factors and Commitment from MEIM-R suggest that the more respondents endorsed White Emotionality and White Standardization, the more they endorsed items that measured knowing what it means to be a member of their respective ethnic group. Particularly, the relationship between White Emotionality and Commitment corroborates what Matias and Allen (2013) explained. Specifically, White people choose to engage in White Emotionality to the detriment of people of color (Matias & Mackey, 2016) because of the commitment they have to their group; as they feel the need to be and remain accepted and loved by the members of their group (Matias & Allen, 2013). The authors argued that White people invest in their community by investing in whiteness through practicing and adhering to White Emotionality (Matias & Allen, 2013).

In describing the high and positive association between White Standardization and Commitment, the finding in this study suggests those who endorse maintaining the pervasiveness of White normalcy (i.e., White standardization) are willing to remain loyal to their group and have a heightened sense of belonging in this group. That is, White psychology majors who endorse White Standardization not only feel the need to maintain it for its social and structural advantages, but also preserve comradery with their fellow peers bestowed with the same advantages (Matias & Allen, 2013).

5.5 Correlations Among Education Students

Like the correlational results from the study with the psychology sample, negative and high correlations were found between the whiteness factors White Emotionality (WCS-WE) and White Standardization (WCS-WS) and majority of the subscales (i.e., Willingness to Confront White Privilege, White Privilege Awareness, and White Privilege Remorse) on the White Privilege Attitudes Scale (WPAS). A low and positive relationship emerged between WCS-WE and WCS-WS and Anticipated Costs of Addressing White Privilege. In addition, positive correlations emerged between the whiteness subscales and the Commitment subscale of the Multiethnic Identity Measure-Revised (MEIM-R). Only Exploration from MEIM-R was not found to have a significant correlation with the whiteness factors.

Regarding the whiteness components in this study and their relationship with White privilege awareness, scholars have discussed that the denial of race (i.e., colorblindness) leads to the unawareness of racism and White privilege—all of which operate in teacher preparation programs with preservice teachers and schools with practicing teachers (Garrett & Segall, 2013; Husband, 2016). Additionally, Neville and colleagues (2000) demonstrated that the unawareness of racial privilege is an aspect of colorblindness. It is argued that this type of ignorance can be intentionally produced as a tactic to avoid engaging in dialogue about race and race-related topics (Garrett & Segall, 2013). Given that Awareness of White Privilege was negatively associated with White Emotionality and White Standardization in this study, it is likely that pre-service teachers who are ignorant of their White privilege also adhere to White Emotionality and White Standardization.

This study showed that preservice teachers who adhere to White Emotionality are likely to report an unawareness of White privilege. Because White Emotionality considers the psychological and emotional meaning behind the emotive responses of White people in race-related dialogue, this study demonstrates the possibility that White preservice teachers are likely to engage in White Emotionality to avoid acknowledging their privilege and to disavow any responsibility for it. In addition, the results from this study also suggest that the preservice teachers who endorse White Emotionality are also likely to express less remorse for it and are unwilling to confront it. Given that White Emotionality aides in centering whiteness by regarding the feelings and emotions of White individuals in conversations concerning racialized oppression, it makes sense for those who adhere to it to lack remorse for possessing their own racialized privileged. Results from this study also demonstrate that White Emotionality even impedes White preservice teachers' willingness to challenge their White privilege, which perpetuates the vicious cycle of whiteness. Regarding the relationship between White Emotionality and Anticipated Costs of Addressing White privilege, this study suggests that the preservice teachers who reported beliefs that relate to White Emotionality also expect to experience adverse consequences for addressing White privilege. Matias and Allen (2013) posit that White persons are likely to engage in White Emotionality to avoid facing accountability for addressing social and racial injustice, evade responsibility for benefitting from White privilege, and avoid being alienated by other White people. With specific regard to the negative relationship between White Standardization and unawareness of White privilege, White pre-service teachers who endorse White Standardization also fail to recognize the racial privilege they have in such context. Teachers who adhere to White

Standardization may not recognize their racial privilege in such settings, mainly because whiteness and White cultural values are normalized.

There was a small but significant relationship between Anticipated Costs of Addressing White Privilege and White Standardization among the preservice teachers in this study. This finding illustrates that those who endorse White Standardization believe there are costs associated with addressing White privilege. It is purported that in the context of White standardization, the anticipated consequence for addressing White privilege would be the possibility of losing one's White dominant positionality in the society and its benefits (Sue, 2015).

The study with the education sample also included an investigation of the relationship between the whiteness subscales, White Emotionality and White Standardization and subscales (i.e., Exploration and Commitment) on the Multigroup Ethnic Identity Measure-Revised (MEIM-R). Like the sample of psychology students, there was no significant relationship between Exploration and any of the whiteness components in this study. Yet there was a moderate to high association between White Emotionality and White Standardization and Commitment. With regards to White Emotionality and Commitment, the moderate relationship between the two factors suggests that the preservice teachers who ascribe to White Emotionality are likely to be committed to their racial/ethnic group and understand what it means to be a part of their group. As Matias and Allen (2013) describe, White people are aware of what it means to be White in a racially unjust society, yet they tend to repress this knowledge and awareness by adopting a strategy, White emotionality. The authors also contend that White individuals do feel the need to be accepted in their racial and ethnic group, which

compels them to demonstrate group commitment and loyalty through White Emotionality.

The high and positive relationship between White Standardization and Commitment provides that the preservice teachers who adhere to White Standardization have a Commitment to their ethnic group and feel they belong. According to Phinney and Ong (2007), the Commitment subscale consists of items that measure attachment, belonging, and understanding of one's ethnic membership. It is both shown in research and purported by scholars that White individuals generally report less ethnic identity salience compared to their counterparts of color (Phinney, 1992; Xu et al., 2015; Yap et al., 2014). It is suggested that people of color report and develop more ethnic identity salience than White individuals because they tend to experience marginalization and social oppression, which causes them to cling to members of their group and find solitude and a sense of belonging. Whereas White persons can move within a society with little to no thought or concern for their ethnicity. However, Sides and colleagues (2017) suggest that in the context of politics, White individuals tend to develop a White conscious through political figures like Trump, who promote notions that persons of color are anti-White and therefore pose a threat to their physical well-being, employment opportunities, and traditional 'American' values. Therefore, it is possible that the participants in this study who endorse White Standardization are likely to be committed to their ethnic group and have more of a sense of belonging in it, as they hold the belief that people of color, particularly Black people, are threatening their traditional values and dominance. The rise of people of color in voice, by speaking up against racial and social injustice, are changing the face of U.S. society and unchallenged societal norms. These societal

changes could be perceived as a threat to White Standardization. Such symbols of threat could be causing more White individuals to feel the need to be more attached and loyal to their ethnic group, by adhering to ideologies and enforcing policies that relate to White Standardization and therefore, reinforcing White supremacy.

5.6 Study Limitations

There were a number of limitations to this study. The main limitation to the study is the low sample size. Despite efforts for recruiting an adequate number of White participants for the two studies, due to a mishap in data collecting (i.e., inadvertently using the same survey link on two separate samples—education and agriculture students) and a couple of significant physical and social constraints (i.e., racial unrest and a global pandemic), it was a challenge to obtain the minimum recommended sample size ($N \geq 200$) for conducting an exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) with ordinal data (Kyriazos, 2018). It is advised that scale development and validation research studies include large sample sizes to increase replicability of the results (Costello & Osborne, 2005). Thus, when a study's sample size is too small in scale development and validation research, it is likely that the factor structure would not be consistent in other studies. Therefore, because the sample sizes were too small in the studies with education and psychology participants, the Whiteness Components Scale (WCS) with 6 items and two factors may not be reliable in other research studies. Furthermore, small samples in EFA and CFA studies can potentially affect the number of loadings, the number of items, and the magnitude of the loadings (Wolfe at al., 2013). It is possible that the small sample size in the two studies affected a few findings, such as

the number of factors (3 factors were initially predicted) and the number of items that yielded strong loadings (only 6 of 21 items displayed strong loadings with adequate model fit). It can also lead to improper factor solutions by producing nonsensical relationships among items. Hence, the two items (i.e., 9 and 18) that loaded on the White Standardization factor in the initial factor structure with 8 items. These items were purported to measure ontological expansiveness, not White Standardization.

Furthermore, after assessing for multivariate outliers using the Mahalanobis distance test for the two samples separately, one multivariate outlier was detected in each sample at a Chi-square alpha level of $p < .001$. After examining the response patterns of the cases with outliers, there was no evidence of unusual patterns and invalid responses. Also, given that only one case per sample was an outlier, and the sample size for each group was already small, it was believed that it would not be in the best interest to remove those cases, as they can still provide useful information. Yet, we do recognize that those outliers may have impacted the results of the study.

Another limitation to the two studies were the low mean estimates on the Whiteness Components Scale (WCS). Many of the respondents reported low endorsement (i.e., *strongly disagree and disagree*) of White Emotionality and White Standardization and the general Whiteness Components Scale (WCS) with 21 items. Overall, the consistently low means showed low variability of responses. It is possible that the low mean estimates on WCS was due to a number of participants providing socially desirable responses in wanting to appear politically correct, especially during a time of racial and political unrest mainly between Black and White Americans due to the

recent race-related tragedies and events. Employing a socially desirable scale would have been useful to examine evidence of response bias.

In addition, reliability was strong for the White Emotionality (WCS-WE) subscale for both samples, but White Standardization (WCS-WS) was shown to be at a lower but acceptable level for the psychology sample, and an unacceptable level for the education sample. According to Tavakol and Dennick (2011), one of the factors that influence alpha reliability is the number of items on a given scale or subscale. If the number of items on a measure is small, the alpha level is likely to be compromised. However, the small length of WCS-WE did not appear to have devastated the reliability of that particular subscale. Yet for WCS-WS, it is likely that more items on it would have increased internal consistency. Another element to consider in explaining WCS-WS's weak alpha level is that, in general, the factor loadings on WCS-WS (i.e., ranging from .50 to .83) were smaller compared to the loadings on WCS-WE (i.e., ranging from .78 to .89), which can also affect internal consistency (Costello & Osborne, 2005). In particular, the loading for item-11 made the acceptable cutoff criterion at .50 but was much lower than the other items on WCS-WS, showing a weaker relationship it has with the factor compared to the other items. Therefore, it would be prudent to consider revising or deleting this item in future studies.

The final limitation is the lack of generalizability of the findings. Because the samples in the studies were homogenous (i.e., White college students from two academic domains), it would be difficult to apply the findings from this study across diverse groups of members who identify as White in the larger population. Also, because the sample size

was too small, it is likely that findings from the studies will not be consistent in future studies with participants from similar backgrounds.

5.7 Future Research

Although there were limitations to the studies, the findings still provided important insight on whiteness, future research directions, and practical implications. Moving forward, there are a few recommendations that are suggested for future research. Given that the current studies did not meet the recommended minimum sample size, it would be necessary to conduct another validation study using the existing items with a larger sample size. Although the majority of the existing items did not meet the factor loading criterion, they would still be useful in future research, but some may need to be rephrased to ensure clarity. In addition, the current 2-Factor structure has 3 items per factor, which may be demonstrating that the factors are underrepresented. Therefore, it may be a good idea to create more items that are hypothesized to measure ontological expansiveness, White Emotionality, and White Standardization. It would also be useful to conduct another measurement invariance test on different samples in future research to show that differences among the samples are due to the characteristics of the samples and not the measure itself. Another psychometric technique that would be useful to employ is item response theory. This approach would allow for an examination of individual items to gain a better understanding of their utility and quality.

5.8 Brief Implications for Teacher Education

Given that the findings with preservice teachers suggested a negative association between White emotionality, White standardization and White privilege attitudes (i.e., White privilege remorse, willingness to confront White privilege, White privilege awareness, and anticipated costs of addressing White privilege), it may be necessary to restructure curriculum in teacher education. Specifically, the findings suggested that the more White preservice teachers endorsed ideologies of White standardization and reported deflecting in conversations about racism (i.e., White emotionality), the less they were willing to confront White privilege, anticipated costs of addressing White privilege, lacked remorse for possessing White privilege, and were less aware of White privilege. These results demonstrate the endorsement of whiteness components among White preservice teachers, specifically White emotionality and White standardization. These findings also show that this endorsement is related to negative aspects of White privilege attitudes (e.g., unawareness of White privilege). Because scholars have argued that whiteness components are psychologically and academically harmful to students of color, perhaps these findings establish the need for whiteness to be critically addressed in teacher education.

Scholars argue that preservice teachers of all racial and ethnic backgrounds, particularly White and Caucasian, must engage in critical whiteness pedagogy (Matias & DiAngelo, 2013; Matias & Mackey, 2016; McCausland & McDonald, 2020; Sleeter, 2017). It is suggested that components of whiteness like White standardization and White emotionality impede efforts for racial justice (DiAngelo, 2018). I assert that behaviors and beliefs that are associated with White emotionality and White standardization inhibit

efforts for establishing and maintaining an equitable educational experience for Black students and other students of color.

Because it is purported that emotionality of whiteness leads to the psychological harm of students of color, it is important to create opportunities and ways for White preservice teachers to be trained on how to avoid practicing and adhering to White emotionality in teacher. A possible way White emotionality can be addressed in teacher education and eventually dismantled in the classroom is by having White preservice teachers face their emotions as they relate to their racial privilege and the racial oppression of others (Matias & Mackey, 2016). This could be achieved by students reflecting on the social, historical, and political significance of being White and engaging with their emotions in a journal and regular dialogue (Matias & Mackey, 2016; McCausland & McDonald, 2020). The goal of reflecting on what it means to be White and being afforded the opportunity to freely express one's feelings about it would be for White preservice teachers to develop a genuine care and love for the students of color they will later serve and establish educational equity in the classroom. In regard to challenging White standardization through critical whiteness pedagogy in teacher education, preservice teachers could be trained on how to apply culturally responsive teaching in the classroom. It is crucial for preservice teachers to be mindful about the harmful effects that occur when White dominant ideologies and practices are imposed onto students of color (e.g., forcing students of color to discontinue their cultural values and practices in the classroom may lead to feelings of inadequacy). These examples are not enough to create critical whiteness pedagogy in teacher education. However, they

could be a start in creating a more equitable, inclusive, and racially just educational experience for all students.

APPENDICES

Appendix A

Whiteness Components Scale

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

1. Black people try to make me feel like a racist when they talk about racism.
2. I readily enter spaces that are occupied by Black people.
3. I believe that Black people become bitter when they talk about racial injustice.
4. English is rightfully a recognized global language.
5. I believe that Black people become overly sensitive when they talk about racism.
6. I feel blamed for racism while discussing it with Black people.
7. I believe that as Americans, we all have the same experiences.
8. I enjoy talking about racism with Black people. (R)
9. It is okay for me to adopt the cultural behaviors of Black people.
10. It is justifiable to say, “All Lives Matter” in response to Black people saying, “Black Lives Matter”.
11. I believe that ethnic hairstyles are professional. (R)
12. I feel unashamed when Black people talk about racism. (R)
13. I believe that Black people play ‘the race card’ during normal conversations.
14. It is useless to talk about racism because people like me have never owned slaves.
15. I feel anxious when I talk about race with Black people.

16. I believe that Black people get hostile when they talk about race.
17. I believe that Black people should adopt my mainstream cultural values.
18. I rightfully have unlimited access to cultural objects that are unique to Black people.
19. I believe that speaking Standard American English is necessary in a professional setting.
20. I feel targeted by Black people in conversations about racism.
21. I am comfortable talking about racism with Black people. (R)

Appendix B

Multigroup Ethnic Identity Measure-Revised

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs. (Exploration)
2. I have a strong sense of belonging to my own ethnic group. (Commitment)
3. I understand pretty well what my ethnic group membership means to me. (Commitment)
4. I have often done things that will help me understand my ethnic background better. (Exploration)
5. I have often talked to other people in order to learn more about my ethnic group. (Exploration)
6. I feel a strong attachment towards my own ethnic group. (Commitment)

Appendix C

White Privilege Attitudes Scale

1	2	3	4	5	6
Strongly					Strongly
Disagree					Agree

Willingness to Confront White Privilege

42. I intend to work toward dismantling White privilege.

54. I want to begin the process of eliminating White privilege.

57. I take action to dismantle White privilege.

32. I have not done anything about White privilege. (R)

2. I plan to work to change our unfair social structure that promotes White privilege.

53. I'm glad to explore my White privilege.

17. I accept responsibility to change White privilege.

33. I look forward to creating a more racially equitable society.

12. I take action against White privilege with people I know.

63. I am eager to find out more about letting go of White privilege.

45. I don't care to explore how I supposedly have unearned benefits from being White. (R)

48. I am curious about how to communicate effectively to break down White privilege.

Anticipated Costs of Addressing White Privilege

75. I am anxious about stirring up bad feelings by exposing the advantages that Whites have.

66. I worry about what giving up some White privileges might mean for me.

29. If I were to speak up against White privilege, I would fear losing my friends.

13. I am worried that taking action against White privilege will hurt my relationships with other Whites.

59. If I address White privilege, I might alienate my family.

55. I am anxious about the personal work I must do within myself to eliminate White privilege.

White Privilege Awareness

25. Everyone has equal opportunity, so this so-called White privilege is really White bashing. (R)

37. White people have it easier than people of color.

4. Our social structure system promotes White privilege.

56. Plenty of people of color are more privileged than Whites. (R)

White Privilege Remorse

21. I am ashamed that the system is stacked in my favor because I am White.

19. I am ashamed of my White privilege.

27. I am angry knowing I have White privilege.

9. I am angry that I keep benefiting from White privilege.

58. White people should feel guilty about having White privilege.

16. I feel awful about White privilege.

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Yoon, I. H. (2016). Trading stories: Middle-class White women teachers and the creation of collective narratives about students and families in a diverse elementary school. *Teachers College Record*, *118*(2), 1-54.

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VITA

Falynn Thompson

Education

M.S.	Educational Psychology, University of Kentucky,	June 2012
B.A.	Psychology, Southern Illinois University Carbondale,	May 2008

Professional Experience

University of Kentucky, Lexington, KY

Research Assistant, College of Fine Arts	1/2021-5/2021
Academic Coach, Transformative Learning	8/2019-5/2020
Teaching Assistant, UK Confucius Institute	6/2019-6/2019
Graduate Assistant, Martin Luther King Center	8/2017-5/2019
Instructor of Record, College of Education	8/2015-5/2017
Research Assistant, College of Education	8/2012-5/2015
Tutor, Center for Academic Resources and Enrichment Services	1/2011-8/2012

District 150 Schools, Peoria, IL

Substitute Teacher, District 150 Schools	1/2009-12/2009
Long-term Substitute Teacher, Trewyn Middle School	1/2010-5/2010
Tutor, Sylvan Learning Center: Glen Oak Elementary School	1/2010-5/2010

Publications

Peterson, C. M., Toland, M. D., Matthews, A., Mathews, S., **Thompson**, **F**., & Conard, L. A. E. (2020). Exploring the Eating Disorder Examination Questionnaire in treatment seeking transgender youth. *Psychology of Sexual Orientation and Gender Diversity*, *7*(3), 304-315. https://doi.org/10.1037/sgd0000386

Bliss, K. T., Mensah, R., Bradley, K. D., Rodgers, A., & **Thompson**, **F**. (2018). Using a transactional model and thematic analysis to evaluate a minority male student success initiative to improve participants' campus experience and retention. *International Journal of Assessment Tools in Education*, *5*(4), 713-730. https://doi.org/10.21449/ijate.478278

Hargrave, L. D., Tyler, K. M., **Thompson**, **F**., & Danner, F. (2016). An examination of the association between student-teacher interactions and academic self-concept among African American male high school students. *Journal of African American Males in Education*, *7*, 33-49.

Tyler, K. M., **Thompson**, **F. A**., Gay, D. E., Burris, J., Lloyd, H., & Fisher, S. (2016).

Internalized stereotypes and academic self-handicapping among Black American male high school students. *Negro Educational Review*, *67*(1-4), 5-31.

Research Presentations

Hanley, C. Toland, M. D., Qui, C., Wu, R., **Thompson**, **F**. **T**., Li, C., & Niu, C. (2019, August). *Resident Advisor (RA) belongingness to a residence hall and to other RAs: Differential item functioning study*. Poster accepted for presentation at the 127th American Psychological Association Conference, Chicago, IL.

Thompson, **F.,** Tyler, K. M., Burris, J., Howard, L., & Fisher, S. (2013, November). *Believing the hype: Examining the Association between internalized racist stereotypes and academic self-handicapping among African American male high school students*. Poster presented at the Mid-Western Educational Research Association at Evanston, IL.

Todd, K., Mensah, R., **Thompson**, **F**., & Rodger, A. (2013, November). *Using a transactional model to evaluate the University of Kentucky Black and Latino male student success initiative from different perspectives*. Paper presented at the Mid-Western Educational Research Association at Evanston, IL.

Thompson, F., Toland, M. D., Hall, A. H., & Danner, F. W. (2013, March). *Changes to the dimensionality of the writing apprehension test (WAT) are proposed*. Poster presented at the Spring Research Conference at the University of Kentucky.

Academic Presentations

Thompson, F. (2021, February). "The manifestation and prevention of whiteness in schools." Discussion held on Zoom for at the University of Houston-Downtown for a course at the Department of Urban Education.

Thompson, **F**. (2020, April). "Item Response Theory in R statistics software." PowerPoint presentation at the University of Kentucky for the Applied Psychometric Strategies Lab.

Thompson, **F**. (2018, October). "Introduction to Confirmatory Factor Analysis." PowerPoint lecture at the University of Kentucky for the Applied Psychometric Strategies Lab.

Thompson, **F**. (2018, February). "Cultural Competence." Discussion held at the University of Kentucky for the Center for Community Outreach.

Baker, K., & **Thompson, F**. (2017, November). "More than statutes: Charlottesville, VA, Lexington, KY, and beyond." PowerPoint presentation presented at the University of Kentucky for the Department of Communication.

Thompson, **F**. (2017, November). "Privilege." PowerPoint presentation presented at the University of Kentucky for the Center for Community Outreach

Burris, J., & **Thompson**, **F**. (2014, February). "The overrepresentation of African American boys in special education: Exploring the nexus of culture, school, and the self for students identified with emotional/behavioral disorders." PowerPoint presentation presented at a FRED Talk at the University of Kentucky hosted by the Educational, School, and Counseling Psychology Department.

Grants, Awards, and Fellowships

Tyler, K. M. (Principal Investigator). (2019-2020). *Examining P.O.W.E.R. at the University of Kentucky.* Center for Equality and Social Justice.

Lyman T. Johnson Fellowship,	2012-2015
Helen Thacker Award,	2012-2015
Gillis Award,	2010-2012