MARYWOOD UNIVERSITY

Interdisciplinary Ph.D. in Human Development

Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania

by

Ross A. Novak

A Dissertation in Higher Education Administration

Submitted in Partial Fulfillment of the Requirements for the Degree of

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College of Professional Studies

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Committee Chair: Dr. Amy Paciej-Woodruff

Committee Members: Dr. Yerodin Lucas and Dr. Tiffany Mulally

Abstract

Despite the stated value of diversity in higher education and changing U.S. demographics, predominately White institutions continue to struggle with racial issues. White students' racial attitudes contribute to the problem. This study examined differences in racial attitudes in White, traditional age, 18 to 22 -year -old, full- or part – time, undergraduate college students in northeastern Pennsylvania based on type of intergroup contact with students of color (SOC), while controlling for pre-college and college classroom diversity exposure. Racial attitudes, the dependent variable, were assessed using the Color-Blind Racial Attitude Scale, which was incorporated into a researcher-designed instrument. This instrument also assessed participants' types of interaction with SOC, the independent variable; pre-college and college classroom diversity exposure, study covariates; as well as participants' perceptions of the race and relationship quality of the SOC with whom they interact, the subject of supplementary analysis. One-way ANCOVA results indicated that, after adjustment for pre-college diversity exposure, there was a statistically significant difference between White students' type of interaction with SOC and their racial attitudes. Post hoc analysis indicated statistically significantly higher total CoBRAS scores for participants with no SOC interactions versus participants with a combination of informal and structural SOC interactions. No statistically significant differences were found between White students' type of interaction with SOC and their racial attitudes after adjustment for pre-college diversity exposure. Descriptive statistics and frequencies were utilized to analyze racial attitudes of participants in each of the eight categories of SOC interaction type and participants' pre-college and college classroom diversity scores. Supplemental analysis

utilizing Spearman's correlations was conducted to determine if associations existed between participants' racial attitudes and perceived quality of interactions with SOC. Results indicated statistically significant weak, negative correlations between participants' racial attitudes and their relationship perceptions of their Resident Advisors and one of their Orientation Advisors, and a statistically significant moderate, positive correlation between participants' racial attitudes and their relationship perceptions of students who are Two or More Races living in residence halls.

Key Words: intergroup contact, race, racial attitudes, color-blind racial attitudes, White students' racial attitudes

Dedication

I would like to dedicate this dissertation to my wife, Jennifer Lisa Rosen Novak. Without her patience, encouragement, support, and belief in me, this work would not have been possible. I love you and appreciate you more than you could possibly know. I look forward to spending quality time together once more.

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Dr. Tiffany Mulally

I am uncertain whether to thank you or to apologize. I appreciate your patience with me; I cannot express what your support and assistance meant to me as I struggled through data analysis. Overcoming this barrier and learning to "fly solo" at the end was truly empowering.

Marywood Faculty

Eighteen years out from obtaining my Master's degree, I entered the doctoral program with a high amount of trepidation, uncertain if I could succeed. From my first doctoral-level course with Dr. Jenkins and Sr. Gail, through statistics with Dr. Levine and Dr. Caputo, until my last classes with Dr. Paciej-Woodruff, faculty have been both supportive and inspiring. I had not realized how much I had missed actively learning in those 18 years. Thank you all for that you have given me.

Marywood University Librarians

Article request after article request, you never let me down. Without your assistance, this work would not have been possible.

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Chapter 1

Statement of the problem

Introduction

United States (U.S.) higher education emphasizes the value of diversity. The American Council on Education issued a document explaining how diversity augments the educational experience, encourages personal growth and a healthy society, improves communities and the workplace, and boosts the United States economic effectiveness (American Council of Education Board of Directors, 2012). Diversity is identified by the American Association of Colleges and Universities (AAC&U) as a high-impact educational practice, a program or activity that appears to "engage participants at levels that elevate their performance across multiple engagements and desired-outcomes measures such as persistence" (Kuh, 2008, p. 14). The ability to "learn from and work collaboratively with individuals from diverse cultures, races, ages, gender, religions, lifestyles, and viewpoints" (Casner-Lotto & Barrington, 2006, p. 16) is identified as a required skill for workplace success in the 21st century. This sentiment is reinforced by a 2018 study of business executives and hiring managers, indicating an employer preference for hiring recent college graduates who have experience working with diverse populations (Hart Research Associates, 2018).

Emphasis on diversity may be driven by the rapidly changing racial demographics of the United States. In 2044 the U.S. is projected to become a majority-minority nation. At this point, for the first time in the history of the nation, the non-Hispanic White-only population will make up less than 50 percent of the nation's total population. For those under the age of 18, the U.S., as of 2014, was already close to becoming a majority-

minority nation with 52 percent of that population non-Hispanic White-only (Colby & Ortman, 2015). These impending demographic shifts make it imperative that students learn the skills necessary to live and work in a diverse democratic society.

Despite the stated value of diversity in higher education and changing U.S. demographics, American colleges and universities continue to struggle with issues of race on campus. This strife is especially true within Predominately White Institutions (PWIs), colleges and universities where White students make up 50% or more of the student body. Repeated incidents of racial slurs directed at Black students at the University of Missouri at Columbia in November 2015 resulted in protests culminating in the resignation of the campus chancellor and president (*Administrators, Students and Activists Take Stock Three Years after 2015 Missouri Protests*, 2018).

Controversy arose in April 2019 after a video of an Ohio University student using racial slurs while reciting a rhyme circulated on social media ("Racist Video Showing Ohio University Students Circulated on Social Media," 2019). Syracuse University experienced student protests and scrutiny from the Governor after a series of racial and anti-Semitic incidents that occurred over 15 days in November of 2019 (Randle, 2019). In November 2022 alone, campus signs and vehicles at Grinnell College were vandalized with racist and white supremacist graffiti (*Several Racist Incidents Occur on the Campus of Grinnell College in Iowa*, 2022), a Black student at the University of Kentucky was physically attacked by a White student yelling racial slurs (*White Student Yelling Racial Slurs Attacks Black Student Worker at the University of Kentucky*, 2022), and at Lehigh University, a Black student had racial slurs shouted at him and was then punched in the

face (*Black Student at Lehigh University in Pennsylvania Victimized in Racist Attack*, 2022).

White students often enter institutions of higher education with little exposure to differences. This may lead to biased assumptions and uncomfortableness when exposed to diverse individuals or placed in diverse settings (Peters et al., 2016). White students from segregated neighborhoods are more likely to come to college with racial biases (Jayakumar, 2015). Anxiety about intergroup contact may decrease the likelihood of outgroup interactions (Rodenborg & Boisen, 2013). Research on cross-racial interactions at PWIs indicates that White students report significantly less cross-racial interaction than students of color. Being a member of a majority population gives White students the privilege of avoiding contact with students of color (Strayhorn & Johnson, 2014). Pursuant to the American Psychological Association (2020) guidelines, terms specifying particular racial and ethnic groups, such as "Black", "Asian American", and "White", are capitalized in this paper. References to collective racial and ethnic groups, such as "students of color" or "underrepresented groups", are not capitalized.

Racial issues on college campuses may be enacted in various ways. The situations which took place at the University of Missouri at Columbia, Ohio University, Syracuse University, Grinnell, the University of Kentucky, and Lehigh, as mentioned previously, involved the use of racial slurs, racially charged graffiti, and racially-based threats or physical assaults. These are examples of overtly racist acts (*Administrators, Students and Activists Take Stock Three Years after 2015 Missouri Protests*, 2018; *Black Student at Lehigh University in Pennsylvania Victimized in Racist Attack*, 2022; "Racist Video Showing Ohio University Students Circulated on Social Media," 2019; *Several*

Racist Incidents Occur on the Campus of Grinnell College in Iowa, 2022; *White Student Yelling Racial Slurs Attacks Black Student Worker at the University of Kentucky*, 2022; Randle, 2019).

Racism on college campuses may also be enacted through microaggressions. Microaggressions may be defined as "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group" (Sue et al., 2007, p. 273). Microaggressions may occur unconsciously through subtle slights or dismissive glances, gestures, and tones and may be so pervasive and automatic in everyday interactions that they can often be dismissed and viewed as unintentional and harmless. Three forms of microaggressions have been identified: microassault, microinsult, and microinvalidation.

Microassaults involve obvious racial denigrations primarily characterized by a nonverbal or verbal attack designed to offend or upset the intended recipient through name-calling, avoidant conduct, or purposeful discriminatory action. Microinsults involve communications that express disrespect and insensitivity and degrade a person's racial heritage or identity. Microinvalidations involve communications that discount, deny, or nullify the thoughts, feelings, or experiences of an individual of color (Sue et al., 2007). Racial microaggressions differ from general rudeness in that they are constant and continual in the lives of individuals of color, are cumulative, and signify an enduring problem of stress. Microaggressions are also a continuous reminder of the target group's lower standing in society and symbolic of systemic and institutional injustices (Sue et al., 2019).

Students experience diversity in a higher education setting in three ways: structural diversity, informal interactional diversity, and classroom diversity. Structural diversity refers to the numerical representation of diverse groups on campus. Structural diversity alone does not ensure meaningful interaction. Informal interactional diversity commonly occurs outside of the classroom and may include interactions in residence halls, campus events, and informal discussions. Frequency and quality are believed to play a vital role in the meaning students place in informal interactional diversity. Classroom diversity focuses on content knowledge and experience with diverse peers in a classroom setting (Gurin et al., 2003).

Researchers have hypothesized that informal and classroom interactions with racial diversity would promote learning and democracy -related outcomes. Examples of learning outcomes include "active thinking skills, intellectual engagement and motivation, and a variety of academic skills" (Gurin, Dey, Hurtado, & Gurin, 2002, p. 334). Examples of democracy outcomes include "perspective-taking, citizenship engagement, racial and cultural understanding, and judgment of the compatibility among different groups in a democracy" (Gurin et al., 2002, p. 334).

Informal interactional diversity was discovered to be particularly influential in accounting for higher levels of intellectual engagement and self-assessed academic skills and citizenship engagement and racial/cultural engagement for students of all races. White students with significant amount of informal interactional diversity and classroom diversity experience most often considered differences compatible with democracy and were most engaged with racial/cultural issues (Gurin et al., 2002). Frequent positive interactions with faculty and satisfaction with campus racial climate have positively

impacted the learning outcome of self-perceived critical thinking (SPCT) for students of color and White students (Cole & Zhou, 2014a). Interactional diversity, in particular, may arouse critical thinking skills in students who are less prepared to develop critical thinking skills via academic experiences. This appears to be particularly true for White students (Pascarella et al., 2014).

Frequent cross-racial interactions of both a positive and a negative quality have been found to positively impact students' social agency – the desire to improve society and to become an agent of social change. When students' experience with cross-racial interaction is generally positive, added interactions can enhance the positive impact on the social agency. Students' perception of the campus climate tempers the effects of students' frequency of cross-racial interaction. Students who view the campus climate more negatively tend to report higher levels of social agency as they participate in greater levels of cross-racial interaction (Denson & Chang, 2015). Similarly, service-learning has increased students' civic-mindedness by providing students with authentic experiences with diverse community members who are likely different from the students' in-group (Cole & Zhou, 2014b).

Theoretical Framework: Intergroup Contact Hypothesis

Intergroup contact hypothesis is a social psychological theory advanced by Gordon Allport in the early 1950s. The premise of the theory is that bias originates from a lack of outgroup knowledge and exposure. Increased interaction with individuals from the outgroup should expand knowledge of that group, thereby leading to decreased hostility and prejudice.

Allport perceived that certain conditions were optimal to achieve successful intergroup contact and bias reduction: equal status, cooperation, common goals, and support of authorities. Cook (1978, as cited in Shook & Fazio, 2008) explained that equal status between participants decreases the impact of negative stereotypes associated with a lower-status group. Sherif et al. (1961, as cited in Shook & Fazio, 2008) described cooperation and shared goals as necessary to overcome competition between groups and encourage participants to depend on one another to reach shared goals. Deutsch and Collins (1951, as cited in Shook & Fazio, 2008) explained that support of authorities enables intergroup contact by delineating social norms and serving as a method of guiding individuals' behavior (Shook & Fazio, 2008).

In 1998, Pettigrew proposed a reformulated theory of intergroup contact. Pettigrew's reformulated theory speculates that with optimal intergroup contact, prejudice is reduced through four overlapping and interacting processes: learning about the outgroup, changing behavior, generating affective ties, and in-group reappraisal. New learning shifts negative in-group members' beliefs about the outgroup. Adjusting to new situations involves adjusting behaviors to meet new expectations. Positive experiences with outgroup members reduce anxiety and can create empathy for outgroup members. In-group norms and customs are questioned, leading to a less narrow-minded view of outgroups (Pettigrew, 1998).

Pettigrew posits that productive intergroup contact relates more closely to long-term close relationships than initial acquaintanceships and requires time for cross-group friendships to develop. As a result, the fifth condition for optimal intergroup contact was added to Allport's original theory, friendship potential. Friendship potential suggests the

possibility of extensive and recurring contact in various social contexts and close interactions, which provide opportunities for self-disclosure.

Friendship potential and Allport's original four optimal conditions, |A| in Figure 1, allow in-group members to view outgroup members at an initial point of contact as people who may share similar interests and values, |C| - Decategorization in Figure 1. As relationships develop, if the in-group member sees the outgroup member as a typical member of the outgroup, the in-group members' feelings about the relationship may be generalized beyond the individual outgroup member to the larger outgroup, |D| - Salient Categorization in Figure 1. Ideally, over time and with continued interactions, recategorization, |E| in Figure 1, occurs as in-group members consider themselves and outgroup members as part of a single, common group

(Pettigrew, 1998). As opposed to decategorization, which attempts to eliminate categorization of outgroup members, recategorization involves bias reduction through a novel, more inclusive, category (Cunningham, 2004).

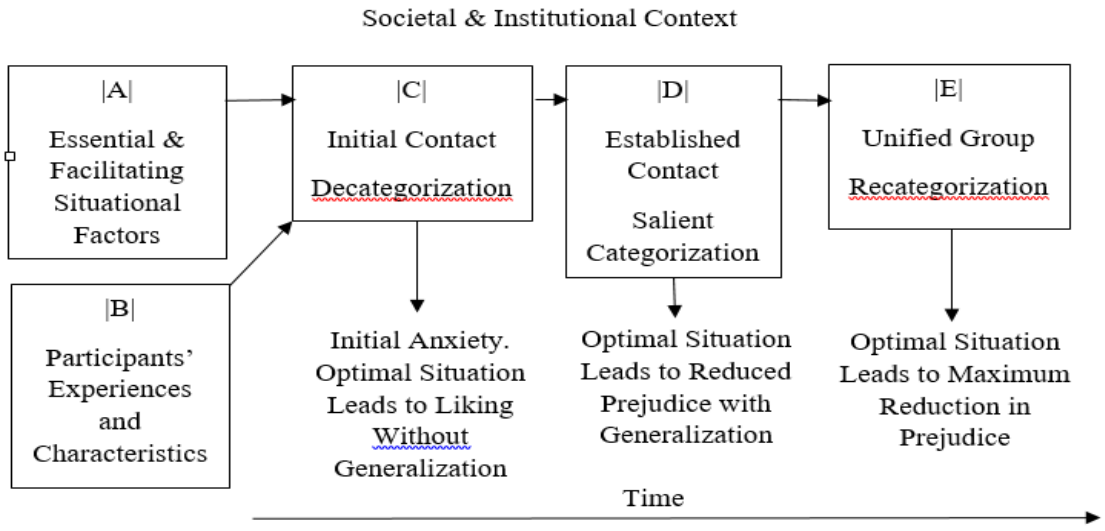


Figure 1. Reformulated Contact Theory (Pettigrew, 1998)

Participants' past experiences and personal characteristics, |B| in figure 1, influence the nature of intergroup interactions and its outcomes. In-group members' level of prejudice toward outgroups may impact whether individuals pursue or avoid intergroup contact. Islam and Hewstone, Stephan, Stephan and Stephan, Wilder, and Wilder and Shapiro (1993; 1992; 1985, 1989, 1992, 1996; 1993a,b; and 1989, as cited in Pettigrew, 1998), found that high intergroup anxiety and perceived intergroup threat also impeded contact as well as its positive effects. Feelings of anxiety and perceived threat often result from a lack of prior outgroup experience (Pettigrew, 1998).

Intergroup contact takes place within social institutions and societies. Kinloch (1981, 1991, as cited in Pettigrew, 1998) states that institutional and societal norms shape the form and effects of intergroup contact situations. In societies where in-group and outgroups are not perceived as equal, and interactions between groups are not supported by authorities, such as occurred in South Africa between racial groups under Apartheid policy, the larger social context inhibits any positive impact of intergroup contact (Pettigrew, 1998).

Research has indicated that intergroup contact primarily relates negatively and significantly to prejudice (Pettigrew & Tropp, 2006). A meta-analysis of intergroup contact hypothesis research revealed that most studies reported positive effects and indicated significant average effects across experiments, which lowered measured prejudices by 0.39 standard deviations. Intergroup contact studies involving mental or physical disabilities were determined to be most effective at reducing prejudice. Studies involving ethnic, racial, religious, and immigrant studies were also found to significantly

lower prejudice but to a lesser extent than those involving disabilities (Paluck et al., 2018).

Research has also indicated that the generalized impact of intergroup contact could extend beyond the individual outgroup members directly involved within the immediate situation to the entire outgroup, to outgroup members in other situations, and outgroups not involved in the contact situation. Studies involving all four of Allport's stated conditions were a significant predictor of contact-prejudice impacts. That said, the exact inverse relationship between contact and prejudice remained even when the contact situation was not structured to match all of Allport's conditions; however, not as strongly. Support of authorities may play a key role in facilitating positive contact results (Pettigrew & Tropp, 2006).

Three items have been identified as mediating intergroup contact and bias: knowledge, anxiety, and empathy and perspective-taking. Anxiety was found to be the strongest of the three mediators. Anxiety, empathy and perspective-taking, and knowledge were found to be intercorrelated. Anxiety correlates significantly and negatively with empathy and perspective-taking and with knowledge. Empathy and perspective-taking and knowledge were determined to be generally unrelated. Though empathy and perspective-taking and anxiety were significantly and negatively related, the two variables mediated contact-prejudice association and accounted for half of the covariance between contact and prejudice in the associated study. This implies that emotional factors play a more significant role in mediating contact-prejudice associations than cognitive processes (Pettigrew & Tropp, 2008).

Conceptual Framework

The present study incorporates Gurin, Dey, Gurin, and Hurtado's (2003) vision of how diversity is experienced by students within a higher education context into Pettigrew's reformulated intergroup contact theory in order to examine how variations in intergroup contact between White students and students of color (SOC), the independent variables, may influence White students' racial attitudes, the dependent variable. A specific focus is placed on intergroup contact occurring through informal interactional diversity experiences. Research has shown particular impacts on student learning and democracy outcomes as well as on students' social agency as a result of informal interactional experiences (Cole & Zhou, 2014a, 2014b; Denson & Chang, 2015; Gurin et al., 2002; Pascarella et al., 2014). Figure 2 illustrates the author's conceptualization of this framework.

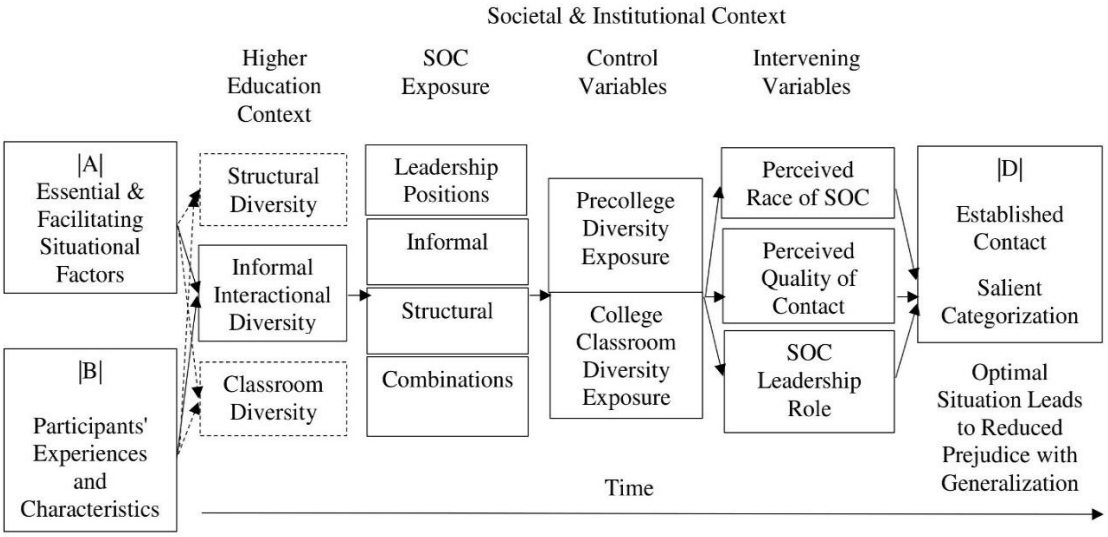


Figure 2. Author's Conceptualization of Intergroup Contact in Higher Education Context

Higher education can be assumed to support the optimal conditions for intergroup contact to reduce prejudice, item |A| in figure 2: equal status as students, common goals of degree attainment, intergroup cooperation in classroom projects, student organizations,

and in on-campus living environments, support of campus authorities, and the potential for friendships to develop. Students come to college with their own unique set of experiences and characteristics, item |B|. The college environment provides various means for in-group members to experience diversity, particularly through opportunities for informal interactions with outgroup members. Over time, and within the context of the norms within larger U.S. society, these repeated informal interactions with outgroup members, SOC, may influence in-group members', White students, racial attitudes, item |D|.

Pre-college characteristics, such as high school experiences with SOC and diversity exposure through structural, informal interactions, and classroom content, may also impact White students' racial attitudes. Exposure to diversity through college course content and formal programming may also play a role in shaping in-group racial attitudes. Both pre-college characteristics and college classroom exposure to diversity are control variables in this study. Intervening variables, such as the perceived race of the SOC involved in the intergroup interaction, and the perceived quality, positive, neutral, or negative, of the intergroup contact, can mediate between intergroup contact and White students' racial attitudes.

Purpose

The purpose of this quantitative study using a cross-sectional online survey is to test the intergroup contact theory that contact between in-group members, White students attending college at Predominately White Institutions (PWIs), and outgroup members, (SOC) at PWIs, can influence in-group member racial attitudes. Measures of White student racial attitudes (DV) for White students with various levels of exposure to SOC at

three PWIs located in northeastern Pennsylvania are compared while controlling for pre-college characteristics and college classroom exposure to diversity.

The first level of the independent variable, exposure to students of color in leadership positions, is defined as White students who interact with students of color who are Resident Assistants, student organization presidents or vice-presidents, athletic team captains, or orientation leaders. The second level, informal interactional exposure to students of color, will be defined as White students who interact with students of color informally in non-leadership roles as roommates, teammates, organization members, friends, or romantic partners. The third level, structural exposure to students of color, will be defined as White students who indicate interactions with SOC, which are impersonal and involve limited or no interpersonal contact such as occurs in passing interactions in campus facilities, in residence halls, or as classmates. Combinations of leadership, informal interactional, and structural exposure to SOC add five additional levels: 1.) leadership & structural; 2.) informal & leadership; 3.) informal & structural; 4.) informal, leadership & structural; and 5.) none/no interaction.

The dependent variable, *White students' racial attitudes*, is defined as a mixture of negative feelings and stereotypes toward a particular outgroup or outgroups and a belief system that sees the social structure of American society as open, fair, and equitable no matter the color of one's skin (McClelland & Linnander, 2006). The control variable *pre-college characteristics* will be defined as high school structural diversity, high school informal interactional exposure to SOC, and high school exposure to classroom diversity, i.e., enrolled in high school classes with content focused on diversity, social justice, or both or attended high school programs focused on diversity,

social justice, or both. The control variable *college classroom exposure to diversity* will be defined as enrollment in college courses with content focused on diversity, social justice, or both or attended college-sponsored programs focused on diversity, social justice, or both. Intervening variables will include the *perceived race of the SOC* and the *perceived quality of contact with the SOC*.

Research Question

The following question guides this research: What are the differences in racial attitudes in White, traditional age, 18 to 22 -year -old, full- or part –time, undergraduate college students in northeastern Pennsylvania based on type of exposure to students of color – exposure to SOC in leadership positions, informal interactional exposure to SOC, structural exposure to SOC, or exposure to SOC in combinations of leadership, informal interactional, and structural situations - when controlling for pre-college characteristics and college classroom diversity exposure?

Sub Problems

Based on the stated research question, the following sub problems will also be explored:

1. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions?
2. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in informal interactional situations?
3. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in structural situations?

4. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in combinations of leadership, informal interactional, and structural situations?
5. What are the pre-college characteristics scores for White college students in northeastern Pennsylvania?
6. What are college classroom diversity exposure scores for White college students in northeastern Pennsylvania?
7. What are the differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure?

Hypotheses

$H1_0$: There will be no differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure.

$H1_a$: There will be differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to

SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure.

Definition of Terms

College Students: For the purpose of this study, college students are defined as undergraduates between the ages of 18 and 22 enrolled in a four-year private or public college or university in Lackawanna or Luzerne counties in northeastern Pennsylvania.

White Students: College students who self-identify as White.

Students of Color (SOC): For the purpose of this study, students of color are defined as college students whom White students perceive as American Indian or Alaskan Native, Asian, Black or African American, Latinx or Hispanic, Middle Eastern or North African, White, two or more races, or Hawaiian or Pacific Islander. White students' racial perceptions may or may not coincide with the actual racial group with whom students of color self-identify.

Predominantly White Institutions (PWI): The Higher Education Act defines a minority institution as an institution of higher education whose enrollment of a single minority or a combination of minorities is more than 50 percent of the institution's total enrollment (*U.S.C. Title 20 - EDUCATION*, n.d.). For the purpose of this study, a predominantly White institution is defined as an institution of higher education where White students make up more than 50 percent of the total enrollment.

Racial Attitudes: Racial attitudes are defined as a mixture of negative feelings and stereotypes toward a particular outgroup or outgroups and a belief system that sees

the social structure of American society as open, fair, and equitable no matter the color of one's skin (McClelland & Linnander, 2006). For the purpose of this study, racial attitudes will be measured by scores on the Color-Blind Racial Attitudes Scale (CoBRAS) (see **Appendix A**).

Informal Interactional Exposure to SOC: Informal interactional exposure to SOC refers to the actual experiences White students have with SOC at an institution of higher education (Gurin et al., 2003). For the purpose of this study, informal interactional exposure is defined as interactions between White students and SOC, which are sustained, ongoing, and involve personal contact. Examples include roommate relationships, teammates, organization members, friendships, and dating relationships. Informal interactional exposure to SOC will be measured by participant responses to the following questions:

- Think of your closest college friend(s). Once you have identified your closest college friend(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your friend(s) race/ethnicity. You may enter this information for up to three close college friends.
- Think about your teammates. In column one, select each of the race/ethnicity categories that you believe are represented in your team. In column two, use the drop-down menu to indicate whether you consider your relationship with your teammates of each identified racial/ethnic category as positive, neutral, or negative.

- Think about the members of the organization in which you are most active. In column one, select each of the racial/ethnic categories that you believe are represented in the membership of this organization. In column two, use the dropdown menu to rate your general relationships with organization members of each identified racial/ethnic category as positive, neutral, or negative.
- Think of your roommate(s). Once you have identified your roommate(s), in column one, select each of the racial/ethnic categories that you believe best describes your roommate(s). In column two, use the drop-down menu to rate your relationship with the roommate(s) of each identified racial/ethnic category as positive, neutral, or negative.
- Think of the individual(s) involved in your most recent dating relationship, other than yourself. In column one, select each of the racial/ethnic categories that you believe best represents the race/ethnicity category of your dating partner(s). In column two, use the drop-down menu to indicate whether you consider your relationship with the individual(s) within each represented race/ethnicity category to be positive, neutral, or negative.

Classroom Exposure to Diversity: For the purpose of this study, classroom exposure to diversity is defined as knowledge about race and ethnicity derived from formal classroom settings or in institution -sponsored events that may influence White students' racial attitudes (Gurin et al., 2003). Classroom exposure to diversity will be measured by participant responses to the following questions:

- As a college student have you taken classes focused on diversity, multiculturalism, and/or social justice?

- As a college student have you been involved in school-related programming focused on diversity, multiculturalism, and/or social justice?

Structural Exposure to SOC: Gurin et al. (2003) define structural diversity as the numerical representation of diverse groups on a college campus. Structural diversity provides opportunities for intergroup contact but does not guarantee in-group and outgroup interaction. For the purpose of this study, structural exposure to SOC is defined as interactions between White students and SOC, which are impersonal and involve limited or no interpersonal contact. Examples may include encountering SOC through the daily course of activities, such as walking across campus, in dining or campus facilities, living in the same residence hall, or sharing space within a classroom setting. Structural exposure to SOC will be measured by participant responses to the following questions:

- Reflect on your residence hall. Think about the individuals that live in your residence hall. In column one, select each of the racial/ethnic groups that you believe is represented within your residence hall. In column two, use the drop-down menu to indicate whether you consider your general relationships with building residents within each represented race/ethnicity category to be positive, neutral, or negative.
- Reflect on your current classes. Think about your classmates. In column one, select each of the racial/ethnic groups that you believe is represented within your classes. In column two, use the drop-down menu to indicate whether you consider your general relationship with classmates within each represented race/ethnicity category to be positive, neutral, or negative.

- Consider your use of campus facilities such as the dining hall (or other campus dining options), the gym, the library, or computer labs. In column one, select each of the racial/ethnic groups that you believe you generally encounter when on campus. In column two, use the drop-down menu to indicate whether you consider your general relationship with individuals you encounter within each represented race/ethnicity category to be positive, neutral, or negative.

Leadership Positions: For the purpose of this study, leadership positions will refer to students of color who assume positions of authority as athletic team captains, student organization presidents or vice-presidents, Resident Assistants, or orientation leaders. Exposure to SOC in leadership positions will be measured by participants' responses to the following questions:

- Think of your team captain(s). Once you have identified your team captain(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your team captain(s) race/ethnicity. In column two, use the drop-down menu to rate your relationship with each team captain as either positive, neutral, or negative. You may enter this information for up to three team captains.
- Think of your organizations top officers, such as the President and Vice President(s). Use the drop down menu in column one to select the race/ethnicity category which best describe how you would characterize each of your organizations top officers. In column two, use the drop-down menu to rate your relationship with each officer as either positive, neutral, or negative. You may enter this information for up to three organization officers.

- Think of your current Resident Advisor/Resident Assistant (RA). Once you have identified your current RA please use the drop down menu in column one and select the race/ethnicity category which best describes how you would characterize your RAs race/ethnicity. In column two, use the drop-down menu to rate your relationship with your RA as either positive, neutral, or negative.
- Think back to your New Student Orientation Advisor/student leader(s). Once you have identified your New Student Orientation (NSO) Advisor/student leader(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize each of your NSO Advisor/student leader(s) race/ethnicities. In column two, use the drop-down menu to rate your relationship with each identified NSO Advisor/student leader(s) as either positive, neutral, or negative. You may enter this information for up to three NSO Advisor/student leader(s).

Quality of Contact: For the purpose of this study, quality of contact will be defined as positive, neutral, or negative. Quality of contact will be measured by participants' rating of their various relationships as described above as either positive, neutral, or negative.

Delimitations

1. This study is delimitated to White, full- or part –time, undergraduate students over the age of 18 enrolled at three higher education institutions located in northeastern Pennsylvania.
2. This study is delimitated to an eight month period.
3. Assessment of racial attitudes are delimitated to scores on the CoBRAS.

Limitations

Instrument Validity. Components of an instrument designed by the researcher (see **Appendix C**) may not accurately measure what it was designed to measure, item validity, or cover the range of the subject area intended, sampling validity (Terrell, 2016).

Self-Reported Data. The ability to verify self-reported data is limited (Labaree, 2020). Social Desirability Bias, respondents answering questions to reflect what they believe to be socially admirable rather than accurate responses (Holbrook & Krosnick, 2010), in this case not appearing racist, may limit the generalizability of the results of this study.

Generalizability due to Location. As this study focuses on students attending college in northeastern Pennsylvania, results may not represent colleges or universities with a higher percentage of students of color or schools in a more racially diverse area (Terrell, 2016).

Assumptions

The researcher assumes that respondents met the stated criteria for inclusion, White undergraduate college students over the age of 18 from a four-year private or public college or university in Lackawanna or Luzerne counties in northeastern Pennsylvania. The researcher assumes that study participants will understand the survey questions. The researcher assumes that study participants will respond honestly and that anonymity will limit social desirability bias and promote honest and accurate responses.

Significance of the Study

Though U.S. institutions of higher education emphasize the value of diversity (American Council of Education Board of Directors, 2012; Casner-Lotto & Barrington, 2006; Kuh, 2008), colleges and universities, particularly predominately White institutions, continue to struggle with racial diversity (*Administrators, Students and Activists Take Stock Three Years after 2015 Missouri Protests*, 2018; "Racist Video Showing Ohio University Students Circulated on Social Media," 2019; Randle, 2019). As U.S. demographics shift (Colby & Ortman, 2015) and the nation becomes more racially diverse, finding ways to reduce racial prejudice becomes imperative. In addition to the larger societal goals associated with reducing racial prejudice, PWIs need to recognize their own financial interest in reducing racial prejudice on their campuses. As the non-Hispanic White population declines, institutions of higher education will need to create a cultural climate that will attract and retain increasingly racially diverse populations. Predominately White colleges and universities would be well served by exploring ways to reduce racial biases of White students.

Intergroup contact appears to be an effective way to reduce racial prejudice (Paluck et al., 2018; Pettigrew & Tropp, 2006, 2008). Previous research on intergroup contact in a higher education setting has looked at the context of the intergroup contact - within residence halls, in classrooms, within student organizations. Little research has been conducted as to the impact that students of color in leadership roles, such as Resident Advisors, athletic team captains, Orientation Advisors, may have on White students' racial attitudes. Subsequently, possible correlation between White students'

perception of the quality of their interactions with SOC in leadership roles has been underexplored. This study will attempt to address these gaps in knowledge.

White students are significantly less likely to interact across races than SOC and, when cross-racial interactions do occur, interactions often involve racial stereotypes, such as Black students are not academically prepared, come from poverty, criminals, athletes, and/or fans of hip-hop, and macro- and microagressions including racial slurs, stares, poor service, being mistaken for other Black students, and avoidance (Harper, 2013). At PWIs, residence halls may be a White student's first encounter with racial diversity. As such, White students' negative racial attitudes have the potential to decrease SOC sense of belonging within the residence hall community through microaggressions, contribute to a sense of isolation among SOC, and may create a negative perception of the larger campus climate (Harwood et al., 2012; Hotchkins & Dancy, 2017). Results from this study could be utilized by Housing & Residence Life staff to develop staff training and residence hall programming designed to reduce racial bias among White students and create opportunities which support positive intergroup interactions.

Findings from this research will also be useful to offices at PWIs which mentor and hire or elect student leaders. As U.S. demographics change, employers seek graduates who are able to work collaboratively with diverse populations (Casner-Lotto & Barrington, 2006; Hart Research Associates, 2018). Student Activities/Engagement Offices, Athletic Departments, and Housing & Residence Life staff and others involved in leadership work could utilize findings from this research to develop programs to identify and mentor students of color for leadership positions and educate White student leaders on cultural competence. Such programs have the potential to create a greater

number of structured opportunities for intergroup contact. White students have less of an opportunity to avoid intergroup cross-racial contact if they must interact with SOC in RA roles, as officers in student organizations, and athletic team captains. Such interactions may increase potential for reducing racial bias among White PWI students while developing desirable job skills for all students. Seeing more SOC in campus leadership positions may improve perceptions of the campus racial climate and may improve recruitment and retention of SOC.

Chapter 2

Review of Literature

Race and Higher Education

Higher education often equates student success in terms of retention, persistence to graduation, and grade point average. Although these may appear to be objective standards, studies have found that differences exist by race. A 2010 study assessed the impact of perceived discrimination on student satisfaction, enrollment persistence, and graduation at a racially mixed campus where no single racial/ethnic group constituted a majority of the student body. Results indicated a rise in reports of occasionally or frequently experiencing or witnessing one or more forms of insensitive behaviors, from 42.1 percent in 1994 to 45.6 percent in 2006. The highest percentages of reports of insensitive behavior over this period were language-based, followed by race/ethnicity. African American students reported experiencing or witnessing the highest percentage of insensitive behavior based on race/ethnicity. American Indian, Asian/Pacific Islander, and Hispanic students reported the second, third, fourth -highest percentages in this order. White students reported experiencing or witnessing the lowest percentage of insensitive behavior based on race/ethnicity within the 1994 to 2006 time span (Miller & Sujitparapitaya, 2010).

Researchers surmised that the highest level of perceived threat, experiencing or witnessing insensitive behavior, may occur more among diverse racial/ethnic minority groups than Whites. These perceptions may result in feelings of alienation or social isolation. As such, at racially mixed institutions of higher education, students may

experience more uncertainty and competition, leading to fractionalization, resulting in SOC and White students joining segregated organizations (Miller & Sujitparapitaya, 2010).

A 2016 qualitative study of barriers to success for African American and Latino males found that stereotyping and stereotype threat, discrimination, and the need for supportive friends contributed to a lack of persistence. Participants identified perceptions of being belittled, treated as ignorant, being addressed with no expectation of success, and a lack of social support, friends, and a social network as specific barriers (Dulabaum, 2016).

Hall (2017) stated that African and Hispanic American males are under-represented in higher education and maintain low academic achievement compared to peers. Lower graduation and retention rates can lead to diminished long-term wealth accumulation, more significant income discrepancy between races and education levels, and weakening the nation's intellectual capital and global competitiveness. Hall (2017) conducted a qualitative study to determine what academic and non-academic factors might support or hinder academic persistence for these two groups.

Racial microaggressions emerged as a theme. Many of the participants reported having experienced acts of microaggressions. While some students perceived the acts as barriers, others described the acts, though problematic, as a motivator that encouraged a focus on persistence and completing their degree. Participants noted faculty and staff as a source of microaggressions. While some faculty supported SOC by providing meaningful challenges and establishing personal connections, other faculty acted as a barrier by stereotyping SOC as unable to speak English, as athletes, as having lower

intellectual capacity, and by holding lower expectations for SOC. Students also reported that White peers held similar stereotypes.

A lack of structural diversity also emerged as a theme. Lack of a larger peer group was found to be a potential barrier to success for SOC. Failure of PWIs to reach a critical mass of racially diverse students may inhibit SOC involvement and connection to the institution (Hall, 2017).

Martin, Spenner, and Mustillo (2017) conducted a quantitative study examining racial differences in academic performance for students enrolled in an elite, private university. Results indicated that in the first year, average GPAs for Whites and Asians were almost one-half of a letter grade higher than for Black students and one-quarter of a letter grade higher than for Latinx students. At the end of the fourth year, the gap between Whites and Blacks had declined to almost one-quarter, and between Whites and Latinx had declined to almost one-sixth of a letter grade.

Researchers attributed almost half of the gap between Whites and Blacks and Latinx students to family background characteristics, such as gender, socioeconomic status, and parents' education levels, as well as high school grades and standardized test scores. Course difficulty and major choice were determined to be factors in racial achievement gaps. Additionally, student perceptions of the campus and classroom environments were significant factors explaining GPA gaps between races.

Reports of conflict, tension, or harassment on campus and perceptions of an unwelcoming or hostile classroom environment resulted in negative declines in GPA. Black students felt a more hostile classroom environment and were the racial group most

likely to report being treated stereotypically by faculty compared to White students. More than three in five Black study participants reported discrimination from faculty, staff, or other campus community members. For White students, that number was one in five, and for Latinx and Asian students, that number was one in three (Martin et al., 2017).

National data of six-year outcomes for students who started college at four-year public institutions in Fall 2012 show that Asian students had the highest completion rate of 76.7 percent, followed by White students at 72.1 percent, Hispanic students at 57.4 percent, and Black students at 47.6 percent (p.16). The race and ethnicity of this cohort of 775,919 students were 67.9 percent White, 13.5 percent Latinx, 12.7 percent Black and 5.9 percent Asian (Shapiro et al., 2018). This data reflects a 24.5 percentage point gap between overall completion rates of Black and White students and a 14.7 percentage point gap between Latinx and White students (Shapiro et al., 2019).

Data of six-year outcomes for students who started college at four-year private non-profit institutions in Fall 2012 show that Asian students had the highest completion rate of 86.2 percent, followed by White students at 82.1 percent, Hispanic students at 72.3 percent, and Black students at 56.2 percent (p.24). The race and ethnicity of this cohort of 323,937 students were 73.3 percent White, 9.7 percent Latinx, 11.3 percent Black and 5.6 percent Asian. This data reflects a 25.9 percentage point gap between overall completion rates of Black and White students and a 9.8 percentage point gap between Latinx and White students (Shapiro et al., 2018).

A 2019 review of literature by Banks and Dohy indicated that when GPA and SAT scores of White students and SOC are compared, SOC were found to have higher

dropout rates than Whites. White perceptions of racial inferiority contributed to dropout rates by making SOC feel they do not belong in PWIs where they experience institutional, implicit, and blatant acts of racism from both students and professors. Such instances of racism contribute to SOC feelings that they do not belong at PWIs leading to disengagement, underperformance, and higher dropout rates (Banks & Dohy, 2019).

Patton, Sanchez, Mac, and Stewart (2019) examined diversity, equity, inclusion, and justice initiatives implemented in higher education between 1968 and 2018. Authors found that although the majority of institutions of higher education incorporate a commitment to diversity and inclusion into mission statements, critical diversity efforts are often the first to be cut or minimized when making financial decisions. Implied in this finding is a contradiction between institutional claims and institutional actions (Patton et al., 2019).

A 2019 study by Arellano and Vue examined discourses of campus racial climate surrounding a student-led campus speak-out at a PWI in the Pacific Northwest. Researchers found that claims of racism from SOC are deemed to have credence when racism is overt. This serves to minimize more common instances of racism that operate covertly. Acts of racism tend to be framed as acts of individuals which neglect the more extensive racial system in which the act is embedded. When racism takes the form of an overt comment, though the comment may be criticized, freedom of speech is often cited, which establishes racism as a matter of individual opinion. This functions to minimize racism as an isolated act and shifts away from examining institutional and systemic racism. In this way, racial inequities are normalized by institutions of higher education and are then interpreted as being beyond the scope of institutional action. Students

identified faculty as the group most likely to perpetrate acts of racism in a classroom setting (Arellano & Vue, 2019).

White Racial Attitudes and Impact for White Students

In 2011, researchers conducted a series of five studies examining Whites' reactions to diversity. The first study revealed an implicit bias among Whites which associated diversity with exclusion rather than inclusion. The second study found that when Whites were explicitly included in the depiction of diversity, this bias was not exhibited. Study three indicated that Whites were less likely to connect diversity and more likely to associate colorblindness with their self-concept than people of color. Study three also indicated that individuals who related diversity with self-concept were more likely to advocate for diversity. Study four further supported the finding that Whites' who feel excluded from diversity messaging were less likely than people of color to support diversity in an organizational workplace. The fifth study showed that Whites' need to belong impacted support for diversity; White individuals who exhibited higher rates of needing to belong preferred colorblind organizational messaging to organizational messaging advocating for multicultural diversity (Plaut et al., 2011).

Goodman, Kivel, and Spanierman and Heppner (2001; 2002; 2004, as cited in Todd, Spanierman, and Poteat, 2011) describe the psychosocial costs of racism to Whites as "the negative cognitive (e.g., distorted view of reality), behavioral (e.g., living in segregated neighborhoods), and affective (e.g., guilt about unearned privilege) consequences of dominant group membership in a White supremacist system" (Todd et al., 2011, p. 508). Todd, Spanierman, and Poteat (2011) conducted a longitudinal study of White undergraduates which examined if and how racial affect, White empathy, guilt,

and fear, change throughout the college experience and if and how participating in more or fewer diversity activities, such as enrollment in diversity courses, participation in diversity programs, and inter-racial friendships, impacts racial affect. Authors hypothesized that males and females and students with high versus low levels of colorblindness (the belief that race should not and does not matter (Neville et al., 2000), e.g. when a White individual claims they do not see color when engaging with people of color) would have different models of racial affect change. Authors also hypothesized that more significant periods of participation in diversity courses and programming would result in increased levels of White empathy and guilt, that periods of increased inter-racial friendships would lead to decreased White fear, and that, cumulatively, students who on average are more involved in diversity activities would have higher average levels of White empathy and guilt and lower average levels of White fear across the first four years of college.

Results indicated patterns of change for all three aspects of racial affect throughout the college experience and that students' level of colorblindness at college entry moderated pattern trajectories. Students with high levels of colorblindness at entry showed a downward trend in White empathy in the first year, upward trends in second and third years, and a downward trend in the fourth year of college. Students with low levels of colorblindness showed an upward trend during the first year of college, a downward trend in the second and third years, and an upward trend for the fourth year (Todd et al., 2011).

In terms of White guilt, students with higher levels of colorblindness at entry showed an upward trend over the initial two and a half years of college, followed by a

downward trend through the fourth year. Students with lower levels of colorblindness at entry showed an initial downward trend which ultimately leveled off through the fourth year. In terms of White fear, students with high levels of colorblindness at entry showed an upward trend in the first year, downward trends in the second and third years, and an upward trend in the fourth year of college. The opposite pattern was found for students with low levels of colorblindness; a downward trend during the first year of college, an upward trend through the second and third years, and a downward trend during the fourth year (Todd et al., 2011).

When students enrolled in more diversity courses or participated in more diversity programming, they reported higher levels of White guilt. Students who reported higher levels of participation in diversity activities over four years of college than other participants were found to have higher average levels of White guilt across the four years of college. Participants who enrolled in more diversity courses over the four years of college were found to have lower average levels of White fear across the four years of college. Students who reported more inter-racial friendships also reported less White fear. Students with cumulatively higher average levels of White empathy and lower average levels of White fear were more likely to indicate cross-racial friendships over four years (Todd et al., 2011).

A 2013 study by Lowe, Byron, Ferry, and Garcia found that White students were less likely to notice race and instances of racism on campus, are hesitant to talk about race and racism, and more likely believed there to be minor, if any, campus racial climate issues. White students overwhelmingly indicated that they felt accepted, were never uncomfortable, and felt like they belonged at the institution. White students felt that

increasing racial diversity would have little impact on their college experience. White students justified a lack of campus racial diversity by invoking a diversity of beliefs and by mentioning the number of diversity-related events held on campus. Strong feelings of acceptance led White students to project their own experience into other racial groups (Lowe et al., 2013).

A 2014 study of perceived status threat from racial demographic shifts found that recognizing reported racial demographic shifts impacted White Americans' political-party inclinations and ideology. White American participants, all identified as independent, who was made aware of racial demographic shifts reported being more conservative and gave a more significant endorsement of conservative policy, both race- and non-race-related, than participants who were not made aware of racial shifts. The effects were mediated by group status threat, the idea that racial shifts would lead to a loss of White social status. The conservative shift disappeared when participants received assurance that racial shifts would not disrupt the current racial hierarchy (Craig & Richeson, 2014).

A 2014 quantitative study by Yeung and Johnston investigated campus culture and climate indicators on a minority-majority campus and how perceptions of campus climate and culture differ between targeted and non-targeted groups after a racially biased incident. Results indicated that, despite not being a numerical majority on campus, White students held a more positive sense of belonging on campus than Asian, Black, and Latinx students. White students also experienced discrimination and bias significantly less frequently than Asian, Black, and multiracial students. These findings indicate institutional culture and practices which may be structured towards and more relevant to White students.

Results also indicated that although perceptions of campus culture did not differ across all racial groups after a racially biased incident, differences in perceptions of campus climate were found. Though the racially biased incident had targeted Asian students, Black students reported greater frequency of conversations across differences and more negative perceptions of cross-racial interactions. These results indicate that broader campus incidents can impact members of racial groups differently, even among non-targeted racial groups. Results also indicated that campus culture might be a more stable construct than that of campus climate. The endurance of campus culture may help explain why, despite being a majority-minority campus, White students perceived both culture and climate more positively than students of other races (Yeung & Johnston, 2014).

Neville, Lewis, Poteat, and Spanierman (2014) conducted a study exploring changes to White students' colorblind racial ideology over four years of college. Researchers found differences in students' colorblind racial attitudes (CoBRAS) at college entry and in students' CoBRAS scores as they advanced through college. Gender was linked to differences in CoBRAS scores at college entry, with females exhibiting lower levels of CoBRAS than males. Females also showed a more significant decrease in CoBRAS than males over time.

Students who had expressed greater interest in social justice issues had lower CoBRAS at entry; however, this variable did not impact CoBRAS levels over time. Students who reported taking more diversity courses and participating in more diversity activities showed significantly more significant decreases in CoBRAS scores each year than other students. More exposure to diversity-related cultural and intellectual activities

over four years of college significantly impacted how student participants considered racism (Neville et al., 2014).

Students who reported having a more significant number of interracial friends showed greater decreases in CoBRAS each year. White students who reported having more Black friends had the most significant decreases in CoBRAS levels each year. Colorblind Racial Attitude Scale (CoBRAS) scores for White students who reported a larger number of Latinx friends decreased at a lesser rate each year than White students who reported no close Latinx friends. Interracial friendships between White students and American Indian or Asian Americans had no significant effects on White CoBRAS scores (Neville et al., 2014).

Hurtado, Ruiz Alvarado, and Gillermo-Wann (2015) explored pre-college socialization factors and college experiences associated with a heightened salience of racial identity for college students and its relationship to campus climate perceptions. Results indicated that underrepresented students spend more time thinking about their race than do White students. Even at diverse campuses, over half of White student respondents never or seldom considered their race.

Family, friends, and coworkers were a primary source of pre-college socialization for students at a four-year institution. This form of socialization helped shape students' knowledge about racial/ethnic groups and framed how students conceptualize their own and others' races. Enrollment in courses focused on equity and inclusion issues, engaging in campus-facilitated co-curricular diversity activities, and participation in in-depth out -of -class conversations about issues regarding racial diversity were all found to have strong relationships to racial identity salience for students (Hurtado et al., 2015).

Jayakumar conducted a 2015 quantitative study exploring the relationship between pre-college residential segregation or pre-college diversity experiences, college experience with diversity, and post-college colorblind ideology. Descriptive statistics indicated that Whites from segregated neighborhoods showed a higher propensity toward colorblind ideology than Whites from desegregated neighborhoods pre-college. Colorblind ideology declined in some individuals over four years of college; however, the difference between groups was insignificant. However, ten years after college entry, colorblind ideology had increased in both groups and was not significantly different between groups.

White students who started college with strong colorblind racial attitudes frequently have strong colorblind racial attitudes ten years later. Involvement in cross-racial engagement and campus diversity experiences during college reduced colorblind racial attitudes post-college. Experiencing a positive campus racial climate, a perception of cross-racial community, and multiethnic diversity through coursework and residential encounters during college reduced colorblind ideology after college. Cross-racial interactions during college, combined with the factors described above and post-college experiences, were linked with a decrease in colorblind ideology six years after college graduation for Whites from segregated pre-college environments (Jayakumar, 2015).

Classroom and structured co-curricular activities during college were linked to reduced post-college colorblind racial ideology for Whites from either pre-college environment. Whites from either pre-college environment who participated in Greek life were more likely to hold colorblind ideologies post-college. Whites who lived a racially

integrated lifestyle and socialized across races after college had lower levels of colorblind ideology six years after graduation (Jayakumar, 2015).

Differences between SOC and White students were found in a 2015 quantitative study that explored the relationship between campus racial climate and student attitudes about the benefits of diversity. Students of color were more in agreement with the belief that SOC was as productive and as qualified as White students and less concerned about the possibility of overlooking a qualified White student in the admissions process in favor of an applicant of color. Students of color tended to enroll in schools within the college with an average higher concentration of SOC (Ward & Zarate, 2015).

White students enrolled in schools within the college where there was less support for institutional efforts to increase campus diversity. Beliefs about the productivity of SOC and concerns about reverse discrimination were found to significantly predict attitudes about diversity as beneficial to scholarship and the campus in general for White students.

White students enrolled in schools where peers supported institutional efforts to increase diversity or in schools with a higher percentage of faculty of color had a more favorable attitude regarding the benefits of diversity. Analogously, being surrounded by peers who firmly believe that the institution should increase and address diversity impacted White students' attitudes about the benefits of diversity. The contribution of peer influence was independent of White students' perceptions of SOC and concern for reverse discrimination (Ward & Zarate, 2015).

White students and SOC at schools with selective admissions programs were found to have more favorable attitudes about the benefits of diversity. Students appear to believe that diversity is beneficial when it is the result of a more selective and fair admissions process. This might imply that students disapprove of institutional diversity if it is promoted at the expense of admitting the best students. Study shows that the more competitive the admissions process, the more its students agree with the benefits of having a diverse student body (Ward & Zarate, 2015).

Warikoo and de Novais conducted a qualitative study exploring race frames expressed by White students at elite U.S. institutions and how these race frames may be shaped by their college experience (2015). The researchers defined race frames as lenses by which people recognize the role of race in society. Four race frames were identified: colorblind frame, diversity frame, culture of poverty frame, and power analysis frame.

The colorblind racial frame is an individualistic attitude towards race relations and is equivalent to colorblind racial attitudes/ideology. Those who operate within this frame perceive that race has little social meaning, does not matter, and acts accordingly, ignoring racial identities and differences. The diversity racial frame is a group -oriented approach toward race relations that recognizes and appreciates differences. Those who hold a diversity racial frame perceive race as a positive cultural identity that forms an individual's world views and cultural practices and believe there is value in cross-racial interactions (Warikoo & de Novais, 2015).

Culture of poverty racial frames also utilize a cultural framework similar to a diversity racial framework. The emphasis, however, is on negative cultural characteristics perceived to be held by minority cultures. Power analysis racial frames

utilize a structural approach that focuses on unequal power relationships between racial groups in a given society (Warikoo & de Novais, 2015).

Results indicated that 51 percent of participants, 24 out of 47, employed a colorblind racial framework while 85 percent, 40 out of 47, utilized a diversity racial frame. Participants referenced more significant usage of a colorblind racial frame pre-college due to segregated neighborhoods, secondary school experiences, and parental influence. Structural diversity and the campus climate, including academic and co-curricular diversity initiatives, were factors that fostered the development of a diversity framework. The average participant attended college with slightly more than half as many Whites and twice as many Black and Latinx students than attended their high school (Warikoo & de Novais, 2015).

Almost 50 percent of participants held both a colorblind and a diversity racial framework simultaneously. The utilization of a dual racial framework impacts White students' perspectives on affirmative action and interracial interaction. While students expressed a belief that racial diversity has educational benefits, a diversity frame perspective, the colorblind concept that race should not matter led students to oppose affirmative action policies, particularly if the student perceived that the policy might cause them harm – i.e., reverse discrimination (Warikoo & de Novais, 2015).

In terms of interracial interaction, this dual racial frameworks led White students to perceive exclusion by SOC. Whites understood this exclusion to be inconsistent with their perception of the purpose of campus diversity, i.e., to enrich White's educational experiences. Colorblind and diversity frameworks ignore inequalities that make same-

race peer groups important to minority students on PWI campuses (Warikoo & de Novais, 2015).

Smith and Mayorga-Gallo (2017) examined colorblindness and diversity ideologies. The majority of race scholars describe Whites' racial attitudes as colorblind. This ideology maintains that because race should not matter in determining individuals' life chances, then race does not matter. Racial inequality is thus explained by focusing on individuals' behaviors and ideas of culture.

Diversity ideology is a White racial ideology that co-exists with colorblindness. Diversity ideology focuses on appreciation and lauding racial differences to accomplish colorblind ideals. Diversity ideology allows Whites to recognize racial differences and racial inequalities without acknowledging the role the White individual and their decisions play in perpetuating this inequality. They can view themselves as nonracist without ensuring equitable outcomes (Smith & Mayorga-Gallo, 2017).

Yi, Todd, and Mekawi examined associations between colorblindness and inaction to address prejudice (2020). Colorblindness was significantly and negatively linked with intergroup empathy and confidence in self-directed and intergroup action to reduce prejudice for White, Asian American, and underrepresented racial minority groups (Black, Latinx, Native American, Hawaiian/Pacific Islander, and Multiracial students from underrepresented groups). Colorblindness was significantly and negatively linked with positive emotions during intergroup interactions and positively linked with negative emotions during intergroup interactions for White and underrepresented students. White students were found to have significantly higher levels of colorblindness and significantly lower levels of intergroup empathy, confidence in intergroup action, and the likelihood of

self-directed and intergroup action to reduce prejudice than Asian American and underrepresented students (Yi et al., 2020).

A higher level of colorblindness was indirectly linked with less confidence in and the likelihood of self-directed and intergroup actions to reduce prejudice through the affective variables of intergroup empathy and positive and negative emotions during intergroup interactions. Colorblindness was linked to lower positive emotions during intergroup interactions, associated with less confidence in action. Support of colorblind racial ideology was found to discourage action from reducing prejudice for all racial groups, thereby maintaining systems of inequality. For White students, inaction to reduce prejudice serves to maintain group interests by maintaining dominant status. Adopting a colorblind racial ideology can serve as a barrier to recognizing personal biases and nullifies the perceived need for collective actions to combat prejudice across both majority and minority racial groups (Yi et al., 2020).

Microaggressions

As previously stated, racism on college campuses may also be enacted through microaggressions, "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group" (Sue et al., 2007, p. 273). Harwood, Huntt, Mendenhall, and Lewis (2012) conducted a qualitative study exploring the experiences of SOC residing in residence halls at PWIs. The study focused on two research questions: 1.) what are the interpersonal racial microaggressions experienced by SOC in residence halls, and 2.) how are these racial microaggressions exhibited at the environmental level within residence halls. Four themes emerged: 1.) racial jokes and

verbal comments, 2.) racial slurs were written in shared spaces, 3.) segregated spaces and unequal treatment, and 4.) denial and minimization of racism.

Racial jokes and verbal comments occurred at an interpersonal level and sometimes involved individuals with whom SOC felt they had a positive relationship. This relationship made it particularly difficult for SOC to confront the behavior. Comments and jokes highlighting the SOC minority group made SOC feel like outsiders within their residence hall communities. Students of color also reported pranks that were not explicitly race -related but were felt to be targeted at them because of their race. When reported to residence hall staff, SOC often felt that such incidents were downplayed, which minimized and invalidated the SOC experience (Harwood et al., 2012).

Participants reported racial slurs written in shared spaces such as on room doors, in study rooms, and elevators. Such slurs made SOC feel unwelcome, angry, and insulted. Minimization and lack of response to such incidents from residence hall staff gave the appearance to SOC that such behaviors were tolerated at an institutional level which decreased SOC sense of belonging and made SOC feel unsafe (Harwood et al., 2012).

Segregated spaces and unequal treatment are forms of environmental, racial microaggressions, indicative of institutional racism, which send the message to SOC that they do not belong within a space. Participants perceived residence halls as racially segregated and described a sense of discomfort and isolation due to a lack of SOC. Spaces with the highest concentration of SOC were perceived on campus as inferior spaces. Students of color also reported selective enforcement of campus policies within

residence halls, with SOC being expected to show identification or open bookbags more often than White students. These experiences left SOC with a negative view of residence halls, extracted an emotional cost, and decreased SOC sense of belonging (Harwood et al., 2012).

A 2013 study by Harper indicated that White students are significantly less likely to interact across races than Black students. When cross-racial interactions at PWIs did occur, they often involved microaggressive racial stereotypes. Interactions with racial stereotypes contributed to Black students' perception of a hostile campus climate. Examples of microaggressions that contributed to perceptions of racial hostility included: White staring, verbal expressions of prejudice, poor service in college offices and facilities, and interpersonal offenses such as being mistaken for other Black students, avoidance, or requiring things of Black students which are not required of White students. While individual acts of microaggressions may not exact harm, the cumulative effect may adversely impact SOC academic outcomes, wellness, and sense of belonging at PWIs (Harper, 2013).

A 2014 quantitative study investigated the relationship between racial microaggressions and mental health. Results indicated a significant negative relationship between mental health and microaggressions. Those who see and experience microaggressions in their daily lives were more likely to show signs of adverse mental health such as depression, anxiety, negative affect, and lessened behavioral control. More total experiences with racial microaggressions were a likely predictor of additional mental health issues (Nadal, Griffin, et al., 2014).

Significant differences were found between Whites and all other racial groups in the study. Black, Asian, Latinx, and multiracial participants experienced a larger number of racial microaggressions than Whites. No significant differences in the total amount of microaggressions between Black, Asian, Latinx, and multiracial participants were discovered (Nadal, Griffin, et al., 2014).

Another 2014 quantitative study examined the relationship between racial microaggressions and self-esteem. Researchers found a significant negative relationship between racial microaggressions and self-esteem. White respondents experienced significantly less frequent racial microaggressions than Black, Asian, Latinx, and Multiracial respondents (Nadal, Wong, et al., 2014).

Significant differences were found in the types of racial microaggressions experienced by racial groups. Black and Latinx respondents reported more microaggressions regarding assumptions of inferiority than White respondents. Black respondents reported more microaggressions related to second-class citizenship and assumptions of criminality than White, Asian, and Latinx respondents. Asian Americans, Multiracial, and Latinx respondents were more likely than Black or White respondents to experience microaggressions related to exoticization. Asian respondents reported more environmental microaggressions than Black and White participants, and White respondents reported significantly less environmental microaggressions than Latinx and Multiracial respondents (Nadal, Wong, et al., 2014).

Results signaled that racial microaggressions are a predictor of self-esteem. The more racial microaggressions an individual experienced, the lower the individuals' reported self-esteem. Microaggressions related to workplace and school settings and

second-class citizenship and criminality in particular significantly and negatively impacted students' self-esteem (Nadal, Wong, et al., 2014).

A 2017 study of the presence and power of racial microaggressions found differences between White respondents who had been exposed to a racial microaggression story and White respondents who had not. Whites in the control group were more likely to view racial inequalities as stemming from biological inadequacies. White respondents exposed to a racial microaggression story were more likely to view racial inequalities as being caused by social forces. While White respondents exposed to a racial microaggression story were less likely to see inequalities in biological terms, all White respondents were more likely to attribute the microaggression as specific to the individual action of the perpetrator rather than evidence of systemic racism. Respondents of color were found to be more racially conscious of inequalities and their social causes than Whites. Whites were more indifferent to the significance of racial inequality and were more likely to perpetrate or dismiss racial microaggressions. The individuals most likely to commit microaggressions appear to be those who benefit most from the current racial and gender social order, White males (Hughey et al., 2017).

Moragne-Patterson and Barnett (2017) found that experiences with acts of racism have physical, emotional, and mental health repercussions for SOC which extend beyond the actual act. This is particularly true when the racist act is perpetrated by faculty and staff, individuals whom SOC expects to be more culturally aware and accepting than their contemporaries. A 2018 study on racial microaggressions and psychological well-being found that racial microaggressions have a detrimental influence on the emotional health of students of color. Experiences with microaggressions can produce a stronger ethnic

identity that may shield against the negative impact of microaggressions. Ethnic identity was positively linked with self-esteem and academic self-efficacy (Forrest-Bank & Cuellar, 2018).

A 2018 study explored White persons' attitudes regarding acceptability to state racially microaggressive comments to minorities in interpersonal interaction. Researchers found that the acceptability of racial microaggressions was positively linked with explicit prejudice and colorblindness and was negatively linked with ethnocultural empathy. Focused on four types of racial microaggressions; victim -blaming, exoticizing, power evasion, and color evasion (Mekawi & Todd, 2018).

Victim blaming consisted of microaggressions that maligned and accused racial and ethnic minority people and cultures of racial disparities. Persons who felt that victim -blaming comments were acceptable were more likely to overlook blatant hatred toward minorities and to ignore the impact of racism. Exoticizing refers to comments which objectify, sexualize, or exoticize and establish superiority by centering White beauty norms as a standard and deviations from these norms as "other." Power evasion is similar to victim blaming in that both deny the role of racism; however, power evasion offers no maligning rationales. Color evasion involves diminishing the importance of seeing or discussing race and ethnicity (Mekawi & Todd, 2018).

White respondents indicated color evasion as the most acceptable form of microaggression, followed by power evasion, exoticizing, and victim -blaming. The more acceptable respondents believed comments to be, the more likely they believed they might say such comments in the future. Those respondents who reported a greater belief that racial microaggressions were unacceptable were linked to a greater willingness to

disagree with an individual who made a racially microaggressive statement. This link was lowest for power evasion, which the authors attributed to the difficulty in addressing due to its lack of explicit racial and ethnic hostility (Mekawi & Todd, 2018).

A 2019 quantitative study of racial microaggressions and traumatic stress indicated that more frequent occurrences of racial microaggressions were significantly linked to more significant traumatic stress symptoms. As with self-esteem, microaggressions related to workplace and school settings were more connected to traumatic symptoms (Nadal et al., 2019).

A 2019 study tested whether White students who had received higher or lower levels of information regarding racial and ethnic microaggressions would be able to identify incidents of racial and ethnic microaggressions. The high-exposure group attended a one-hour lecture on the topic. The low-exposure group read a scholarly article on microaggressions. The control group read an article on positive psychology. Microaggression identification was measured by participants' ability to identify and describe microaggressions after watching multimedia clips. Researchers found no significant results regarding detection rates (Patterson & Domenech Rodríguez, 2019).

Given the lack of findings in detection rates, researchers instead explored the impact of microaggression education on students' colorblind racial attitudes (CoBRAS). Results indicated a significant decrease in White students' colorblind racial attitudes from pre- to post-intervention for participants in all three conditions. This decrease occurred in overall CoBRAS scores and the Racial Privilege subset. No significant changes were found in the Institutional Discrimination or Blatant Discrimination subsets. Because the decrease in colorblind racial attitudes occurred across conditions, researchers attributed

the decrease to exposure to multimedia clips of microaggression and accompanying reflection rather than the information intervention (Patterson & Domenech Rodríguez, 2019).

Effects of White Racial Attitudes and Microaggressions on Students of Color

A 2010 quantitative study explored the unique experiences Black and Latinx college students have with racism, impacting them academically and psychologically. Research questions focused on: the relationships among self-efficacy, academic and social engagement, and racism-related stress in SOC; if racism-related stress predicted academic motivation; and how race impacted the relationship between racism-related stress and academic motivation. Findings suggested that SOCs are more likely to succeed with social support and that higher academic engagement levels positively influence motivation. Racism-related stress, particularly institutional racism-related stress, negatively impacted academic motivation for Black and Latinx students, the magnitude of which was more remarkable for Black students. Students with higher amotivation levels were more likely to question their college attendance and hold negative attitudes toward the school (Reynolds et al., 2010).

A 2010 quantitative study by Wei, Liao, Chao, Mallinckrodt, Tsai, and Botello-Azamarron examined the direct effect of perceived bicultural competence (PBC) on depressive symptoms and PBC a possible coping resource to moderate the relationship between minority stress and depressive symptoms. Results supported the concept that SOC experience minority stress, a unique form of stress different from the general stress experienced by all students. Examples of minority stress might include dealing with the low academic expectations of others and the need to prove oneself to others. Bicultural

competence appeared to be a vital coping resource for SOC as higher levels of perceived bicultural competence were associated with lower levels of depressive symptoms. Students of color with higher levels of perceived bicultural competence may be better able to navigate the minority stress of attending a PWI (Wei et al., 2010).

Harper (2013) takes the perspective that higher education institutions in the United States were created under White cultural norms, which have resulted in toxic campus climates for SOC. Often, underrepresentation at PWI experience results in feelings of 'onlyness.' Harper et al. (2011, as cited in Harper, 2013 p. 189) defined 'onlyness' as "the psychoemotional burden of having to strategically navigate a racially politicized space occupied by few peers, role models, and guardian's from one's same racial or ethnic group."

Onlyness involves underrepresentation on campus and the burden of feeling that one must represent their race, whether through the need to be continuously exceptional or the expectation of others that SOC will act as spokespeople for their race. Such experiences can lead SOC to experience stereotype threats. Stereotype threat, an internalized fear of affirming negative stereotypes associated with one's racial group, can lead to anxiety and poor academic performance (Harper, 2013).

Harper states that stereotypes regarding Blacks, particularly Black males, found in media, popular discourse, and research focus on underperformance, disengagement, and dysfunctional behaviors, lowering expectations for success. This creates a situation where Whites perceive that Black students come from low-income economic situations and secondary schools that did not adequately prepare them for college. At the same

time, Black students experience anxiety about being cast as anti-intellectual and tokenized (Harper, 2013).

A 2013 qualitative study of diverse learning environments found that African American students were the only racial group that described stereotypes and stereotype threat as a significant barrier to academic success. Students perceived that faculty and classmates stereotyped Blacks as intellectually unqualified and undeserving of admission. These stereotypes may be expressed indirectly but are often expressed directly and verbally to Black students. Due to power dynamics, students found it difficult to formally complain or address issues of stereotyping when faculty are the offenders. Stereotypes regarding intellectual capabilities impacted interactions with classmates as other students did not want to share notes or work in groups with them (Johnson-Ahorlu, 2013).

Participants described these stereotypes as a heavy burden that caused feelings of pressure and anxiety and ultimately negatively impacted their academic success. Students reported determination not to substantiate the stereotypes imposed upon them and felt responsible for proving that African Americans are intelligent, legitimate members of the campus community. Underrepresentation in classrooms and campuses exacerbated this stereotype threat, creating additional pressure not to confirm racial stereotypes (Johnson-Ahorlu, 2013).

A 2013 study by Lowe, Byron, Ferry, and Garcia found that SOC were 65 to 81 percent less likely than White students to report a positive view of the campus racial climate. Students of color indicated that they are repeatedly made aware of their race or ethnicity in everyday interactions across various contexts and were more likely to identify

the institution itself as the basis of dissatisfaction with the campus racial climate. Students of color reported feeling misled by the way the institution portrayed campus racial diversity and the idea that the institution overstates representation of SOC to attract other prospective SOC Students of color perceived a lack of institutional support for diversity; that the institutions rhetoric did not match its practices and that the institution did not address the needs of SOC Such experiences lead SOC to feel like guests at their PWI institution, continuously aware of their "otherness." They feel more pessimistic about the institution's racial climate (Lowe et al., 2013).

Johnson, Wasserman, Yildirim, and Yonai (2014) found that unique forms of stress and different campus experiences influenced persistence decisions and feelings about the campus environment for SOC and White students. Stress -related to the academic environment was an indirect negative influence on persistence for SOC. This academic environment stress directly affected the commitment to the institution and indirectly impacted SOC's intent to return and make academic progress after the first and second years of college. Encounters with and observations of racism on campus increased academic environment stress and negatively influenced feelings about the campus environment, which affected commitment to the institution and ultimately persistence decisions. Entry characteristics were also found to impact persistence decisions for SOC. Feeling prepared for the social environment and high school GPA had direct adverse effects on observations of racism for SOC. Financial need negatively impacted SOC interactions with peers from other racial/ethnic groups (D. R. Johnson et al., 2014).

Hurtado, Ruiz Alvarado, and Guillermo-Wann (2015) found that subjection to incidents of discrimination and bias was strongly associated with how often students consider their race and influenced perceptions of campus racial climate. Asian American students, in particular, reported significantly more discrimination and bias than their Latinx, White, and Black peers. Positive interracial interactions were found to be positively correlated with higher racial salience for students. Institutional compositional diversity was also related to racial identity salience (Hurtado et al., 2015).

Bourke (2016) found that SOC experienced PWIs differently than White students did. Feelings of alienation could lead some SOC to reactions ranging from withdrawal from relations outside of their subcultures to withdrawal from the institution. In order to better understand how race is experienced on campus, one must ask if the curriculum reflects diverse perspectives, in what ways and where SOC are involved on campus, and to what extent campus traditions and celebrations reflect the diversity of the student population (Bourke, 2016).

A 2017 qualitative study exploring Black students' perceptions of campus racial climate within a residence hall setting and their responses to being racialized uncovered three themes: 1.) finding our space, 2.) absent while present, and 3.) perpetual homelessness. The theme of finding our space dealt with creating or joining spaces away from White peers to separate themselves from racial microaggressions, which SOC experienced in residence halls. A component of this theme was that residence hall staff lacked the cultural competence to create environments where SOC did not have to experience racial incidents (Hotchkins & Dancy, 2017).

The 'absent while present' theme dealt with SOC's perception of a lack of Black cultural presence in residence hall artwork, pictures, and namesakes. Participants interpreted this absence as discarding of Blackness and a type of environmental, racial aggression. The monolithic presence of Whiteness within the PWI campus served as a barrier to academic and social advancement for participants (Hotchkins & Dancy, 2017).

The final theme, perpetual homelessness, spoke to participants' experiences with a place and space exclusion or attempts to locate a racial authority. Examples participants provided included repeatedly being singled out to show identification when entering their residence hall when White friends are not asked and White residents attempting to explain a Black student's Blackness – i.e., you are different from other Black students. Repeated incidents of this nature negatively impacted participants who often expressed regret about living in on-campus housing (Hotchkins & Dancy, 2017).

A 2018 study examined how SOC serving as orientation leaders and admissions tour guides experience campus climate concerning their racial identities and student ambassador positions. Participants reported inconsistencies and conflicts between the institution's diversity narrative and their own experiences. Students of color reported microaggressions within classroom space. These microaggressions often took the form of White students avoiding interactions with SOC, White students making statements that SOC did not belong in classes or at the college, or being tokenized by faculty and classmates. Such actions left SOC feeling unwelcome and contributed to participants' identity -related stress (Linley, 2018).

Participants reported negative racial experiences experienced in the context of their student ambassador positions. Students of color were expected to answer all

diversity -related questions and work with students of the same racial backgrounds. Students of color expressed feeling used and exploited - that the admissions office viewed their value only in recruiting people of color. Participants reported tension between expectations to paint the institution in the best light as a student ambassador and their own lived experience. Respondents also reported experiencing negative racial experiences off-campus within the local community. These off-campus experiences contributed to SOC perceptions of campus climate (Linley, 2018).

A 2018 qualitative study of Black undergraduate students at a PWI explored how Black students contextualized campus racial climate within the larger racial climates of U.S. higher education and society. Four themes were discovered: perceptions of Blackness on campus, campus racial climate mirroring societal racial climate, experiencing and engaging in movements on campus, and the impact of racial climate on future planning. Respondents perceived that stereotypes and attitudes surrounding Blackness caused fear in White students, which often resulted in negative and prejudiced behaviors enacted through microaggressions rather than overt acts of racism (Mwangi et al., 2018).

Racial events in the larger society impacted respondents; the murders of Trayvon Martin and Tamir Rice and racially charged language used by politicians resulted in feelings of anxiety on campus. Respondents felt that PWIs and White students had the privilege of ignoring these negative aspects while they could not. Often these situations were not discussed on campus; however, when situations were discussed, the discussions were not well facilitated, and Black students were expected to represent their race.

Respondents also expressed discontent with steps that their intuitions were taking to engage racial issues feeling that it was not enough (Mwangi et al., 2018).

Respondents' experience of these issues on campus led to or reinforced the desire to become engaged in race-related activism. Respondents felt that White students did not understand the significance of such activism as White students did not believe that the Black students at their campuses were directly impacted. Respondent's campus racial experiences led to an increased desire to positively represent the Black community and motivated them to take on leadership roles to provide opportunities for future Black students. While positive, this also created a sense of pressure for these students to excel constantly. This could be conceptualized through Harper's (2013) term 'onlyness' (Mwangi et al., 2018).

A 2018 mixed methods study attempted to discover the institutional mechanisms associated with ethnicity which shape differential experiences among Asian and Pacific Islander (AAPI) students. Researchers focused on determining how AAPI undergraduates' campus experiences are racialized and if racialization varied across AAPI ethnic groups. Researchers also sought to determine if there were differences between AAPI subgroups regarding their experiences with racial climate (Nguyen et al., 2018).

From a compositional perspective, participants indicated a lack of AAPI faculty and staff members. Southeast Asian and Filipinx students indicated a desire not just for more AAPI faculty and staff but for faculty and staff specifically from their ethnic backgrounds. Students indicated that greater faculty and staff representation would provide not only inspiration but a greater sense of belonging. Asian and Pacific Islander students statistically reported significantly lower levels of sense of belonging on campus

than White students. Statistical differences were also found in the sense of belonging among AAPI subgroups. Though AAPIs comprised a large portion of the campus population, AAPI subgroups with smaller populations did not feel a sense of belonging on campus (Nguyen et al., 2018).

From a behavioral perspective, students engaged in interethnic interactions most often within formal campus settings, of which ethnic student organizations and ethnic student-run programs were most prevalent. These ethnic organizations contributed to a greater sense of belonging. Interethnic interactions tended to be described negatively. Interracial interactions were reported as the least frequent form of interaction. Interracial interactions were primarily described as unfavorable. Among AAPI subgroups, 74.6 percent of Filipinx, 73.9 percent of Southeast Asians, 70 percent of East Asians, and 67.3 percent of South Asians reported experiencing negative and stereotypical views from community members of other races. Compared to White students, AAPIs were more likely to feel that their campus was unappreciative of diversity (Nguyen et al., 2018).

From a psychological perspective, most participants felt that the campus climate was isolating and unsupportive of AAPI students. Compared to White students, AAPI students were more likely to feel that their campus was intolerant of diversity. Students described feelings of being invisible and unrecognized within the larger student body and felt that their institution provided insufficient commitment and support to diversity and race-related issues. Compared with White students, AAPI students were more likely to disagree that their race/ethnicity was respected on campus, with significant differences in levels of disagreement between different AAPI subgroups (Nguyen et al., 2018).

Boettcher, Eason, Earnest, and Lewis (2019) conducted a qualitative study that explored how SOC developed support networks within residence halls at PWIs. Establishing relationships within the residence hall community, Resident Advisors, friends and roommates, and custodial staff were critical in establishing feelings of connection. Connection with other residents prepared SOC for experiences within the larger campus.

Resident Advisors were viewed as essential individuals who could help SOC build support networks. SOC needed to see other SOC in these leadership roles. Friends assisted SOC in getting through difficult situations. Engagement with roommates provided opportunities for SOC to increase their sense of connection and increased feelings of belonging and safety. This often involved educating White roommates on campus about racial issues and privilege. Connections with custodial staff created a sense of care for SOC and the feeling that adults within the community knew and interacted with them (Boettcher et al., 2019).

A 2019 qualitative study explored how pre-college experiences influence a SOC's navigation of social interactions with the majority students at a PWI. Found that SOC implements different forms of social adaptation based on high school ethnoracial composition. Researchers identified three distinctive approaches used by SOC to navigate majority-White peer networks: integrators, marginalized segregation, and social adaptors. Integrators from predominantly White high schools tended to engage easily with White peers emphasizing a shared focus on academic pursuits. Integrators identified as SOC had the slightest interaction with other students of color, experienced little

discomfort with their minority status on campus, and were the least likely to report racial stereotyping or prejudice (A. M. Johnson, 2019).

Marginalized segregators' came from segregated or mixed high schools. Marginalized segregators encountered difficulties working with White peers due to cultural differences and perceptions of their minority status on campus and racial stereotyping and prejudice. Students of color falling into this category were more likely to establish ties with individuals of the same race or other SOC with whom they perceive cultural similarities (A. M. Johnson, 2019).

The majority of study respondents were social adaptors. Social adaptors encountered discomfort due to their minority status but navigated these incidents in ways that allowed them to engage White peers successfully. Pre-college high school experience varied among this group. Social adaptors who came from integrated high schools tended to focus on cultural similarities and seek relationships with same race or SOC peers but could easily engage with White peer networks. Social adaptors from segregated or mixed high schools tended to seek to diversify peer networks however experienced discomfort engaging in White peer networks due to lack of experience and unfamiliarity with affluent White cultural norms (A. M. Johnson, 2019).

As White culture shaped and controlled the dominant social capital of the institution studied, SOC coming from more integrated high schools were more easily able to utilize this social capital to create integrated academic peer networks and obtain more learning opportunities. Though more likely to benefit from integrated academic peer networks, SOC from mixed or segregated high school environments were less likely to

develop such networks. This situation may perpetuate academic disparities (A. M. Johnson, 2019).

Intergroup Contact Theory

Lowe, Byron, Ferry, and Garcia (2013) conducted mixed methods research exploring how race, institutional climate, and interracial interaction in different campus locations simultaneously shape students' perceptions of racial climate. Research questions focused on 1.) how do students, particularly SOC, focus on overall racial climate at a Southern PWI?, 2.) how does the frequency of interaction in different campus contexts impact these perceptions, and 3.) what other institutional or demographic features impact these perceptions? Findings indicated that campus structural diversity could interrupt White students' projection of their own experiences onto other racial groups by increasing the potential for interracial interaction. When such interracial interactions allow for self-disclosure and friendship potential, there is more significant potential for White students to understand that not all students experience the institution in the same way.

The frequency of interracial interactions in the classroom was not significantly related to student perception of campus racial climate. This finding was attributed to the range of experiences students reported within classroom settings – from positive interactions, which led to breakthroughs in understanding for students of all races, to reports from SOC of stereotyping and expectations that SOC represent their races in class discussions from fellow students as well as from faculty. The frequency of interracial interactions within residence halls was also found not to have a significant impact on campus climate perceptions. This is also attributed to the range of experiences reported,

from pleasant interactions to being forced to move out and being the butt of racial jokes and negative comments (Lowe et al., 2013).

The frequency of interracial interactions in the campus dining hall positively influences students' campus racial climate perceptions. Compared with students who reported frequent interracial dining experiences, students who reported never or seldom eating with others of different races or ethnicity were between 57 and 73 percent less likely to hold a positive view of the campus racial climate. Those who reported sometimes having interracial dining experiences were 50 to 58 percent less likely to hold a positive view of the campus racial climate than students who reported frequent meals with students of other racial and ethnic groups. Unlike other environments where interracial interactions may be at a more surface level or prone to political correctness expectations, eating frequent meals with individuals from different racial or ethnic groups may allow a more significant opportunity for informal and equal interactions, meaningful disclosure, and potential for a potential friendship. Attention must be paid to the context of interracial contact (Lowe et al., 2013).

Bowman and Park (2014) conducted a four-year longitudinal study of 2,932 undergraduate students at 28 institutions to compare and contrast predictors of cross - racial interaction (CRI) and interracial friendships (IRF). Researchers conducted additional subgroup analysis to determine the degree to which relationships varied as a function of students' race or ethnicity.

Overall results indicated that Asian American, Black, and Latinx students were found to have more CRI and IRF than White students. Both CRI and IRF were also positively associated with perceived closeness to other races when entering college.

Religiosity when entering college, being female, and participation in ethnic student organizations were all significantly and positively related to CRI but significantly and negatively related to IRF. Social science majors were found to engage in more CRI than students in other majors. Time spent socializing, and structural racial diversity was also positively related to CRI (Bowman & Park, 2014).

Public university students were found to have lower IRF than private university students. Students in math and engineering and arts and humanities majors were found to have greater IRF than social science majors. Study abroad experiences, high school diversity exposure, and parental education were positively related to IRF. Involvement in a religious student organization was negatively related (Bowman & Park, 2014).

Results of CRI analysis by race/ethnicity indicated that structural racial diversity was positively related to CRI for Black and White students, with White students experiencing a significantly larger effect size than any other group. High school diversity exposure was connected to greater CRI for White students with an effect size more extensive than other groups. For Asian Americans, Blacks, and Whites, CRI was positively associated with closeness to other races. Latinx students in arts and humanities majors were found to have greater CRI than Latinx students in social sciences, while Whites in social science majors had greater CRI than Whites majoring in arts and humanities (Bowman & Park, 2014).

Results of IRF by race/ethnicity indicated that the relationship between structural diversity and IRF was positive for Whites, more so than for any other race/ethnicity, and that the relationship between IRF and structural diversity was inverse for Asian Americans and Latinx students. High school diversity exposure was connected to greater

IRF for all groups. Religiosity was found to affect Asian Americans, Blacks, and Latinx negatively and have no significant effects for White students. Greek membership was negatively associated with IRF for White students in terms of involvement in student organizations, while membership in ethnic groups predicted higher IRF for Whites and lower IRF for Asian American, Black, and Latinx students (Bowman & Park, 2014).

Students of color participated in more CRI and IRF than White students. Closeness to other races was positively related to CRI and IRF, leading researchers to posit that positive racial attitudes might assist in promoting casual encounters as well as close relationships across race and ethnicity (Bowman & Park, 2014).

Results indicate the importance of structural diversity, particularly for White students. While SOC have no choice but to engage in intergroup contact, structural diversity increases White students' chances of intergroup contact. The collegiate environment has a significant impact in breaking pre and post-college cycles of segregation (Bowman & Park, 2014).

A 2014 study looked at the impact of stress and campus climate perceptions on persistence decisions of SOC and White students. Social difficulty stress was determined to have an indirect impact on persistence decisions for White students. Social difficulty stress was found to directly affect the commitment to the institution and indirect effects of intention to return and make academic progress by the end of the second year of college. Researchers determined that opportunities for interracial interactions on campus reduced social difficulty stress and positively impacted White students' feelings about the campus environment (D. R. Johnson et al., 2014).

A 2014 quantitative study examined how student organizations, specifically ethnic, Greek, religious, career, service, arts, and intermural sports, can impede or facilitate interracial interaction and friendship. Three questions guided the research: 1.) does the distribution of students of various racial/ethnic groups vary significantly between different student organizations, 2.) are students of varying races/ethnicities more or less likely to spend time with same-race peers in specific student organizations, and 3.) does participation in a particular type of student organization significantly predict having at least one close friend of another race/ethnicity during the fourth year of college (Park, 2014).

A student's race/ethnicity was a strong predictor of interracial friendship. Compared to Latinx, Asian American, and Black students, White students were the least likely to have at least one close friend from another racial/ethnic group. The distribution between different racial/ethnic groups significantly varied between different student organizations. Whites made up a more significant percentage of Greek organizations and intermural sports. Asian Americans have a more significant percentage of religious organizations and ethnic student organizations, and Black students are more significant in music/arts/theater organizations. White students were more likely to participate in Greek organizations, while SOC were more likely to participate in service organizations (Park, 2014).

White students in Greek organizations were most likely to spend time with same-race peers; religious organizations were the least racially isolated organization type for White students. Students of color were overall less likely than White students to be in racially homogeneous student organizations and were inclined to participate in

organizations in which SOC were the majority or organizations that were majority White. Black and Asian Americans were more likely to spend time with same-race peers in ethnic organizations and religious organizations. Latinx students were more likely to spend time with same-race peers in ethnic organizations and career organizations (Park, 2014).

Being a SOC was found to be associated with a higher probability of interracial friendship. Racial differences in students' pre-college friend group and attending a structurally diverse college were found to be predictors of having at least one close friend of another race/ethnicity during the fourth year of college. Involvement in Greek, religious, and ethnic student organizations were found to impact the chances of interracial friendships negatively. The involvement of students in service, arts, career, and intermural sports organizations did not significantly impact interracial friendship (Park, 2014).

Bowman and Park (2015) conducted a longitudinal study of the impact of cross-racial interaction and close interracial friendship on student outcomes. Researchers also examined whether the potential outcomes associated with cross-racial interaction and interracial friendship differ as a function of a student's own race/ethnicity. Cross-racial interaction was found to be positively associated with almost all outcomes assessed: ease of getting along with people from other races, belief that people from other races are hardworking, situational attributions for life outcomes of people of color, college satisfaction, self-reported growth, and post-college volunteering intentions. Close interracial friendships were not found to be positively associated with any outcome.

Cross-racial interactions were positively and significantly related to college satisfaction and self-reported growth for students from all racial/ethnic backgrounds. However, the relationship was more substantial for Blacks, Asian American/Pacific Islanders, and Latino/Hispanics than for Whites. Cross-racial interaction was found to significantly predict the ease of getting along with people from other races for all racial/ethnic groups except Whites. Cross-racial interaction was also positively associated with the belief that people from other races are hardworking among Latino/Hispanics, situational attributions for life outcomes of people of color among Whites and Asian American/Pacific Islanders, and post-college volunteering for Whites. Close interracial friendship was positively and significantly associated with ease of getting along with people from other races for Latino/Hispanics, situational attributions for life outcomes of people of color among Asian Americans/Pacific Islanders, and emotional well-being among Whites (Bowman & Park, 2015).

Findings supported the theory that weak social ties which facilitate frequent exposure to new situations and information can lead to the most significant opportunity to reach educational outcomes. Conditions that foster cross-racial interactions may be different from those that foster close interracial friendships. Universities should promote continuous, casual, and meaningful cross-racial interaction. Examples might include roommate assignments, racially diverse classes, and diverse co-curricular activities (Bowman & Park, 2015).

Chapter 3

Methodology

Research Design

This quantitative study utilized a cross-sectional online survey to assess differences in racial attitudes in White undergraduate college students with different levels of exposure to SOC. Categories of the independent variable for this study include 1.) Informal Only, 2.) Leadership Only, 3.) Structural Only, 4.) Informal & Leadership, 5.) Informal & Structural, 6.) Leadership & Structural, 7.) Informal, Leadership, & Structural, and 8.) None/No Interaction. The dependent variable is White student racial attitudes. Controls were set for pre-college characteristics and college classroom diversity experiences. For the purpose of this study, the researcher served as a neutral bystander and will be independent of the study. The research process was value-free in that the researcher attempted to exclude their personal values and follow a deductive approach. Based on these characteristics, the use of a quantitative survey approach was appropriate (Terrell, 2016).

Sample

The sample for this census study consisted of White undergraduate college students between the ages of 18 and 22. Students were recruited from three, four-year private or public universities in Lackawanna or Luzerne counties in northeastern Pennsylvania. Institutional data from the three institutions indicates a total White population of approximately 3510 students and a total of 1224 students of color.

Upon receiving authorization from each institution, an email explaining the study was sent to all students via each institution's email system (**Appendix F**). This email contained eligibility criteria as well as a link to the online survey. After clicking the link, students completed an informed consent form before beginning the survey.

Instrumentation

The Color-Blind Racial Attitude Scale (CoBRAS). The Color-Blind Racial Attitude Scale (CoBRAS) was used as the measure of the dependent variable, the color-blind racial attitudes of White undergraduate students. It is a 20-item scale developed by Neville, Lilly, Duran, Lee, and Brown in 2000 to measure color-blind racial attitudes. Subjects are asked to rate each item on a 6-point scale ranging from 1, Strongly Disagree, to 6, Strongly Agree. The CoBRAS instrument measures three factors, Racial Privilege, Institutional Discrimination, and Blatant Racial Issues (Neville et al., 2000) (see **Appendix A** for full CoBRAS instrument).

Factor one, Racial Privilege, consists of seven questions, six of which are reverse scored, ranging from seven to 42. Factor two, Institutional Discrimination, consists of seven questions, one of which is reverse -scored and a score range from seven to 42. Factor three, Blatant Racial Issues, consists of six questions, three of which are reverse scored and a score range from six to 36 (Neville et al., 2000). Scores are added together and can range from 20 to 120, with higher scores indicating a more significant endorsement of color-blind racial attitudes (Keum et al., 2018).

Cronbach's alpha coefficients for subscales of factors and total scores were determined to be acceptable at .83 for the Racial Privilege factor, .81 for the Institutional Discrimination factor, .76 for the Blatant Racial Issues factor, and .91 for the CoBRAS

total score. Additional reliability testing has resulted in a Guttman split-half reliability estimate of .72 and Cronbach's alpha coefficients for each factor and total score ranging from .70 for the Blatant Racial Issues factor to .86 for the CoBRAS total score (Neville et al., 2000).

Content validity was established for the CoBRAS through expert feedback on content and clarity. Concurrent validity was reported between scores on each factor and between total score and the scores of related measures of racial and social attitudes, the Global Belief in a Just World Scale and the Sociopolitical subscale of the Multidimensional Belief in a Just World Scale, which resulted in correlations ranging from .39 to .61. The CoBRAS instrument was also significantly correlated with the Quick Discrimination Index, with correlations ranging from -.25 to -.83 (Neville et al., 2000).

Researcher Designed Instrument. An instrument was developed by the researcher for use in this study. The purpose of the instrument is to assess the independent variable, White students' level of exposure to SOC, and to calculate co-variables, pre-college characteristics and college classroom diversity exposure. A pilot study was conducted to assess the reliability and validity of the survey. Adjustments were made based on feedback related to question clarity, completion time, and ability to capture the intended data. After adjustments, the instrument was subjected to professional review by a credentialed professional.

The first four items of the instrument asked participants gender and, for screening purposes, age, undergraduate student status, and racial identity. The 20 items in the Color-Blind Racial Attitude Scale (CoBRAS), as described above, then followed.

Participants then identified pre-college characteristics through four questions. Question one involved high school structural diversity, “Would you consider the student body of the high school you graduated from to be predominately, more than 50%, White?” Question two focused on high school informal interactional exposure to peers of color via friendships, “Think of your closest high school friend(s). Once you have identified your closest high school friend(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your friend(s) race/ethnicity. You may enter this information for up to three close high school friends.” Questions three and four dealt with high school classroom diversity exposure, “As a High School student did you take classes focused on diversity, multiculturalism, and/or social justice?” and “As a High School student were you involved in school-related programming focused on diversity, multiculturalism, and/or social justice?”

Participants received one point for every “yes” response and one point for each high school close friend of a race/ethnicity other than white. Participants could score a maximum of six points: 6 = high pre-college diversity exposure, 0 = no pre-college diversity exposure. This pre-college diversity exposure score was used as the measure of the first co-variable, pre- college characteristics of White undergraduate students.

Participants then responded to two questions related to exposure to college classroom diversity; “As a college student have you taken classes focused on diversity, multiculturalism, and/or social justice?” and “As a college student have you been involved in school-related programming focused on diversity, multiculturalism, and/or social justice?” Participants received one point for every “yes” response for a maximum of two points: 2 = high college classroom diversity exposure, 0 = no college classroom

diversity exposure. This college classroom diversity exposure score was used as the measure of the second co-variable, college classroom diversity exposure of White undergraduate students.

The remainder of the instrument addressed participants' levels of informal exposure to students of color in three categories of interaction; interactions with SOC in leadership positions, informal interactions, and structural interactions. Responses to each question indicated whether or not the participant had exposure to SOC within each interaction category. If exposure within an interaction category took place, the participant scored a "1"; if no exposure within an interaction category took place, the participant scored a "0." Ultimately, this scoring created eight levels of the independent variable: 1.) Informal Only, 2.) Leadership Only, 3.) Structural Only, 4.) Informal & Leadership, 5.) Informal & Structural, 6.) Leadership & Structural, 7.) Informal, Leadership, & Structural, and 8.) None/No Interaction. Participants were also asked to identify the perceived race of SOC with whom they interact and evaluate their perception of the quality of the contact; positive, neutral, or negative.

Data Collection Procedure

Before data collection, permission was obtained by the Marywood University Exempt Review Committee (ERC) and the ERCs or Institutional Review Boards (IRB) of other participating institutions (see **Appendix E**). Surveys were conducted using Qualtrics, the official survey platform of Marywood University. Recruitment emails were sent out to potential participants after obtaining institutional permission from each participating institution (see **Appendix F**).

Recruitment emails were initially sent out three times over a five week-period at all three institutions. The first email was sent in late March 2022. The second email was sent in early April, and the final email at the end of April. Students had a total of 34 days from the initial email to complete the survey. Emails directed participants to an informed consent form and the survey link.

Low initial response rates led to additional recruitment efforts. A total of nine additional recruitment emails were sent out to potential participants at one of the participating private institutions; two in June 2022, three in July 2022, one on August 2022, and three in October 2022. Surveys at all three institutions remained open until November 16. 2022. All data was scored as described in the previous 'Instrumentation' section. Scored data was uploaded into SPSS for analysis.

Data Analysis

The researcher utilized a one-way analysis of covariance (ANCOVA) test to answer the main research question, what are the differences in racial attitudes in White, traditional age, 18 to 22 -year -old, undergraduate college students in northeastern Pennsylvania based on level of exposure to students of color when controlling for pre-college characteristics and college classroom diversity exposure. A one-way ANCOVA allows the researcher to determine whether there are statistically significant differences between the adjusted populations of various independent groups while incorporating a covariate. To utilize a one-way ANCOVA, ten assumptions must be considered, four assumption related to study design and six related to data fit (Laerd Statistics, 2017).

This research met the following assumptions related to study design:

1.) One dependent variable, White students' racial attitudes, measured at the continuous level;
2.) One independent variables, exposure to students of color, consisting of eight categorical, independent groups;
3.) Covariates, pre- college characteristics and college classroom diversity exposure, measured at a continuous level; and
4.) Independence of observations between each category of the independent variable.

Once data has been collected, SPSS was used to test the remaining six assumptions:

5.) The covariate should be linearly related to the dependent variable at each group of the independent variable;
6.) There should be homogeneity of regression slopes;
7.) The dependent variable should be normally distributed for each category of the independent variable;
8.) There should be homoscedasticity;
9.) There should be homogeneity of variance; and
10.) There should be no significant unusual points in independent variable groups (Laerd Statistics, 2017).

Descriptive statistics and estimates of adjusted means were presented for each of the eight groups of the independent variable, exposure to students of color. Results of the one-way ANCOVA were presented with a p-value $\leq .05$ used to assess significance. If statistically significant differences were found, Bonferroni post hoc test were conducted

to determine differences between independent variable categories (Laerd Statistics, 2017).

Sub Problems

Based on the stated research question, the following sub problems were also explored:

1. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions?

   This question will be analyzed using descriptive statistics and frequencies.
2. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in informal interactional situations?

   This question will be analyzed using descriptive statistics and frequencies.
3. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in structural situations?

   This question will be analyzed using descriptive statistics and frequencies.
4. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in combinations of leadership, informal interactional, and structural situations?

   This question will be analyzed using descriptive statistics and frequencies.
5. What are the pre-college characteristics scores for White college students in northeastern Pennsylvania?

   This question will be analyzed using descriptive statistics and frequencies.
6. What are college classroom diversity exposure scores for White college students in northeastern Pennsylvania?

   This question will be analyzed using descriptive statistics and frequencies.

7. What are the differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure?

   This question will be analyzed using a one-way analysis of covariance (ANCOVA).

Supplemental Analysis

In addition to the research questions and sub problems discussed above, supplemental analyses were performed. Spearman's Correlations were utilized to determine if an association between perceived quality of interaction and White students' racial attitudes, as defined by total CoBRAS scores, existed. Spearman's Correlation is appropriate if three assumptions are met:

1.) There are two variables measured on a continuous and/or ordinal scale;
2.) Variable represent paired observations; and
3.) A monotonic relationship exists between the two variable (Laerd Statistics, 2018).

Spearman's correlations calculate a coefficient which indicates the direction and strength of the association between the two measured variables (Laerd Statistics, 2018). Correlation coefficients range from -1 to +1. The closer the coefficient is to -1 or +1, the stronger the relationship. A positive correlation indicates that as one variable increases,

the other variable is also apt to increase; a negative correlation indicates that as one variable increases the other decreases (Frost, 2021). The cutoff value, or *p*-value, used to reject the null hypothesis and accept the alternative hypothesis was set at .05. As such, if $p < .05$, the alternative hypothesis is accepted and the null hypothesis is rejected (Laerd Statistics, 2018).

A total of 12 Spearman's correlations were conducted. Five were conducted on data pertaining to White students' Informal Interactions with SOC as college friends, athletic teammates, organization members, roommates, and as dating partners. For each of these five questions, a separate Spearman's correlations were conducted with White students' total CoBRAS scores as the dependent variable (DV) and White students' perception of the SOCs race and their relationship – positive, neutral, or negative – as the independent variable (IV).

Four Spearman's correlations were conducted on data pertaining to White students' Leadership Interactions with SOC as athletic team captains, organization officers, Resident Advisors, and New Student Orientation Advisors. For each of these four questions, a Spearman's correlation was conducted with White students' total CoBRAS scores as the DV and the White students' perception of the individual student leaders of color races and their relationship – positive, neutral, or negative – as the IV. Finally, three Spearman's correlations were conducted on data pertaining to White students' Structural Interactions with SOC, passing encounters within residence halls, in classes, and in campus facilities. For each of these three questions, a separate Spearman's correlation was conducted with White students' total CoBRAS scores as the DV and the

White students' perception of their structural encounters with SOC race and their relationship – positive, neutral, or negative – as the IV.

It should be noted that data collection related to Informal Interactions with students of color as college friends and the four categories of Leadership Interactions with SOC - as athletic team captains, organization officers, Resident Advisors, and New Student Orientation Advisors – asked participants to identify, if applicable, one-to-three specific individuals in those roles, select their perception of those individuals perceived race/ethnicity, and then rate their relationship with the specific individuals in those roles. Questions which collected data for the remaining four Informal Interactions categories - athletic teammates, organization members, roommates, and dating partners – and the three categories of Structural Interactions with SOC - passing encounters within residence halls, in classes, and in campus facilities – asked respondents to identify their perceptions of the races/ethnicities of general group/community members and to rate their general relationships with individuals within that racial/ethnic category. As a result, Spearman's Correlation output for Informal Interactions with SOC as college friends and the four categories of Leadership Interactions with SOC are reported as White students' relationship perceptions for one to three specific individuals. Spearman's Correlation output for all other Informal and Structural Interactions are reported as White students' race/ethnicity and relationship perceptions for each racial/ethnic category.

Chapter 4

Results

Introduction

This study investigated whether contact between in-group members, White students attending college at Predominately White Institutions (PWIs), and outgroup members, (SOC) at PWIs, can influence in-group member racial attitudes. Measures of White student racial attitudes (DV) for White students with various levels of exposure to SOC (IVs) at three PWIs located in northeastern Pennsylvania are compared while controlling for pre-college diversity exposure and college classroom exposure to diversity. Statistical Package for the Social Sciences (SPSS®) v.28 software was used to enter and analyze the data related to White student racial attitudes and levels of exposure to SOC.

Demographics and Response Rate

The target participants for this study were undergraduate college students, ages 18 to 22, in Northeastern Pennsylvania, who identify racially as White. Data from the National Center for Education Statistics (NCES) was used to assess the number of White students at the three participating institutions (National Center for Education Statistics, n.d.). A total of 3510 White undergraduate students were identified.

Qualtrics sample size calculator (Qualtrics, 2020) was used to establish a sample size for this study. Utilizing a confidence level of 95% and a margin of error of 5%, the ideal sample size was determined to be 347 respondents. Ultimately 106 usable responses were received between the three institutions, a 3% response rate. This small

sample size is less likely to generate significant results as smaller sample sizes produce larger standard errors (Urdan, 2017).

Data Preprocessing

To begin, data was tested to ensure that the ten assumptions necessary to utilize a one-way ANCOVA were met for each covariate. It was determined that the covariate pre-college diversity exposure violated the assumption of homogeneity of regression slopes as the interaction term was statistically significant, $F(4, 93) = 2.630$, $p = .039$. As such it was not possible to proceed with the one-way ANCOVA procedure using the pre-college diversity exposure covariate.

It was determined that the covariate college classroom diversity exposure violated the assumption of normality; standardized residuals for interaction types and for overall model were not normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$). Because the one-way ANCOVA is fairly resistant to deviations from normality – i.e. non-normality does not substantially impact Type I error rate – the decision was made to proceed with the data (Laerd Statistics, 2017). It was then determined that the covariate college classroom diversity exposure also violated the assumption of outliers as there were cases with standardized residuals greater than 3 standard deviations. Because this covariate violated the assumptions of normality and of outliers, the decision was made to transform the dependent variable.

In reviewing plots generated as part of the assessment of normality, it was determined that the dependent variable data, total CoBRAS scores was positively skewed. An attempt was made to correct for a moderately positive skew of the dependent

variable utilizing SPSS® v.28 software's square root function and instructions from Laerd Statistics (2017). Further assessment showed continued violation of the assumptions of normality and of outliers.

Statistical Package for the Social Sciences v.28 was then used to correct for a strongly, positive skew. A logarithmic transformation was applied utilizing instructions from Laerd statistics (2017). This logarithmic transformation successfully resolved the issues with normality and outliers associated with the covariate college classroom diversity exposure. Data using the college classroom diversity exposure covariate now met all assumptions of the one-way ANCOVA.

Using the transformed dependent variable, data utilizing the pre-college diversity exposure covariate was retested. The violation of the assumption of homogeneity of regression slopes had been resolved, the interaction term was not statistically significant, $F(4, 93) = 1.963$, $p = .107$. It was determined that data using the pre-college diversity exposure covariate now also met all assumptions, allowing the researcher to proceed with the one-way ANCOVA procedure for both covariates.

Descriptive Statistics

Total CoBRAS scores range from 20 to 120, with higher scores indicating a more significant endorsement of color-blind racial attitudes (Keum et al., 2018). Total CoBRAS scores for this study ranged from 20 to 120. After transformation, total CoBRAS scores ranged from 1.30 to 2.08. Table 1 below displays frequency information for total CoBRAS scores and the transformed total CoBRAS scores of all 106 participants.

Table 1

Frequencies: CoBRAS Scores and Transformed CoBRAS Scores

	CoBRAS Scores	Frequency	%	Valid %	Cumulative %	Transformed CoBRAS Scores
Low	20.00	2	1.9	1.9	1.9	1.30
	21.00	1	0.9	0.9	2.8	1.32
	24.00	1	0.9	0.9	3.8	1.38
	25.00	4	3.8	3.8	7.5	1.40
	26.00	1	0.9	0.9	8.5	1.41
	27.00	2	1.9	1.9	10.4	1.43
	30.00	4	3.8	3.8	14.2	1.48
	31.00	3	2.8	2.8	17.0	1.49
	32.00	2	1.9	1.9	18.9	1.51
	33.00	3	2.8	2.8	21.7	1.52
	34.00	4	3.8	3.8	25.5	1.53
	35.00	2	1.9	1.9	27.4	1.54
	36.00	5	4.7	4.7	32.1	1.56
	37.00	5	4.7	4.7	36.8	1.57
	38.00	2	1.9	1.9	38.7	1.58
	39.00	2	1.9	1.9	40.6	1.59
	41.00	1	0.9	0.9	41.5	1.61
Mid	42.00	6	5.7	5.7	47.2	1.62
	43.00	3	2.8	2.8	50.0	1.63
	44.00	2	1.9	1.9	51.9	1.64
	45.00	3	2.8	2.8	54.7	1.65
	46.00	4	3.8	3.8	58.5	1.66
	47.00	2	1.9	1.9	60.4	1.67
	50.00	2	1.9	1.9	62.3	1.70
	51.00	1	0.9	0.9	63.2	1.71
	52.00	2	1.9	1.9	65.1	1.72
	54.00	1	0.9	0.9	66.0	1.73
	55.00	2	1.9	1.9	67.9	1.74
	56.00	2	1.9	1.9	69.8	1.75
	57.00	1	0.9	0.9	70.8	1.76
	58.00	2	1.9	1.9	72.6	1.76
	63.00	1	0.9	0.9	73.6	1.80
	64.00	4	3.8	3.8	77.4	1.81
	66.00	1	0.9	0.9	78.3	1.82
	67.00	2	1.9	1.9	80.2	1.83

High	68.00	2	1.9	1.9	82.1	1.83
	69.00	1	0.9	0.9	83.0	1.84
	70.00	1	0.9	0.9	84.0	1.85
	72.00	1	0.9	0.9	84.9	1.86
	73.00	1	0.9	0.9	85.8	1.86
	74.00	1	0.9	0.9	86.8	1.87
	75.00	2	1.9	1.9	88.7	1.88
	78.00	3	2.8	2.8	91.5	1.89
	80.00	1	0.9	0.9	92.5	1.90
	83.00	1	0.9	0.9	93.4	1.92
	88.00	1	0.9	0.9	94.3	1.94
	95.00	1	0.9	0.9	95.3	1.98
	103.00	1	0.9	0.9	96.2	2.01
	104.00	1	0.9	0.9	97.2	2.02
	115.00	1	0.9	0.9	98.1	2.06
	117.00	1	0.9	0.9	99.1	2.07
	120.00	1	0.9	0.9	100.0	2.08
	Total	106	100.0	100.0		Total

Of the 106 participants, 87 identified as “Female (Cisgender or Transgender)”; 15 identified as “Male (Cisgender or Transgender)”; two identified as “Non-Binary/Third Gender”; and two responded “Prefer Not to Say”. Consistent with literature (Neville et al., 2014), those who identified as “Male (Cisgender or Transgender)” had the highest unadjusted mean CoBRAS scores. Table 2 below provides descriptive statistics from transformed total CoBRAS scores based on participant identified gender category.

Table 2

Unadjusted Means and Variability for Transformed Total CoBRAS Scores by Gender

	n	*%*	*M*	*Mdn*	*SD*	*min*	*max*
Gender							
Female (Cisgender or Transgender)	87	82	1.6426	1.6232	0.16059	1.30	2.08
Male (Cisgender or Transgender)	15	14	1.7802	1.8195	0.19998	1.30	2.06
Non-Binary/Third Gender	2	2	1.4978	1.4978	0.02927	1.48	1.52
Prefer Not to Say	2	2	1.7798	1.7798	0.40788	1.49	2.07

Note: *n* = number of participants, *M* = Mean, Mdn = Median, *SD* = Standard Deviation, *min* = Minimum, *max* = Maximum

Racial attitudes of White college students in northeastern Pennsylvania, as defined by total transformed CoBRAS scores, for each of the eight categories of the independent variable, White students with various levels of exposure to SOC, are presented below in Table 3.

Table 3

Unadjusted Means and Variability for Transformed Total CoBRAS Scores by Interaction Type

	n	*%*	*M*	*Mdn*	*SD*	*min*	*max*
Categories of Exposure to Students of Color							
Leadership Interaction	1	1	1.5315	1.5315	-	1.53	1.53
Informal & Structural Interaction	32	30	1.6276	1.6015	0.20768	1.30	2.08
Structural Interaction	14	13	1.6363	1.6334	0.18084	1.38	1.88
Informal, Leadership, & Structural Interaction	45	42	1.6545	1.6335	0.13313	1.41	2.01
Informal & Leadership Interaction	2	2	1.7253	1.7253	0.27407	1.53	1.92
Leadership & Structural Interaction	4	4	1.7506	1.7051	0.17402	1.56	1.94
Informal Interaction	4	4	1.7776	1.8278	0.21882	1.48	1.98
None/No Interaction	4	4	1.9073	1.8836	0.07568	1.85	2.02

Note: *n* = number of participants, *M* = Mean, Mdn = Median, *SD* = Standard Deviation, *min* = Minimum, *max* = Maximum

As shown above, White students interacting with students of color in leadership roles only had the lowest transformed total CoBRAS score mean. White students who indicated no interactions with students of color had the highest transformed total CoBRAS score mean.

The CoBRAS instrument measures three factors, Unawareness of Racial Privilege, Unawareness of Institutional Discrimination, and Unawareness of Blatant

Racial Issues. Scores for factor one, Unawareness of Racial Privilege, and factor two, Unawareness of Institutional Discrimination, range from seven to 42. Scores for Factor three, Unawareness to Blatant Racial Issues, range from six to 36 (Neville et al., 2000). Higher scores indicate a more significant endorsement of color-blind racial attitudes within each factor (Keum et al., 2018). It should be noted that while total CoBRAS scores were transformed for this study, scores for each of the three CoBRAS factors were not. Table 4 below presents untransformed means and variability for each CoBRAS factor by interaction type. Tables 5, 6, and 7 present frequency data for each CoBRAS factor.

Table 4

Unadjusted Means and Variability for CoBRAS Factors and Interaction Type

	n	*M*	*Mdn*	*SD*	*min*	*max*
Unawareness of Racial Privilege	106	21.3774	20.0000	8.86991	7.00	42.00
Leadership Interaction	1	17.0000	17.0000	-	17.00	17.00
Informal & Structural Interaction	32	20.0313	18.0000	9.49867	7.00	42.00
Structural Interaction	14	22.0714	22.0000	9.84858	11.00	39.00
Informal, Leadership, & Structural Interaction	45	19.7556	19.0000	6.69177	7.00	40.00
Informal & Leadership Interaction	2	25.5000	25.5000	13.43503	16.00	35.00
Leadership & Structural Interaction	4	25.7500	27.0000	9.28709	15.00	34.00
Informal Interaction	4	30.5000	33.0000	13.10216	14.00	42.00
None/No Interaction	4	33.5000	34.5000	3.87298	28.00	37.00
Unawareness of Institutional Discrimination	106	16.7264	14.0000	7.87949	7.00	42.00
Leadership Interaction	1	10.0000	10.0000	-	10.00	10.00
Informal & Structural Interaction	32	16.0000	12.0000	10.16318	7.00	42.00
Structural Interaction	14	14.3571	12.5000	6.10935	7.00	24.00
Informal, Leadership, & Structural Interaction	45	16.7111	15.0000	6.12232	10.00	31.00
Informal & Leadership Interaction	2	18.5000	18.5000	9.19239	12.00	25.00
Leadership & Structural Interaction	4	19.7500	15.5000	10.24288	13.00	35.00

Informal Interaction	4	19.2500	21.0000	6.50000	10.00	25.00
None/No Interaction	4	26.2500	25.0000	5.31507	22.00	33.00
Unawareness to Blatant Racial Issues	106	11.8491	10.0000	6.91416	6.00	36.00
Leadership Interaction	1	7.0000	7.0000	-	7.00	7.00
Informal & Structural Interaction	32	11.8125	9.0000	8.25574	6.00	36.00
Structural Interaction	14	10.3571	8.5000	5.01700	6.00	19.00
Informal, Leadership, & Structural Interaction	45	10.8889	9.0000	5.22765	6.00	33.00
Informal & Leadership Interaction	2	14.5000	14.5000	12.02082	6.00	23.00
Leadership & Structural Interaction	4	14.2500	14.5000	6.13052	8.00	20.00
Informal Interaction	4	15.5000	13.0000	10.24695	6.00	30.00
None/No Interaction	4	22.0000	19.5000	8.28654	15.00	34.00

Note: *n* = number of participants, *M* = Mean, *Mdn* = Median, *SD* = Standard Deviation, *min* = Minimum,

max = Maximum

Table 5

CoBRAS Factor Frequencies: Unawareness of Racial Privilege

	Leadership Interaction		Informal & Structural Interaction		Structural Interaction		Informal, Leadership, & Structural Interaction		Informal & Leadership Interaction		Leadership & Structural Interaction		Informal Interaction		None/No Interaction	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
7.00			3	9.4			1	2.2								
8.00			1	3.1												
9.00							3	6.7								
10.00			1	3.1			1	2.2								
11.00					2	14.3										
12.00					2	14.3										
13.00			1	3.1			1	2.2								
14.00			1	3.1	1	7.1	2	4.4					1	25.0		
15.00			4	12.5	1	7.1	5	11.1			1	25.0				
16.00			2	6.3			1	2.2	1	50.0						
17.00	1	100.0	3	9.4			3	6.7								
18.00							2	4.4								
19.00			1	3.1			4	8.9								
20.00			3	9.4			2	4.4								
21.00			1	3.1	1	7.1	3	6.7			1	25.0				
22.00							2	4.4								
23.00			3	9.4	1	7.1	4	8.9								
24.00			2	6.3			2	4.4								
25.00							1	2.2								
26.00					1	7.1	2	4.4					1	25.0		
27.00					1	7.1	3	6.7								
28.00			1	3.1												
29.00			1	3.1	1	7.1									1	25.0
30.00																
31.00							1	2.2								
32.00			1	3.1	1	7.1										
33.00											1	25.0				
34.00							1	2.2			1	25.0			1	25.0
35.00									1	50.0					1	25.0
36.00																
37.00					1	7.1									1	25.0
38.00																
39.00					1	7.1										
40.00							1	2.2					1	25.0		
41.00																
42.00			3	9.4									1	25.0		

Note: Freq. = Frequency, % = percent of total participants

Table 6

CoBRAS Factor Frequencies: Unawareness of Institutional Discrimination

	Leadership Interaction		Informal & Structural Interaction		Structural Interaction		Informal, Leadership, & Structural Interaction		Informal & Leadership Interaction		Leadership & Structural Interaction		Informal Interaction		None/No Interaction	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
7.00			4	12.5	2	14.3										
8.00			1	3.1	1	7.1										
9.00			2	6.3	1	7.1										
10.00	1	100.0	3	9.4	1	7.1	6	13.3					1	25.0		
11.00			4	12.5			1	2.2								
12.00			4	12.5	2	14.3	7	15.6	1	50.0						
13.00			3	9.4	1	7.1	4	8.9			1	25.0				
14.00			1	3.1			4	8.9								
15.00					1	7.1	5	11.1			1	25.0				
16.00							2	4.4			1	25.0				
17.00			1	3.1			1	2.2								
18.00			1	3.1			1	2.2								
19.00					1	7.1	1	2.2								
20.00							1	2.2					1	25.0		
21.00			1	3.1	1	7.1										
22.00					2	14.3	3	6.7					1	25.0	2	50.0
23.00			1	3.1			1	2.2								
24.00			1	3.1	1	7.1	1	2.2								
25.00							1	2.2	1	50.0			1	25.0		
26.00							1	2.2								
27.00			2	6.3			1	2.2								
28.00							2	4.4							1	25.0
29.00																
30.00							1	2.2								
31.00							1	2.2								
32.00																
33.00															1	25.0
34.00																
35.00											1	25.0				
36.00																
37.00																
38.00																
39.00																
40.00																
41.00																
42.00			3	9.4												

Note: Freq. = Frequency, % = percent of total participants

Table 7

CoBRAS Factor Frequencies: Unawareness of Blatant Racial Issues

	Leadership Interaction		Informal & Structural Interaction		Structural Interaction		Informal, Leadership, & Structural Interaction		Informal & Leadership Interaction		Leadership & Structural Interaction		Informal Interaction		None/No Interaction	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
6.00			11	34.4	6	42.9	8	17.8	1	50.0			1	25.0		
7.00	1	100.0	2	6.3	1	7.1	6	13.3								
8.00			1	3.1			5	11.1			1	25.0				
9.00			4	12.5			4	8.9								
10.00			3	9.3	2	14.3	2	4.4			1	25.0				
11.00			2	6.3			2	4.4								
12.00							4	8.9					1	25.0		
13.00			1	3.1	1	7.1	4	8.9								
14.00							2	4.4					1	25.0		
15.00			2	6.3			3	6.7							1	25.0
16.00					1	7.1	1	2.2								
17.00			1	3.1	2	14.3										
18.00			1	3.1												
19.00					1	7.1	2	4.4			1	25.0			1	25.0
20.00											1	25.0			1	25.0
21.00																
22.00							1	2.2								
23.00									1	50.0						
24.00			1	3.1												
25.00																
26.00																
27.00																
28.00																
29.00																
30.00													1	25.0		
31.00			1	3.1												
32.00																
33.00			1	3.1			1	2.2								
34.00															1	25.0
35.00																
36.00			1	3.1												

Note: Freq. = Frequency, % = percent of total participants

Participants' overall mean CoBRAS factor scores were highest for Unawareness of Racial Privilege, 21.3774 versus 16.7264 for Unawareness of Institutional Discrimination and 11.8491 for Unawareness to Blatant Racial Issues. When viewed by type of interaction with SOC, Leadership Interaction had the lowest mean scores and None/No Interaction had the highest mean scores of all interaction types for each of the three CoBRAS factors. Other than Leadership Interaction, Informal & Structural

Interactions, and Informal & Leadership Interactions with SOC, the majority of participant scores for the remaining five interaction types in the Unawareness of Racial Privilege factor are in the mid- to – high score range, i.e. scores between 19 and 42. The majority of participant scores across all eight interaction types for Unawareness of Institutional Discrimination and Unawareness to Blatant Racial Issues fell into the low- to – mid score range, scores between seven and 30 for Unawareness of Institutional Discrimination and between six and 26 for Unawareness to Blatant Racial Issues.

Table 8 below provides descriptive statistics for the covariates, Pre-college Diversity and College Classroom Diversity.

Table 8

Unadjusted Means and Variability for Pre-college & College Classroom Diversity Scores

	n	*M*	*Mdn*	*SD*	*min*	*max*
Pre-college Diversity Scores	106	1.9434	2.0000	1.09397	0.00	6.00
Classroom Diversity Scores	106	1.1415	1.0000	0.82160	0.00	2.00

Note: *n* = number of participants, *M* = Mean, *Mdn* = Median, *SD* = Standard Deviation, *min* = Minimum, *max* = Maximum

Frequencies of Pre-college and College Classroom Diversity scores are presented in Table 9.

Table 9

Pre-college & College Classroom Diversity Score Frequencies

	Frequency	*%*
Pre-college Diversity Scores		
0.00	2	1.9
1.00	41	38.7
2.00	39	36.8

3.00	12	11.3
4.00	10	9.4
5.00	1	0.9
6.00	1	0.9
Collage Classroom Diversity Scores		
0.00	29	27.4
1.00	33	31.1
2.00	44	41.5

Note: *%* = percent of total participants

The majority of White student participants, 80 (75.5%), reported low levels of pre-college diversity exposure, scores of 1.00 or 2.00; only two participants (1.9%) reported no pre-college diversity exposure. Though 44 participants (41.5%) reported high levels of college classroom diversity exposure, a score of 2.00, the number of participants who reported no college classroom diversity exposure, 29 (27.4%), was higher than the number of participants who reported no pre-college diversity exposure.

Sub Problems

Sub problems stated in chapters one and three are addressed below:

1. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions?

White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions made up one percent of this study (one participant). With only one participant in this category, variability and frequency information is limited. Score and mean for the CoBRAS factor Unawareness of Racial Privilege were 17.000, the lowest of the eight interaction categories, placing it at rank one of eight from lowest, one, to highest, eight. Score and mean for the CoBRAS factor Unawareness of Institutional

Discrimination were 10.0000, the lowest of the eight interaction categories, placing it at rank one of eight from lowest, one, to highest, eight. Score and mean for the CoBRAS factor Unawareness to Blatant Racial Issues were 7.0000, the lowest of the eight interaction categories, placing it at rank one of eight from lowest, one, to highest, eight. Mean total transformed CoBRAS score for this category was 1.5315, the lowest of the eight interaction categories, placing it at rank one of eight from lowest, one, to highest, eight.

2. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in informal interactional situations?

White college students in northeastern Pennsylvania who are exposed to SOC in informal interactional situations made up four percent of this study (four participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from 14 to 42 with a mean of 30.5000, placing it at rank seven of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from 13 to 35 with a mean of 19.2500, placing it at rank six of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from 6 to 30 with a mean of 15.5000, placing it at rank seven of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the four participants in this category ranged from 1.48 to 1.98 with a mean total transformed CoBRAS score of 1.7776, placing it at rank seven of eight from lowest, one, to highest, eight.

3. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in structural situations?

White college students in northeastern Pennsylvania who are exposed to SOC in structural situations made up 13% of this study (14 participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from 11 to 39 with a mean of 22.0714, placing it at rank four of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from seven to 24 with a mean of 14.3571, placing it at rank two of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from 6 to 19 with a mean of 10.3571, placing it at rank two of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the 14 participants in this category ranged from 1.38 to 1.88 with a mean total transformed CoBRAS score of 1.6363, placing it at rank three of eight from lowest, one, to highest, eight.

4. What are the racial attitudes of White college students in northeastern Pennsylvania who are exposed to SOC in combinations of leadership, informal interactional, and structural situations?

White college students in northeastern Pennsylvania who are exposed to SOC in combinations of leadership, informal interactional, and structural situations made up 82% of this study (87 participants). In all, an additional five interaction categories were created from combinations of leadership, informal interactional, and structural interactions. These are: Informal & Structural Interactions; Informal, Leadership, & Structural Interactions; Informal & Leadership Interactions; Leadership & Structural Interactions, and None/No Interactions.

Participants in the Informal & Structural Interactions category made up 30% of the study (32 participants). Scores for the CoBRAS factor Unawareness of Racial

Privilege ranged from seven to 42 with a mean of 20.0313, placing it at rank three of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from seven to 42 with a mean of 16.0000, placing it at rank three of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from 6 to 36 with a mean of 10.3571, placing it at rank four of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the 32 participants in this category ranged from 1.30 to 2.08 with a mean total transformed CoBRAS score of 1.6276, placing it at rank two of eight from lowest, one, to highest, eight.

Participants in the Informal, Leadership, & Structural Interactions category made up 42% of the study (45 participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from seven to 40 with a mean of 19.7556, placing it at rank two of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from 10 to 31 with a mean of 16.7111, placing it at rank four of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from six to 33 with a mean of 10.8889, placing it at rank three of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the 45 participants in this category ranged from 1.41 to 2.01 with a mean total transformed CoBRAS score of 1.6545, placing it at rank four of eight from lowest, one, to highest, eight.

Participants in the Informal & Leadership Interactions category made up 2% of the study (2 participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from 16 to 35 with a mean of 25.5000, placing it at rank five of eight

from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from 12 to 25 with a mean of 18.5000, placing it at rank five of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from 6 to 23 with a mean of 14.5000, placing it at rank six of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the two participants in this category ranged from 1.53 to 1.92 with a mean of 1.7253, placing it at rank five of eight from lowest, one, to highest, eight.

Participants in the Leadership & Structural Interactions category made up 4% of the study (4 participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from 15 to 34 with a mean of 25.7500, placing it at rank six of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from 13 to 35 with a mean of 19.7500, placing it at rank seven of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from eight to 20 with a mean of 14.2500, placing it at rank five of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the four participants in this category ranged from 1.56 to 1.94 with a mean of 1.7506, placing it at rank six of eight from lowest, one, to highest, eight.

Participants in the None/No Interactions category made up 4% of the study (4 participants). Scores for the CoBRAS factor Unawareness of Racial Privilege ranged from 28 to 37 with a mean of 33.5000, the highest of the eight interaction categories, placing it at rank eight of eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness of Institutional Discrimination ranged from 22 to 33 with a mean of 26.500, the highest of the eight interaction categories, placing it at rank eight of

eight from lowest, one, to highest, eight. Scores for the CoBRAS factor Unawareness to Blatant Racial Issues ranged from 15 to 34 with a mean of 22.0000, the highest of the eight interaction categories, placing it at rank eight of eight from lowest, one, to highest, eight. Total transformed CoBRAS scores for the four participants in this category ranged from 1.85 to 2.02 with a mean of 1.9073, the highest of the eight interaction categories, placing it at rank eight of eight from lowest, one, to highest, eight.

5. What are the pre-college characteristics scores for White college students in northeastern Pennsylvania?

Pre-college characteristics scores for White college students in northeastern Pennsylvania who participated in this study ranged from zero to six with a mean of 1.9434. Of the 106 participants, 1.9% (two participants) reported no pre-college diversity exposure and 75.5% (80 participants) reported low pre-college diversity exposure – scores of one or two. Twenty point seven percent (20.7%, 22 participants) reported moderate pre-college diversity exposure – scores of three or four. One point eight percent (1.8%, two participants) reported high pre-college diversity exposure – scores of five or six.

6. What are college classroom diversity exposure scores for White college students in northeastern Pennsylvania?

Classroom diversity exposure for White college students in northeastern Pennsylvania who participated in this study ranged from zero to two with a mean of 1.1415. Of the 106 participants, 27.4% (29 participants) reported no classroom diversity exposure, 31.1% (33 participants) reported moderate classroom diversity exposure – a

score of one, and 41.5% (44 participants) reported high classroom diversity exposure – a score of two.

7. What are the differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure?

Differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure are addressed in the Results section below

Results

An ANCOVA was run to determine the effect of interactions with SOC on White students' racial attitudes, as measured by total CoBRAS scores, after controlling for pre-college diversity exposure. There was a linear relationship between pre-college diversity exposure and total CoBRAS scores for each interaction type, as assessed by visual inspection of a scatterplot. There was homogeneity of regression slopes as the interaction term was not statistically significant, $F(4, 93) = 1.963$, $p = .107$. Standardized residuals for the interaction types and for the overall model were normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$). There was homoscedasticity and homogeneity of

variances, as assessed by visual inspection of a scatterplot and Levene's test of homogeneity of variance (p = .126), respectively. There were no outliers in the data, as assessed by no cases with standardized residuals greater than ±3 standard deviations. After adjustment for pre-college diversity exposure, there was a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, between the types of interaction with SOC, $F(7, 97) = 2.104$, $p < .05$, partial $\eta^2 = .132$. Post hoc analysis was performed with a Bonferroni adjustment. Total CoBRAS scores were statistically significantly higher in the None/No Interaction category vs the Informal & Structural Interaction category ($M_{diff} = .298$, 95% CI [0.003, 0.594], $p < .05$). No other statistically significant differences between total CoBRAS scores and types of interactions with SOC were found.

Table 10

Unadjusted and Adjusted Means and Variability for Transformed Total CoBRAS Scores by Interaction Type with Pre-college Diversity Exposure as a Covariate

		Unadjusted		*Adjusted*	
	N	*M*	*SD*	*M*	*SE*
Informal Only	4	1.7776	0.21882	1.772	0.086
Informal & Leadership	2	1.7253	0.27407	1.742	0.122
Informal, Leadership & Structural	45	1.6545	0.13313	1.653	0.025
Leadership Only	1	1.5315	.	1.530	0.171
Leadership & Structural	4	1.7506	0.17402	1.754	0.085
Structural Only	14	1.6363	0.18084	1.638	0.046
None/No Interaction	4	1.9073	0.07568	1.924	0.087
Informal & Structural	32	1.6276	0.20768	1.626	0.030

Note: *N* = number of participants, *M* = Mean, *SD* = Standard Deviation, *SE* = Standard Error

Table 11

Pairwise Comparisons of Dependent Variable: Total Transformed CoBRAS Score with Pre-college Diversity Exposure as a Covariate

(I) groups	(J) groups	M_{diff} (I-J)	*SE*	Sig.[b]	95% CI[b] [*LB* , *UB*]	
Informal Only	Informal & Leadership	0.030	0.149	1.000	[-0.450 ,	0.509]
	Informal, Leadership & Structural	0.119	0.089	1.000	[-0.168 ,	0.406]
	Leadership Only	0.242	0.191	1.000	[-0.372 ,	0.855]
	Leadership & Structural	0.018	0.121	1.000	[-0.371 ,	0.407]
	Structural Only	0.134	0.097	1.000	[-0.178 ,	0.446]
	Informal & Structural	0.146	0.091	1.000	[-0.145 ,	0.437]
Informal & Leadership	Informal, Leadership & Structural	0.089	0.124	1.000	[-0.311 ,	0.489]
	Leadership Only	0.212	0.210	1.000	[-0.462 ,	0.886]
	Structural Only	0.104	0.130	1.000	[-0.313 ,	0.521]
	Informal & Structural	0.116	0.126	1.000	[-0.287 ,	0.520]
Informal, Leadership & Structural	Leadership Only	0.123	0.173	1.000	[-0.432 ,	0.677]
	Structural Only	0.015	0.052	1.000	[-0.153 ,	0.183]
	Informal & Structural	0.027	0.039	1.000	[-0.100 ,	0.154]
Leadership & Structural	Informal & Leadership	0.012	0.148	1.000	[-0.465 ,	0.489]
	Informal, Leadership & Structural	0.101	0.089	1.000	[-0.186 ,	0.388]
	Leadership Only	0.224	0.191	1.000	[-0.390 ,	0.837]
	Structural Only	0.116	0.097	1.000	[-0.195 ,	0.427]
	Informal & Structural	0.128	0.091	1.000	[-0.163 ,	0.419]
Structural Only	Leadership Only	0.107	0.177	1.000	[-0.461 ,	0.675]
	Informal & Structural	0.012	0.055	1.000	[-0.164 ,	0.188]
None/No Interaction	Informal Only	0.152	0.122	1.000	[-0.241 ,	0.545]
	Informal & Leadership	0.182	0.148	1.000	[-0.293 ,	0.657]
	Informal, Leadership & Structural	0.271	0.091	0.097	[-0.020 ,	0.562]
	Leadership Only	0.394	0.192	1.000	[-0.222 ,	1.009]
	Leadership & Structural	0.170	0.121	1.000	[-0.220 ,	0.560]
	Structural Only	0.286	0.098	0.118	[-0.028 ,	0.601]
	Informal & Structural	0.298*	0.092	0.046	[0.003 ,	0.594]
Informal & Structural	Leadership Only	0.096	0.173	1.000	[-0.462 ,	0.653]

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

M_{diff} = Mean Difference, *SE* = Standard Error, Sig. = $p < .05$, CI = Confidence Interval, *LB* = Lower Bound, *UB* = Upper Bound

An ANCOVA was run to determine the effect of interactions with SOC on White students' racial attitudes, as measured by total CoBRAS scores, after controlling for college classroom diversity exposure. There was a linear relationship between college classroom diversity exposure and total CoBRAS scores for each interaction type, as assessed by visual inspection of a scatterplot. There was homogeneity of regression slopes as the interaction term was not statistically significant, $F(6, 91) = .637$, $p = .700$. Standardized residuals for the interaction types and for the overall model were normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$). There was homoscedasticity and homogeneity of variances, as assessed by visual inspection of a scatterplot and Levene's test of homogeneity of variance ($p = .200$), respectively. There were no outliers in the data, as assessed by no cases with standardized residuals greater than ±3 standard deviations. After adjustment for college classroom diversity exposure, there was not a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, between the types of interaction with SOC, $F(7, 97) = 1.863$, $p = .08$, partial $\eta^2 = .118$. Adjusted and unadjusted means and variability for transformed total CoBRAS scores with college classroom diversity exposure as a covariate are presented below in Table 12.

Table 12

Unadjusted and Adjusted Means and Variability for Transformed Total COBRAS Scores by Interaction Type with College Classroom Diversity Exposure as a Covariate

		Unadjusted		*Adjusted*	
	n	*M*	*SD*	*M*	*SE*
Informal Only	4	1.7776	0.21882	1.773	0.085
Informal & Leadership	2	1.7253	0.27407	1.721	0.12
Informal, Leadership & Structural	45	1.6545	0.13313	1.656	0.025
Leadership Only	1	1.5315	.	1.496	0.172
Leadership & Structural	4	1.7506	0.17402	1.731	0.086
Structural Only	14	1.6363	0.18084	1.630	0.046
None/No Interaction	4	1.9073	0.07568	1.903	0.085
Informal & Structural	32	1.6276	0.20768	1.633	0.03

Note: *n* = number of participants, *M* = Mean, *SD* = Standard Deviation, *SE* = Standard Error

Supplemental Analysis Results

Informal Interaction Results. Five Spearman's rank-order correlations were run to assess, respectively, the relationships between 1.) White students' perception of their three closest college friends race and relationship and total CoBRAS scores, 2.) White students' perception of their athletic teammates race and relationship and total CoBRAS scores, 3.) White students' perception of their student organization members race and relationship and total CoBRAS scores, 4.) White students' perception of their roommates and total CoBRAS scores, and 5.) White students' perception of their dating partners race and relationship and total CoBRAS scores. One hundred and six participants were recruited. Preliminary analysis showed relationships to be monotonic, as assessed by visual inspection of respective scatterplots. No statistically significant correlation was found between White students' perception of their three closest college friends race and relationship and total CoBRAS scores; between White students' perception of their

athletic teammates race and relationship and total CoBRAS scores; between White students' perception of their student organization members race and relationship and total CoBRAS scores; between White students' perception of their roommates and total CoBRAS scores; or between White students' perception of their dating partners race and relationship and total CoBRAS scores. Table 13 below provides Spearman's correlation results for each type of Informal Interactions with SOC. As the relationships between White students' perception of their three closest college friends, their athletic teammates, their student organization members, their roommates, their dating partners and total CoBRAS scores were not statistically significant we reject the alternative hypothesis and accept the null hypothesis for these relationships.

Table 13

Spearman's correlation results for Informal Interactions with SOC

	College Friends	Athletic Teammates	Organization Members	Roommates	Dating Partners
College Friend 1	$r_s(102) = .048$, $p = .627$	N/A	N/A	N/A	N/A
College Friend 2	$r_s(101) = -.094$, $p = .342$	N/A	N/A	N/A	N/A
College Friend 3	$r_s(100) = -.056$, $p = .579$	N/A	N/A	N/A	N/A
American Indian or Alaskan Native	N/A	$r_s(0) = -$, $p = -$	$r_s(4) = .683$, $p = .135$	$r_s(2) = -$, $p = -$	$r_s(0) = -$, $p = -$
Asian	N/A	$r_s(1) = -$, $p = -$	$r_s(28) = .055$, $p = .774$	$r_s(0) = -$, $p = -$	$r_s(4) = .778$, $p = .069$
Black or African American	N/A	$r_s(7) = -$, $p = -$	$r_s(52) = -.032$, $p = .817$	$r_s(5) = -$, $p = -$	$r_s(8) = -.078$, $p = .831$
Hawaiian or Pacific Islander	N/A	$r_s(0) = -$, $p = -$	$r_s(4) = .488$, $p = .326$	$r_s(0) = -$, $p = -$	$r_s(0) = -$, $p = -$
Latinx or Hispanic	N/A	$r_s(2) = -$, $p = -$	$r_s(39) = .056$, $p = .730$	$r_s(1) = -$, $p = -$	$r_s(7) = .414$, $p = .268$
Middle Eastern or North African	N/A	$r_s(0) = -$, $p = -$	$r_s(8) = .107$, $p = .768$	$r_s(0) = -$, $p = -$	$r_s(0) = -$, $p = -$
White	N/A	$r_s(19) = -.130$, $p = .573$	$r_s(65) = -.153$, $p = .217$	$r_s(50) = .189$, $p = .180$	$r_s(56) = -.023$, $p = .862$
Two or More Races	N/A	$r_s(2) = -$, $p = -$	$r_s(23) = -.146$, $p = .487$	$r_s(2) = -$, $p = -$	$r_s(1) = .866$, $p = .333$

Note: r_s = correlation coefficient, (#) = Degree of Freedom (*Number of Participants*-2), p = cutoff value ($p < .05$), N/A = Not Applicable, $r_s(\#) = -$, $p = -$ = No output

Leadership Interaction Results. Four Spearman's rank-order correlations were run to assess, respectively, the relationships between 1.) White students' perception of their Athletic team captains race and relationship and total CoBRAS scores, 2.) White students' perception of their RAs race and relationship and total CoBRAS scores, 3.) White students' perception of their student organization officers race and relationship and total CoBRAS scores, 4.) White students' perception of their new student orientation advisors race and relationship and total CoBRAS scores. One hundred and six participants were recruited. Preliminary analysis showed relationships to be monotonic, as assessed by visual inspection of a scatterplot. There was a statistically significant, weak negative correlation between White students' perception of their RAs race and relationship and total CoBRAS scores, $r_s(44) = -.299$, $p < .05$. There was a statistically significant, weak negative correlation between White students' perception of one of three of their new student orientation advisors race and relationship and total CoBRAS scores, $r_s(55) = -.264$, $p < .05$. Therefore, in these two relationships, we can reject the null hypothesis and accept the alternative hypothesis.

No statistically significant correlation was found between White students' perception of Athletic team captains race and relationship and total CoBRAS scores; between White students' perception of their student organization officers race and relationship and total CoBRAS scores; or between White students' perception of two of their new student orientation advisors race and relationship and total CoBRAS scores. Table 14 below provides Spearman's correlation results for each type of Leadership Interaction with SOC. As the relationships between White students' perception of Athletic team captains, student organization officers, and two of three New Student

Orientation leaders race and relationship and total CoBRAS scores were not statistically significant we reject the alternative hypothesis and accept the null hypothesis for these relationships.

Table 14

Spearman's correlation results for Leadership Interactions with SOC

	Team Captains	Organization Officers	Resident Advisors	Orientation Leaders
Leader 1	$r_s(19) = -.054$, $p = .816$	$r_s(52) = -.048$, $p = .728$	$r_s(44) = -.299$, $p < .05$	$r_s(62) = -.155$, $p = .220$
Leader 2	$r_s(16) = -.345$, $p = .161$	$r_s(49) = -.267$, $p = .058$	N/A	$r_s(55) = -.264$, $p < .05$
Leader 3	$r_s(12) = -.076$, $p = .795$	$r_s(45) = -.178$, $p = .230$	N/A	$r_s(49) = -.151$, $p = .289$

Note: r_s = correlation coefficient, (#) = Degree of Freedom (*Number of Participants*-2), p = cutoff value ($p < .05$), N/A = Not Applicable

Structural Interaction Results. Three Spearman's rank-order correlations were run to assess, respectively, the relationships between 1.) White students' perception of their classmates race and relationship and total CoBRAS scores, 2.) White students' perception of their campus encounters with other students based on race and relationship and total CoBRAS scores, and 3.) White students' perception of race and relationship of other residential students living in their residence halls and total CoBRAS scores. One hundred and six participants were recruited. Preliminary analysis showed relationships to be monotonic, as assessed by visual inspection of a scatterplot. There was a statistically significant, moderate positive correlation between White students' perception of race and relationship of other residential students living in their residence halls for students who are Two or More Races and total CoBRAS scores, $r_s(10) = .648$, $p < .05$. Therefore, we can reject the null hypothesis and accept the alternative hypothesis for this relationship.

No statistically significant correlation was found between White students' perception of their classmates race and relationship and total CoBRAS scores; between White students' perception of their general campus encounters with other students based on race and relationship and total CoBRAS scores; or between White students' perception of other racial categories and relationship with other residential students living in their residence halls and total CoBRAS scores. Table 15 below provides Spearman's correlation results for each type of Structural Interactions with SOC. As the relationships between White students' perception of classmates, general campus encounters with other students, and residential students living in their residence halls - other than students perceived as being of Two or More Races - race and relationship and total CoBRAS scores were not statistically significant we reject the alternative hypothesis and accept the null hypothesis for these relationships.

Table 15

Spearman's correlation results for Structural Interactions with SOC

	Residence Halls	Classes	Campus Encounters
American Indian or Alaskan Native	$r_s(3) = -, p = -$	$r_s(8) = -.038, p = .917$	$r_s(10) = -.251, p = .432$
Asian	$r_s(18) = .095, p = .691$	$r_s(55) = -.090, p = .507$	$r_s(55) = -.129, p = .341$
Black or African American	$r_s(29) = -.117, p = .533$	$r_s(74) = .105, p = .366$	$r_s(77) = -.058, p = .612$
Hawaiian or Pacific Islander	$r_s(1) = .866, p = .333$	$r_s(5) = .289, p = .530$	$r_s(7) = -.174, p = .654$
Latinx or Hispanic	$r_s(22) = -.271, p = .201$	$r_s(63) = -.042, p = .741$	$r_s(64) = .003, p = .983$
Middle Eastern or North African	$r_s(1) = .000\ p = 1.000$	$r_s(21) = .034, p = .879$	$r_s(23) = -.066, p = .756$
White	$r_s(40) = -.062, p = .699$	$r_s(91) = -.016, p = .875$	$r_s(87) = .004, p = .969$

Two or More Races	$r_s(10) = .648$, $p < .05$	$r_s(31) = -.011$, $p = .953$	$r_s(36) = .098$, $p = .558$

Note: r_s = correlation coefficient, (#) = Degree of Freedom (*Number of Participants*-2), p = cutoff value ($p < .05$), N/A = Not Applicable, r_s(#) = -, p = - = no output

Chapter 5

Discussion, Conclusions, Recommendations

Summary

A cross-sectional online survey was conducted to answer the primary research question, what are the differences in racial attitudes in White, traditional age, 18 to 22 -year -old, undergraduate college students in northeastern Pennsylvania based on level of exposure to students of color when controlling for pre-college characteristics and college classroom diversity exposure. Student participants were recruited from three, four-year private or public universities in Lackawanna or Luzerne counties in northeastern Pennsylvania. One-hundred and six usable responses were ultimately collected. One-way ANCOVAs were run to answer the primary research question. One-way ANCOVA results are summarized below, followed by an overview of descriptive statistical findings and a summary of supplementary analysis findings.

One-way ANCOVA Result Summary

A one-way ANCOVA was conducted to determine the effect of interactions with SOC on White students' racial attitudes, as measured by total CoBRAS scores, after controlling for pre-college diversity exposure. After adjustment for pre-college diversity exposure, there was a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, between the types of interaction with SOC. Post hoc analysis Total CoBRAS scores were statistically significantly higher in the None/No Interaction category vs the Informal & Structural Interaction category. No other statistically significant differences between total CoBRAS scores and types of

interactions with SOC after controlling for pre-college diversity exposure were found. Based on these results we reject the null hypothesis and accept the alternative hypothesis, that there are differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for pre-college characteristics.

A one-way ANCOVA was conducted to determine the effect of interactions with SOC on White students' racial attitudes, as measured by total CoBRAS scores, after controlling for college classroom diversity exposure. After adjustment for college classroom diversity exposure, there was not a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, between the types of interaction with SOC. Based on these results we reject the alternative hypothesis and accept the null hypothesis, that there are no differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or structural exposure to SOC, or combinations of leadership, informal interactional, and structural exposure to SOC when controlling for college classroom diversity exposure.

Descriptive Statistic Overview

When viewed by gender, participants who identified as Non-Binary/Third Gender had the lowest mean Total CoBRAS score (1.4978). Participants who identified as Female had a mean total CoBRAS score of 1.6426, a lower mean than participants who identified as Male, 1.7802, and those participants who responded "Prefer Not to Say",

1.7798. Eights levels of the IV, exposure to SOC, were identified. Unadjusted means of transformed total CoBRAS scores indicated that White students exposed to SOC through Leadership Interactions only had the lowest Total CoBRA score mean, 1.5315. White students exposed to SOC through Informal & Structural Interactions were second, 1.6276; Structural Interactions only were third, 1.6363; Informal, Leadership & Structural Interactions fourth, 1.6545; Informal & Leadership Interactions fifth, 1.7253; Leadership & Structural Interactions sixth, 1.7506; and Informal Interactions only seventh, 1.7776. White students who reported None/No Interactions with SOC had the highest total CoBRAS score mean, 1.9073.

Total COBRAS scores are derived from three factors: Unawareness of Social Privilege, Unawareness of Institutional Discrimination, and Unawareness to Blatant Racial Issues. Descriptive data indicated higher participant scores in the Unawareness of Racial Privilege factor, a total score mean of 21.3772 versus a total score mean of 16.7264 for the Unawareness of Institutional Discrimination factor and a total score mean of 11.8491 for the Unawareness to Blatant Racial Issues factor. Within each of the three factors, White students exposed to SOC through Leadership Interactions only consistently had the lowest factor score mean, 17.0000, 10.0000, and 7.0000, respectively. White students who reported None/No Interactions with SOC consistently had the highest factor score mean, 30.5000, 26.2500, and 22.0000, respectively.

Supplemental Analysis Summary

Spearman's correlations were run to assess relationships between White students' perceptions of race and relationships and total CoBRAS scores in Informal Interactions with SOC, Leadership Interactions with SOC, and Structural Interactions with SOC.

Statistically significant, weak negative correlations were found between two types of Leadership Interactions, White students' perception of their RAs race and relationship and total CoBRAS scores and between one of their new student orientation advisors race and relationship and total CoBRAS scores. A statistically significant, moderate positive correlation was found for one type of Structural Interaction, White students' perception of race and relationship of other residential students living in their residence halls for students who are Two or More Races and total CoBRAS scores. For these three relationships we can reject the null hypothesis and accept the alternative hypothesis. For all Informal Interactions and other types of Leadership and Structural Interactions we reject the alternative hypothesis and accept the null hypothesis for these relationships.

Discussion

Gurin, Dey, Gurin, and Hurtado (2003) envisioned that students experience diversity in a higher education setting in three ways: structural diversity, informal interactional diversity, and classroom diversity. Informal and classroom diversity interactions are believed to promote learning and democracy- related outcomes for students. Informal interactional diversity experiences in particular have been linked to additional outcomes including higher levels of intellectual engagement and self-assessed academic skills (Gurin et al., 2002) as well as developing critical thinking skills (Pascarella et al., 2014). There is evidence to suggest that students' assessment of the quality of cross-racial interactions as positive or negative affects diversity-related outcomes (Denson & Chang, 2015).

Intergroup contact theory posits that intergroup contact in situations where both the in- and out- groups have equal status, cooperate, share common goals, have the

support of authorities, and where friendship potential exists has the potential to increase in-group knowledge of the outgroup and lead to reduced prejudice. In-group members past experiences can affect the nature of intergroup interactions and their outcomes (Pettigrew, 1998). Findings from various studies have supported the idea that intergroup contact involving the stated conditions can reduce prejudice (Bowman & Park, 2014, 2015; Lowe et al., 2013; Paluck et al., 2018; Pettigrew & Tropp, 2006)

The present study incorporated Gurin, Dey, Gurin, and Hurtado's (2003) vision of how diversity is experienced by students within a higher education context into Pettigrew's reformulated intergroup contact theory in order to examine how variations in intergroup contact between White students and students of color (SOC) may influence White students' racial attitudes. Specific focus was placed on intergroup contact that occurred via forms of informal interactional diversity experiences, with controls in place for pre-college and college classroom diversity exposure.

Descriptive statistics appear to support intergroup contact theory. Unadjusted means for the eight categories of informal interaction types between White students and SOC indicated lower total CoBRAS scores for White students who had intergroup contact with SOC than White students who indicated no contact with SOC. White students who had intergroup contact with SOC also had lower adjusted mean total CoBRAS scores than White students who indicated no contact with SOC after controlling for pre-college diversity exposure and for college classroom diversity exposure.

One-way ANCOVA results showed a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, between the types of interaction with SOC after controlling for precollege diversity exposure. Post hoc

analysis determined that total CoBRAS scores were statistically significantly higher for participants reporting “None/No Interaction” with SOC versus students who reported a combination of “Informal & Structural” Interactions with SOC. This study defined informal interactional exposure as interactions between White students and SOC, which are sustained, ongoing, and involve personal contact. Structural exposure to SOC was defined as interactions between White students and SOC, which are impersonal and involve limited or no interpersonal contact.

Specific informal interactional exposure types examined were White students’ closest college friends, teammates, fellow organization members, roommates, and dating partners. Specific types of structural exposure examined were other residents living in the participants’ residence hall, classmates, and other students using campus facilities. This study was unable to identify what specific combination of informal and structural interactions with SOC contributed to the statistically significant finding for this interaction category. Previous research suggests that interracial structural interactions occurring in campus dining halls and in classrooms and informal interactional contexts such as roommate situations and diverse co-curricular activities – teammates and organization members – have the potential to be particularly impactful (Bowman & Park, 2015; Lowe et al., 2013).

When reviewing the adjusted means of total CoBRAS scores for all eight categories of interaction types with pre-college diversity exposure as a covariate, interaction types involving White students’ structural exposure to SOC were found to have the second, “Informal & Structural” (1.626); third, “Structural Only” (1.638); and fourth, “Informal, Leadership, & Structural” (1.653) lowest means. Although no

statistically significant difference was found in White students' racial attitudes, as measured by total CoBRAS scores, between types of interaction with SOC after controlling for college classroom diversity exposure, adjusted means of total CoBRAS scores for interaction types involving structural interactions were also found to be lower. Participants in the "Structural Only" category had the second (1.630), "Informal & Structural" participants the third (1.633), and "Informal, Leadership, & Structural" (1.656) participants the fourth, lowest mean total CoBRAS scores.

This is consistent with previous research, which found that structural diversity is particularly important as it provides opportunities for intergroup contact (Bowman & Park, 2014; Gurin et al., 2003; Lowe et al., 2013). This finding is particularly significant in light of the Supreme Courts' recent decision in Students for Fair Admissions v. Harvard, 600 U.S. 181 (2023). The Court held that race-based affirmative action programs in admissions processes violate the Equal Protection Clause of the Fourteenth Amendment, a finding which has the potential to reduce structural diversity on U.S. college campuses (*20-1199 Students for Fair Admissions, Inc. v. President and Fellows of Harvard College (06/29/2023)*, 2023).

Participants in the "Leadership Only" interaction category had the lowest unadjusted and adjusted mean total CoBRAS score of all eight categories of interaction type in each context. Only one participant fell into this category, however, limiting variability. Other interaction types which included leadership interactions with SOC, "Informal & Leadership" and "Leadership & Structural", displayed higher mean total CoBRAS scores, typically the fifth or sixth lowest means in each context. Additional

research is needed to determine if low mean total CoBRAS scores would persist if additional participants fell into the "Leadership Only" interaction type category.

Spearman's correlations were run to assess relationships between White student participants' perception of their relationships in various contexts and their total CoBRAS scores. Three statistically significant correlations were found, weak negative correlations related to two leadership positions – residence hall RAs and new student orientation (NSO) advisor - and one moderate positive correlation related to a structural interaction - individuals living in residence halls perceived as being "Two of More Races". As both correlations for leadership positions were weak and negative, total CoBRAS scores would slightly increase when participant perceived their relationship with their RA or NSO advisor as positive and slightly decrease when the relationship was perceived as negative. This finding was unexpected. Further research should be done to explore factors that may be involved in the relationships between these leadership positions and total CoBRAS scores.

While only two participants reported no pre-college diversity exposure, the majority of White student participants indicated relatively low pre-college diversity exposure. This finding was in line with previous research which found that White students often arrive at college with limited exposure to racial diversity (Warikoo & de Novais, 2015). Previous studies have also found that White students with less pre-college diversity exposure tend toward significant usage of colorblind ideology (Jayakumar, 2015; Warikoo & de Novais, 2015). Though correlation between pre-college diversity exposure and participants total CoBRAS scores was not explored as a component of this study, findings from the previous studies cited indicate a likelihood

that participants with lower pre-college diversity exposure would have higher total CoBRAS scores.

The majority of participants reported college classroom diversity exposure. That said, a surprisingly high percentage of participants, 27.4% (29 participants) reported no college classroom diversity exposure. Though correlations between college classroom diversity exposure and participants total CoBRAS scores were not explored within this study, research suggests that participants reporting no college classroom diversity exposure would also have higher total CoBRAS scores (Neville et al., 2014).

The CoBRAS instrument measures three factors, Unawareness of Racial Privilege, Unawareness of Institutional Discrimination, and Unawareness of Blatant Racial Issues. Unawareness of Racial Privilege had highest total unadjusted mean as well as the highest unadjusted means for each of the eight categories of interaction types of the three CoBRAS factors. Limited pre-college diversity exposure and no or low college classroom diversity exposure may contribute to higher means for this CoBRAS factor. Educating students on racial privilege may have the potential to reduce White students' negative racial attitudes at the three institutions studied. Despite the potential, this approach would not be without its challenges.

Pettigrew (1998) recognized that intergroup contact takes place within social institutions and societies which have the potential to inhibit its positive impact. Craig and Richeson found in 2014 that as U.S. racial demographics shift, and White Americans become aware of this shift, concerns arose regarding the loss of White social status. These concerns resulted in a shift to conservative ideology in order to avoid disruption of the current racial hierarchy. These findings appear to be more relevant than ever given

the number of "Anti-Diversity, Equity, & Inclusion" bills proposed in multiple U.S. states in 2023 (Bryant & Appleby, 2023). Such legislation creates a chilling effect on diversity initiatives and education, potentially negatively affecting White students' racial attitudes.

Applications/ Implications for Practice

Findings from this study have several implications for practice within the context of the three PWIs studied. White students at these institutions enter with limited pre-college diversity exposure and a significant percentage have no or limited classroom diversity exposure. These factors contribute to negative racial attitudes, which may surface in the form of microaggressions towards SOC. Microaggressions negatively affect SOC in multiple ways, including sense of belonging and retention. Recruitment, retention, and completion rates of SOC, who will soon make up the majority of the U.S. traditional college-age population, would be improved by positively shifting White students' racial attitudes.

It is important to note that efforts to shift White students' racial attitudes must not come at the expense of SOC. The purpose of admitting SOC into PWIs is not and should not be for the benefit of White students. This would be exploitive and would serve only to perpetuate systemic racism with U.S. society as well as within the institution of higher education. The phrase, "A Rising Tide Lifts All Boats" is applicable in this situation; efforts to shift White students' racial attitudes must benefit all students.

It is equally important to acknowledge the potential conflict this creates; ensuring the success of SOC threatens the current racial hierarchy. This perceived threat has the potential to generate resistance. Evidence suggests that explicitly including Whites in

depictions of diversity and diversity messaging reduces resistance (Plaut et al., 2011). As such, explicit explanation of how intergroup contact benefits all involved – White students become more desirable to employers, institutions of higher education improve retention, recruitment, graduation, and employment rates – may reduce White student and institutional resistance to change efforts.

That a statistically significant difference in White students' racial attitudes, as measured by total CoBRAS scores, was found between the types of interaction with SOC after controlling for precollege diversity exposure would indicate that intergroup contact has the potential to positively change White students' racial attitudes. "Informal & Structural" interactions with SOC may be particularly effective at changing White students' racial attitudes. Bowman and Park (2015) recommended that universities provide opportunities for continuous, casual, and meaningful intergroup contact. Examples from the literature of such contact include roommate and housing assignments, racially diverse classes, and diverse co-curricular activities (Bowman & Park, 2014, 2015), as well as intergroup dining experiences (Lowe et al., 2013). The author of this study suggests that peer mentoring may be another avenue for providing continuous, casual, and meaningful opportunities for intergroup contact. When utilized in the context of specific activities, such as officer positions in student organizations, athletic teams, and student staff positions, peer mentoring may have the added benefit of creating leadership opportunities for SOC, which, in turn, could foster additional opportunities for intergroup contact.

Raising awareness of racial privilege may also assist in positively affecting White students' racial attitudes. Literature has indicated that at PWIs as well as at more diverse

institutions, White students have the privilege of not having to consider their race as a component of their college experience (Hurtado et al., 2015; Lowe et al., 2013). Asking students to consider how or in what ways their race has or has not influenced their college experience may be a good way to introduce the idea of racial privilege in a way which White students might find nonthreatening.

Educating White students on microaggressions has been shown to reduce total CoBRAS scores as well as Unawareness of Racial Privilege factor scores. Lectures, reading scholarly articles, and watching videos related to microaggressions and privilege followed by discussion have all been found to be effective means of educating White students in these areas (Bronder, 2016; Patterson & Domenech Rodríguez, 2019). Activities related to both awareness raising and education on microagressions could occur as part of course work, perhaps a required "University 100" course for first-year students, as part of training for campus leadership roles, or as part of a campus program. Academic departments, Student Activities/Engagement Offices, Athletic Departments, and Housing & Residence Life staff can utilize this information to strategically, and more effectively, plan trainings and programs, staff selection, housing placement, and student experiences with this goal in mind.

In light of the current U.S. social climate, a strong institutional commitment would be required to pursue this goal. Institutions would need to institute admission strategies that ensure a sufficient level of structural diversity to allow for intergroup contact. Thoughtful curricular and co-curricular experiences that encourage and foster direct and indirect opportunities for intergroup contact and raise White students' awareness of racial privilege would need to be created. Assessment strategies would also

need to be developed. Policies to support these efforts would need to be established and enforced and appropriate resources allocated to see them through.

Creating optimal conditions for successful intergroup contact to occur at these PWIs has the potential to benefit all students by improving persistence and reducing barriers for SOC while allowing their White students to gain the societal benefits and the required workplace skills described in the introduction of this study. Improved campus racial climates resulting from changing White students' racial attitudes has the potential to enhance the recruitment and retention of SOC. Given the stated demographic shifts in the college-age population (Colby & Ortman, 2015), current public perception of the value of higher education (Blake, 2023), and the enrollment (Knox, 2023) and fiscal challenges many colleges and universities are facing (Lederman, 2023), improving the campus racial climate could ultimately assist these PWIs in achieving fiscal goals in these uncertain times.

Limitations

Several limitations emerged over the course of this study. The first involved instrument validity**.** Components of an instrument designed by the researcher may not accurately measure what it was designed to measure, item validity, or cover the range of the subject area intended, sampling validity (Terrell, 2016). The researcher designed instrument utilized in this study asked participants to identify race and provide relationship assessments for specific individuals in certain informal and leadership interactions as well as race and relationships assessments of generalized groups of people on their campuses in all other informal and structural interactions. Scoring and analysis methods for both categories, individual and generalized, were the same. Data collected

from instrument questions focused on specific individuals emphasized relationship assessment over race assessment. Data collected from instrument questions focused on generalized groups assessed race and relationship equally. While the main research question was unaffected, the emphasis on relationship assessment for data focused on specific individuals did affect supplemental analysis. Spearman's correlations conducted using data focused on specific individuals were limited to relationships between White students' perception of their relationship with specific individuals and the White students' total CoBRAS score – assessed race was not a factor in the correlation. For future research, adjusting questions or scoring for responses related to specific individuals may improve instrument validity, particularly for use in determining correlations.

Reliance on self-reported data was another identified limitation**.** The ability to verify self-reported data is limited (Labaree, 2020). Social Desirability Bias, respondents answering questions to reflect what they believe to be socially admirable rather than accurate responses (Holbrook & Krosnick, 2010), may have limited the generalizability of the results of this study. White students' assessments of their relationships with SOC in this study were more positive than anticipated. Participants may have overstated their relationship assessments so as not to appear racist.

As this study focuses on students attending college in northeastern Pennsylvania, generalizability may be limited due to location. Results may not represent colleges or universities with a higher percentage of students of color or schools in a more racially diverse area (Terrell, 2016).

Sample size was identified as a significant limitation of this study. Qualtrics sample size calculator (Qualtrics, 2020) was used to establish sample size. Utilizing a confidence level of 95% and a margin of error of 5%, the ideal sample size was determined to be 347 respondents. Ultimately 106 usable responses were received between three institutions, a 3% response rate. This small sample size is less likely to generate significant results as smaller sample sizes produce larger standard errors (Urdan, 2017).

In addition to small sample sizes, limited numbers of students in certain racial categories at the three institutions, and low numbers of SOC in some of the categories examined affected Spearman's correlation results. Limited responses with a lack of variation in responses – i.e. all of the limited responses assessed the relationship as positive - resulted in Spearman's correlation results with no values. This was particularly true in the case of Informal Interaction with SOC as athletic teammates, roommates, and, to some degree, dating partners, as seen in Table 13.

Suggestions for Future Research

Findings from this study provide ample opportunities for additional research. After controlling for pre-college diversity exposure, mean total CoBRAS scores for White students who had intergroup contact with SOC in "Informal & Structural" contexts were statistically significantly lower than for White students who reported "None/No Interactions" with SOC. Although specific types of informal interactional - closest college friends, teammates, fellow organization members, roommates, and dating partners - and structural exposures - other residents living in the participants' residence hall, classmates, and other students using campus facilities - were identified for use in

this study, further research should be conducted to identify which combinations of informal and structural interactions contributed to this finding.

Consistent with previous findings (Neville et al., 2014), those who identified as "Male (Cisgender or Transgender)" had the highest unadjusted mean CoBRAS scores. It is interesting to note that participants who identified as "Non-Binary/Third Gender" had the lowest mean total CoBRAS score. Further research should explore whether identification as "Non-Binary/Third Gender", which could also be considered an outgroup status in current U.S. American society, may affect attitudes towards other outgroups, in this case SOC.

No statistically significant findings for any combination of leadership interactions were found relative to the main research question of this study. Though the "Leadership Only" interaction category had the lowest mean total CoBRAS score and the lowest mean total CoBRAS factor scores in every context, means were based on a singular participant. Means for all other interaction types involving leadership interactions trended higher. Statistically significant correlations were found between White students' perceptions of their relationships with their RAs and with one of their new student orientation leaders and total CoBRAS scores were found; however, the nature of the correlations indicated that positive relationship perceptions resulted in slightly higher total CoBRAS scores and vice-versa. These findings indicate the need for further research into the impact of interactions with SOC in leadership positions on White students' racial attitudes and the impact of White students' relationship perceptions of SOC in leadership positions.

Descriptive statistics for CoBRAS factors indicated that participants' unawareness of racial privilege contributed to higher mean total CoBRAS scores. Further research

should be conducted to determine what, if any, effects pre-college diversity exposure and college classroom diversity exposure may have on White students' awareness of racial privilege. Data from such research, along with data on effective intergroup contact categories, could be utilized to identify and develop effective, developmentally appropriate, curricular and co-curricular methods of raising White students' awareness of racial privilege.

Conclusions

This study sought to contribute to the body of research on intergroup contact theory through the examination of differences in racial attitudes in White, traditional age, 18 to 22 -year -old, full- or part –time, undergraduate college students in northeastern Pennsylvania based on type of exposure to students of color – exposure to SOC in leadership positions, informal interactional exposure to SOC, structural exposure to SOC, or exposure to SOC in combinations of leadership, informal interactional, and structural situations - when controlling for pre-college characteristics and college classroom diversity exposure. A statistically significant difference was found in White students' racial attitudes based on type of exposure to SOC when controlling for pre-college characteristics. Post hoc testing identified a statistically significant difference in racial attitudes between White students with a combination of informal and structural exposure to SOC and White students who reported no interaction with SOC. Descriptive statics and frequencies indicated low levels of pre-college diversity experience and that many participants reported little-to-no college classroom diversity exposure. Statistics also indicated that raising White students' awareness of racial privilege may positively impact their racial attitudes. While low response rates prevent generalization beyond the

participants of this study and their respective institutions, results appear to support the idea that intergroup contact between White students and SOC at PWIs has the potential to affect White students' racial attitudes. Further research regarding the impact of specific categories of intergroup contact interactions at PWIs on White students' racial attitudes is recommended in order to capitalize from the results of this study.

Bibliography

20-1199 Students for Fair Admissions, Inc. V. President and Fellows of Harvard College (06/29/2023). (2023).

Administrators, students and activists take stock three years after 2015 Missouri protests. (2018, September 12). https://www.insidehighered.com/news/2018/09/12/administrators-students-and-activists-take-stock-three-years-after-2015-missouri

American Council of Education Board of Directors. (2012). On the Importance of Diversity in Higher Education. American Council on Education. http://www.acenet.edu/news-room/Documents/BoardDiversityStatement-June2012.pdf

American Psychological Association. (2020). Publication Manual of the American Psychological Association (7th ed.). https://doi.org/10.1037/0000165-000

Arellano, L., & Vue, R. (2019). Transforming Campus Racial Climates: Examining Discourses around Student Experiences of Racial Violence and Institutional (In)Action. Journal of Diversity in Higher Education, 12(4), 351–364.

Banks, T., & Dohy, J. (2019). Mitigating Barriers to Persistence: A Review of Efforts to Improve Retention and Graduation Rates for Students of Color in Higher Education. Higher Education Studies, 9(1), 118. https://doi.org/10.5539/hes.v9n1p118

Black Student at Lehigh University in Pennsylvania Victimized in Racist Attack. (2022, November 24). The Journal of Blacks in Higher Education.

https://www.jbhe.com/2022/11/black-student-at-lehigh-university-in-pennsylvania-victimized-in-racist-attack/

Blake, J. (2023, July 11). American Confidence in Higher Ed Hits Historic Low. Inside Higher Ed. https://www.insidehighered.com/news/business/financial-health/2023/07/11/american-confidence-higher-ed-hits-historic-low

Boettcher, M. L., Eason, A., Earnest, K., & Lewis, L. (2019). The Cultivation of Support Networks by Students of Color in a Residence Hall Setting at a Predominantly White Institution. Journal of College and University Student Housing, 45(3), 30–46.

Bourke, B. (2016). Meaning and Implications of Being Labelled a Predominately White Institution. American Association of Collegiate Registrats and Admissions Officers, 91(3), 12–21.

Bowman, N. A., & Park, J. J. (2014). Interracial Contact on College Campuses: Comparing and Contrasting Predictors of Cross-Racial Interaction and Interracial Friendship. Journal of Higher Education, 85(5), 660–690.

Bowman, N. A., & Park, J. J. (2015). Not All Diversity Interactions are Created Equal: Cross-Racial Interaction, Close Interracial Friendship, and College Student Outcomes. Research in Higher Education, 56(6), 601–621. https://doi.org/10.1007/s11162-015-9365-z

Bronder, E. C. (2016). AN INTERVENTION TO REDUCE COLOR-BLIND RACIAL ATTITUDES IN WHITE COLLEGE STUDENTS. 133.

Bryant, J., & Appleby, C. (2023, June 21). Anti-DEI Legislation Tracker | BestColleges. Best Colleges. https://www.bestcolleges.com/news/anti-dei-legislation-tracker/

Casner-Lotto, J., & Barrington, L. (2006). Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century US Workforce. (p. 64). The Conference Board, Inc., the Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management. http://eric.ed.gov/?id=ED519465

Colby, S. L., & Ortman, J. M. (2015). Projections of the Size and Composition of the U.S. Population: 2014 to 2060—P25-1143.pdf. U.S. Census Bureau. http://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf?

Cole, D., & Zhou, J. (2014a). Diversity and Collegiate Experiences Affecting Self-Perceived Gains in Critical Thinking Which Works, and Who Benefits? The Journal of General Education, 63(1), 15–34.

Cole, D., & Zhou, J. (2014b). Do Diversity Experiences Help College Students Become More Civically Minded? Applying Banks' Multicultural Education Framework. Innovative Higher Education, 39(2), 109–121. https://doi.org/10.1007/s10755-013-9268-x

Craig, M. A., & Richeson, J. A. (2014). On the Precipice of a "Majority-Minority" America: Perceived Status Threat From the Racial Demographic Shift Affects White Americans' Political Ideology. Psychological Science, 25(6), 1189–1197.

Cunningham, G. (2004). Strategies for Transforming the Possible Negative Effects of Group Diversity. Quest, 56. https://doi.org/10.1080/00336297.2004.10491835

Denson, N., & Chang, M. J. (2015). Dynamic relationships: Identifying moderators that maximize benefits associated with diversity. The Journal of Higher Education, 86(1), 1–37.

Dulabaum, N. L. (2016). Barriers to Academic Success: A Qualitative Study of African American and Latino Male Students | The League for Innovation in the Community College. https://www.league.org/innovation-showcase/barriers-academic-success-qualitative-study-african-american-and-latino-male

Forrest-Bank, S. S., & Cuellar, M. J. (2018). The Mediating Effects of Ethnic Identity on the Relationships between Racial Microaggression and Psychological Well-Being. Social Work Research, 42(1), 44–56. https://doi.org/10.1093/swr/svx023

Frost, J. (2021, March 29). Spearman's Correlation Explained. Statistics By Jim. https://statisticsbyjim.com/basics/spearmans-correlation/

Gurin, P. Y., Dey, E. L., Gurin, G., & Hurtado, S. (2003). How Does Racial/Ethnic Diversity Promote Education? The Western Journal of Black Studies, Vol. 27(1), 20–29.

Gurin, P. Y., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and Higher Education: Theory and Impact on Educational Outcomes. Harvard Educational Review, Vol. 72(No. 3), 330–366.

Hall, R. (2017). FACTORS CONTRIBUTING TO THE PERSISTENCE OF AFRICAN AMERICAN AND HISPANIC UNDERGRADUATE MALES ENROLLED AT REGIONAL PREDOMINATELY WHITE INSTITUTION. Administrative Issues Journalst, 7(1). https://doi.org/10.5929/2017.7.1.4

Harper, S. R. (2013). Am I My Brother's Teacher? Black Undergraduates, Racial Socialization, and Peer Pedagogies in Predominantly White Postsecondary Contexts. Review of Research in Education, 37, 183–211.

Hart Research Associates. (2018). Fulfilling the American Dream: Liberal Education and the Future of Work. https://www.aacu.org/sites/default/files/files/LEAP/2018EmployerResearchReport.pdf

Harwood, S. A., Huntt, M. B., Mendenhall, R., & Lewis, J. A. (2012). Racial Microaggressions in the Residence Halls: Experiences of Students of Color at a Predominantly White University. Journal of Diversity in Higher Education, 5(3), 159–173.

Holbrook, A. L., & Krosnick, J. A. (2010). Social desirability bias in voter turnout reports. Public Opinion Quarterly, 74(1), 37–67. https://doi.org/10.1093/poq/nfp065

Hotchkins, B. K., & Dancy, T. E. (2017). A House Is Not A Home: Black Students' Responses to Racism in University Residential Halls. Journal of College & University Student Housing, 43(3), 42–53.

Hughey, M. W., Rees, J., Goss, D. R., Rosino, M. L., & Lesser, E. (2017). Making Everyday Microaggressions: An Exploratory Experimental Vignette Study on the Presence and Power of Racial Microaggressions. Sociological Inquiry, 87(2), 303–336. https://doi.org/10.1111/soin.12167

Hurtado, S., Alvarado, A. R., & Guillermo-Wann, C. (2015). Thinking about Race: The salience of Racial identity at Two-and Four-year Colleges and the Climate for Diversity. The Journal of Higher Education, 86(1), 127–155.

Jayakumar, U. M. (2015). The Shaping of Postcollege Colorblind Orientation Among Whites: Residential Segregation and Campus Diversity Experiences. Harvard Educational Review, 85(4), 609–645.

Johnson, A. M. (2019). '"I Can Turn It on When I Need To"': Pre-college Integration, Culture, and Peer Academic Engagement among Black and Latino/a Engineering Students. Sociology of Education, 92(1), 1–20. https://doi.org/10.1177/0038040718817064

Johnson, D. R., Wasserman, T. H., Yildirim, N., & Yonai, B. A. (2014). Examining the Effects of Stress and Campus Climate on the Persistence of Students of Color and White Students: An Application of Bean and Eaton's Psychological Model of Retention. Research in Higher Education, 55(1), 75–100. https://doi.org/10.1007/s11162-013-9304-9

Johnson-Ahorlu, R. N. (2013). "Our Biggest Challenge is Stereotypes": Understanding Stereotype Threat and the Aacdemic Experiences of African American Undergraduates. Journal of Negro Education, 82(4), 382–392.

Keum, B. T., Miller, M. J., Lee, M., & Chen, G. A. (2018). Color-Blind Racial Attitudes Scale for Asian Americans: Testing the Factor Structure and Measurement Invariance Across Generational Status. Asian American Journal of Psychology. https://doi.org/DOI: 10.1037/aap0000100

Knox, L. (2023, May 12). Grasping for a Foothold on the Enrollment Cliff. Inside Higher Ed. https://www.insidehighered.com/news/business/revenue-strategies/2023/05/12/grasping-foothold-enrollment-cliff

Kuh, G. D. (2008). High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter. Association of American Colleges and Universities. http://ueeval.ucr.edu/teaching_practices_inventory/Kuh_2008.pdf

Labaree, R. V. (2020). Research Guides: Organizing Your Social Sciences Research Paper: Purpose of Guide [Research Guide]. https://libguides.usc.edu/writingguide/purpose

Laerd Statistics. (2017). One-way ANCOVA using SPSS Statistics. Statistical Tutorials and Software Guides. https://statistics.laerd.com/

Laerd Statistics. (2018). Spearman's correlation using SPSS Statistics. Statistical Tutorials and Software Guides. https://statistics.laerd.com/

Lederman, D. (2023, October 2). Citing Significant Budget Deficits, Several Colleges Face Cuts. Inside Higher Ed. https://www.insidehighered.com/news/business/cost-cutting/2023/10/02/several-colleges-plan-cuts-address-significant-financial-woes

Linley, J. L. (2018). Racism Here, Racism There, Racism Everywhere: The Racial Realities of Minoritized Peer Socialization Agents at a Historically White Institution. Journal of College Student Development, 59(1), 21–36. https://doi.org/10.1353/csd.2018.0002

Lowe, M. R., Byron, R. A., Ferry, G., & Garcia, M. (2013). Food for Thought: Frequent Interracial Dining Experiences as a Predictor of Students' Racial Climate Perceptions. Journal of Higher Education, 84(4), 569–600.

Martin, N. D., Spenner, K. I., & Mustillo, S. A. (2017). A Test of Leading Explanations for the College Racial-Ethnic Achievement Gap: Evidence from a Longitudinal Case Study. Research in Higher Education, 58(6), 617–645.

McClelland, K., & Linnander, E. (2006). The Role of Contact and Information in Racial Attitude Change among White College Students. Sociological Inquiry, 76(1), 81–115. https://doi.org/10.1111/j.1475-682X.2006.00145.x

Mekawi, Y., & Todd, N. R. (2018). Okay to say?: Initial validation of the Acceptability of Racial Microaggressions Scale. Cultural Diversity & Ethnic Minority Psychology, 24(3), 346–362. https://doi.org/10.1037/cdp0000201

Miller, B., & Sujitparapitaya, S. (2010). Campus Climate in the Twenty-First Century: Estimating Perceptions of Discrimination at a Racially Mixed Institution, 1994-2006. New Directions for Institutional Research, 145, 29–52.

Moragne-Patterson, Y. K., & Barnett, T. M. (2017). Experiences and Responses to Microaggressions on Historically White Campuses: A Qualitative Interpretive Meta-Synthesis. Journal of Sociology & Social Welfare, 44(3), 3–26.

Mwangi, C. A. G., Thelamour, B., Ezeofor, I., & Carpenter, A. (2018). "Black Elephant in the Room": Black Students Contextualizing Campus Racial Climate Within US Racial Climate. Journal of College Student Development, 59(4), 456–474. https://doi.org/10.1353/csd.2018.0042

Nadal, K. L., Erazo, T., & King, R. (2019). Challenging Definitions of Psychological Trauma: Connecting Racial Microaggressions and Traumatic Stress. Journal for Social Action in Counseling & Psychology, 11(2), Article 2. https://doi.org/10.33043/JSACP.11.2.2-16

Nadal, K. L., Griffin, K. E., Wong, Y., Hamit, S., & Rasmus, M. (2014). The Impact of Racial Microaggressions on Mental Health: Counseling Implications for Clients of Color. Journal of Counseling & Development, 92(1), 57–66. https://doi.org/10.1002/j.1556-6676.2014.00130.x

Nadal, K. L., Wong, Y., Griffin, K. E., Davidoff, K., & Sriken, J. (2014). The Adverse Impact of Racial Microaggressions on College Students' Self-Esteem. Journal of College Student Development, 55(5), 461–474. https://doi.org/10.1353/csd.2014.0051

National Center for Education Statistics. (n.d.). Search for Schools and Colleges. National Center for Education Statistics. Retrieved February 26, 2023, from https://nces.ed.gov/globallocator/index.asp?search=1&State=PA&city=&zipcode=&miles=&itemname=Misericordia+University&sortby=name&School=1&PrivSchool=1&College=1&Status=Search+Finished&Records=1&CS=88C6DF74

Neville, H. A., Lilly, R. L., Duran, G., Lee, R. M., & Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitudes Scale (CoBRAS). Journal of Counseling Psychology, 47(1), 59–70. https://doi.org/10.1037//0022-0167.47.1.59

Neville, H. A., Poteat, V. P., Lewis, J. A., & Spanierman, L. B. (2014). Changes in White college students' color-blind racial ideology over 4 years: Do diversity

experiences make a difference? Journal of Counseling Psychology, 61(2), 179–190. https://doi.org/10.1037/a0035168

Nguyen, M. H., Chan, J., Nguyen, B. M. D., & Teranishi, R. T. (2018). Beyond Compositional Diversity: Examining the Campus Climate Experiences of Asian American and Pacific Islander Students. Journal of Diversity in Higher Education, 11(4), 484–501.

Paluck, E. L., Green, S. A., & Green, D. P. (2018). The Contact Hypothesis Re-Evaluated. Behavioural Public Policy, 1–30. https://doi.org/10.1017/bpp.2018.25

Park, J. J. (2014). Clubs and the Campus Racial Climate: Student Organizations and Interracial Friendship in College. Journal of College Student Development, 55(7), 641–660. https://doi.org/10.1353/csd.2014.0076

Pascarella, E. T., Martin, G. L., Hanson, J. M., Trolian, T. L., Gillig, B., & Blaich, C. (2014). Effects of Diversity Experiences on Critical Thinking Skills Over 4 Years of College. Journal of College Student Development, 55(1), 86–92. https://doi.org/10.1353/csd.2014.0009

Patterson, C. A., & Domenech Rodríguez, M. M. (2019). Microaggression Detection Measurement Impact on White College Students' Colorblindness. Psi Chi Journal of Psychological Research, 24, 127–138. https://doi.org/10.24839/2325-7342.JN24.2.127

Patton, L. D., Sanchez, B., Mac, J., & Stewart, D.-L. (2019). An Inconvenient Truth About "Progress": An Analysis of the Promises and Perils of Research on Campus Diversity. The Review of Higher Education, 42, 173–198. https://doi.org/10.1353/rhe.2019.0049

Peters, T., Margolin, M., Fragnoli, K., & Bloom, D. (2016). What's Race Got To Do With It?: Preservice Teachers and White Racial Identity. Current Issues in Education, 19(1). https://cie.asu.edu/ojs/index.php/cieatasu/article/view/1661

Pettigrew, T. F. (1998). Intergroup Contact Theory. Annual Review of Psychology, 49(1), 65–85. https://doi.org/10.1146/annurev.psych.49.1.65

Pettigrew, T. F., & Tropp, L. R. (2006). A Meta-Analytic Test of Intergroup Contact Theory. Journal of Personality & Social Psychology, 90(5), 751–783. https://doi.org/10.1037/0022-3514.90.5.751

Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. European Journal of Social Psychology, 38(6), 922–934. https://doi.org/10.1002/ejsp.504

Plaut, V. C., Gamett, F. G., Sanchez-Burks, J., & Buffardi, L. E. (2011). "What About Me?" Perceptions of Exclusion and Whites' Reactions to Multiculturalism. Journal of Personality & Social Psychology, 101(2), 337–353. https://doi.org/10.1037/a0022832

Qualtrics. (2020, May 21). Sample Size Calculator & Complete Guide in 2022. Qualtrics. https://www.qualtrics.com/blog/calculating-sample-size/

Racist Video Showing Ohio University Students Circulated on Social Media. (2019, April 19). The Journal of Blacks in Higher Education. https://www.jbhe.com/2019/04/racist-video-showing-ohio-university-students-circulated-on-social-media/

Randle, A. (2019, November 27). Racial Slurs, and the 15 Days That Shook Syracuse. The New York Times. https://www.nytimes.com/2019/11/27/nyregion/syracuse-university-racism.html

Reynolds, A. L., Sneva, J. N., & Beehler, G. P. (2010). The Influence of Racism-Related Stress on the Academic Motivation of Black and Latino/a Students. Journal of College Student Development, 51(2), 135–149. https://doi.org/10.1353/csd.0.0120

Rodenborg, N. A., & Boisen, L. A. (2013). Aversive racism and intergroup contact theories: Cultural competence in a segregated world. Journal of Social Work Education, 49(4), 564–579.

Several Racist Incidents Occur on the Campus of Grinnell College in Iowa. (2022, November 1). The Journal of Blacks in Higher Education. https://www.jbhe.com/2022/11/several-racist-incidents-occur-on-the-campus-of-grinnell-college-in-iowa/

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Bhimdiwala, A., & Wilson, S. (2019). Completing College: A State-Level View of Student Completion Rates (Signature Report No. 16a). National Student Clearinghouse Research Center. https://nscresearchcenter.org/wp-content/uploads/NSCSignatureReport16_StateSupp.pdf

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P. K., & Bhimdiwala, A. (2018). Completing College: A National View of Student Completion Rates—Fall 2012 Cohort (Signature Report No. 16). National Student Clearinghouse Research Center. https://nscresearchcenter.org/wp-content/uploads/SignatureReport16.pdf

Shook, N. J., & Fazio, R. H. (2008). Interracial Roommate Relationships: An Experimental Field Test of the Contact Hypothesis. Psychological Science, 19(7), 717–723. https://doi.org/10.1111/j.1467-9280.2008.02147.x

Smith, C. W., & Mayorga-Gallo, S. (2017). The New Principle-policy Gap: How Diversity Ideology Subverts Diversity Initiatives. Sociological Perspectives, 60(5), 889–911. https://doi.org/10.1177/0731121417719693

Strayhorn, T. L., & Johnson, R. M. (2014). Why Are All the White Students Sitting Together in College? Impact of Brown v. Board of Education on Cross-Racial Interactions among Blacks and Whites. The Journal of Negro Education, 83(3), 385–398. https://doi.org/10.7709/jnegroeducation.83.3.0385

Sue, D. W., Alsaidi, S., Awad, M. N., Glaeser, E., Calle, C. Z., & Mendez, N. (2019). Disarming racial microaggressions: Microintervention strategies for targets, White allies, and bystanders. American Psychologist, 74(1), 128–142. https://doi.org/10.1037/amp0000296

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial Microaggressions in Everyday Life. American Psychologist, 62(4), 271–286.

Terrell, S. R. (2016). Writing a Proposal for Your Dissertation Guidelines and Examples. The Guilford Press.

Todd, N. R., Spanierman, L. B., & Poteat, V. P. (2011). Longitudinal Examination of the Psychosocial Costs of Racism to Whites Across the College Experience. Journal of Counseling Psychology, 58(4), 508–521. https://doi.org/10.1037/a0025066

Urdan, T. C. (2017). Statistics in Plain English (4th ed.). Routledge.

U.S.C. Title 20—EDUCATION. (n.d.). Retrieved February 16, 2020, from https://www.govinfo.gov/content/pkg/USCODE-2011-title20/html/USCODE-2011-title20-chap28-subchapIII-partE-subpart3-sec1067k.htm

Ward, K. M., & Zarate, M. E. (2015). The Influence of Campus Racial Climate on Graduate Student Attitudes About the Benefits of Diversity. 38(4), 589–617. http://dx.doi.org/10.1353/rhe.2015.0034

Warikoo, N. K., & de Novais, J. (2015). Colourblindness and Diversity: Race Frames and Their Consequences for White Undergraduates at Elite US Universities. Ethnic and Racial Studies, 38(6), 860–976. https://doi.org/10.1080/01419870.2014.964281

Wei, M., Liao, K. Y.-H., Chao, R. C.-L., Mallinckrodt, B., Tsai, P.-C., & Botello-Zamarron, R. (2010). Minority Stress, Perceived Bicultural Competence, and Depressive Symptoms among Ethnic Minority College Students. Journal of Counseling Psychology, 57(4), 411–422.

White Student Yelling Racial Slurs Attacks Black Student Worker at the University of Kentucky. (2022, November 13). The Journal of Blacks in Higher Education. https://www.jbhe.com/2022/11/white-student-yelling-racial-slurs-attacks-black-student-worker-at-the-university-of-kentucky/

Yeung, F. P., & Johnston, M. P. (2014). Investigating the Role of a Racially Biased Incident on Changes in Culture and Climate Indicators across Targeted and Non-Targeted Groups. Journal of Diversity in Higher Education, 7(4), 252–264.

Yi, J., Todd, N. R., & Mekawi, Y. (2020). Racial Colorblindness and Confidence in and Likelihood of Action to Address Prejudice. American Journal of Community Psychology, 65(3–4), 407–422. https://doi.org/10.1002/ajcp.12409

Appendix A

Color-Blind Racial Attitudes Scale

COLOR-BLIND RACIAL ATTITUDES SCALE SCORING INFORMATION

Neville, H. A., Lilly, R. L, Duran, G., Lee, R. M., Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitudes Scale (CoBRAS). *Journal of Counseling Psychology, 47,* 59-70.

The items highlighted in yellow are the items included in the CoBRAS-14

Directions. Below is a set of questions that deal with social issues in the United States (U.S.). Using the 6-point scale, please give your honest rating about the degree to which you personally agree or disagree with each statement. Please be as open and honest as you can; there are no right or wrong answers. Record your response to the left of each item.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

1. ____ Everyone who works hard, no matter what race they are, has an equal chance to become rich.

2. ____ **Race plays a major role in the type of social services (such as type of health care or day care) that people receive in the U.S.**

3. ____ It is important that people begin to think of themselves as American and not African American, Mexican American or Italian American.

4. ____ **Due to racial discrimination, programs such as affirmative action are necessary to help create equality.**

5. ____ **Racism is a major problem in the U.S.**

6. ____ **Race is very important in determining who is successful and who is not.**

7. ____ Racism may have been a problem in the past, but it is not an important problem today. (4)

8. ____ **Racial and ethnic minorities do not have the same opportunities as White people in the U.S. (5)**

9. ____ White people in the U.S. are discriminated against because of the color their skin. (6)

10. ____ Talking about racial issues causes unnecessary tension.

11. ____ **It is important for political leaders to talk about racism to help work through or solve society's problems.**

12. ____ **White people in the U.S. have certain advantages because of the color of their skin. (7)**

13. ____ Immigrants should try to fit into the culture and adopt the values of the U.S. (8)

14. ____ English should be the only official language in the U.S.

15. ____ **White people are more to blame for racial discrimination in the U.S. than racial and ethnic minorities. (9)**

16. ____ Social policies, such as affirmative action, discriminate unfairly against White people. (10)

17. ____ **It is important for public schools to teach about the history and contributions of racial and ethnic minorities. (11)**

18. ____ Racial and ethnic minorities in the U.S. have certain advantages because of the color of their skin. (12)

19. ____ Racial problems in the U.S. are rare, isolated situations. (13)

20. ____ **Race plays an important role in who gets sent to prison. (14)**

The following items (which are bolded above) are reversed score (such that 6 = 1, 5 = 2, 4 = 3, 3 = 4, 2 = 5, 1 = 6): item #2, 4, 5, 6, 8, 11, 12, 15, 17, 20. Higher scores should greater levels of "blindness", denial, or unawareness.

Factor 1: Unawareness of Racial Privilege consists of the following 7 items: 1, **2**, **6**, **8**, **12**, **15**, **20**

Factor 2: Unawareness of Institutional Discrimination consists of the following 7 items: 3, **4**, 9, 13, 14, 16, 18

Factor 3: Unawareness to Blatant Racial Issues consists of the following 6 items: **5**, 7, 10, **11**, **17**, 19

Results from Neville et al. (2000) suggest that higher scores on each of the CoBRAS factors and the total score are related to greater: (a) global belief in a just world; (b) sociopolitical dimensions of a belief in a just world, (c) racial and gender intolerance, and (d) racial prejudice. For information on the scale, please contact Helen Neville (hneville@uiuc.edu).

Appendix B

Permission to Utilize Color-Blind Racial Attitudes Scale

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

Permission to Utilize Color-Blind Racial Attitudes Scale

Neville, Helen A <hneville@illinois.edu> Thu, Dec 30, 2021 at 9:42 PM
To: Ross Novak <rnovak@maryu.marywood.edu>, "hneville@uiuc.edu" <hneville@uiuc.edu>

Yikes. I am just not seeing this. Feel free to use the CoBRAS. See attached.

ILLINOIS

Helen A. Neville, PhD | Professor | Educational Psychology and African American Studies | Past-President Society for the Psychological Study of Culture, Ethnicity and Race (APA, Division 45), 2019 |
Liberation Lab
https://liberationlab.education.illinois.edu/about

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Wednesday, November 10, 2021 7:10 PM
To: hneville@uiuc.edu <hneville@uiuc.edu>; Neville, Helen A <hneville@illinois.edu>
Subject: Permission to Utilize Color-Blind Racial Attitudes Scale

Dr. Neville:

Good evening. I hope that this email finds you well. My name is Ross Novak and I am a PhD student at Marywood University, located in Scranton, PA.

I am in the process of planning my dissertation proposal and hope to utilize the Color-Blind Racial Attitudes Scale (CoBRAS) as a research instrument. The purpose of my study will be to test intergroup contact theory; that contact between in-group members, in this case White students attending college at Predominately White institutions (PWIs), and out-group members, students of color at PWIs, can influence in-group member racial attitudes.

The question guiding my research will be: What are the differences in racial attitudes in White, traditional age, 18-to-22 year old, undergraduate college students in northeastern Pennsylvania based on level of exposure to students of color - exposure to students of color in leadership roles (Resident Advisors, organization Presidents, Orientation Advisors, team Captains), informal interactional exposure to students of color (roommates, teammates, organization members, friends, or romantic partners), exposure to students of color in both leadership roles and informal interactional exposure, structural exposure to students of color (impersonal interactions with limited or no interpersonal contact - i.e. living in the same residence hall or sharing space within a classroom setting), or no exposure to students of color. I hope to also examine how White students' perception of the exposures, as positive, neutral, or negative, might impact White students racial attitudes.

I would be happy to provide whatever additional information may be necessary for this request to be considered. I may be reached at this email address, rnovak@marywood.edu, or by telephone at (570) 499-9056. Thank you in advance for your time and consideration.

Sincerely,
Ross Novak
rnovak@marywood.edu

CoBRAS-Short and Long Forms.doc
31K

Appendix C

Researcher-Created Instrument

Consent & Screen

Exempt Informed Consent Form

Title: *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*

Principal Investigator (PI): Ross Novak, Student at Marywood University
Principal Investigator Contact Information: (570) 348-6246 rnovak@marywood.edu
Research Advisor: Dr. Amy Paciej-Woodruff
Research Advisor Contact Information: (570) 348-6289 apaciej@marywood.edu

Invitation for a Research Study

You are invited to participate in a research study about the impact of intergroup contact on the racial attitudes of White university students at predominately White institutions. You were chosen because you are a currently enrolled college student in Northeastern Pennsylvania. Please read this form. Ask any questions you may have before agreeing to take part in this study.

Additional participant inclusion criteria:

- Undergraduate student
- Racially identifies as White
- Between the ages of 18 and 22

Purpose – About the Study

The purpose of this study is to determine if intergroup contact can influence racial attitudes of White university students at predominately White institutions.

Procedures - What You Will Do

You will be asked to complete one survey. The survey will ask your feelings about social issues in the United States as well as demographic information and your racial perceptions of and relationships with others. The survey should take approximately 25-30 minutes to complete. You are asked to complete the survey only once.

Risks and Benefits

The risks are no greater than the risks in daily life or activities.

A risk may be that participation could cause mental or emotional distress; in this case you are encouraged to contact Marywood University's Counseling & Student Development Center at (570) 348-6245, or by visiting 1017 McGowan Building.

A benefit may be that it may help student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

Payment or Other Rewards

You will not receive a payment or reward.

Confidentiality

The records of this study will be kept private. Information used in any written or presented report will not make it possible to identify you. Only the investigator and research advisor will have access to the research records. Minimal data points will be collected. No IP Addresses, location data, or contact information will be recorded. Records will be kept on a password protected computer. Records will be kept for two years. Then they will destroyed by deleting the electronic record on which it is stored. No web-based action is perfectly secure. However, reasonable efforts will be made to protect your transmission from third-party access.

Taking Part is Voluntary

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Marywood University. You may withdraw at any time prior to submission. There will be no penalty. To withdraw, simply close your web browser prior to submitting your response to the final question. Your information will be collected and your responses included in results data if submitted.

Contacts and Questions

If you have questions about this study at any time, contact the principal investigator or the advisor. Their contact information appears at the top of this page.

If you have questions related to the rights of research participants or research-related injuries (where applicable), please contact the Institutional Review Board at (570) 961-4782 or irbhelp@marywood.edu.

You may print a copy of this form to keep for your records.

Statement of Consent

By proceeding:

- You understand what the study involves.
- You have asked questions if you had them.
- You agree to participate in the study.

To determine eligibility and participate in this study, please click the arrow button below.

Gender & Screen

Please indicate the gender with which you identify:

- ○ Female (Cisgender or Transgender)
- ○ Male (Cisgender or Transgender)
- ○ Non-binary / third gender
- ○ Prefer not to say

Your Age:

- ○ Under 18
- ○ Between the ages of 18 and 22
- ○ Over 22

Are you a full- or part-time undergraduate student?

- ○ Yes
- ○ No

With which race/ethnicity do you identify?

- ○ American Indian or Alaska Native
- ○ Asian
- ○ Black or African American
- ○ Hawaiian or Pacific Islander
- ○ Latinx or Hispanic
- ○ Middle Eastern or North African
- ○ White
- ○ Two or more races

Color-Blind Racial Attitude Scale (CoBRAS)

Below is a set of questions that deal with social issues in the United States (U.S.). Using the 6-point scale, please give your honest rating about the degree to which you personally agree or disagree with each statement. Please be as open and honest as you can; there are no right or wrong answers.

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Everyone who works hard, no matter what race they are, has an equal chance to become rich.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Race plays a major role in the type of social services (such as type of health care or day care) that people receive in the U.S.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
It is important that people begin to think of themselves as American and not African American, Mexican American or Italian American.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Due to racial discrimination, programs such as affirmative action are necessary to help create equality.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Racism is a major problem in the U.S.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Race is very important in determining who is successful and who is not.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Racism may have been a problem in the past, but it is not an important problem today.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Racial and ethnic minorities do not have the same opportunities as White people in the U.S.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
White people in the U.S. are discriminated against because of the color of their skin.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Talking about racial issues causes unnecessary tension.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
It is important for political leaders to talk about racism to help work through or solve society's problems.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
White people in the U.S. have certain advantages because of the color of their skin.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Immigrants should try to fit into the culture and adopt the values of the U.S.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
English should be the only official language in the U.S.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
White people are more to blame for racial discrimination in the U.S. than racial and ethnic minorities.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Social policies, such as affirmative action, discriminate unfairly against White people.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
It is important for public schools to teach about the history and contributions of racial and ethnic minorities.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Racial and ethnic minorities in the U.S. have certain advantages because of the color of their skin.	○	○	○	○	○	○

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Racial problems in the U.S. are rare, isolated situations.	○	○	○	○	○	○

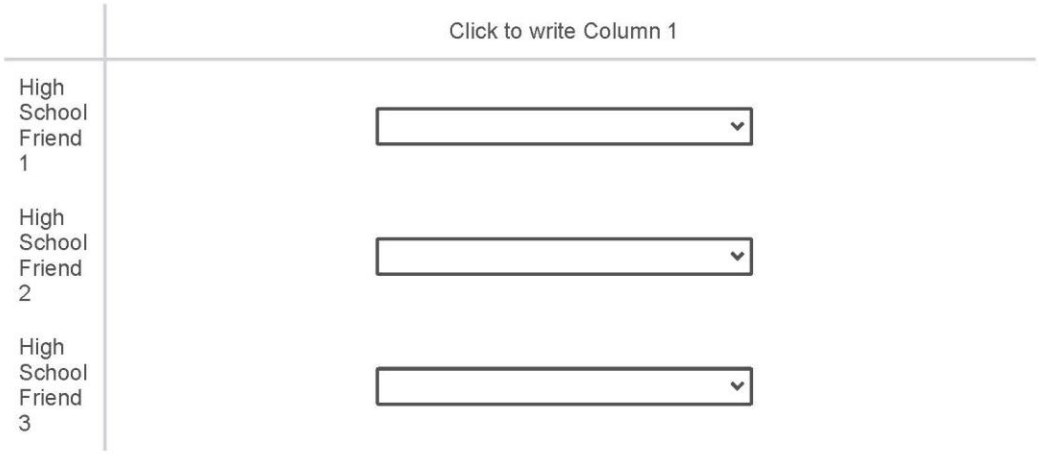
	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
Race plays an important role in who gets sent to prison.	○	○	○	○	○	○

Pre-College Characteristics

Would you consider the student body of the high school you graduated from to be predominately, more than 50%, White?

○ Yes
○ No

Think of your closest high school friend(s). Once you have identified your closest high school friend(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your friend(s) race/ethnicity. You may enter this information for up to three close high school friends.



As a High School student did you take classes focused on diversity, multiculturalism, and/or social justice?

- Yes
- No

As a High School student were you involved in school-related programming focused on diversity, multiculturalism, and/or social justice?

- Yes
- No

College Classroom & Friendship

As a college student have you taken classes focused on diversity, multiculturalism, and/or social justice?

- Yes
- No

As a college student have you been involved in school-related programming focused on diversity, multiculturalism, and/or social justice?

- ○ Yes
- ○ No

Think of your closest college friend(s). Once you have identified your closest college friend(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your friend(s) race/ethnicity. You may enter this information for up to three close college friends.

	Click to write Column 1
College Friend 1	
College Friend 2	
College Friend 3	

Athletics

Are you involved in college athletics?

- ○ Yes
- ○ No

Think about your teammates. In column one, select each of the race/ethnicity categories that you believe are represented in your team. In column two, use the drop-down menu to indicate whether you consider your relationship with your teammates of each identified racial/ethnic category as positive, neutral, or negative.

	Race/ethnicities represented on team: Column 1	Teammate Relationship Rating:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	
Middle Eastern or North African	☐	
White	☐	
Two or more races	☐	

Think of your team captain(s). Once you have identified your team captain(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize your team captain(s) race/ethnicity. In column two, use the drop-down menu to rate your relationship with each team captain as either positive, neutral, or negative. You may enter this information for up to three team captains.

	Race/Ethnicity of Team Captain:	Team Captain Relationship:
Team Captain 1		
Team Captain 2		

	Race/Ethnicity of Team Captain:	Team Captain Relationship:
Team Captain 3		

Student Organizations

Are you a member of a student club or organization?

- Yes
- No

Think about the members of the organization in which you are most active. In column one, select each of the racial/ethnic categories that you believe are represented in the membership of this organization. In column two, use the drop-down menu to rate your general relationships with organization members of each identified racial/ethnic category as positive, neutral, or negative.

	Race/ethnicities represented in organization: Column 1	Member Relationship Rating:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	

	Race/ethnicities represented in organization: Column 1	Member Relationship Rating:
Middle Eastern or North African	☐	
White	☐	
Two or more races	☐	

Think of your organizations top officers, such as the President and Vice President(s). Use the drop down menu in column one to select the race/ethnicity category which best describe how you would characterize each of your organizations top officers. In column two, use the drop-down menu to rate your relationship with each officer as either positive, neutral, or negative. You may enter this information for up to three organization officers.

	Officer Race/Ethnicity:	Officer Relationship:
Organization Officer 1		
Organization Officer 2		
Organization Officer 3		

Housing

Do you have one or more roommates?

- ○ Yes
- ○ No

Think of your roommate(s). Once you have identified your roommate(s), in column one, select each of the racial/ethnic categories that you believe best describes your

roommate(s). In column two, use the drop-down menu to rate your relationship with the roommate(s) of each identified racial/ethnic category as positive, neutral, or negative.

	Roommates race/ethnicities: Column 1	Roommate Relationship Rating:
American Indian or Alaska Native	☐	▾
Asian	☐	▾
Black or African American	☐	▾
Hawaiian or Pacific Islander	☐	▾
Latinx or Hispanic	☐	▾
Middle Eastern or North African	☐	▾
White	☐	▾
Two or more races	☐	▾

Do you live in on-campus housing?

- ○ Yes
- ○ No

Think of your current Resident Advisor/Resident Assistant (RA). Once you have identified your current RA please use the drop down menu in column one and select the race/ethnicity category which best describes how you would characterize your RAs

race/ethnicity. In column two, use the drop-down menu to rate your relationship with your RA as either positive, neutral, or negative.

	RA Race/Ethnicity:	RA Relationship:
Your current RA		

Reflect on your residence hall. Think about the individuals that live in your residence hall. In column one, select each of the racial/ethnic groups that you believe is represented within your residence hall. In column two, use the drop-down menu to indicate whether you consider your general relationships with building residents within each represented race/ethnicity category to be positive, neutral, or negative.

	Race/Ethnicities represented in Residence Hall: Column 1	Your General Relationship with Residents in this Race/Ethnicity Category:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	
Middle Eastern or North African	☐	
White	☐	

	Race/Ethnicities represented in Residence Hall: Column 1	Your General Relationship with Residents in this Race/Ethnicity Category:
Two or more races	☐	

New Student Orientation

Did you attend your college/university New Student Orientation?

- ○ Yes
- ○ No

Think back to your New Student Orientation Advisor/student leader(s). Once you have identified your New Student Orientation (NSO) Advisor/student leader(s), please use the drop down menu and select the race/ethnicity category which best describes how you would characterize each of your NSO Advisor/student leader(s) race/ethnicities. In column two, use the drop-down menu to rate your relationship with each identified NSO Advisor/student leader(s) as either positive, neutral, or negative. You may enter this information for up to three NSO Advisor/student leader(s).

	Race/Ethnicity of NSO Advisor:	NSO Advisor relationship:
NSO Advisor/student leader(s) 1		
NSO Advisor/student leader(s) 2		
NSO Advisor/student leader(s) 3		

Dating

Have you been involved in a dating relationship in your time at college?

- ○ Yes
- ○ No

Think of the individual(s) involved in your most recent dating relationship, other than yourself. In column one, select each of the racial/ethnic categories that you believe best represents the race/ethnicity category of your dating partner(s). In column two, use the drop-down menu to indicate whether you consider your relationship with the individual(s) within each represented race/ethnicity category to be positive, neutral, or negative.

	Dating Race/Ethnicity: Column 1	Relationship Quality:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	
Middle Eastern or North African	☐	
White	☐	
Two or more races	☐	

Structural

Reflect on your current classes. Think about your classmates. In column one, select each of the racial/ethnic groups that you believe is represented within your classes. In column two, use the drop-down menu to indicate whether you consider your general relationship with classmates within each represented race/ethnicity category to be positive, neutral, or negative.

	Race/Ethnicities represented in classes: Column 1	Your General Relationship with Classmates in this Race/Ethnicity Category:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	
Middle Eastern or North African	☐	
White	☐	
Two or more races	☐	

FINAL QUESTION Consider your use of campus facilities such as the dining hall (or other campus dining options), the gym, the library, or computer labs. In column one, select each of the racial/ethnic groups that you believe you generally encounter when on campus. In

column two, use the drop-down menu to indicate whether you consider your general relationship with individuals you encounter within each represented race/ethnicity category to be positive, neutral, or negative.

	Race/Ethnicities represented in campus facilities: Column 1	Your General Relationship with Individuals Encountered in this Race/Ethnicity Category:
American Indian or Alaska Native	☐	
Asian	☐	
Black or African American	☐	
Hawaiian or Pacific Islander	☐	
Latinx or Hispanic	☐	
Middle Eastern or North African	☐	
White	☐	
Two or more races	☐	

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Appendix D

Professional Review Form – Signed by Dr. Brian Monahan

Marywood University – Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

PROFESSIONAL REVIEW FORM

INSTRUCTIONS: Complete this form when you have created or adapted a questionnaire, interview questions or other instrumentation, or when planning to use standardized instruments which lack established validity or reliability. The reviewing professional must hold a Master's degree or higher in a related discipline, and have no role within your study (e.g. professor who does not serve as advisor or on your thesis/dissertation committee; professional working in field). **Submit the completed and hand-signed form at www.irbnet.org with your submission package.**

Principal Investigator	*Ross Novak*
Co-Investigator(s)	Click here to enter name(s) or N/A.
Title of Study	*Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*

Professional's Name & Degrees	Dr. Brian Monahan, Ph.D., Sociology
Professional's Work Title	Professor
Professional's Telephone	(440) 826-2146
Professional's Email	bmonahan@bw.edu

List of Documents Reviewed	1.) Researcher self-created survey 2.) Adapted Color-Blind Racial Attitudes Scale (incorporated into researcher-created survey)

I certify that I have reviewed the self-created, adapted or non-validated and reliable research questionnaire, interview questions or other instrumentation that will be utilized in this study. I attest that it/they are appropriate for the nature of the proposed research and fully endorse utilization within this study.

Brian Monahan
Hand Signature of Professional

Appendix E

ERC/IRB Authorization Materials and Communication from Participating Institutions

Marywood University ERC Application

Marywood University - Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

EXEMPTION REQUEST APPLICATION

INSTRUCTIONS: **Complete this form and submit it with supporting documents at www.irbnet.org.** Before review may begin, your submission must be complete and contain all required e-signatures. Students and unaffiliated investigators must identify a Marywood research advisor, who must e-sign the submission.

DO NOT COVERT THIS OR ANY OTHER DOCUMENTS TO .PDF FORMAT.

TITLE OF STUDY	**Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania**

PRINCIPAL INVESTIGATOR (PI)

Name	Ross Novak
Telephone	(570) 499-9056
Email	rnovak@marywood.edu
Department	Click or tap here to enter text.
Personal Mailing Address	1210 Richmont Street Scranton, PA 18509

University Status

Select all that apply. If you are a student or unaffiliated investigator, identify a MU research advisor in the next section.

- ☐ Faculty (FT)
- ☐ Faculty (PT/Adjunct)
- ☐ Staff/Admin (FT)
- ☐ Staff/Admin (PT)
- ☐ Graduate Student
- ☐ Undergraduate Student
- ☒ Doctoral Student (Ph.D.)
- ☐ Doctoral Student (Psy.D.)
- ☐ Unaffiliated

☒ **HUMAN RESEARCH TRAINING (CITI):** Check if you have taken the course and downloaded your completion **REPORT** (with modules and grades) from CITI. Add your report into your IRBNet user profile (one time) or into your submission (with each new study). The Human Research course is required. The Responsible Conduct of Research course is only required for specific Federal funding. Additional courses may be required for certain activities. See Mandatory Training policy.

MU RESEARCH ADVISOR – For student or unaffiliated investigators

Name	Dr. Amy Paciej-Woodruff	**Business Address**	Marywood University 2300 Adams Ave. Scranton, PA 18509
Telephone	(570) 348-6289		
Email	apaciej@marywood.edu	**University Status**	☒ Faculty (FT) ☐ Faculty (PT/Adjunct) ☐ Staff/Admin (FT) ☐ Staff/Admin (PT)
Department	Education		

☒ **HUMAN RESEARCH TRAINING (CITI):** Check if your advisor has added a completion **REPORT** (with modules and grades) to his/her IRBNet user profile. Requirements are the same as for investigators. See Mandatory Training policy.

CO-INVESTIGATORS or RESEARCH PERSONNEL – Insert rows if necessary.

Name	Organization and Department	University Status	Project Role Provide a description of their activities later in application.	Completed Required Training?
Click or tap here to enter text.	Click or tap here to enter text.	Choose an item.	Choose an item.	☐
Click or tap here to enter text.	Click or tap here to enter text.	Choose an item.	Choose an item.	☐
Click or tap here to enter text.	Click or tap here to enter text.	Choose an item.	Choose an item.	☐

Thesis or Dissertation Committee Members (Other than Advisor): Names are requested in case they also serve on the IRB, so that we do not assign it for their review. CITI training is not required unless they are engaged in research activities (recruiting, obtaining consent, collecting data, analyzing identifiable data, etc.).	Dr. Yerodin Lucas	☐
	Dr. Tiffany Mulally	☐

EXEMPTION CATEGORIES			
Based on activities, select **all** categories involved. Since this list is condensed, review our Exemption Policy. While there are eight exemptions, categories 5 and 6 are uncommon. Categories 7 and 8 concerning broad consent are not shown because they are not being implemented at this time.			
Category 1 ☐	Research conducted in established or commonly accepted educational settings that **specifically involves normal educational practices** that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.		
Category 2 ☒	**Interactions involving educational tests** (cognitive, diagnostic, aptitude, achievement), **surveys, interviews or observation of public behavior** (including visual or auditory recording), if **(i)** recorded by the investigator in such a manner that the identity of the subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; **OR (ii)** any disclosure of responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.		
Category 3 ☐	**Benign behavioral interventions** in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection, and if **(i)** recorded by the investigator in such a manner that the identity of the subjects cannot readily be ascertained, directly or through identifiers linked to the subjects, **OR (ii)** any disclosure of their responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.		
Category 4 ☐	**Secondary research (existing data) for which consent is not required** (i.e. no other laws require permission/consent) and which uses identifiable private information or identifiable biospecimens, but which: is recorded by the investigator in such a manner that subjects' identities cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects; OR which is conducted by, or on behalf of, a Federal dept. or agency using government-generated or collected information obtained for non-research activities, with additional, specific stipulations (review Exemption Policy)		
Category 5 ☐	Research and demonstration projects Federally-conducted or supported and designed to examine public benefit or service programs	**Category 6** ☐	Taste and food quality evaluation and consumer acceptance studies

SCREENING QUESTIONS			
Will you include…?	**YES**	**NO**	**N/A**
A. Activities which pose more than minimal risk, where the anticipated probability and magnitude of harm or discomfort to subjects is greater than the risks ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests?	☐	☒	---
B. Prisoners or those involuntarily confined or detained in an institution?	☐	☒	---
C. Children – those under the age of majority in the activity's jurisdiction, usually under age 18 (19 in NE and AL or 21 in MS)?	☐	☒	---
IF YES, will you employ surveys, interviews, observations where you participate in the observation or behavioral interventions (if no, exemption might be possible in certain circumstances)?	☐	☐	☒
D. Anyone located in the European Economic Area at the time of the research, along with your recording information in a manner considered identifiable under the GDPR's parameters?	☐	☒	---

	YES	NO	N/A
E. Deception or withholding or any study details from subjects to eliminate bias in the results? NOTE: Exemption allowed for Cat. 3, benign behavioral intervention with adults, but only w/ prospective agreement to the deception or withholding and debriefing afterward.	☐	☒	---
F. Drugs, supplements, ingested items or foods, investigational devices, or biologics?	☐	☒	---
G. Collection of biological specimens (e.g., tissue, blood, plasma, urine, saliva, etc.)?	☐	☒	---
H. Physical activities (exercise, muscular strength testing, etc.) or any procedures routinely employed in clinical practice (e.g. sensory testing, activity trackers, heart rate monitors, EEG, ultrasound, body composition, etc.)?	☐	☒	---
I. **FOR CATEGORY 2 or CATEGORY 3 activities** in which you are also able to readily ascertain identities (directly or indirectly), will any disclosure of subjects' responses outside of the research reasonably place them at risk of criminal or civil liability, or be damaging to their financial standing, employability, educational advancement, or reputation?	☐	☒	☐
J. **FOR CATEGORY 4 activities (secondary research / existing information or records):**			
a. Will you record information in such a way that subjects will be directly (e.g., names, SSN, addresses, etc.) **OR** indirectly (e.g. key, client #, demographics, etc.) identifiable?	☐	☐	☒
b. Will any student records be included? NOTE: Exemption prohibited when FERPA requires written permission (consent) for release.	☐	☐	☒
c. Are records health-related and held by a covered entity? If collecting any of 18 identifiers, it might not be exempt if subject authorization is required. NOTE: See HIPAA.	☐	☐	☒

STOP **If you have checked YES to any of the above questions, STOP HERE. Your project most likely does not qualify for exemption. Instead, apply to the IRB using an IRB application.**

FUNDING AND CONFLICTS OF INTEREST

A. Will your study receive funding? ☐ Yes ☒ No (Skip to letter F.)	**B.** If Yes, **indicate type:** ☐ External – Federal ☐ External – Private Grant ☐ Other ☐ External – State ☐ Internal – Student/Faculty Award		
C. Funder Name	Click or tap here to enter text.	**D. Award Name**	Click or tap here to enter text.
E. Who or what organization will take responsibility for the project's fiscal matters?	Click or tap here to enter text.		
F. Do you or any co-investigators, research assistants or advisors have a conflict of interest (e.g. personal considerations which may or appear to compromise your professional judgment, financial stake in the research, etc.)?	☐ Yes ☒ No		

1. PURPOSE and LITERATURE REVIEW

In this section:

A. Clearly state your study's purpose.
B. Clearly describe your overall research question(s) or hypothesis.
C. Clearly describe the results of your review of existing literature. Include in-text citations when you reference, summarize, paraphrase, or quote from another source, e.g. (Smith & Jones, 2012) or "Smith & Jones (2012) found xxx."
D. Provide a complete reference list for any works cited for C.

A. Purpose:

The purpose of this quantitative study is to test the intergroup contact theory that contact between in-group members, White students attending college at Predominately White Institutions (PWIs), and outgroup members, students of color (SOC), at PWIs, can influence in-group member racial attitudes.

B. Research Question/Hypothesis:

The following question guides this research: What are the differences in racial attitudes in White, traditional age, 18 to 22 -year -old, full- or part –time, undergraduate college students in northeastern Pennsylvania based on level of exposure to students of color – exposure to SOC in leadership positions, informal interactional exposure to SOC, exposure to SOC in leadership positions as well as informal interactional exposure, structural exposure to SOC, or no exposure to SOC - when controlling for pre-college characteristics and college classroom diversity exposure?

$H1_0$: There will be no differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or have both exposure to SOC in leadership positions as well as informal interactional exposure to SOC, or structural exposure to SOC, or no exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure.

$H1_a$: There will be differences in racial attitudes in White college students in northeastern Pennsylvania who are exposed to SOC in leadership positions, or who have informal interactional exposure to SOC, or have both exposure to SOC in leadership positions as well as informal interactional exposure to SOC, or structural exposure to SOC, or no exposure to SOC when controlling for pre-college characteristics and college classroom diversity exposure.

C. Literature Review:

Higher education often equates student success in terms of retention, persistence to graduation, and grade point average. Although these may appear to be objective standards, studies have found that differences exist by race. Six year completion data at public institutions reflects a 24.5 percentage point gap between overall completion rates of Black and White students and a 14.7 percentage point gap between Latinx and White students (Shapiro et al., 2019). Six year completion data at private non-profit institutions reflects a 25.9 percentage point gap between overall completion rates of Black and White students and a 9.8 percentage point gap between Latinx and White students (Shapiro et al., 2018). Student perceptions of the campus and classroom environments were significant factors explaining GPA gaps between races; reports of conflict, tension, or harassment on campus and perceptions of an unwelcoming or hostile classroom environment resulted in negative declines in GPA (Martin et al., 2017). White perceptions of racial inferiority contributed to dropout rates by making SOC feel they do not belong in PWIs where they experience institutional, implicit, and blatant acts of racism from both students and professors leading to disengagement, underperformance, and higher dropout rates among SOC (Banks & Dohy, 2019).

White students are less likely to notice race and instances of racism on campus, are hesitant to talk about race and racism, and more likely believed there to be minor, if any, campus racial climate issues. Strong feelings of acceptance led White students to project their own experience into other racial groups (Lowe et al., 2013). White students were found to have significantly higher levels of colorblindness and significantly lower levels of intergroup empathy, confidence in intergroup action, and the likelihood of self-directed and intergroup action to reduce prejudice than SOC. For White students, inaction to reduce prejudice serves to maintain group interests by maintaining dominant status (Yi et al., 2020). Involvement in cross-racial engagement and campus diversity experiences; experiencing a positive campus racial climate, a perception of cross-racial community, and multiethnic diversity through coursework and residential encounters; and cross-racial interactions during college were linked with a decrease in colorblind ideology six years after college graduation for White students from segregated pre-college environments (Jayakumar, 2015).

Whites, particularly White males, have been found to be more indifferent to the significance of racial inequality and more likely to perpetrate or dismiss racial microaggressions (Hughey et al., 2017). Those who see and experience microaggressions in their daily lives were more likely to show signs of adverse mental health such as depression, anxiety, negative affect, and lessened behavioral control (Nadal, Griffin, et al., 2014); experience low self-esteem (Nadal, Wong, et al., 2014); and traumatic stress symptoms (Nadal et al., 2019). Black, Asian, Latinx, and multiracial participants experienced a larger number of racial

microaggressions than Whites (Nadal, Griffin, et al., 2014). White attitudes toward acceptability of racial microaggressions has been positively linked with explicit prejudice and colorblindness and negatively linked with ethnocultural empathy (Mekawi & Todd, 2018).

Higher education institutions in the United States were created under White cultural norms, which have resulted in toxic campus climates for SOC. Often, underrepresentation at PWIs results in feelings of 'onlyness' and the burden of feeling that one must represent their race, whether through the need to be continuously exceptional or the expectation of others that SOC will act as spokespeople for their race (Harper, 2013). Unique forms of stress and different campus experiences influenced persistence decisions and feelings about the campus environment for SOC (Johnson et al., 2014). Students of color are 65 to 81 percent less likely than White students to report a positive view of the campus racial climate (Lowe et al., 2013). Subjection to incidents of discrimination and bias is strongly associated with how often students consider their race and influenced perceptions of campus racial climate (Hurtado et al., 2015). African American students perceived that stereotypes and attitudes surrounding Blackness caused fear in White students, which often resulted in negative and prejudiced behaviors enacted through microaggressions rather than overt acts of racism (Mwangi et al., 2018).

Campus structural diversity could interrupt White students' projection of their own experiences onto other racial groups by increasing the potential for interracial interaction. When such interracial interactions allow for self-disclosure and friendship potential, there is more significant potential for White students to understand that not all students experience the institution in the same way (Lowe et al., 2013). Cross-racial interaction was found to be positively associated with: ease of getting along with people from other races, belief that people from other races are hardworking, situational attributions for life outcomes of people of color, college satisfaction, self-reported growth, and post-college volunteering intentions. Weak social ties facilitate frequent exposure to new situations and information for White students and can lead to the most significant opportunity to reach desired educational outcomes. As a result, universities should promote continuous, casual, and meaningful cross-racial interaction (Bowman & Park, 2015).

Refrences

Banks, T., & Dohy, J. (2019). Mitigating Barriers to Persistence: A Review of Efforts to Improve Retention and Graduation Rates for Students of Color in Higher Education. *Higher Education Studies*, *9*(1), 118. https://doi.org/10.5539/hes.v9n1p118

Bowman, N. A., & Park, J. J. (2015). Not All Diversity Interactions are Created Equal: Cross-Racial Interaction, Close Interracial Friendship, and College Student Outcomes. *Research in Higher Education*, *56*(6), 601–621. https://doi.org/10.1007/s11162-015-9365-z

Harper, S. R. (2013). Am I My Brother's Teacher? Black Undergraduates, Racial Socialization, and Peer Pedagogies in Predominantly White Postsecondary Contexts. *Review of Research in Education*, *37*, 183–211.

Hughey, M. W., Rees, J., Goss, D. R., Rosino, M. L., & Lesser, E. (2017). Making Everyday Microaggressions: An Exploratory Experimental Vignette Study on the Presence and Power of Racial Microaggressions. *Sociological Inquiry*, *87*(2), 303–336. https://doi.org/10.1111/soin.12167

Hurtado, S., Alvarado, A. R., & Guillermo-Wann, C. (2015). Thinking About Race: The Salience of Racial Identity at Two- and Four-Year Colleges and the Climate for Diversity. *Journal of Higher Education*, *86*(1), 127–155.

Jayakumar, U. M. (2015). The Shaping of Postcollege Colorblind Orientation Among Whites: Residential Segregation and Campus Diversity Experiences. *Harvard Educational Review*, *85*(4), 609–645.

Johnson, D. R., Wasserman, T. H., Yildirim, N., & Yonai, B. A. (2014). Examining the Effects of Stress and Campus Climate on the Persistence of Students of Color and White Students: An Application of Bean and Eaton's Psychological Model of Retention. *Research in Higher Education*, *55*(1), 75–100. https://doi.org/10.1007/s11162-013-9304-9

Lowe, M. R., Byron, R. A., Ferry, G., & Garcia, M. (2013). Food for Thought: Frequent Interracial Dining Experiences as a Predictor of Students' Racial Climate Perceptions. *Journal of Higher Education*, *84*(4), 569–600.

Martin, N. D., Spenner, K. I., & Mustillo, S. A. (2017). A Test of Leading Explanations for the College Racial-Ethnic Achievement Gap: Evidence from a Longitudinal Case Study. *Research in Higher Education*, *58*(6), 617–645.

Mekawi, Y., & Todd, N. R. (2018). Okay to say?: Initial validation of the Acceptability of Racial Microaggressions Scale. *Cultural Diversity & Ethnic Minority Psychology*, *24*(3), 346–362. https://doi.org/10.1037/cdp0000201

Mwangi, C. A. G., Thelamour, B., Ezeofor, I., & Carpenter, A. (2018). "Black Elephant in the Room": Black Students Contextualizing Campus Racial Climate Within US Racial Climate. *Journal of College Student Development*, *59*(4), 456–474. https://doi.org/10.1353/csd.2018.0042

Nadal, K. L., Erazo, T., & King, R. (2019). Challenging Definitions of Psychological Trauma: Connecting Racial Microaggressions and Traumatic Stress. *Journal for Social Action in Counseling & Psychology*, *11*(2), 2–16. https://doi.org/10.33043/JSACP.11.2.2-16

Nadal, K. L., Griffin, K. E., Wong, Y., Hamit, S., & Rasmus, M. (2014). The Impact of Racial Microaggressions on Mental Health: Counseling Implications for Clients of Color. *Journal of Counseling & Development*, *92*(1), 57–66. https://doi.org/10.1002/j.1556-6676.2014.00130.x

Nadal, K. L., Wong, Y., Griffin, K. E., Davidoff, K., & Sriken, J. (2014). The Adverse Impact of Racial Microaggressions on College Students' Self-Esteem. *Journal of College Student Development*, *55*(5), 461–474. https://doi.org/10.1353/csd.2014.0051

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Bhimdiwala, A., & Wilson, S. (2019). *Completing College: A State-Level View of Student Completion Rates* (Signature Report No. 16a). National Student Clearinghouse Research Center. https://nscresearchcenter.org/wp-content/uploads/NSCSignatureReport16_StateSupp.pdf

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P. K., & Bhimdiwala, A. (2018). *Completeing College: A National View of Student Completion Rates—Fall 2012 Cohort* (Signature Report No. 16). National Student Clearinghouse Research Center. https://nscresearchcenter.org/wp-content/uploads/SignatureReport16.pdf

Yi, J., Todd, N. R., & Mekawi, Y. (2020). Racial Colorblindness and Confidence in and Likelihood of Action to Address Prejudice. *American Journal of Community Psychology*, *65*(3–4), 407–422. https://doi.org/10.1002/ajcp.12409

2. SECONDARY RESEARCH – Use of existing records or materials to be collected for non-research purposes (e.g., medical records) – SKIP if not applicable.

A. Record Holder Name Attach Permission Letter	Click or tap here to enter text.	**B. Approximate number of records or materials to be included**	Click or tap here to enter text.
C. Record Format	☐ Paper ☐ Electronic ☐ Biospecimen ☐ Audio/Visual ☐ Other		
D. Are the records or specimens publicly available, meaning that anyone can easily access them without special assistance, payment, passwords, etc.?			☐ Yes ☐ No
E. Will the record holder remove all identifiers before providing records or information to you or your research team, such that you can never re-identify them?			☐ Yes ☐ No
F. If E is No, will YOU (or a co-investigator or RA) have access to the identifiable records or specimens yourself, but record your data without any identifiers or codes that link back to or may be associated with specific individuals? NOTE: Secondary research cannot be exempt if directly or indirectly identifiable.			☐ Yes ☐ No ☐ N/A
G. Exact Location In hard copy files, in provider's computer database, on a website, etc. NOTE: If on a website, provide a URL to the site, and if available, an exact URL to the actual dataset	Click or tap here to enter text.		

H. Describe the records or materials in more detail, such as:

1. How you will decide which ones to include or exclude
2. What data points you or the record holder will extract. Attach a data collection sheet or spreadsheet.
3. A description of your relationship to those whose records you are accessing (e.g., case worker, teacher, etc.)

Click or tap here to enter text.

3. PARTICIPANTS (SUBJECTS) and RECRUITMENT – SKIP if no interaction, interventions or observation is involved.

A. Describe your participants' characteristics and inclusion or exclusion criteria. Include age range.
Undergraduate student, enrolled in an institution of higher education in Northeastern Pennsylvania, who identified racially as White, and is between the ages of 18 and 22.

B. What is your intended number of participants? Include both recruitment # and enrollment #.	Recruitment #: 1311 (number of White, non-Hispanic UG students) Intended #: 298

C. What entity is allowing recruitment? Attach Permission Letter	☒ MU ☐ Other	**Entity Name (if MU, name exact unit)** Interim Executive Director of Human Services

D. What is your role at the location? Employee	**If other, explain:** Click or tap here to enter text.

E. Describe your relationship to the population (e.g., case worker, teacher, etc.), if any. If a relationship exists, explain how you will reduce undue influence to participate.

In addition to being a Ph.D. student I also serve as the Dean of Students at Marywood University. To reduce undue influence I plan to recruit study participants only through emails sent through a third party to an undergraduate email list.

F. Who is recruiting?	☒ PI or Co-Investigator ☐ Research Assistant ☐ Other (May require training)
G. Recruitment Method(s) Attach Advertisements	☒ Email ☐ Postal Mail ☐ Social Media ☐ Snowball Sampling ☐ Other ☐ In Person ☐ Telephone ☐ SONA Advertisement ☐ Flyer Hanging

H. Provide recruitment detail. If using social media, explain where, settings, etc. For instance, on Facebook, are you purchasing an ad? Are you posting from your personal account or a "page" created just for the research? Are you posting a flyer or text? Are you posting to your own wall or to an existing group? Do you have permission to post according to the group's rules or from a group moderator? Will you disable or otherwise monitor comments?

I plan to recruit potential undergraduate student participants at Marywood University via three recruitment emails posted to the undergraduate email distribution list, with assistance from Academic Affairs Coordinator Adrienne Mullikin over a six week period.

I. How many times will you send emails, make phone calls, post to social media, etc.?	Three times

4. INFORMED CONSENT

An ERC informed consent form (formerly participant letter) is required of subjects or their legally authorized representatives (LAR) for most exempted studies. This is typical of interventions or interactions. Under exemption, subject signatures are NOT typically required to be collected on the form. Attach copies of all forms.

In Person or Postal Mail Presentation	☐	I will present subjects or their LARs with a hard copy informed consent form and have uploaded a copy with my submission.

Online Presentation	☒	I will present subjects or their LARs with an electronic copy of the informed consent form at the beginning of an online survey, or via other electronic means. I have uploaded a copy with my submission. NOTE: For online surveys (e.g., REDCap, SurveyMonkey), **please do not attach two versions** of the informed consent form. One, stand-alone, .doc formatted document is sufficient. Once approved, you will place it before the survey on the survey platform.
Telephone Presentation	☐	I will orally present informed consent to subjects or their LARs. I have uploaded a copy with my submission.
Informed Consent Not Required	☐	I am not seeking informed consent because I am conducting research with existing records or information (secondary research) and will not be collecting identifiers, creating codes, or making associations, and no additional consent requirements apply (e.g., FERPA, HIPAA, GDPR).

5. PROCEDURES

A. Method Type ☐ Qualitative ☒ Quantitative ☐ Mixed Methods (Both)

B. Check all data collection methods (not to be confused with recruitment procedure).

☐ Survey – In Person	☐ Interview – In Person	☐ Focus Group	☐ Other
☒ Survey – Survey Website	☐ Interview – Online (e.g. Skype)	☐ Observation of Behavior	Describe in Activity Detail.
☐ Survey – Postal Mail	☐ Interview - Telephone	☐ Psych Laboratory Procedure	

If using a web-based survey platform (REDCap, SONA, etc.), name it. If using SurveyMonkey, state whether it's your own or a professor's account. MU library's account may not be used.

Activity location and any other detail about procedures: Survey will be web based and hosted on Qualtrics. After reviewing informed consent, participants will have the option to press a start button to begin the survey. The initial four questions screen participants based on inclusion criteria. Those that do not meet the inclusion criteria skip to the end of the survey. Participants who meet inclusion criteria then respond to the 20 items in the Color-Blind Racial Attitude Scale (CoBRAS) and finally respond to the items in the Principal Investigators' self-created instrument. The survey ends upon participants survey submission.

C. Check the type of instruments or interventions you are using. Attach all instruments (no Internet links). Include any extra demographic questions, if applicable.

☒ **Self-Created:** Attach a professional review form signed by an individual with a Master's or higher in the field and who is not affiliated with your study

☐ **Standardized:** Provide reliability and validity information from scholarly literature and any intervention details (e.g., Psychology computer exams with photos)

The Color-Blind Racial Attitude Scale (CoBRAS) will be used to measure the dependent variable, the color-blind racial attitudes of White undergraduate students. It is a 20-item scale developed by Neville, Lilly, Duran, Lee, and Brown in 2000 to measure color-blind racial attitudes. Subjects are asked to rate each item on a 6-point scale ranging from 1, Strongly Disagree, to 6, Strongly Agree. The CoBRAS instrument measures three factors, Racial Privilege, Institutional Discrimination, and Blatant Racial Issues (Neville et al., 2000)

Cronbach's alpha coefficient = .86 for the CoBRAS total score
Content validity was established for the CoBRAS through expert feedback on content and clarity.

Concurrent validity was reported between scores on each factor and between total score and the scores of related measures of racial and social attitudes, the Global Belief in a Just World Scale and the Sociopolitical subscale of the Multidimensional Belief in a Just World Scale, which resulted in correlations ranging from .39 to .61. The CoBRAS instrument was also significantly correlated with the Quick Discrimination Index, with correlations ranging from -.25 to -.83

Self-Created Instrument - An instrument was developed by the Principal Investigator for use in this study. The purpose of the instrument is to assess the independent variable, White students level of exposure to SOC, and to calculate co-variables, pre-college characteristics and college classroom diversity exposure.

The first four items of the instrument ask participants gender and then, for screening purposes, age, undergraduate student status, and racial identity. The 20 items in the Color-Blind Racial Attitude Scale (CoBRAS), as described above, then follow.

Participants then identify pre-college characteristics through four questions about high school structural diversity, high school informal interactional exposure to peers of color, and high school classroom diversity exposure.

Participants then respond to two questions related to exposure to college classroom diversity.
The remainder of the instrument addresses participants' levels of informal exposure to students of color in five categories of informal interaction; SOC in leadership positions, informal interactions, both SOC in leadership positions and informal interactions, structural interactions, and no interaction. Participants are asked to identify the perceived race of SOC with whom they interact and evaluate their perception of the quality of the contact; positive, neutral, or negative.

A pilot study was conducted to assess the reliability and validity of the survey. Adjustments were made based on feedback related to question clarity, completion time, and ability to capture the intended data. After adjustments, the instrument was subjected to professional review by a credentialed professional.

D. State (1) how you will analyze data AND (2) who is performing analysis. Data will be analyzed using SPSS by the Principal Investigator Ross Novak. An analysis of covariance (ANCOVA) test will be utilized to answer the main research question. Descriptive statistics and frequencies will also be computed for each level of the independent variable exposure to SOC.

E. If offering an incentive or compensation, explain the method and rationale. If using gift cards, explain the type (VISA, Amazon, etc.) and whether or not you will mail a physical card or email a code.

Click or tap here to enter text.

F. State the approximate time commitment expected for participants. Completion of the survey should take no more then 25 to 30 minutes.

6. RISKS, BENEFITS, CONFIDENTIALITY & RETENTION

A. Identify potential benefits to your field of study. Benefits may include assisting student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

B. Only if they exist, identify potential benefits to participants (do not include incentives or compensation).
Click or tap here to enter text.

C. Identify risks (psychological, social, financial, legal or physical) or discomforts. State if no greater than minimal. If slightly more than minimal, state what actions you will take to reduce risks (e.g., referral to counseling resources).

The risks are no greater than the risks in daily life or activities.

A risk may be that participation could cause mental or emotional distress; in this case you are encouraged to contact Marywood University's Counseling & Student Development Center at (570) 348-6245, or by visiting 1017 McGowan Building.

D. Describe the measures you will take to protect participants' identities and responses, or data obtained from private records or specimens. Examples are disabling IP address collection on web-based survey platforms, collecting minimal data points (demographics) in a small and familiar population, or not collecting any identifiers.

No IP Addresses, location data, or contact information will be collected; only minimal data points will be collected.

E. Indicate when you anticipate that data collection and analysis will end.	May 7, 2022

F. Will you share your data with anyone other than your co-investigators, research assistants, or research advisor?	No, I will not share any research data. **With Whom?** Click or tap here to enter text.
G. How and where will you keep your records (e.g., locked file cabinet in home, password protected computer, password protected memory stick or folder, etc.)**?** Records will be kept electronically on a password protected computer.	
H. How long will you retain records after closure (e.g. one month, indefinitely)?	Two years
I. How will you destroy records?	☐ N/A – Keeping ☐ Paper Burning ☒ Electronic Deletion ☐ Paper Shredding ☐ Erasure of AV Recordings ☐ Other

☒ **By checking this box and e-signing my IRBNet submission package, I agree to all policies and procedures concerning human research and exemption, including:**

- Submitting a closure report form at the completion of my research
- Submitting a check-in form if my research is still active at its one-year approval anniversary
- Submitting any changes for review and approval before implementation (Revision Request)
- Reporting of deviations from what was proposed or reporting serious events or unanticipated problems

I will NOT begin any part of the proposed research until final approval is issued, with the exception of obtaining site permission (recruitment or data access permission letter from the location).

Marywood University Informed Consent

Exempt Informed Consent Form
Title: *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*

Principal Investigator (PI): Ross Novak, Student at Marywood University
Principal Investigator Contact Information: (570) 348-6246 rnovak@marywood.edu
Research Advisor: Dr. Amy Paciej-Woodruff
Research Advisor Contact Information: (570) 348-6289 apaciej@marywood.edu

Invitation for a Research Study

You are invited to participate in a research study about the impact of intergroup contact on the racial attitudes of White university students at predominately White institutions. You were chosen because you are a currently enrolled college student in Northeastern Pennsylvania. Please read this form. Ask any questions you may have before agreeing to take part in this study.

Additional participant inclusion criteria:

- Undergraduate student
- Racially identifies as White
- Between the ages of 18 and 22

Purpose – About the Study

The purpose of this study is to determine if intergroup contact can influence racial attitudes of White university students at predominately White institutions.

Procedures - What You Will Do

You will be asked to complete one survey. The survey will ask your feelings about social issues in the United States as well as demographic information and your racial perceptions of and relationships with others. The survey should take approximately 25-30 minutes to complete. You are asked to complete the survey only once.

Risks and Benefits

The risks are no greater than the risks in daily life or activities.

A risk may be that participation could cause mental or emotional distress; in this case you are encouraged to contact Marywood University's Counseling & Student Development Center at (570) 348-6245, or by visiting 1017 McGowan Building.

A benefit may be that it may help student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

Payment or Other Rewards

You will not receive a payment or reward.

Confidentiality

The records of this study will be kept private. Information used in any written or presented report will not make it possible to identify you. Only the investigator and research advisor will have

access to the research records. Minimal data points will be collected. No IP Addresses, location data, or contact information will be recorded. Records will be kept on a password protected computer. Records will be kept for two years. Then they will destroyed by deleting the electronic record on which it is stored. No web-based action is perfectly secure. However, reasonable efforts will be made to protect your transmission from third-party access.

Taking Part is Voluntary

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Marywood University. You may withdraw at any time prior to submission. There will be no penalty. To withdraw, simply close your web browser prior to submitting your response to the final question. Your information will be collected and your responses included in results data if submitted.

Contacts and Questions

If you have questions about this study at any time, contact the principal investigator or the advisor. Their contact information appears at the top of page one.

If you have questions related to the rights of research participants or research-related injuries (where applicable), please contact the Institutional Review Board at (570) 961-4782 or irbhelp@marywood.edu.

You may print a copy of this form to keep for your records.

Statement of Consent

By proceeding:

- You understand what the study involves.
- You have asked questions if you had them.
- You agree to participate in the study.

Marywood University IRBNet Approval Letter

MARYWOOD UNIVERSITY
EXEMPT REVIEW COMMITTEE
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509

DATE:	February 28, 2022
TO:	Ross Novak
FROM:	Marywood University Exempt Review Committee
STUDY TITLE:	[1878443-1] *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*
MU ERC #:	2022-E012
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	February 28, 2022
CHECK IN DUE DATE:	**February 28, 2023**
REVIEW TYPE:	EXEMPT REVIEW
EXEMPT CATEGORY:	45 CFR 46.104 (d)(2)(i)

Dear Mr. Novak:

Thank you for your submission of New Project materials to your Exemption Request for this research study. Marywood University's ERC has **APPROVED** your submission. The project meets federal exemption criteria and involves minimal risk to subjects participating in the research. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a complete description of the study and assurance of subject understanding.

We have applied the ERC's approval stamp to the following documents, which have been uploaded with this letter in IRBNet. The stamp must appear on versions shared with subjects wherever possible. If it is not feasible to use the stamped versions online (e.g. some email

systems or survey platforms), please ensure that the language in the transmitted versions is identical to the stamped versions.

1. Informed Consent Form
2. Email Recruitment Message

Please also note that:

- **CLOSURE REPORTING:** Upon completion of the research, you must file a closure report form via IRBNet.
- **CHECK IN REPORTING:** While there is no expiration date for exempted studies, the ERC maintains oversight of open projects. **If activities will continue beyond your approval's one-year anniversary of February 28, 2023, file a check in form by that date.**
- **RECORDS RETENTION:** While there is no minimum retention period for exempted studies, you must retain records for the length of time stated in your application and informed consent form.
- **DEVIATION, UNANTICIPATED PROBLEM OR SERIOUS ADVERSE EVENT REPORTING:** If any of these events occur, you must file the appropriate form immediately via IRBNet.
- **REVISION REQUESTS:** If you decide to make procedural or document changes to your approved project, you must file a revision request form for review and approval prior to implementation, except when necessary to eliminate apparent, immediate hazards to the subjects. In hazardous situations, you must file the form immediately afterward.

Forms for the reports mentioned above may be found on the ERC's website or in IRBNet's Forms library. The library appears after you begin a follow-up package within your existing project and then click the Designer button on the left menu, followed by the blue "Need forms" link on the main screen (opens library under Step 1).

If you have any questions, please contact the Research Office at 570-348-6211, x.2418 or irbhelp@marywood.edu. Please include your study title and IRBNet number in all correspondence with this office.

Thank you and good luck with your research!

Regards,
Exempt Review Committee

Marywood University Revision Request Form 6/9/2022

Marywood University - Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

REVISION REQUEST FORM

For Changes to Previously-Approved Research

INSTRUCTIONS: If you wish to revise your approved study, complete and submit this form in a follow-up package within your existing project at www.irbnet.org. There is no need to revise your original application form, since this form captures what is needed. Revisions include those to the purpose, subject pool, recruitment methods or advertisements, sites, the informed consent process or forms, data collection procedures or instrumentation, personnel, etc. The PI must e-sign in IRBNet before submitting.

Today's Date	6/9/2022	**Principal Investigator**	Ross Novak
Study Title	Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania		
IRBNet Number	1878443	While viewing a project at IRBNet, the number appears at the top of each page, in brackets, directly under the photo header and next to the title. Enter only the number before the dash, which is the project number (not package number after the dash).	

REVISION DETAIL	
1	**I am adding or removing a co-investigator, research assistant, or other individual who is engaged in research activities (e.g. interpreters, etc.).** If adding anyone, attach appropriate CITI Training Report(s) to your IRBNet package. ☒ **No** ☐ **Adding Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role. ☐ **Removing Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role.
2	**I am revising previously-approved documents (e.g. advertisement, informed consent form, survey or questions, etc.).** If yes, attach documents to your IRBNet package. Make sure past tracking has been accepted, and only current revisions are tracked. ☐ Yes ☒ No If yes, click here to describe exactly what documents you wish to revise.
3	**I am making some other type of revision.** ☒ Yes ☐ No I plan to recruit potential undergraduate student participants at Marywood University via previously approved recruitment emails posted to the undergraduate email distribution list, with assistance from Academic Affairs Coordinator Adrienne Mullikin. I plan to have the recruitment emails set three times during Summer Session I, 6/6/2-7/9/22 and three times during Summer Session II, 7/11/22-8/13/22.
4	**Will any of the above revisions affect the study's risk to benefit ratio?** ☐ Yes ☒ No If yes, click here to describe.

Marywood University ERC Approval Letter – Extended Recruitment

MARYWOOD UNIVERSITY
EXEMPT REVIEW COMMITTEE
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509

DATE:	June 10, 2022
TO:	Ross Novak
FROM:	Marywood University Exempt Review Committee
STUDY TITLE:	[1878443-4] *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*
MU ERC #:	2022-E012
SUBMISSION TYPE:	Revision #3
ACTION:	APPROVED
APPROVAL DATE:	June 10, 2022
CHECK IN DUE DATE:	**February 28, 2023**
REVIEW TYPE:	EXEMPT REVIEW
EXEMPT CATEGORY:	45 CFR 46.104 (d)(2)(i)

Dear Mr. Novak:

Thank you for your submission of Revision materials to your Exemption Request for this research study. Marywood University's ERC has **APPROVED** your submission, which includes additional recruitment via three email messages to be sent during Summer Session I (6/6/22-7/9/22) and three to be sent during Summer Session II (7/11/22-8/13/22). The project meets federal exemption criteria and involves minimal risk to subjects participating in the research. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a complete description of the study and assurance of subject understanding.

No new documents required the ERC's stamp as part of this approval. Note that you may access past stamped documents in IRBNet while viewing any package within your study (Reviews tab on left > under Board Documents > MU documents next to #1; Misericordia documents next to #2; Keystone documents next to #3).

Please also note that:

- **CLOSURE REPORTING:** Upon completion of the research, you must file a closure report form via IRBNet.
- **CHECK IN REPORTING:** While there is no expiration date for exempted studies, the ERC maintains oversight of open projects. **If activities will continue beyond your approval's one-year anniversary of February 28, 2023, file a check in form by that date.**
- **RECORDS RETENTION:** While there is no minimum retention period for exempted studies, you must retain records for the length of time stated in your application and informed consent form.
- **DEVIATION, UNANTICIPATED PROBLEM OR SERIOUS ADVERSE EVENT REPORTING:** If any of these events occur, you must file the appropriate form immediately via IRBNet.
- **REVISION REQUESTS:** If you decide to make procedural or document changes to your approved project, you must file a revision request form for review and approval prior to implementation, except when necessary to eliminate apparent, immediate hazards to the subjects. In hazardous situations, you must file the form immediately afterward.

Forms for the reports mentioned above may be found on the ERC's website or in IRBNet's Forms library. The library appears after you begin a follow-up package within your existing project and then click the Designer button on the left menu, followed by the blue "Need forms" link on the main screen (opens library under Step 1).

If you have any questions, please contact the Research Office at 570-348-6211, x.2418 or irbhelp@marywood.edu. Please include your study title and IRBNet number in all correspondence with this office.

Thank you and good luck with your research!

Regards,
Exempt Review Committee

Marywood University Revision Request Form 9/20/2022

Marywood University - Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

REVISION REQUEST FORM

For Changes to Previously-Approved Research

INSTRUCTIONS: If you wish to revise your approved study, complete and submit this form in a follow-up package within your existing project at www.irbnet.org. There is no need to revise your original application form, since this form captures what is needed. Revisions include those to the purpose, subject pool, recruitment methods or advertisements, sites, the informed consent process or forms, data collection procedures or instrumentation, personnel, etc. The PI must e-sign in IRBNet before submitting.

Today's Date	9/20/2022	**Principal Investigator**	Ross Novak
Study Title	Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania		
IRBNet Number	1878443	While viewing a project at IRBNet, the number appears at the top of each page, in brackets, directly under the photo header and next to the title. Enter only the number before the dash, which is the project number (not package number after the dash).	

REVISION DETAIL	
1	**I am adding or removing a co-investigator, research assistant, or other individual who is engaged in research activities (e.g. interpreters, etc.).** If adding anyone, attach appropriate CITI Training Report(s) to your IRBNet package. ☒ **No** ☐ **Adding Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role. ☐ **Removing Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role.
2	**I am revising previously-approved documents (e.g. advertisement, informed consent form, survey or questions, etc.).** If yes, attach documents to your IRBNet package. Make sure past tracking has been accepted, and only current revisions are tracked. ☐ Yes ☒ No If yes, click here to describe exactly what documents you wish to revise.
3	**I am making some other type of revision.** ☒ Yes ☐ No I plan to recruit potential undergraduate student participants at Marywood University via previously approved recruitment emails posted to the undergraduate email distribution list, with assistance from Academic Affairs Coordinator Adrienne Mullikin. I plan to have the recruitment emails set three times during the Fall 2022 semester.
4	**Will any of the above revisions affect the study's risk to benefit ratio?** ☐ Yes ☒ No If yes, click here to describe.

Marywood University Approval Letter for Extended Recruitment 9/22/2022

MARYWOOD UNIVERSITY
EXEMPT REVIEW COMMITTEE
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509

DATE:	September 22, 2022
TO:	Ross Novak
FROM:	Marywood University Exempt Review Committee
STUDY TITLE:	[1878443-5] *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*
MU ERC #:	2022-E012
SUBMISSION TYPE:	Revision #4
ACTION:	APPROVED
APPROVAL DATE:	September 22, 2022
CHECK IN DUE DATE:	**February 28, 2023**
REVIEW TYPE:	EXEMPT REVIEW
EXEMPT CATEGORY:	45 CFR 46.104 (d)(2)(i)

Dear Mr. Novak:

Thank you for your submission of Revision materials to your Exemption Request for this research study. Marywood University's ERC has **APPROVED** your submission, which includes additional recruitment via three email messages to be sent during Fall Semester of 2022. The project meets federal exemption criteria and involves minimal risk to subjects participating in the research. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a complete description of the study and assurance of subject understanding.

No new documents required the ERC's stamp as part of this approval. Note that you may access past stamped documents in IRBNet while viewing any package within your study (Reviews tab on

left > under Board Documents > MU documents next to #1; Misericordia documents next to #2; Keystone documents next to #3).

Please also note that:

- **CLOSURE REPORTING:** Upon completion of the research, you must file a closure report form via IRBNet.
- **CHECK IN REPORTING:** While there is no expiration date for exempted studies, the ERC maintains oversight of open projects. **If activities will continue beyond your approval's one-year anniversary of February 28, 2023, file a check in form by that date.**
- **RECORDS RETENTION:** While there is no minimum retention period for exempted studies, you must retain records for the length of time stated in your application and informed consent form.
- **DEVIATION, UNANTICIPATED PROBLEM OR SERIOUS ADVERSE EVENT REPORTING:** If any of these events occur, you must file the appropriate form immediately via IRBNet.
- **REVISION REQUESTS:** If you decide to make procedural or document changes to your approved project, you must file a revision request form for review and approval prior to implementation, except when necessary to eliminate apparent, immediate hazards to the subjects. In hazardous situations, you must file the form immediately afterward.

Forms for the reports mentioned above may be found on the ERC's website or in IRBNet's Forms library. The library appears after you begin a follow-up package within your existing project and then click the Designer button on the left menu, followed by the blue "Need forms" link on the main screen (opens library under Step 1).

If you have any questions, please contact the Research Office at 570-348-6211, x.2418 or irbhelp@marywood.edu. Please include your study title and IRBNet number in all correspondence with this office.

Thank you and good luck with your research!

Regards,
Exempt Review Committee

Marywood University Closure Report Form

Marywood University - Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

CLOSURE REPORT FORM

INSTRUCTIONS: Complete this form and submit it at www.irbnet.org if your study is closing. Do not submit writing assignments, theses or dissertation documents. The PI must e-sign in IRBNet before submitting. You are required to retain your records for as long as you have proposed after the official date of closure.

Today's Date	2/20/23	**Principal Investigator**	Ross Novak
Study Title	Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania		
IRBNet Number	1878443	While viewing a project at IRBNet, the number appears at the top of each page, in brackets, directly under the photo header and next to the title. Enter only the number before the dash, which is the project number (not package number after the dash).	

REASON FOR CLOSURE		
Important: Check only **ONE** box below. Insert information requested in orange. Do not list future dates.		
1	**Complete** ☐	The study was conducted and no activities remain (no advertising, enrollment, data collection, follow-up with subjects, or data analysis remains). **Enter completion date:** Click or tap here to enter date.
2	**Only De-Identified Analysis Remains** ☒	The only remaining activity is analysis, but the information or specimens do not contain any identifiers, whether direct or indirect (e.g. coded/linked), and identities may not be associated by the investigator with the information or specimens collected. If your activity was covered by HIPAA, note that there are 18 identifiers, so if any remain with analysis, closure cannot take place at this time. **A. Enter the DATE data collection ended:** November 15, 2022 **B. Explain HOW records were de-identified or if identifiers were never recorded.** Identifiers were never recorded
3	**Separation with Active Study** ☐	The Principal Investigator is separating from Marywood University and intends to continue the research under the auspices of another institution. No MU subjects, MU co-investigators, or MU research assistants will continue involvement after the separation. **Enter the New Institution's FWA #, from https://bit.ly/2Nx6cjc:** Click or tap here to enter FWA number.
4	**Never Conducted** ☐	The research was approved, but either never initiated or no one enrolled. **Skip the rest of the form.**
5	**Withdraw Before Approval** ☐	An application was submitted to a board, but is being abandoned while under review (no approval reached). **Skip the rest of the form.** **Explain the reason for withdrawing:** Click or tap here to enter text.
6	**Other** ☐	The research must be closed for some other reason not described above. **Explain the reason:** Click or tap here to enter text.

STUDY DETAILS			
1. **At your study's end, what was the number** of subjects who had participated via intervention, interaction, or observation (even if online), OR the number of individuals' existing records or specimens (secondary research) that you have accessed?	210		
2. How many subjects withdrew over the course of the study?	0		
3. Do you have signed copies of subjects', LARs' or parents' informed consent forms, or children's assent forms on file?	☐ Yes ☒ No – Study was exempt, so no signatures were required or collected ☐ No – Waiver of documentation was granted, waiving signature requirement ☐ No – Full waiver of consent was granted, waiving the entire consent process		
		YES	**NO**
4. Only if you checked reason 1, 3, 4, 5, or 6 on the first page of this form, are your study records directly identifiable, or are you able to associate identities with the information indirectly? Note that there are 18 identifiers if HIPAA applies. **If yes, describe how and where you will store your data.** Click or tap here to enter text.		☐	☐
5. Were all study procedures followed exactly as last approved? **If no, explain:** Click or tap here to enter text.		☒	☐
6. Have there been any adverse events or unanticipated problems that you have not previously reported, or have there been any concerns or complaints expressed by subjects? **If yes, explain:** Click or tap here to enter text.		☐	☒
7. Did the research result in any publications, or are any pending? **If yes, name them:** Click or tap here to enter text.		☐	☒
8. **Clinical Trial Requirement:** If you have conducted a Federally-funded clinical trial* **or** research involving an FDA-covered drug, supplement, biologic or device, have you registered study information and/or posted an IRB-approved informed consent form at clinicaltrials.gov? See information at 45 CFR 46.116(h), NIH or FDA. * Clinical trial means research in which one or more human subjects are assigned to one or more interventions (incl. placebo or other control) to evaluate the effects of the interventions on biomedical or behavioral health-related outcomes.		☒ Not Applicable ☐ Yes ☐ No	

STUDY RESULTS

Provide a summary of your study's purpose and results. Skip if you chose reason 4 or 5 on p. 1.

The purpose of this quantitative study is to test the intergroup contact theory that contact between in-group members, White students attending college at Predominately White Institutions (PWIs), and outgroup members, students of color (SOC), at PWIs, can influence in-group member racial attitudes.

Data for the study were collected but have not yet been analyzed.

Misericordia University Cooperative Research Question Outreach Emails

3/7/2022 – 3/9/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

Cooperative Reserach Question

George Godlewski <ggodlewski@misericordia.edu> Wed, Mar 9, 2022 at 4:22 PM
To: Ross Novak <rnovak@maryu.marywood.edu>
Cc: Orley Templeton <otempleton@misericordia.edu>, Patricia Thatcher <pthatcher@misericordia.edu>, David Rehm <drehm@misericordia.edu>

exploring logistics with IT.

I think you may need more precise instructions in your email. For example, if you are interested in completing the survey click the following link-or something like that. You may also want to note that your recruiting has been approved by Misericordia University (if we reach that point).

I will be in touch when I hear from IT.

George A. Godlewski, MSW, PhD.
Director, Social Work Program
College of Health Science & Education
Misericordia University
Trocaire 231
301 Lake Street
Dallas, PA 18612
570-674-6233

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Tuesday, March 8, 2022 6:54 PM
To: George Godlewski <ggodlewski@misericordia.edu>
Cc: Orley Templeton <otempleton@misericordia.edu>; Patricia Thatcher <pthatcher@misericordia.edu>; David Rehm <drehm@misericordia.edu>
Subject: Re: Cooperative Reserach Question

External Email: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Dr. Godlewski:

Good afternoon. I have attached a pdf of the survey. Please be aware that Qualtrics, when exporting to Word, may present differently then the online survey and may not reflect all formatting customizations. In this case, column responses in questions 14, 15, 17, 18, 20, 22, 23, 25, 27, 28, 29 are all reversed with column 1 appearing to the right of column 2. If you would prefer to view the online version where columns are presented correctly I would be happy to provide a survey link.

I have re-attached a copy of the approved email message students will receive.

The informed consent form leads the survey. Participants have the opportunity to email myself or my advisor with any questions or concerns. A statement of consent is offered which explains that by proceeding - clicking the arrow button in the survey- the participant understands what the study involves, has had the opportunity to ask questions, and agrees to participate in the study.

Outside of sending the email to students, no other IT-related work would be required.

If Misericordia University would allow me the opportunity to recruit participants I would submit a Revision Request Form through our Marywood IRB/ERC with an adjusted Informed Consent form. This adjusted Informed Consent form would specify the Marywood University Counseling & Student Development Center as a resource for Marywood University students and offer community resources to participants not affiliated with Marywood University. I would also revise the Taking Part is Voluntary section to add "or your institution" - i.e. "Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Marywood University or your institution."

If this is acceptable I would need a permission letter for recruitment at Misericordia University to submit as part of my Revision Request. I have attached a Word template of the Permission Letter used here at Marywood University with the necessary information, highlighted in yellow, inserted. I'm certain that, as long as the relevant information is included, if Misericordia has its own permission letter template, that would be acceptable.

Thank you once again for your time and consideration.

Sincerely,

Ross Novak
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

On Tue, Mar 8, 2022 at 3:52 PM George Godlewski <ggodlewski@misericordia.edu> wrote:

> Do you have the exact email that students will receive?
> Would you please send the survey.
>
> Will Marywood counseling be available to all potential participants if they require? I understand the risk is minimal.
>
> How will you assure that the informed consent is understood by the participants?
>
> Is there any IT-related work?
>
> You have a short timeframe!!

George A. Godlewski, MSW, PhD.
Director, Social Work Program
College of Health Science & Education
Misericordia University
Trocaire 231
301 Lake Street
Dallas, PA 18612
570-674-6233

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Tuesday, March 8, 2022 12:57 PM
To: George Godlewski <ggodlewski@misericordia.edu>
Cc: Orley Templeton <otempleton@misericordia.edu>; Patricia Thatcher <pthatcher@misericordia.edu>; David Rehm <drehm@misericordia.edu>
Subject: Re: Cooperative Reserach Question

External Email: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Dr. Godlewski:

Good afternoon. Thank you for your response. I completely understand the importance of protecting our students. I have attached all requested documents. I would be happy to discuss in more detail should you have any questions. Thank you in advance for your consideration.

Sincerely,
Ross Novak

On Tue, Mar 8, 2022 at 10:24 AM George Godlewski <ggodlewski@misericordia.edu> wrote:

> Mr. Novak,

Our spirit is to be collaborative and collegial within the education space. That said, we must also appropriately protect our students. We have, in the past, assisted researchers in participant recruitment and we are open to exploring this with you.

For starters:
Please provide for us:1) for study protocol, design, informed consent, etc. 2) the Marywood IRB approval related to your work.

Thanks.

George A. Godlewski, MSW, PhD.
Director, Social Work Program
College of Health Science & Education
Misericordia University
Trocaire 231
301 Lake Street
Dallas, PA 18612
570-674-6233

From: Orley Templeton <otempleton@misericordia.edu>
Sent: Tuesday, March 8, 2022 10:19 AM
To: Ross Novak <rnovak@maryu.marywood.edu>; George Godlewski <ggodlewski@misericordia.edu>
Subject: Re: Cooperative Reserach Question

Good morning, Ross,

Thank you for your email. I have added Dr. George Godlewski onto this email. He is Misericordia University's IRB Administrator and can assist in this process.

All the best,

Orley

From: Ross Novak <rnovak@maryu.marywood.edu>
Date: Monday, March 7, 2022 at 2:14 PM
To: Orley Templeton <otempleton@misericordia.edu>
Subject: Cooperative Reserach Question

External Email: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Dr. Templeton:

Good afternoon. I hope you are enjoying the start of your Spring Break. I am Ross Novak, a PhD student at Marywood University. I was referred to you by Dr. Thatcher in Academic Affairs.

I am in the dissertation stage of my program and recently received ERC approval from Marywood University to conduct research. I am very much interested in the possibility of including Misericordia University students in my research study.

> Specifically, my hope is to be able to have an email sent to all undergraduate Misericordia University students three times between April 1 and May 7, 2022. The email would contain a survey link.
>
> If you could provide me information on the cooperative research approval process it would be much appreciated. I may be reached by email at rnovak@marywood.edu or by phone at 570-348-6246.
>
> Thank you in advance for your assistance.
>
> Sincerely,
>
> Ross Novak

--

Misericordia University Research Participants Email Communication

3/16/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

research participants

Ross Novak <rnovak@maryu.marywood.edu> Wed, Mar 16, 2022 at 6:19 PM
To: George Godlewski <ggodlewski@misericordia.edu>

Dr. Godlewski:

Good evening. Thank you for your email. Now that I know this is possible I'll move forward with submitting a Revision Request through Marywood ERC. That must be approved before I can supply the recruitment email with the survey link. I've spoken with our Director of Human Participants Protection & Research Compliance and have the impression turnaround should be relatively short. I hope to begin that process tomorrow afternoon, Thursday, 3/17.

I've attached drafts of the revised recruitment email and informed consent form; revisions were based on feedback from our previous exchanges. Please let me know if any additional changes may be required.

I had previously mentioned that Marywood's ERC requires me to obtain a permission letter for recruitment at Misericordia University and to submit that permission letter as part of my Revision Request. I can attempt to submit your email in this capacity but am uncertain if they will accept it. In case they do not accept your email, I am wondering if you could supply me with something on letterhead. I have attached a Word template of the Permission Letter used here at Marywood University with the necessary information, highlighted in yellow, inserted. I'm certain that, as long as the relevant information is included, if Misericordia has its own permission letter template, that would be acceptable.

Once again, I very much appreciate your time and the assistance you have provided through this process.

Sincerely,

Ross Novak
Dean of Students
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

On Wed, Mar 16, 2022 at 12:46 PM George Godlewski <ggodlewski@misericordia.edu> wrote:

> Mr Novak,
>
> If you have your ducks in a row I can get your email to students. Feel free to call me 570-490-9217
>
> George A. Godlewski, MSW, PhD.
> Director, Social Work Program
> College of Health Science & Education
> Misericordia University
> Trocaire 231
> 301 Lake Street
> Dallas, PA 18612
> 570-674-6233

--

3 attachments

Ross Novak Advertising Email - Misericordia University.docx
25K

Ross Novak Informed Consent Form - Misericordia University.docx
33K

Misericordia Recruitment+Data+Permission+Ltr+Template.docx
28K

Marywood University Revision Request Form – Misericordia University

Marywood University - Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

REVISION REQUEST FORM

For Changes to Previously-Approved Research

INSTRUCTIONS: If you wish to revise your approved study, complete and submit this form in a follow-up package within your existing project at www.irbnet.org. There is no need to revise your original application form, since this form captures what is needed. Revisions include those to the purpose, subject pool, recruitment methods or advertisements, sites, the informed consent process or forms, data collection procedures or instrumentation, personnel, etc. The PI must e-sign in IRBNet before submitting.

Today's Date	March 16, 2022	**Principal Investigator**	Ross Novak
Study Title	Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania		
IRBNet Number	1878443	While viewing a project at IRBNet, the number appears at the top of each page, in brackets, directly under the photo header and next to the title. Enter only the number before the dash, which is the project number (not package number after the dash).	

REVISION DETAIL	
1	**I am adding or removing a co-investigator, research assistant, or other individual who is engaged in research activities (e.g. interpreters, etc.).** If adding anyone, attach appropriate CITI Training Report(s) to your IRBNet package. ☒ **No** ☐ **Adding Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role. ☐ **Removing Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role.
2	**I am revising previously-approved documents (e.g. advertisement, informed consent form, survey or questions, etc.).** If yes, attach documents to your IRBNet package. Make sure past tracking has been accepted, and only current revisions are tracked. ☒ Yes ☐ No Misericordia University has given me permission to recruit student participants. Misericordia is requesting a revised email recruitment advertising message and a revised informed consent form with Misericordia specific content. Revised versions of both documents are attached. I am also including an email communication from Misericordia University's IRB Administrator Dr. George Godlewski indicating the ability to send my recruitment email to Misericordia students.
3	**I am making some other type of revision.** ☐ Yes ☒ No Click here to describe the exact revision(s) you wish to make.
4	**Will any of the above revisions affect the study's risk to benefit ratio?** ☐ Yes ☒ No If yes, click here to describe.

Misericordia University Informed Consent Form

Exempt Informed Consent Form
Title: *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*

Principal Investigator (PI): Ross Novak, Student at Marywood University
Principal Investigator Contact Information: (570) 348-6246 rnovak@marywood.edu
Research Advisor: Dr. Amy Paciej-Woodruff
Research Advisor Contact Information: (570) 348-6289 apaciej@marywood.edu

Invitation for a Research Study

You are invited to participate in a research study about the impact of intergroup contact on the racial attitudes of White university students at predominately White institutions. You were chosen because you are a currently enrolled college student in Northeastern Pennsylvania. Please read this form. Ask any questions you may have before agreeing to take part in this study.

Additional participant inclusion criteria:

- Undergraduate student
- Racially identifies as White
- Between the ages of 18 and 22

Purpose – About the Study

The purpose of this study is to determine if intergroup contact can influence racial attitudes of White university students at predominately White institutions.

Procedures - What You Will Do

You will be asked to complete one survey. The survey will ask your feelings about social issues in the United States as well as demographic information and your racial perceptions of and relationships with others. The survey should take approximately 25-30 minutes to complete. You are asked to complete the survey only once.

Risks and Benefits

The risks are no greater than the risks in daily life or activities.

A risk may be that participation could cause mental or emotional distress; in this case you are encouraged to contact Misericordia University's Counseling and Psychological Services (CAPS) Center at (570) 674-6408, by email at caps@misericordia.edu or by visiting the CAPS Center on the lower level of McGowan Hall.

A benefit may be that it may help student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

Payment or Other Rewards

You will not receive a payment or reward.

Confidentiality

The records of this study will be kept private. Information used in any written or presented report will not make it possible to identify you. Only the investigator and research advisor will have access to the research records. Minimal data points will be collected. No IP Addresses, location data, or contact information will be recorded. Records will be kept on a password protected computer. Records will be kept for two years. Then they will destroyed by deleting the electronic record on which it is stored. No web-based action is perfectly secure. However, reasonable efforts will be made to protect your transmission from third-party access.

Taking Part is Voluntary

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Misericordia University or Marywood University. You may withdraw at any time prior to submission. There will be no penalty. To withdraw, simply close your web browser prior to submitting your response to the final question. Your information will be collected and your responses included in results data if submitted.

Contacts and Questions

If you have questions about this study at any time, contact the principal investigator or the advisor. Their contact information appears at the top of page one.

If you have questions related to the rights of research participants or research-related injuries (where applicable), please contact the Institutional Review Board at (570) 961-4782 or irbhelp@marywood.edu.

You may print a copy of this form to keep for your records.

Statement of Consent

By proceeding:

- You understand what the study involves.
- You have asked questions if you had them.
- You agree to participate in the study.

Misericordia University IRBNet ERC Approval Letter

MARYWOOD UNIVERSITY
EXEMPT REVIEW COMMITTEE
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509

DATE:	March 22, 2022
TO:	Ross Novak
FROM:	Marywood University Exempt Review Committee
STUDY TITLE:	[1878443-2] *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*
MU ERC #:	2022-E012
SUBMISSION TYPE:	Revision #1
ACTION:	APPROVED
APPROVAL DATE:	March 22, 2022
CHECK IN DUE DATE:	**February 28, 2023**
REVIEW TYPE:	EXEMPT REVIEW
EXEMPT CATEGORY:	45 CFR 46.104 (d)(2)(i)

Dear Mr. Novak:

Thank you for your submission of Revision materials for this research study. Marywood University's ERC has **APPROVED** your submission, which includes the addition of recruitment via Misericordia University and accompanying revisions to the email recruitment message and informed consent form that will be used with its population. The project meets federal exemption criteria and involves minimal risk to subjects participating in the research. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a complete description of the study and assurance of subject understanding.

We have applied the ERC's approval stamp to the following documents, which have been uploaded with this letter in IRBNet. The stamp must appear on versions shared with subjects wherever possible. If it is not feasible to use the stamped versions online (e.g. some email systems or survey platforms), please ensure that the language in the transmitted versions is identical to the stamped versions. Note that you may also access past stamped documents in IRBNet while viewing any package within your study (Reviews tab on left > under Board Documents > next to #1; new documents next to #2).

1. Informed Consent Form
2. Email Recruitment Message

Please also note that:

- **CLOSURE REPORTING:** Upon completion of the research, you must file a closure report form via IRBNet.
- **CHECK IN REPORTING:** While there is no expiration date for exempted studies, the ERC maintains oversight of open projects. **If activities will continue beyond your approval's one-year anniversary of February 28, 2023, file a check in form by that date.**
- **RECORDS RETENTION:** While there is no minimum retention period for exempted studies, you must retain records for the length of time stated in your application and informed consent form.
- **DEVIATION, UNANTICIPATED PROBLEM OR SERIOUS ADVERSE EVENT REPORTING:** If any of these events occur, you must file the appropriate form immediately via IRBNet.
- **REVISION REQUESTS:** If you decide to make procedural or document changes to your approved project, you must file a revision request form for review and approval prior to implementation, except when necessary to eliminate apparent, immediate hazards to the subjects. In hazardous situations, you must file the form immediately afterward.

Forms for the reports mentioned above may be found on the ERC's website or in IRBNet's Forms library. The library appears after you begin a follow-up package within your existing project and then click the Designer button on the left menu, followed by the blue "Need forms" link on the main screen (opens library under Step 1).

If you have any questions, please contact the Research Office at 570-348-6211, x.2418 or irbhelp@marywood.edu. Please include your study title and IRBNet number in all correspondence with this office.

Thank you and good luck with your research!

Regards,
Exempt Review Committee

Misericordia University Recruitment Permission Letter

College of Health Sciences and Education

MISERICORDIA UNIVERSITY

March 25, 2022

Marywood University
Exempt Review Committee
2300 Adams Avenue
Scranton, PA 18509

Dear Exempt Review Committee:

RE: Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania

This letter confirms that as an authorized representative of Misericordia University, I am aware of Ross Novak's research project and protocol.

I will allow the investigator to recruit participants at Misericordia University. Specifically, I will authorize a recruitment email containing a survey link to be sent to all undergraduate students three times between April 1 and May 7, 2022. However, activities may commence only after the investigator provides evidence of final approval from Marywood University's IRB or ERC. If you have any questions, please contact me.

Sincerely,

DocuSigned by:
George Godlewski
BD07253845724D4...

George A. Godlewski, MSW, PhD.
IRB Administrator
Misericordia University
310 Lake Street
Dallas, PA 18612
570-674-6233

DocuSigned by:
David Rehm
ED825CF9C9334FB...

David Rehm, PhD
VP Academic Affairs
Misericordia University
310 Lake Street
Dallas, PA 18612

Misericordia University Email Follow-Up 3/22/2022 – 3/29/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

Checking in RE: Marywood Cooperative Research

George Godlewski <ggodlewski@misericordia.edu> Tue, Mar 29, 2022 at 9:07 AM
To: Ross Novak <rnovak@maryu.marywood.edu>

Everything is in to IT. I asked them to confirm with me that the emails are sent.

George A. Godlewski, MSW, PhD.
Director, Social Work Program
College of Health Science & Education
Misericordia University
Trocaire 231
301 Lake Street
Dallas, PA 18612
570-674-6233

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Tuesday, March 29, 2022 8:07 AM
To: George Godlewski <ggodlewski@misericordia.edu>
Subject: Checking in RE: Marywood Cooperative Research

External Email: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Dr. Godlewski:

Good morning. I hope that this email finds you well. I apologize for my persistence, just wanted to check in and see if any other documents or materials are needed from me at this time in order to move forward with student recruitment at Misericordia University.

Thank you once again for all of your assistance in this process.

Sincerely,
Ross Novak
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

from: **Ross Novak** <rnovak@maryu.marywood.edu>
to: George Godlewski <ggodlewski@misericordia.edu>
date: Mar 22, 2022, 6:21 PM
subject: Misericordia Research Next Steps - Re: your letter

Dr. Godlewski:

Good afternoon. Thank you, once again! I submitted the signed Misericordia permission letter to Marywoods' ERC on 3/21/22 and received approval today, 3/22/22.

Attached to this email, please find two items:

1.) a copy of the additional ERC approval letter
2.) a Word document containing the email recruitment message with the survey link.

Ideally, the three dates the email recruitment message would be send to all undergraduate students would be:

- Friday, April 1, 2022
- Sunday, April 17, 2022

- Monday, May 2, 2022

Please let me know what additional documents and/or information may be needed at this time.

Sincerely,

Ross Novak
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

--

Keystone College Cooperative Research Questions Email Outreach

3/7/2022 – 4/5/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

Cooperative Reserach Question

Ross Novak <rnovak@maryu.marywood.edu> Tue, Apr 5, 2022 at 4:18 PM
To: Sherry Strain <sherry.strain@keystone.edu>

Dr. Strain:

Good afternoon. Per your email and our phone conversation I have attached the proposed recruitment message and informed consent form revised for Keystone College. If, after review, you have suggestions for wording I'm open to feedback. I did speak with the Keystone College Counseling Center to ensure their approval to be listed as a resource under risks and benefits.

Thank you once again for your time and consideration.

Sincerely,
Ross Novak
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

On Tue, Apr 5, 2022 at 12:03 PM Sherry Strain <Sherry.Strain@keystone.edu> wrote:

> Hi Ryan—
>
> I am sorry that this is taking so long. The last couple of weeks have brought up To Do items that I wasn't expecting.
>
> I have a question—I don't think it would impact our Approval, but it is a bit of a concern for me.
>
> If we allow you to put a blurb in our morning e-newsletter, how would you word it? Since you are looking for only white students to take the survey? Will you ask all students? Does your survey have a decision tree that ends the survey if a students answers something other than that for Race? Or will you accept fully completed surveys from any student, then discard those from students of color?
>
> I ask because I can guess that if you word the blurb to ask for only white students, the students of color on our campus will immediately be suspicious and I don't want to create backlash for either us or you.
>
> Sherry S. Strain, PhD
>
> Professor of Communications
>
> Chair, Department of Communication, Art, and Humanities
>
> Keystone College
>
> PO Box 50
>
> One College Green
>
> La Plume PA 18440
>
> 570.945.8490
>
> Sherry.Strain@keystone.edu

Keystone College BELIEVE. BELONG. BECOME.

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Friday, March 25, 2022 5:57 PM
To: Sherry Strain <Sherry.Strain@keystone.edu>
Subject: Re: Cooperative Reserach Question

Dr. Strain:

Good afternoon. I have attached a pdf of the survey. Please be aware that Qualtrics, when exporting to Word, can present differently then the online survey and may not reflect all formatting customizations. In this case, column responses in questions 14, 15, 17, 18, 20, 22, 23, 25, 27, 28, 29 are all reversed with column 1 appearing to the right of column 2. If you would prefer to view the online version where columns are presented correctly I would be happy to provide a survey link.

As previously mentioned, if all this is acceptable, I would need a permission letter for recruitment at Keystone College to submit as part of my Revision Request. I have attached a Word template of the Permission Letter used here at Marywood University with the necessary information, highlighted in yellow, inserted. I'm certain that, as long as the relevant information is included, if Keystone has its own permission letter template, that would be acceptable.

Thank you once again for your time and consideration.

Sincerely,

Ross Novak

Marywood University
2300 Adams Ave.

Scranton, PA 18509

(570)-348-6246

rnovak@marywood.edu

On Fri, Mar 25, 2022 at 11:49 AM Sherry Strain <Sherry.Strain@keystone.edu> wrote:

> Hi Ryan—
>
> My apologies for not getting back to you sooner. My Spring Break didn't go quite as I had planned and then I was inundated with student IRB requests here at Keystone.
>
> I have reviewed all the materials that you provided and I don't expect to have any problem in Approving your request to recruit Keystone students by way of a blurb in KC Morning Notes.

But I do need to take a look at your actual survey first. I didn't find an actual link in your materials. Or maybe I missed it?

If you can send me that, I will review it as quickly as possible..

Sherry S. Strain, PhD

Professor of Communications

Chair, Department of Communication, Art, and Humanities

Chair, IRB

Keystone College

PO Box 50

One College Green

La Plume PA 18440

570.945.8490

Sherry.Strain@keystone.edu

Keystone College BELIEVE. BELONG. BECOME.

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Wednesday, March 16, 2022 5:29 PM
To: Sherry Strain <Sherry.Strain@keystone.edu>
Subject: Re: Cooperative Reserach Question

You don't often get email from rnovak@maryu.marywood.edu. Learn why this is important

Dr. Strain:

Good afternoon. I hope this email finds you well. I am writing to circle back on our 3/7/22 email conversation, below. Is there additional information you would need from me at this time?

If Keystone College would allow me the opportunity to recruit participants I would submit a Revision Request Form through our Marywood IRB/ERC with an adjusted Informed Consent form. This adjusted Informed Consent form would specify the Keystone College Counseling Center as a resource for Keystone College students (I did speak with the Assistant Director there to obtain permission). I would also revise the Taking Part is Voluntary section to add Keystone College - i.e. "Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Keystone College or Marywood University."

If this is acceptable I would need a permission letter for recruitment at Keystone College to submit as part of my Revision Request. I have attached a Word template of the Permission Letter used here at Marywood University with the necessary information, highlighted in yellow, inserted. I'm certain that, as long as the relevant information is included, if Keystone has its own permission letter template, that would be acceptable.

Thank you once again for your time and consideration.

Sincerely,

On Mon, Mar 7, 2022 at 4:02 PM Sherry Strain <Sherry.Strain@keystone.edu> wrote:

> Hi Ross—
>
> Keystone typically doesn't do mass emails to students for outside research studies. However, in the past we have put blurbs in Keystone Morning Notes, our daily email newsletter, asking students to participate in such studies and providing a link (if it is a survey).
>
> If this sounds like an approach you are willing to take, I need to see your Approved IRB (ERC) Application so that I can review it to be sure that it provides the information that Keystone College requires.
>
> I hope this is helpful. Please let me know if I can help further.
>
> Sherry S. Strain, PhD
>
> Professor of Communications
>
> Chair, Department of Communication, Art, and Humanities
>
> Chair, IRB
>
> Keystone College
>
> PO Box 50
>
> One College Green
>
> La Plume PA 18440
>
> 570.945.8490
>
> Sherry.Strain@keystone.edu
>
> Keystone College BELIEVE. BELONG. BECOME.

From: Ross Novak <rnovak@maryu.marywood.edu>
Sent: Monday, March 7, 2022 2:30 PM
To: Sherry Strain <Sherry.Strain@keystone.edu>
Subject: Cooperative Reserach Question

> You don't often get email from rnovak@maryu.marywood.edu. Learn why this is important

Caution! This message was sent from a non-Keystone email address. Please be sure you trust the sender before taking any action.

To Whom It May Concern:

Good afternoon. I am Ross Novak, a PhD student at Marywood University. I am in the dissertation stage of my program and recently received ERC approval from Marywood University to conduct research. I am very much interested in the possibility of including Keystone College students in my research study.

Specifically, my hope is to be able to have an email sent to all undergraduate Keystone College students three times between April 1 and May 7, 2022. The email would contain a survey link.

If you could provide me information on the cooperative research approval process it would be much appreciated. I may be reached by email at rnovak@marywood.edu or by phone at 570-348-6246.

Thank you in advance for your assistance.

Sincerely,

Ross Novak

--

--

CONFIDENTIAL COMMUNICATION: *Email is not a secure form of communication, confidentiality cannot be guaranteed. This electronic mail message and any attachments are intended only for the use of the addressee(s) named above and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not an intended recipient, or the employee or agent responsible for delivering this e-mail to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this e-mail message in error, please immediately notify the sender by replying to this message or by telephone: (570) 348-6246.*

2 attachments

Ross Novak Advertising Email - Keystone College.docx
25K

Ross Novak Informed Consent Form - Keystone College.docx
33K

Marywood University Revision Request Form – Keystone College

Marywood University - Institutional Review Board and Exempt Review Committee
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509
Phone: (570) 348-6211, x.2418 or Email: irbhelp@marywood.edu

REVISION REQUEST FORM

For Changes to Previously-Approved Research

INSTRUCTIONS: If you wish to revise your approved study, complete and submit this form in a follow-up package within your existing project at www.irbnet.org. There is no need to revise your original application form, since this form captures what is needed. Revisions include those to the purpose, subject pool, recruitment methods or advertisements, sites, the informed consent process or forms, data collection procedures or instrumentation, personnel, etc. The PI must e-sign in IRBNet before submitting.

Today's Date	April 13, 2022	**Principal Investigator**	Ross Novak
Study Title	Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania		
IRBNet Number	1878443	While viewing a project at IRBNet, the number appears at the top of each page, in brackets, directly under the photo header and next to the title. Enter only the number before the dash, which is the project number (not package number after the dash).	

REVISION DETAIL	
1	**I am adding or removing a co-investigator, research assistant, or other individual who is engaged in research activities (e.g. interpreters, etc.).** If adding anyone, attach appropriate CITI Training Report(s) to your IRBNet package. ☒ **No** ☐ **Adding Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role. ☐ **Removing Personnel** Name: Click here to enter name. Role: Click here to enter role. Name: Click here to enter name. Role: Click here to enter role.
2	**I am revising previously-approved documents (e.g. advertisement, informed consent form, survey or questions, etc.).** If yes, attach documents to your IRBNet package. Make sure past tracking has been accepted, and only current revisions are tracked. ☒ Yes ☐ No Keystone College has given me permission to recruit student participants. Keystone is requesting a revised email recruitment advertising message and a revised informed consent form with Keystone specific content. Revised versions of both documents are attached.
3	**I am making some other type of revision.** ☐ Yes ☒ No Click here to describe the exact revision(s) you wish to make.
4	**Will any of the above revisions affect the study's risk to benefit ratio?** ☐ Yes ☒ No If yes, click here to describe.

Keystone College Informed Consent Form

Exempt Informed Consent Form
Title: *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*

Principal Investigator (PI): Ross Novak, Student at Marywood University
Principal Investigator Contact Information: (570) 348-6246 rnovak@marywood.edu
Research Advisor: Dr. Amy Paciej-Woodruff
Research Advisor Contact Information: (570) 348-6289 apaciej@marywood.edu

Invitation for a Research Study

You are invited to participate in a research study about the impact of intergroup contact on the racial attitudes of White university students at predominately White institutions. You were chosen because you are a currently enrolled college student in Northeastern Pennsylvania. Please read this form. Ask any questions you may have before agreeing to take part in this study.

Additional participant inclusion criteria:

- Undergraduate student
- Racially identifies as White
- Between the ages of 18 and 22

Purpose – About the Study

The purpose of this study is to determine if intergroup contact can influence racial attitudes of White university students at predominately White institutions.

Procedures - What You Will Do

You will be asked to complete one survey. The survey will ask your feelings about social issues in the United States as well as demographic information and your racial perceptions of and relationships with others. The survey should take approximately 25-30 minutes to complete. You are asked to complete the survey only once.

Risks and Benefits

The risks are no greater than the risks in daily life or activities.

A risk may be that participation could cause mental or emotional distress; in this case you are encouraged to contact Keystone College's Counseling Center at (570) 945-8309 or by email at counseling@keystone.edu.

A benefit may be that it may help student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

Payment or Other Rewards

You will not receive a payment or reward.

Confidentiality

The records of this study will be kept private. Information used in any written or presented report will not make it possible to identify you. Only the investigator and research advisor will have access to the research records. Minimal data points will be collected. No IP Addresses, location data, or contact information will be recorded. Records will be kept on a password protected computer. Records will be kept for two years. Then they will destroyed by deleting the electronic record on which it is stored. No web-based action is perfectly secure. However, reasonable efforts will be made to protect your transmission from third-party access.

Taking Part is Voluntary

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relationship with the investigator[s]. It will not affect your relationship with Keystone College or Marywood University. You may withdraw at any time prior to submission. There will be no penalty. To withdraw, simply close your web browser prior to submitting your response to the final question. Your information will be collected and your responses included in results data if submitted.

Contacts and Questions

If you have questions about this study at any time, contact the principal investigator or the advisor. Their contact information appears at the top of page one.

If you have questions related to the rights of research participants or research-related injuries (where applicable), please contact the Institutional Review Board at (570) 961-4782 or irbhelp@marywood.edu.

You may print a copy of this form to keep for your records.

Statement of Consent

By proceeding:

- You understand what the study involves.
- You have asked questions if you had them.
- You agree to participate in the study.

Keystone College IRBNet ERC Approval Letter

MARYWOOD UNIVERSITY
EXEMPT REVIEW COMMITTEE
Immaculata Hall, 2300 Adams Avenue, Scranton, PA 18509

DATE:	April 13, 2022
TO:	Ross Novak
FROM:	Marywood University Exempt Review Committee
STUDY TITLE:	[1878443-3] *Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania*
MU ERC #:	2022-E012
SUBMISSION TYPE:	Revision #2
ACTION:	APPROVED
APPROVAL DATE:	April 13, 2022
CHECK IN DUE DATE:	**February 28, 2023**
REVIEW TYPE:	EXEMPT REVIEW
EXEMPT CATEGORY:	45 CFR 46.104 (d)(2)(i)

Dear Mr. Novak:

Thank you for your submission of Revision materials to your Exemption Request for this research study. Marywood University's ERC has **APPROVED** your submission, which includes the addition of recruitment via Keystone College and accompanying revisions to the email recruitment message and informed consent form that will be used with its population. The project meets federal exemption criteria and involves minimal risk to subjects participating in the research. All research must be conducted in accordance with this approved submission.

Please remember that informed consent is a process beginning with a complete description of the study and assurance of subject understanding.

We have applied the ERC's approval stamp to the following documents, which have been

uploaded with this letter in IRBNet. The stamp must appear on versions shared with subjects wherever possible. If it is not feasible to use the stamped versions online (e.g. some email systems or survey platforms), please ensure that the language in the transmitted versions is identical to the stamped versions. Note that you may also access past stamped documents in IRBNet while viewing any package within your study (Reviews tab on left > under Board Documents > MU documents next to #1; Misericordia documents next to #2; Keystone documents next to #3).

1. Informed Consent Form
2. Email Recruitment Message

Please also note that:

- **CLOSURE REPORTING:** Upon completion of the research, you must file a closure report form via IRBNet.
- **CHECK IN REPORTING:** While there is no expiration date for exempted studies, the ERC maintains oversight of open projects. **If activities will continue beyond your approval's one-year anniversary of February 28, 2023, file a check in form by that date.**
- **RECORDS RETENTION:** While there is no minimum retention period for exempted studies, you must retain records for the length of time stated in your application and informed consent form.
- **DEVIATION, UNANTICIPATED PROBLEM OR SERIOUS ADVERSE EVENT REPORTING:** If any of these events occur, you must file the appropriate form immediately via IRBNet.
- **REVISION REQUESTS:** If you decide to make procedural or document changes to your approved project, you must file a revision request form for review and approval prior to implementation, except when necessary to eliminate apparent, immediate hazards to the subjects. In hazardous situations, you must file the form immediately afterward.

Forms for the reports mentioned above may be found on the ERC's website or in IRBNet's Forms library. The library appears after you begin a follow-up package within your existing project and then click the Designer button on the left menu, followed by the blue "Need forms" link on the main screen (opens library under Step 1).

If you have any questions, please contact the Research Office at 570-348-6211, x.2418 or irbhelp@marywood.edu. Please include your study title and IRBNet number in all correspondence with this office.

Thank you and good luck with your research!

Regards,
Exempt Review Committee

Keystone College IRB Approval Email 4/27/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

IRB Application #2022-000872

Sherry Strain <Sherry.Strain@keystone.edu> Wed, Apr 27, 2022 at 11:16 AM
To: Ross Novak <rnovak@maryu.marywood.edu>

Applicant: Ross Novak, Marywood University

The Keystone College Institutional Review Board has reviewed and approved as submitted on April 27, 2022 your research entitled "Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania." This research was approved under expedited review. The IRB reserves the right at any time to request full review of the study.

A formal letter of acceptance, outlining the IRB protocol for ongoing approval, and a copy of the signed Approval form will be sent to you at the address on your application. In the meantime, you may begin your data collection.

Dr. Strain will be in contact shortly to facilitate your recruitment via Keystone Morning Notes.

Good luck with your research!

Sherry S. Strain, PhD
Professor of Communications
Chair, Department of Communications, Art, and Humanities
Chair, IRB
Keystone College

Appendix F

Approved Recruitment Emails and Related Communication from Participating Institutions

Marywood University Approved Email Recruitment Message

Email Recruitment Template

Marywood University
Exempt Review Committee
APPROVED
DATE: 02/28/2022

Subject Line: Invitation to Participate: Study on Intergroup Contact and White Racial Attitudes

Dear Student:

My name is Ross Novak, and I am a doctoral student at Marywood University. I am conducting a research study with the purpose of determining if intergroup contact can influence the racial attitudes of White university students at predominately White institutions.

You are invited to participate in the study if you qualify. To qualify, you must be an undergraduate student, between the ages of 18 and 22, who identifies as White. The research will take place through an online survey site, Qualtrics. The survey will take about 25 to 30 minutes to complete.

Benefits may include assisting student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

Survey Link:

This study has been approved by Marywood University's Exempt Review Committee.

Sincerely,

Ross Novak
Email: rnovak@marywood.edu

Misericordia University Approved Email Recruitment Message

Email Recruitment Template

Subject Line: Invitation to Participate: Study on Intergroup Contact and White Racial Attitudes

Dear Student:

My name is Ross Novak, and I am a doctoral student at Marywood University. I am conducting a research study with the purpose of determining if intergroup contact can influence the racial attitudes of White university students at predominately White institutions.

You are invited to participate in the study if you qualify. To qualify, you must be an undergraduate student, between the ages of 18 and 22, who identifies as White. The research will take place through an online survey site, Qualtrics. The survey will take about 25 to 30 minutes to complete. Recruitment has been approved by Misericordia University.

Benefits may include assisting student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

If you are interested in participating in this study, please click the following survey link: https://marywood.iad1.qualtrics.com/jfe/form/SV_3vZqXeT3qEff0rA

This study has been approved by Marywood University's Exempt Review Committee.

Sincerely,

Ross Novak
Email: rnovak@marywood.edu

Keystone College Approved Email Recruitment Message

Email Recruitment Template

Subject Line: Invitation to Participate: Study on Intergroup Contact and White Racial Attitudes

Dear Student:

My name is Ross Novak, and I am a doctoral student at Marywood University. I am conducting a research study with the purpose of determining if intergroup contact can influence the racial attitudes of White university students at predominately White institutions.

You are invited to participate in the study if you qualify. To qualify, you must be an undergraduate student, between the ages of 18 and 22, who identifies as White. The research will take place through an online survey site, Qualtrics. The survey will take about 25 to 30 minutes to complete. Recruitment has been approved by Keystone College.

Benefits may include assisting student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

If you are interested in participating in this study, please click the following survey link: https://marywood.iad1.qualtrics.com/jfe/form/SV_74fNBrXNLRIG6Fg

This study has been approved by Marywood University's Exempt Review Committee.

Sincerely,

Ross Novak
Email: rnovak@marywood.edu

Keystone College Email Communication IRB Application #2022-0008

4/12/2022 – 4/26/2022

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

IRB Application #2022-0008

Ross Novak <rnovak@maryu.marywood.edu> Tue, Apr 26, 2022 at 11:06 AM
To: Sherry Strain <sherry.strain@keystone.edu>

Dr. Strain:

Good morning. I hope this email finds you well. I am writing as a follow-up to my 4/13 communication, below. Please let me know if you received the necessary documentation and if any additional information is needed from me in order to move forward. Again, I thank you for your time and assistance and hope to hear from you soon.

Sincerely,
Ross Novak
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

On Wed, Apr 13, 2022 at 7:26 PM Ross Novak <rnovak@maryu.marywood.edu> wrote:

> Dr. Strain:
>
> Good evening. Thank you for your assistance through this process. I very much appreciate all that you have done. Attached, please find:
>
> 1.) IRBNetDocument Novak ERC Approval Letter Keystone - the Marywood University Exempt Review Committee approval letter
> 2.) Ross Novak Advertising Email Keystone College - MS Word version of recruitment email
> 3.) Ross Novak Advertising Email Keystone College - PDF version of recruitment email
>
> Please let me know if you have any questions or concerns regarding the documents. Is there any additional information needed from me at this time in order to move forward? In addition to the phone number listed in my signature line, I can be reached at any time through my cell phone number, (570) 499-9056. Once again, thank you!
>
> Sincerely,
>
> Ross Novak
> Marywood University
> 2300 Adams Ave.
> Scranton, PA 18509
> (570)-348-6246
> rnovak@marywood.edu
>
> On Tue, Apr 12, 2022 at 12:30 PM Sherry Strain <Sherry.Strain@keystone.edu> wrote:
>
> > Applicant: Ross Novak, Marywood University
> >
> > The Keystone College Institutional Review Board has reviewed and **conditionally** approved as submitted on April 12, 2022 your research entitled "Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania." This research was approved under expedited review. The IRB reserves the right at any time to request full review of the study. The Keystone IRB will grant full Approval when full approval by the Marywood IRB (or equivalent) is received.
> >
> > A formal letter outlining this conditional Approval is attached.
> >
> > Sherry S. Strain, PhD

Professor of Communications

Chair, Department of Communication, Art, and Humanities

Chair, IRB

Keystone College

PO Box 50

One College Green

La Plume PA 18440

570.945.8490

Sherry.Strain@keystone.edu

Keystone College Recruitment Permission Letter

Keystone College
One College Green, P.O. Box 50, La Plume, Pennsylvania 18440-0200

Alumni Hall

April 12, 2022

Ross Novak
1210 Richmont Street
Scranton PA 18509

Dear Mr. Novak:

The Keystone College Institutional Review Board has reviewed and **conditionally** approved as submitted your research proposal entitled "Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania." The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB for this several months before the anniversary date of your initial approval.

Your protocol has been reviewed and approved under expedited review. The IRB reserves the right at any time to request full review of the study.

This letter confirms that as an authorized representative of Keystone College, I am aware of Ross Novaks' research project and protocol.

I will allow the investigator to recruit participants at Keystone College. Specifically, I will authorize a recruitment message containing a survey link to be included in Keystone Morning Notes between April 1 and May 7, 2022, and I will work with him on the wording of that message. **However, activities may commence only after the investigator provides evidence of final approval from Marywood University's IRB or ERC for the proposed project.**

Thank you for your cooperation.

Sincerely,

Sherry S. Strain

Sherry S. Strain, PhD
Professor of Communications
Chair, IRB
Keystone College
One College Green
PO Box 50
La Plume PA 18440

Keystone College Email Communication on Recruiting Keystone Students

Marywood UNIVERSITY

Ross Novak <rnovak@maryu.marywood.edu>

Recruiting Keystone Students for Your IRB Approved Study

Ross Novak <rnovak@maryu.marywood.edu> Thu, Apr 28, 2022 at 11:44 AM
To: Beth Miller <Beth.Miller@keystone.edu>
Cc: Sherry Strain <Sherry.Strain@keystone.edu>

Beth:

Perfect, thank you very much!

Sincerely,
Ross Novak

On Thu, Apr 28, 2022 at 11:30 AM Beth Miller <Beth.Miller@keystone.edu> wrote:

> Great. We limit the number of times an announcement can appear, so the max I can run is five days.
>
> **From:** Ross Novak <rnovak@maryu.marywood.edu>
> **Sent:** Thursday, April 28, 2022 10:52 AM
> **To:** Beth Miller <Beth.Miller@keystone.edu>
> **Cc:** Sherry Strain <Sherry.Strain@keystone.edu>
> **Subject:** Re: Recruiting Keystone Students for Your IRB Approved Study
>
> Beth:
>
> No concerns at all. Thank you very much. To clarify, would this announcement be included in each daily newsletter between 4/29 and 5/6?
>
> Sincerely,
>
> Ross Novak
>
> On Thu, Apr 28, 2022 at 10:34 AM Beth Miller <Beth.Miller@keystone.edu> wrote:
>
> > Thanks, Ross. The formatting of our daily e-newsletter features short blurbs and bulleted announcements. To keep your announcement in line with our style guidelines, I've edited a bit and added the following:
> >
> > - Marywood University doctoral student Ross Novak is conducting a study, "Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania." Student are invited to participate in the study, if they qualify. Click here for more information.
> >
> > Any concerns with the above?
> >
> > Beth
> >
> > **From:** Ross Novak <rnovak@maryu.marywood.edu>
> > **Sent:** Thursday, April 28, 2022 10:11 AM

To: Beth Miller <Beth.Miller@keystone.edu>
Cc: Sherry Strain <Sherry.Strain@keystone.edu>
Subject: Re: Recruiting Keystone Students for Your IRB Approved Study

Caution! This message was sent from a non-Keystone email address. Please be sure you trust the sender before taking any action.

Beth:

Good morning. Below is the message which was approved by our ERC here at Marywood University. Please let me know if there are any concerns with the message. If it would be easier to discuss via phone call I may be reached at my office number in my signature or through my cell phone, (570) 499-9056.

Thank You,

Ross Novak

Marywood University
2300 Adams Ave.

Scranton, PA 18509

(570)-348-6246

rnovak@marywood.edu

Email Recruitment Template

Subject Line: Invitation to Participate: Study on Intergroup Contact and White Racial Attitudes

Dear Student:

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Benefits may include assisting student affairs administrators, as well as college and university faculty, in changing racial attitudes and supporting and retaining racially diverse students at predominately White institutions. These findings may lead to future research in the areas of intergroup contact and student affairs administration.

If you are interested in participating in this study, please click the following survey link:
https://marywood.iad1.qualtrics.com/jfe/form/SV_74fNBrXNLRIG6Fg

This study has been approved by Marywood University's Exempt Review Committee.

Sincerely,

Ross Novak
Email: rnovak@marywood.edu

On Thu, Apr 28, 2022 at 9:48 AM Beth Miller <Beth.Miller@keystone.edu> wrote:

> Thanks, Sherry.
>
> Ross: Please forward along the info you'd like include in KC Morning and I'd be happy to include.
>
> Beth
>
> ---
>
> **From:** Sherry Strain <Sherry.Strain@keystone.edu>
> **Sent:** Wednesday, April 27, 2022 11:23 AM
> **To:** Ross Novak <rnovak@maryu.marywood.edu>
> **Cc:** Beth Miller <Beth.Miller@keystone.edu>
> **Subject:** Recruiting Keystone Students for Your IRB Approved Study
> **Importance:** High
>
> Hi Ross--
>
> Your study titled "Influence of Intergroup Contact on the Racial Attitudes of White, Traditional Age, Undergraduate College Students in Northeastern Pennsylvania" has been Approved by the Keystone IRB, so we can now work on helping you recruit Keystone students for the study.
>
> I am copying Beth Miller, Senior Director of Communications and Marketing, on this email because she is the person in charge of KC Morning Notes. Please work with her on a blurb for that publication. I expect it will work best if you have a short blurb that includes a link to your recruitment template.
>
> I would ask that you add to that template that your study has been approved by the Keystone College IRB, as well as the Marywood equivalent (as it does state).
>
> I would appreciate it if you would both keep me in the loop on the wording for the blurb.
>
> Thank you.
>
> Sherry S. Strain, PhD
>
> Chair, IRB
>
> Keystone College

--

--

Ross Novak

Dean of Students

Marywood University
2300 Adams Ave.

Scranton, PA 18509

(570)-348-6246

rnovak@marywood.edu

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Ross Novak
Dean of Students
Marywood University
2300 Adams Ave.
Scranton, PA 18509
(570)-348-6246
rnovak@marywood.edu

CONFIDENTIAL COMMUNICATION: *Email is not a secure form of communication, confidentiality cannot be guaranteed. This electronic mail message and any attachments are intended only for the use of the addressee(s) named above and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not an intended recipient, or the employee or agent responsible for delivering this e-mail to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this e-mail message in error, please immediately notify the sender by replying to this message or by telephone: (570) 348-6246.*