Fast Friends: A Quasi-Experimental Design Among Two Racially Diverse Student Populations

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Abstract

This exploratory study sought to determine if the Fast Friend intervention (Aron, Melinat, Aron, Vallone, & Bator, 1997) improve racial cognizance of cross-group dyads. Data were collected from freshmen (n=34) enrolled in a college of agriculture. The treatment and control groups included cross-group, same-sex, dyads composed of African American students and Caucasian students. In this quasi-experimental, nonequivalent comparison group, descriptive statistics revealed both the treatment and control participants failed to establish a difference between pretest/posttest and between control/treatment participants in Implicit Theory of Intelligence Scale, Color Blind Racial Attitude Scale, and Communal Orientation Scale. However, results did indicate significance in the Collective Self-Esteem Scale among treatment group participants and control group participants overtime. At the end of the study, a significant difference existed as treatment participants were more adaptive while the control were more maladaptive. Results indicate that engaged conversations among interracial groups over a short period of time, does not have large impacts on cognizance, but makes substantial differences among perception of whom they feel comfortable talking to. Further research should be conducted to establish interventions that measure racial cognizance through longitudinal studies, cross-institutional studies, and an increase quantity of participants.

Keywords: implicit, color blind, race, attitude, quasi-experimental

A population report by Colby and Ortman (2015) of the United States Census indicated changing demographics. The Non-Hispanic White population is currently the majority group by race; by 2060 the group will decrease to 44%, making the non-Hispanic White population a racial minority.

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Changing demographics are observed in the overall United States population, and changes in student demographics in colleges and universities have recently been noted. For example, according to the University of Kentucky Institutional Research & Advanced Analytics (2016), in 2015 the college of agriculture had an enrollment of 14.3 percent Black or African American students, the highest of all racial minority populations. This percentage of Black or African American students in the University of Kentucky's College of Agriculture, Food, & Environment is higher than what is reflected across that nation. Given that there is a growing population of racially and ethnically diverse students, possibilities of initial implicit bias and prejudice behavior are great, impacting the experiences, performance, and friendship formations of all students (Guzman-Lopez, 2015). Continuous changes in the United States demographics have magnified the importance of preparing students for engagement in society and the workforce It has also increased the importance of providing an education that values and fosters diversity (Locks et al., 2008).

Colleges and universities prepare students for future careers, life experiences, and social interactions that are enhanced by providing students with an education that expands mindsets (Locks et al., 2008). The changing demographic of the United States population has increased the need for education that fosters diversity of experiences and thought. Prior to college, students are likely to come from backgrounds of similar socio-economic, ethnic, and racial identities that have been conditioned due to social homophily, institutional racism, and residential segregation (Fisher, 2008). Incoming freshmen at universities may likely be exposed to cross-group populations for the first time after entering college. Furthermore, students are likely to form relationships with students with like attributes rather than those who are different due to the need for a sense of belonging (Walton & Cohen, 2011). This social homophilic behavior encourages implicit bias to occur among student groups and makes it harder to notice and disrupt it. Conditions of perception, attitudes, stereotypes, self-esteem, self-concept, racial colorblindness, and bias are linked to implicit social cognition (Greenwald & Krieger, 2006) and occur within student populations (Wyatt et al., 2019). Despite this knowledge, there is limited research on implicit social cognition among student populations and even less literature of racial implicit research within an agricultural college where implicitness is even more likely to occur due to enrollment of rural and nontraditional students.

While there is substantial evidence that support the concept that having more racially diverse students on college campuses increase educational outcomes for all students, the area of research in education is relatively new and can be strengthened with empirical data (Denson & Chang, 2009). Furthermore, there is little documentation of cross-group relationships or members of different groups that can be differentiated by social, cultural, racial, or ethnic composition characteristics (Page-Gould et al., 2010), being examined within a college of agriculture. This quasi-experiment seeks to determine if the Fast Friends Program originally designed by Aron et al. (1997) would reduce racial anxiety, implicitness, prejudice, and racial color-blindness among college freshman students in the college of agriculture. The Fast Friends Program experiment implements three 45-minute meetings, where participants complete self-disclosing and relationship-building tasks that gradually escalate in intensity over time. Such programs are aimed to understand how cross-group relationships between racially diverse students can increase cultural competence (Page-Gould et al., 2008).

Friendship formations are impacted by status similarity (relationship where one is more interested in the other based upon one's status), reciprocity (relationship of someone of the same status level or of less stature), and most influentially, homophily (Fischer, 2008). According to Borgatti and Cross (2003) homophily research suggests that people are more likely to have strong social ties with people they find like them based on socially important characteristics such as race, sex, education, and age. Thus, students have natural tendencies to develop relationships with those like them. Consequently, elements of skin tone, religious preference, and socio-economic status are the major dividing factors. Therefore, examining the cross-group relationship of students who come from dissimilar backgrounds can help address the need for prepared and professional college students in an increasingly diverse workforce and society.

Theoretical/Conceptual Framework

Implicit bias, also known in the literature as implicit memory, implicit psychology, implicit social cognition, or unconscious bias, is an automatic and involuntary attitude or stereotype formed through cognitive processes (Fischer, 2008). Explicit bias, unlike implicit bias, is an active and conscious affirmation of attitude. Implicit attitudes are formed through internally unidentified reminiscences of former experiences "that mediate attributions of qualities to members of social categories" (Greenwald & Banaji, 1995 p. 15). Exposure to environmental stimuli and memory impulsively activate and trigger an implicit attitude or implicit bias (Stepanikova et al., 2011). The implicit bias model has developed over decades of research from both social psychologists and cognitive scientists. Implicit biases are involuntary responses that arise without little or no awareness from individuals who have them (Gallegos De Castillo, 2018). Banaji and Greenwald (2013) accredited implicit bias as a human adaptation to avoid danger. For example, the association of snake with the concept of danger creates a bias that bolsters survival. Even though, all snakes are not dangerous. The implicit bias emerges when an individual avoids specific areas – without realizing – for a potential threat of a snake.

According to Hong et al. (2004), implicit biases are constructed frameworks that individuals use to interpret and evaluate their social world (p. 1036). As such, a network of subconscious beliefs creates actions that may lead to a manifestation of stereotyping and prejudice (Levy, 1999). Implicitness is believed to be worth studying as a deterrent to social injustice. It is important to note, implicit actions of prejudice are typically unconscious and involuntary, even by individuals who consider themselves culturally responsive

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(Levy & Dweck, 1999). Many theorists argued the implicit bias model serves as an explanatory force that perpetuate inequality of marginalized populations (Fischer, 2008; Locks et al., 2008; Page-Gould et al., 2010).

Purpose and Objectives

This exploratory quasi-experimental design study's purpose was to ascertain whether the Fast Friends program would help reduce racial anxiety, implicit bias, and racial colorblindness among incoming freshman at an agricultural college. The following objectives guided the study...
1. Describe the difference in the Implicitness Intelligence scale of the treatment and control group participants.
2. Describe the difference in the Almost Perfect scale of the treatment and control group participants.
3. Describe the difference in the Color-Blind Attitude scale of the treatment and control group participants.
4. Describe the difference in the Communal Orientation scale of the treatment and control group participants.
5. Describe the difference in the Collective Self-Esteem scale of the treatment and control group participants.

Methods

Study Population

The study's population included freshman enrolled in a major within the college of agriculture and self-identified as African American or White, non-Hispanic. Both the treatment group and the control group consisted of White, non-Hispanic and African American students. The treatment (n = 20) included African American students (n = 10) and White, non-Hispanic students (n = 10) and the control group (n = 14) consisted of African American students (n = 7) and White, non-Hispanic students (n = 7). Fowler (2014) stated sampling should not be based on the norms of other research studies but rather based on analysis plans. The overall population was limited within the college; thus, convenient sample size, based upon availability and consent, was used to meet the research objectives and plans for analysis (Purswell & Ray, 2014).

During a freshman opportunity fair where 86% of enrolled freshmen attended, a booth was stationed where students could register for the opportunity to participate in the study. From funds allocated through a college mini-grant proposal, all participants chosen received a $100 gift card at the conclusion of the study. A convenient sample of 66 students registered to participate in the study, of the nearly 600 incoming freshmen. Students self-identified the racial composition that best describes them. An additional email was sent to encourage participation as well as an announcement at a required freshman agriculture course. From the two additional recruitment strategies, an additional 13 names were acquired. Of the 79 volunteers, 36 attended an interest meeting and 34 remained active throughout the process. The nine students that did not complete the study,

provided reasons of "too busy", "no longer interested", "did not know that it would consume so much time" or simply did not respond.

Research Design

This study was a quasi-experimental, nonequivalent comparison group design that sought to explore the effects that the Fast Friends program on a select group of students. In a nonequivalent quasi-experimental design, the experimental groups and the control group are not randomly selected and both groups are required to take a pretest and a post-test evaluation (Creswell, 2014). The control group did not participate in the Fast Friends program. At the beginning of the semester, both control and treatment participants received the pretest and a post-test seven weeks later. Between the pretest and posttest, the treatment group was exposed to the Fast Friends program, where paired same-sex cross groups of African American and White, non-Hispanic students, met and interacted three times throughout the semester. At the conclusion of the third and final meeting, the students took a posttest. The authors received approval of the university's Institutional Review Board prior to participant recruitment.

Intervention

The treatment selected for this study was the Fast Friends program. This program was originally developed and validated by Aron et al. (1997) to examine interpersonal closeness of cross-cultural groups and to identify the characteristics of a relationship that could be manipulated variables (Aron et al., 1997). The variables for this specific intervention were selected to evaluate perceived intelligence, perfectionism, color blindness, care for others, and self-confidence in social settings. These variables are all indicators of implicitness allowing the researcher to measure potential change in implicit bias of students. Originally inspired by the work of Collins and Miller (1994) on self-disclosure, Fast Friends resulted from the researchers recognizing a need for a procedure that expanded to on-going interactions of partners. The need for expanded interaction sculpted the overarching procedural purpose of encouraging a feeling of closeness between individuals (Aron et al., 1992; Aron, Aron, Tudor, & Nelson, 1991), defined as including others in the self- an interconnectedness of self and other, (Aron et al., 1997, p. 377). After later modification by Page-Gould et al. (2008), this procedure became known as Fast Friends. This process has impacted the scientific community by allowing social physiological research to (a) measure individual difference variables before, during or after interactions, (b) control who is in the relationship, (c) directly manipulate relationship variables, and (d) created a setting that can be observed (Aron et al., 1997).

In this study, the treatment group was exposed to the Fast Friends program and were paired same-sex, cross-groups of African American and White, non-Hispanic students, met and interacted, a minimum of, three times over the course of three months. Each interaction lasted one-hour, uninterrupted with no one in the room but a video

recorder. At the control and treatment participants' pretest meeting, all student participants completed the Implicitness Scale, Color-Blind Racial Attitude Scale, Communal Orientation Scale, and the Collective Self-Esteem Scale. Also, during the first meeting, the students were informed whether they were a part of the control or treatment group, and the first treatment group meeting was scheduled. At the first treatment group meeting, the participants were paired and met in a room to discuss a series of questions pre-designed by the Fast Friends program. At the second meeting, the dyads met in the designated room to discuss the second round of topic questions. During the third and final meeting, the paired participants met for a one-hour social interaction by playing a Hasbro's ® Jenga® game. They were not given prompted questions. Following the interaction, the participants completed a posttest that was identical to the pretest along with the completion of the Almost Perfect Scale. During each student pair interaction, a log that included steps and times were recorded to assist in providing a similar experience for each student that participated at the time they were assigned. Time was the only factor recorded that was not exact within the log. The researchers followed the steps provided by Hagermoser and Luh (2020) to maintain treatment fidelity.

Instrumentation

The protocol for this experiment was originally developed by Aron et al. (1997) as a procedure for measuring experimental interpersonal closeness and was later modified by Page-Gould et al. (2008). The pretest and posttest for both the treatment group and the control group were identical and were based on the Fast Friends experiential protocol (Page-Gould et al, 2008). The following served as indicators of racial implicitness in the questionnaire: (a) implicit theory of intelligence, (b) Almost Perfect Scale, (c) Color Blind Racial Attitude Scale, (d) communal orientation, and (e) collective self-esteem. Data were collected via online survey (Survey Monkey®) and proctored by the research assistant in an on-campus computer lab.

Implicit theory of intelligence

Implicit theory of intelligence evaluates whether an individual believes their intelligence is fixed or if their intelligence and ability can change. Implicit theory of intelligence originated from Dweck and her colleagues (Dweck, 1999; Dweck & Leggett, 1988) and is centered upon the idea that a person's intelligence is recognized as a malleable trait. Individuals that believe that intelligence is fixed are characteristic of an entity, and those that believe intelligence is malleable and can accumulate are characters of an incremental mindset (Blackwell et al., 2007); that is, they believe in the value of effort and have been associated with higher academic goals. If an individual believes that intelligence is fixed (entity), it is likely that with or without a social intervention, their implicit mindset will not change. Conversely, if an individual believes their intelligence can change (incremental), it is possible that their implicit mindset and their ability can be altered due to an intervention. Fujii

&Uebuchi (2010) evaluated the online Implicit Theory of Intelligence theory among postsecondary undergraduate students and determined the instrument to be highly reliable.

Almost perfect scale

The almost perfect scale reveals characteristics associated with perfectionism. Those that obtain perfectionist qualities are either maladaptive or adaptive, while those that are not perfectionist are identified as non-perfectionists. Maladaptive individuals strive for unattainable ideals and adaptive individuals express flexibility based upon their motivation to achieve. Non-perfectionists are not naturally goal oriented and are not motivated by achievement. According to these classifications, in social settings maladaptive and non-perfectionist individuals may not naturally adjust to the conditions associated with a social interaction, while adaptive individuals can alter their behaviors to match a setting. Therefore, if an individual's implicitness does not change, it could be due to having a maladaptive or non-perfectionist identity, and if an individual's implicitness does change, it could be due to obtaining an adaptive identity. The Almost Perfect Scale was originated by Slaney and Ashby (1996), resulting in three different patterns: high standards, order, and discrepancy that differentiate individuals as having adaptive or maladaptive perfectionism. The research team utilized Rice et al.'s (2014) revised questionnaire which was tested among 749 individuals and determined to be valid and reliable. The higher score reflects a more maladaptive perfectionist trait that includes setting unrealistic standards, overreacting when not reaching such standards, and needing always to be in control. A lower score reflects a more adaptive perfectionist trait that includes the completion of tasks in good time and have high standards for their work. Adaptive perfectionists consider their strengths and limitations and don't overexert themselves unless it really matters. In this study, the researchers utilized the Almost Perfect Scale at the Post- assessment phase, rather the pre- and post-phase.

Color-blind racial attitude

Sculpted by the defining characteristics by Schofield (1986) and Frankenberg (1993) on color-blind racial attitudes, the Color-Blind Racial Attitude Scale was developed and validated by Neville et al. (2000). Aspects of color-blind racial attitude are similar to what is commonly referred to as racial color blindness. The scale is based on the following assumptions:

> (a) racism exists on structural and ideological levels (Thompson & Neville, 1999); (b) racism creates a system of advantages for Whites, mainly White elite, and disadvantages for racial and ethnic minorities (Thompson & Neville, 1999); (c) denial of these realities is the core component of color-blind racial attitudes; (d) people across racial groups can maintain a color-blind perspective; and (e) color-blind racial attitudes are cognitive in nature; they are part of a cognitive schema used to interpret racial stimuli. (Neville et. al., 2000, p. 61)

With these grounded assumptions focus on racial

attitudes and awareness, the Racial Color-Blind Attitude Scale evaluate individuals on three components: racial privilege, intuitional discrimination, and blatant racial issues (Neville et al., 2000).

Communal orientation

Communal orientation measures how much an individual cares for another's wellbeing and how much one may value another person's needs or feelings. Communal orientation was developed on the premise that relationship rules affect the giving and receiving of benefits depending on the type of connection and was studied, validated, and proven dependable by Clark et al. (1987). Specifically, according to Clark et al. (1987) high levels of communal orientation are associated with people who are more helpful than individuals with low communal orientation. If the communal orientation of an individual increases, the intervention may have increased their care, empathy, and willingness to help others of different racial ethnic backgrounds. If communal orientation does not change, then the intervention had no impact on how much an individual cares for others.

Collective self-esteem

Personal identity and social identity are distinct attributes of Tajfel and Turner's social identity theory, meaning that social and personal are each a part of the construction of one's identity (Riia & Crocker, 1992). However, theories in social psychology on self-esteem were considered a self-concept and individualistic. Riia and Crocker (1992) argued that individualistic attributes of self-esteem only revealed part of one's self-concept and social behavior. To develop an approach to evaluating self-esteem that assesses individual differences of collective, Riia and Crocker (1992) developed the Collective Self-Esteem Scale. Collective self-esteem evaluates self-perception from how an individual interacts in social groups or with others. After exposure to the intervention, if collective self-esteem increases, the confidence and comfortability of individuals interacting with those that are different has increased. If collective self-esteem decreases, then the confidence and comfortability of interacting with those that are different has decreased. In 2010, Rossouw reevaluated the Riia Crocker questionnaire and still found it to be reliable and the elements of the collective self-esteem through a factor analysis evaluation.

Data Analysis

The quantitative data were analyzed using Statistical Package for the Social Sciences® (SPSS) version 24. The research objectives of this study guided the analysis. To address the five research objectives, descriptive statistics were used to describe each scale. Mean scores, standard deviations, and t-scores were calculated using SPSS. Such analysis was appropriate for the sampling size and research objectives in an exploratory study (Creswell, 2014).

Findings

This study consisted of incoming freshman majoring within a College of Agriculture. The student participants self-identified as either White, non-Hispanic or African American. After attending an orientation meeting, the students were separated into treatment and control groups, while treatment groups were paired with one participant in each pair representing a different racial identity. Students within the treatment group followed the Fast Friend protocol, a product originated from the University of California-Berkeley (Page-Gould et al., 2008).

Apparent limitations occurred with the small study population of both the treatment and control groups. Incoming students declared in the college of agriculture at the university that identified as African American, or White, non-Hispanic students were eligible for this study. Recruitment of African American students was challenging due to a small population of size within the agriculture college. Students selected for the treatment group were required to meet three times throughout the semester.

Research objective 1 sought to describe the difference in implicitness theory of intelligence of freshman college students that participated in the Fast Friends intervention and those that did not. An analysis of descriptive statistics shows the mean of the control group pretest as 3.7, and the mean of the control group posttest 3.4. The treatment group's pretest means 3.4 and a 3.3 for the posttest (see Table 1). By the end of the semester, both the control and treatment group provided a slight decrease in their racial implicitness.

Table 1.

Student Participants Implicitness by Assigned Group (n=34)

Implicitness	Control (*n* = 14)	Treatment (*n* = 20)
	m(SD)	*m*(SD)
Pretest	3.7(.16)	3.4(.49)
Posttest	3.4(2.5)	3.3(.55)
Difference of Mean Score	-.3	-.1
t-score	-1.99	-.49
Cohen's *d*	0.14	0.19

Note. Instrument based on a 6-Point Likert scale (1 - Strongly Agree, 6 – Strongly Disagree).

Research objective 2 sought to describe the difference in Almost Perfect Scale by the two groups. The Almost Perfect Scale was only reviewed at the end of the Fast Friends study. The Almost Perfect scale was based on a 7 – point Likert scale. As seen in Table 2, the mean of the control group was 5.1 and the treatment group showed a mean of 4.5. The mean differences were significant among the control group which reflected a large difference and being more maladaptive perfectionist (Urdan, 2010).

Table 2.

Student Participants Almost Perfect Scale by Assigned Group (n=34)

	Control	Treatment
	m(SD)	*m(SD)*
Almost Perfect Scale	5.1(.64)	4.5(.65)
t-score difference		3.42*
Cohen's d		0.93

Note. * = *p* ≤ .05, Instrument based on a 7-Point Likert scale (1 - Strongly Disagree, 7 – Strongly Agree).

Research objective 3 sought to describe the difference in color blind attitude of freshman college students that participated in the Fast Friends intervention and those that did not. The Color-Blind Attitude scale was based on a 6 – point Likert scale. Table 3 shows a control group pretest mean of 3.5 and posttest of 3.6. The treatment group showed a pretest mean of 3.6 with no change on the posttest. Even after three months of conversation with someone of the differing race, the treatment group had zero change on the Color-Blind Attitude scale.

Table 3.

Student Participants Color Blind Attitude by Experimental Group (n=34)

Color Blind Attitude	Control	Treatment
	m(SD)	*m(SD)*
Pretest	3.5(.25)	3.6(.36)
Posttest	3.6(.64)	3.6(.37)
Difference of Mean Score	.1	0
t-score	.23	.65
Cohen's d	0,21	0.0

Note. Instrument based on a 6-Point Likert scale (1 - Strongly Agree, 6 – Strongly Disagree).

Research objective 4 sought to describe the difference in communal orientation of freshman college students that participated in the Fast Friends intervention and those that did not. The Communal Orientation scale was based on a 7 – point Likert scale. The control group pretest mean was 3.5 and the posttest was 3.9. The treatment group showed a pretest mean of 3.6 and a 3.6 for the posttest. No difference in the treatment and the control group occurred on the Command Orientation scale (see Table 4).

Table 4.

Student Participants Communal Orientation Scale by Experimental Group (n=34)

Communal Orientation	Control	Treatment
	m(SD)	*m(SD)*
Pretest	3.5(.51)	3.6(.38)
Posttest	3.9(.52)	3.6(.31)
Difference of Mean Score	.4	0
t-score	1.18	.29
Cohen's d	0.78	0.0

Note. Instrument based on a 7-Point Likert scale (1 – Extremely Uncharacteristic of me, 7 – Extremely Characteristic of me).

Research objective 5 sought to describe the difference in collective self-esteem. The Almost Perfect scale was based on a 7 – point Likert scale. Although significance was not necessary, it was determined that both the treatment group and the control group had a small (d < .20) significant change (p ≤ .05) in collective self-esteem. Table 5 describes the control group significantly increased while the treatment group significantly increased over the course of three months.

Table 5.

Student Participants Collective Self Esteem by Experimental Group (n=34)

Collective Self Esteem	Control	Treatment
	m(SD)	*m(SD)*
Pretest	3.9(5.1)	4.1(3.4)
Posttest	4.2(.32)	3.8(.39)
Difference of Mean Score	.3	-.3
t-score	1.16*	2.33*
Cohen's d	0.08	0.12

Note. * = p ≤ .05, Instrument based on a (1 – Extremely Uncharacteristic of me, 7 – Extremely Characteristic of me).

Summary

This study explored the effects of the treatment of cross-group friendships (Fast Friends) on racial implicitness. Previous research supports that cross-group friendships reduce racial anxiety (Page-Gould et al., 2008), and close relationships develop through social interactions with outgroup strangers predicted by positive experiences (Page-Gould et al., 2010). This study did not have findings like previous research. Individuals that received the treatment and those who did not receive the treatment failed to have significant difference between pretest and posttest or between control and treatment participants in evaluations

based upon implicit theory of intelligence, almost perfect attitude, color blind racial attitude, and communal orientation. However, results did indicate a significant decrease in collective self-esteem among treatment group participants.

Implicit Theory of Intelligence

Human psychology and behaviors are factors of implicit theories of intelligence (Cabello & Fernandez-Berrocal, 2015). Individuals with incremental intelligence tend to be goal oriented and consider making effort as necessary that is positive for improvement of malleable traits (Blackwell et al., 2007; Cabello & Fernandez-Berrocal, 2015; Dweck and Leggett, 1989). Based upon the findings, throughout the Fast Friends project, both the control and treatment group declined in their implicit intelligences. The research team was looking for efforts of incremental implicit change. Unfortunately, the results showed a fixed intelligence over the course of three months.

Almost Perfect Attitude

The Almost Perfect scale classifies individuals between adaptive perfectionism and maladaptive perfectionism or non-perfectionists and measures attitudes of individuals towards themselves, their performance, and attitudes towards others (Slaney et al., 2001). At the end of the timeline, a significant difference existed between the two groups. The control group revealed scores reflecting more maladaptive perfectionist traits, primarily in both Standards and Order (Wang & Slaney, 2015). Participants from the treatment group revealed more adaptive perfectionisms overall, but primarily in the deficiency domain. According to Slaney and Ashby (1996), people with maladaptive perfectionisms tend to be highly self-conscious and develop negative attitudes when events do not go as they desire. The negative attitudes are linked to psychological disorders such as depression and anxiety (2015). The time to address maladaptive personalities is at the post-secondary level as students are exposed to multicultural audiences. The lifetime damage that comes from maladaptive perfectionist traits correlates with imposter fears (Herman et al., 2013), internalized racism (Dancy & Jean-Marie, 2014), and resistance in multicultural awareness (Wang et al., 2014).

The importance of identifying students' perfectionist traits among student interaction should be of high need within colleges of agriculture. By knowing the adaptive and maladaptive personalities, faculty can begin to navigate in efforts that help students obtain more adaptive traits. Faculty and academic advisors are encouraged to design assignments that allow students to establish 'achievement-oriented' mindsets rather than 'failure-oriented' mindsets. Achievement oriented students understand their limitations and work toward what they determine as successful rather than comparing to others and determining a failure. Group work can assist with transitioning students into an adaptive perfectionism. In the realm of multiculturalism, having students placed in culturally diverse group dynamics with assignments specific to everyone assist the maladaptive student to realize the project's achievement is limited to the group.

Racial Color Blindness Attitude

Color Blind Racial Attitude scale is based on an individual's awareness and racial attitudes. Color blind racial attitude evaluates individuals on three components: racial privilege, intuitional discrimination, and blatant racial issues (Neville et al., 2000). Based upon the findings, it was determined that the control group's racial color-blindness increased over the three-month span of the study. Following the intervention, no change in color blind racial attitude was determined among the treatment group indicating the intervention had no impact on color blind racial attitude in both populations.

Communal Orientation

Communal Orientation scale measures how much an individual cares for another's wellbeing and how much one may value another person's needs or feelings. According to Clark et al. (1987) high levels of communal orientation are associated with people who are more helpful than individuals with low communal orientation. Individuals with high levels of communal orientation also expect others to help in return; much like a mutually beneficial transaction. Based upon the findings of both the control and treatment groups, only the control group improved their communal orientation over the span of the Fast Friends project, however, it was nonsignificant. The treatment group showed no change in communal orientation from pre- to post- assessment.

Collective Self-Esteem

Collective Self-Esteem scale measures self-perception from how an individual interacts in social groups or with others (Luhtanen & Crocker, 1992). According to the results, the control group improved over the timeline devoted to the Fast Friends project, while the treatment group decreased. The improvement of the control group was not significant; however, the decrease of the treatment group was determined to be a significant change. In addition, based on their pre- and post-results, there was a substantial difference between the control or treatment groups.

According to Cabello and Fernandez-Berrocal (2015) theories of implicitness act as structures of knowledge (Chiu et al. 1997; Plaks et al., 2009) and the way that people interpret and process individually, or of other objects such as people, generally mirrors implications of implicit theories (Dweck, 2012). Therefore, "implicit theories profoundly affect human behavior, and understanding natural variation in those theories may help predict how people will respond to particular stimuli, psychotherapy, or behavioral training," (Cabello & Fernandez-Berrocal, 2015, p. 6). Prior to this study it was predicted that the Fast Friends intervention would impact the outlook, behavior, and implicitness of students by the interaction of cross-groups and the formation of cross-group friendships. More specifically it was projected that the Fast Friends program would assist in lowering racial anxiety, implicitness, prejudice, and racial colorblindness among entering freshmen.

Collective self-esteem measures self-image and self-

perception from how an individual interacts with others or in social groups (Luhtanen & Crocker, 1992). Therefore, it indicates a person's self-perception and confidence when interacting with others of another social group. In this study, the treatment group's collective self-esteem significantly decreased after participating in the Fast Friends intervention. The decrease of collective self-esteem for the treatment group and lack of change in all other categories potentially indicates that personal interaction with an individual of a cross group three times is not strong enough to change an entire mindset or perception of person. It is, however, influential enough to generate a new schema due to interactions, thus altering their collective self-esteem. The treatment group consisting of paired students, one African American and one White, non-Hispanic, had a decrease in their collective self-esteem or in other words, a decrease in their confidence when interacting with a cross-group member. This implies the intimacy of the Fast Friends project lowered the realization that incoming freshman are not as confident as they thought toward interacting with a cross group member.

Although a considerable drop in the treatment group's overall self-esteem may seem like a bad thing, it actually shows that there is an increase in intergroup self-awareness. After three intimate interactions with cross-group partners, over seven weeks, treatment group members decreased their self-perception and self-confidence when engaging in social settings. These interactions made an impression and changed their perception of interacting with a person of another race. Growth in self-awareness and the decrease in confidence suggests a change in perceptions of people that are different which could implicitly alter future social behaviors of students.

Recommendations

Changing students' self-perception through interaction with a cross-group member can serve as a catalytic or beginning platform for a progression of building cultural competency throughout the course of their education. If this study was to be repeated, it is recommended that the study population be recruited from one or more freshman courses and the study be conducted during class hours. This would increase the student population and increase the accountability of students. It is also recommended future studies should employ a larger sampling size that would justify inferential statistical analysis.

Based on the negative change in collective self-esteem of treatment group members it is recommended that the colleges and universities foster more opportunities for individuals to have cross-group interactions that are integrated into curricular and non-curricular activities for students. Many of the current opportunities for students on campus are formed utilizing recruitment methods that are based on 'like' interests and characteristics. Examples of cross-group engagement include increasing active involvement in cultural groups on campus such as campus cultural centers and the creation of immersion experiences through students' organizations. Off-campus engagement is also recommended such as cultural immersion and relationship building with community organizations and stakeholders that will increase exposure and interaction with diverse communities, neighborhoods, and families. When engaging in the community Participatory Action Research (Reason & Bradbury, 2008) approaches are recommended in order to enrich experiences for both university and community members.

As shown in this exploratory study, three interactions may not be enough to alter the behavior of students. It is recommended that future studies extend beyond the scope of minimal cross-group interaction opportunities for students during their freshman year and consistently provide and measure these interactions throughout the entire college experience. Since developing culturally competent and self-aware students that are on track to reach autonomy during or soon after their college experience is advantageous for universities, future studies may reveal methods to achieve the desired outcomes of institutions. This can be greater achieved through quasi-experimental designs that measure the effects of programs and activities that go far beyond bringing students from diverse backgrounds into the same space. Future research in this line of inquiry may measure interactions on an intimate level, development cross-group friendship, student's implicitness, pseudo-independent experiences, and cultural autonomy.

The research team recognized in the recruitment process, that many students were not ready to participate in a conversation with someone of a different racial group. When beginning the study, we were encouraged by the enthusiasm of college faculty and college administrators with the hopes that positive changes could encourage college-wide programs. Unfortunately, the results were alarming and new approaches are being taken for students to engage in more conversations. Since this study, the movement of the Office of Diversity has occurred, so it is near the students' common area. Additional funds for undergraduate and graduate scholarships are established to assist in the increase of enrollment. Finally, another round of Fast Friends is already in the planning stages with the hopes of utilizing the college's living communities (dormitories) and college-wide courses.

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