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Nithya Muthuswamy

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By

Nithya Muthuswamy

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Department of Communication-Urban Studies

2003

## **ABSTRACT**

### **DIVERSITY INITIATIVE OUTCOMES: AN INQUIRY INTO THE CONSEQUENCES OF ADOPTING MRULE – A SOCIAL INNOVATION AIMED AT BRIDGING THE RACIAL DIVIDE ON A COLLEGE CAMPUS**

By

Nithya Muthuswamy

This paper views diffusion from the social change perspective and synthesizes literature on diversity initiatives and diffusion by placing the problems associated with race relations on campus into Fairweather's experimental social innovation model. In light of a lack of emphasis on the study of consequences in both diffusion and diversity literatures, this paper reports an empirical study of the consequences of participating in the Multi Racial Unity Living Experience (MRULE) program, an innovative race relations program in Michigan State University that aims to promote integration among students. Toward this end, 164 students comprising of participants in the program, prospective participants of the program, and students who are not a part of the program were administered a survey to determine differences between these groups in levels of salience, knowledge, attitudes and overt behaviors related to race. Results suggest that students in the MRULE program hold significantly more positive attitudes, express greater interracial behaviors, and possess more accurate knowledge regarding issues related to race, in comparison to the other two groups. The implications of these findings are discussed.

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To Dr. Richard Thomas and Dr. Jeanne Gazel whose contribution  
to race relations continues to inspire me

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## TABLE OF CONTENTS

LIST OF TABLES.....	vii
Chapter 1: Introduction.....	1
Diffusion-A social change perspective.....	3
The social problem: Issue of diversity in higher education.....	4
What is racial/ethnic diversity?.....	6
The creation of innovative models to solve the social problem.....	9
MRULE – a social innovation in bridging the racial divide.....	9
A scientifically credible evaluation of the effectiveness of the innovation.....	12
Rogers’s framework for the study of consequences – evaluating MRULE.....	14
Chapter 2: Method.....	17
Participants.....	17
Design.....	18
Procedure.....	19
Measures.....	20
Chapter 3: Results.....	22
Substantive finding.....	22
Attitude.....	22
Salience.....	23
Behavior.....	23
Knowledge.....	24
Supplemental analysis.....	25
Chapter 4: Discussion. ....	28
APPENDICES	
Appendix A: Tables.....	40
Appendix B: Survey.....	44
REFERENCES.....	59

## **LIST OF TABLES**

Table 1. Demographic Characteristic of Participants in the Quazi-Experiment.....	41
Table 2. Mean differences of participants' Demographics between the three groups.....	42
Table 3. Mean Differences in Dependent Measures between the Three Groups.....	43

## Chapter 1

### Introduction

“Invention and diffusion are but means to an ultimate end; the consequences of adoption of an innovation” (Rogers 1995, p.405).

The diffusion of innovation from a social change perspective aims at the creation of positive change through the intentional spread of programs or policies aimed at a solution to a social problem (Mayer & Davidson, 2000). While diffusion research has focused extensively on attributes of innovations and variables related to the degrees of innovativeness that explain why individuals adopt an idea or policy, the consequences accompanying these innovations have received little attention (Rogers, 1995). Thus research on diffusion of innovations has been predominantly concerned with events prior to, and including the adoption decision (Blakely et al., 1987). This lack of emphasis on the post adoption stages of innovations and their consequences blurs the understanding of the utility of programs and policies in addressing the social problem, and provides little insight into the advantages and disadvantages experienced by the adopters of the innovation.

The lack of emphasis on consequences is particularly true within the context of diversity and multiculturalism, an issue that constitutes one of the most controversial topics in higher education (Astin, 1993). Institutes of higher learning have been concerned with the goal of achieving diversity for a long time, but have wrestled with the means of achieving it. This concern has led to a generation of considerable body of research that has unearthed the merits associated with numerically racial/ethnic diverse student and faculty bodies (Alger et al., 2001; Orfield & Miller, 1998). There has also

been a tremendous growth of diversity training workshops and programs that are aimed at positively influencing the minds of students such that a diverse racial climate on campus can be created and sustained (Gazel, 2001). Little attention has however been paid to the assessment of the consequences that participants experience as a result of being involved in such programs (Neville & Furlong, 1994). This paper presents an empirical study of the consequences of participating in the Multi Racial Living Unity Experience (MRULE) program, a social innovation that addresses the issue of racial diversity at Michigan State University. Specifically, the study focuses on the effects of adopting/participating in MRULE, on the level of salience, knowledge, implicit attitude and overt behaviors associated with racial issues.

Towards this end, diffusion is placed in the context of social change, and the stage model of experimental social innovations is introduced. Based on the framework of this model, first, the issue of diversity in higher education and the ambiguity in the definition and operationalization of the term is discussed. Second, race related initiatives that have been experimented with, on campuses are outlined, and MRULE is introduced as a social innovation in the field of race relations. Third, the lack of emphasis on consequences of innovations, the factors responsible for this and the need for such an emphasis are described. Fourth, Rogers's paradigm of analyzing consequences is presented and the research question guiding the evaluation of the MRULE program is introduced. Fifth, the methodology of the study is outlined and results of this study are presented. This is followed by a discussion of findings, their implications, and a discussion of the contribution of these data to diffusion and diversity literature.

### Diffusion – A social change perspective.

Diffusion is defined as the “ acceptance, over time, of some specific item - an idea or practice, by individuals, groups, or other adopting units, linked by specific channels of communication, to a social structure, and to a given system of values, or culture” (Katz, Levin & Hamilton, 1963, p.240). From the social change perspective, this ‘idea’ or ‘practice’ seeks to improve status quo by bringing about modification or changes in the existing state of affairs. According to this view, the impetus for creation and implementation of innovations emanate from a basic dissatisfaction with a current practice, policy or program (Barnett, 1953; Lapiere, 1965).

Dissatisfaction with status quo alone might however, be an insufficient condition for the creation of desirable/positive change. Since change is often met with resistance by practitioners, clients, communities who grapple with the uncertainties associated with the change process a planned and systematic approach that is designed to achieve the goal of desirable social change is required (Yin, 1978). This approach typically involves the implementation of “action oriented steps” that facilitate the adoption and execution of social innovations. The systematic design and implementation of these sequential steps geared towards addressing a particular problem through the intentional spread of social programs have become critical to the process of diffusion (Ettlie, 1980; Mayer & Davidson, 2000).

Stage models offer one way of understanding the sequences involved in implementing such diffusive efforts (Fairweather & Tornatzky, 1977). Fairweather’s framework of experimental social innovation is one such model (Fairweather & Davidson, 1986). The model explains how diffusion of innovations fit within a sequential

four-phased process of social change. The first stage consists of the creation of innovative models that are designed to solve a social problem. The second stage is a scientifically credible evaluation of the effectiveness of the innovation. The third stage comprises of a limited replication of the innovation, provided there is evidence of a positive assessment of its effectiveness. And lastly, in the fourth stage, active dissemination or purposeful attempts to implement the program on a large scale are executed. These four phases represent an incremental and dynamic process, with each phase dependent on the previous steps, such that a failure at any phase necessitates reverting to prior phases. While this model can be criticized because of its source- centered perspective (Tornatzky et al., 1983) and the fact that change does not necessarily follow such rationality and reasoning but is often “natural” and unplanned (Eveland et al., 1977), this model demonstrates the significance of a scientifically credible evaluation of the impact of an innovation. It also cautions, that overlooking the crucial second stage of this model might threaten the meaningful dissemination of the program in large scale.

The social problem: Issue of diversity in higher education.

Prior to analyzing the phases in the model in relation to diversity initiatives, a brief discussion of the problems associated with diversity is relevant. The issue of race on college campuses has been one of the most profound and controversial topics in higher education (Astin, 1993). Hacker (1992) suggests that race relations on college campuses have been reflective of a broader resurgence of racial and ethnic strife in the United States, especially in the last decade. Thus race relations on campus have been indicative of the persistence of racism in social structures and interpersonal relationships in the United States (Hacker, 1992). Enrilich’s (1990, 1992) investigations bear testimony to

this claim. Nearly one million U.S college students experienced racially or ethnically motivated violence annually, and most victims did not report these incidents to campus officials (Enrilich 1990; Enrilich, 1992). Of those who reported these incidents, nearly a quarter of minority students indicated that they experienced racially or ethnically motivated assaults, vandalism or harassment and more than half of minority group members experienced related distress as a result.

The racial tension that was a consistent problem throughout the 1990s was reflected in the racial climate at Michigan State University as well. As evidence indicating this, Gazel (2001) details the segregated cafeteria tables, the reactions of students to the O. J. Simpson verdict in 1995, the scathing letters to the State News Editor, segregated social settings, and the racial climate in the classrooms that sent messages to students that “it was easier, safer and more natural to hang out separately” (p.2).

The direct and inverse relationship between racism on campus and diminished academic performance (Nettles, 1998), and greater alienation from the institutions (Cabrera & Nora, 1994), as well as the complexities that arose in the wake of a dramatic transformation in the composition of the student population in U. S colleges posed tremendous challenges to higher education administrators (Hansen, Rockwell & Green, 2000). Universities had to contend with the reality that students who had been socially segregated prior to college, entered universities on separate racial tracks (Gurin, 1999). Because colleges often provided the first opportunities for students to interact with others from diverse racial, economic, or national backgrounds (Clements, 2000), new strategies that effectively understand and address the racial divide became critical. The changing

demographics on campuses made it imperative for Michigan State and other universities to equip students with necessary skills that would enable them to deal with an increasingly diverse society.

Consequently, diversity became a buzzword in the 1990s and was upheld as one of the important values in educational institutions (Gazel, 2001). This phenomenon is evident in literature. Researchers began to unearth scientifically, the merits associated with the goal of diversity. A substantial number of expert reports and testimonies that verified the overall benefits of a diverse college campus in determining learning outcomes were generated (Smith, 1997). Data consistently suggested that university programs emphasizing diversity in a 'student-centered' environment where faculty took a personal interest in the student's learning showed more positive outcomes for the overall educational experience (Chang, 1997; Marayuma & Moreno, 2001).

#### What is racial/ethnic diversity?

Despite its popularity in usage, there is considerable ambiguity that surrounds the definition and operationalization of the term 'diversity' in research and practice (Gazel, 2001; Hurtado, 1997). This ambiguity makes it difficult for scholars and practitioners to create and sustain and study an environment that espouses diversity, and further poses constraints on the effective evaluation of 'diversity' based initiatives. In the absence of clarity of a sound definition, it becomes difficult to associate potential effects/outcomes to any diversity-based initiatives. In short, an accurate assessment of the consequences of 'diversity' initiatives is threatened.

Several meanings of the term are employed in literature and practice. Racial or ethnic diversity has been widely used in the context of affirmative action struggles. In



this light, diversity has been defined in numerical terms, referring to the proportion of students of color admitted and retained in universities. The association of diversity with the controversial issue of affirmative action has often meant that diversity is understood by many as concerning minority students alone (Gazel, 2001). This 'minority focus' is apparent in many of the university-based 'diversity' initiatives that stress recruitment, retention, financial assistance, and developmental programs for minorities (Spitzburg & Thorndike, 1992). An unanticipated consequence of such an emphasis, often results in white students and students of color feeling, and remaining socially segregated. (Gazel, 2001).

Most importantly, an emphasis on numerical diversity alone, does not guarantee a diverse campus. Because interactions between different groups do not take place on their own, the mere existence of a numerically diverse group is not a sufficient guarantee for a diverse campus (Yales, 2000). Gurin (1999) articulates three different types of diversity that brings out this crucial point. "Structural diversity", according to Gurin (1999) is defined in numerical terms and refers to the extent to which a campus has a diverse student body. On the other hand, "Classroom diversity" refers to the extent to which knowledge about diverse groups and issues relating to diversity is included and discussed as a part of the curriculum in classrooms. Gurin (1999) contrast these definitions of diversity with "informal interaction diversity," that is conceptualized as the extent to which campuses provided opportunities for informal interaction across diverse groups.

Drawing from the contact theory (Allport, 1954), Gurin (1999) found that structural diversity was necessary, but insufficient in producing benefits to its stakeholders, and that it was informal interactional diversity that was positively

associated with learning outcomes such as increased active thinking, academic engagement, participation in citizenship activities, and greater appreciation for differences. According to Vontress (1996), it is through interactions that students learn how to relate to one another across personal differences. By engaging in the process of knowledge exchange of different people and their cultures, participants gradually learn to challenge stereotypes. Therefore, many researchers (e.g., McAllister & Irvine, 2002; Smith, 1997; Pascarella et al., 1996) support the claim that if diversity is not brought forth through interaction, it is in fact meaningless to consider a class or a campus as diverse. Thus the literature strongly indicates that the notion of diversity entails benefits to the extent that diversity is defined and operationalized as a communicative phenomenon, rooted in the nature of the interaction. This paper endorses this view, and conceptualizes racial diversity in terms of interactional diversity, which is characterized by the extent to which students are aware and accepting of the likeness and differences of each other (Vontress, 1996).

Interactional diversity is not common in campuses today. Based on the racial clusters that are typically observed in classrooms and cafeterias, Gazel (2001), Gurin, (2001) and Yales (2000) observe that it is common for students to be socially segregated, and that few white students and students of color share meaningful interracial connections that enhance their educational experience. In other words, there appears to be a wide gap between the desirable effects associated with interactional diversity, and the practice of such a phenomena in reality. Universities have addressed this gap by creating various platforms that allow meaningful experiences for students with their peers of different backgrounds.

### The creation of innovative models to solve the social problem

Campus diversity programs have mushroomed over the last decade, creating “a plethora of diversity training workshops” (Gazel, 2001). These initiatives typically take the form of inter-group race relations dialogues in and outside classrooms (Springer et al., 1996). These interactional diversity initiatives often involve the comprehension of the historical and cultural contexts of different racial/ethnic groups, based on the premise that such knowledge would enhance one’s understanding about individuals who belonged to the particular group. However, because this approach incorporated issues on oppression and marginalization of several groups in the United States, it caused discomfort in the minds of participants. Consequently, many diversity-training programs became unpopular and withdrew from educating around race (Thomas, 1996).

Nonetheless, many universities upheld the value of racial and ethnic interactional diversity by creating and retaining several efforts. These efforts typically revolved around conducting one shot voluntary programs, encouraging faculty to present academic programs in residence halls, and conducting activities initiated by campus wide committees or the student affairs to encourage minority leadership and multicultural understanding (Marklein, 1998). Typically, these initiatives reflect a combination of efforts that are designed to promote structural as well as interactional diversity; some with a deliberate minority focus and others that take a broader and more inclusive approach.

### MRULE – a social innovation in bridging the racial divide

The Multi Racial Living Unity Experience (MURLE) program that began in 1996 was initiated by Dr. Jeanne Gazel and Dr. Richard Thomas, faculty members with the

departments of History and Urban Studies at Michigan State University, with the help of a strong of institutional commitment to promote race relations on campus. MRULE was created to promote integration among students by building a multi-racial community of students from diverse backgrounds at Michigan State University (MRULE brochure, 2001). At MRULE, numerically diverse groups of students come together to engage in non-threatening round table dialogues held in their dormitories, once a week, throughout the academic year. In these sessions, students discuss issues related to race, and connect these issues to their own current and future lives, while simultaneously unearthing historical facts associated with these issues. Peer leaders who are groomed to be student leaders in a rigorous training program, facilitate these dialogues. These discussions form the center of knowledge gain and attitude change among the students (Gazel, 2001).

In addition to round table dialogues, students engage in monthly socials that are designed to offer a congenial platform wherein they get an opportunity to know their peers as individuals and build ‘genuine’ relationships with them (Gazel, 2001). To strengthen the emerging interracial friendship networks, and to learn about the multicultural history and culture of this nation, students make trips to a metropolitan area once a year. Further, participants also get involved in community service at least once every semester. By engaging in these four components of the program that are designed to build a community of diverse students, participants explore their own knowledge and attitudes related to race. This exploration is expected to translate into practice/ behavior, such that each participant becomes a change agent impacting race relations proactively in his or her own way. In short, MRULE seeks to enhance participants’ knowledge about race related issues, promote positive attitudes towards people who belong to different

racial backgrounds, highlight the importance of racial issues in various contexts of one's life, and most importantly encourage its participants to interact with members of diverse groups.

MRULE can be regarded as a social innovation in the field of diversity initiatives on campus for several reasons. First, it is a unique program in the field of race relations because it offers a coordinated and a multi-pronged approach towards the creation and sustenance of interactional diversity by permeating various aspects of the life of a student. The MRULE approach is holistic and goes beyond spreading awareness about race related issues, or changing attitudes of students towards race alone. Rather the goal is to build a community of students across racial/ethnic groups who form genuine relationships with each other. This approach offers a contrast to most campus diversity initiatives that are typically piecemeal, uncoordinated, and lacking the ability to influence the totality of the life of a student on campus (Brown, 1998).

Second, the methodology employed by MRULE also distinguishes it from other race relations programs. Unique to MRULE is its approach of encouraging participants to apply race related facts and issues to their own lives. By making connections between their day-to-day perceptions and experiences with friends and families, and the history that underlies common racial attitudes and practices, the program is made meaningful to the lives of students. Because of this unique approach, MRULE is a synthesis of theory and practice (Gazel, 2001). As a result, participants in MRULE are not merely exposed to a race-relations program but rather go through an experience of self-discovery and growth. Third, the channel that MRULE uses to educate participants around racial issues are students themselves. This peer-to-peer educating has proved powerful tool in

educating students around race because participants develop close ties, and identify with their students leaders, who also serve as a role model for them. This coupled with the voluntary nature of the program gives students the space to make themselves comfortable in processing the import of the discussion and activities, as well as participating in them. Fourth, because of the above reasons, MRULE is a novel experience to its participants, therefore making it an innovation in the eyes of the adopters of the program.

A scientifically credible evaluation of the effectiveness of the innovation.

The question remains however, whether interactional diversity efforts like MRULE and others indeed have yielded desirable consequences, such that it is reflected in the level of salience attributed to race by the participants, as well as their knowledge, attitudes and behaviors related to race. With few exceptions (e.g. Facing History, 2002; Smith, 1992), empirical studies on consequences of such programs in terms of their impact on the participants are lacking (Neville & Furlong, 1994). Several reasons might account for this. It is plausible that evaluations are conducted at the university level but are not published in journals, making access difficult for the academic body at large. Alternatively, the lack of emphasis on consequences of social programs could be reflective of the dearth of research on consequences in diffusion literature.

Rogers (1995) observes that studies on costs and gains that individuals experience as a result of adopting an innovation have received little attention from diffusion researchers. This observation spans across various fields, and is applicable to both tangible innovations, as well as social innovations such as policies and social programs. For example, in the social sector, Racine (1998) observes that crucial information needed by stakeholders to judge whether a social program is replicable or not is lacking. The

lack of emphasis on consequences is also observed among change agents who often assume that innovations automatically imply betterment (Smith et. al., 1996). Change agents, who often sponsor diffusion research, overemphasize adoption, and make implicit and often false assumptions about the need for such innovations and the benefits associated with its adoption to the various stakeholders involved. This 'pro-innovation bias, or the tendency of innovation creators and change agencies to assume that the adoption of a given social innovation would produce only beneficial results for adopters is well documented (Rogers, 1995). This could be especially true in the case of diversity based social innovations, given that the goal of diversity is highly valued, and yet consistent ambiguity exists in the meaning of the diversity, and the means to achieve it (Astin, 1993).

In addition to the factors outlined above, lack of studies on consequences of innovation might be accounted for, in part by the complexities involved in the measurement of consequences. Since social programs focus on changes in behavioral intent, this becomes hard to identify, quantify and measure (Racine, 1998). Major methodological criticism of literature on consequences also includes lack of predictive designs, lack of meaningful criteria employed to evaluate programs, unreplicability of measurement, and the predominance of case studies dealing with only a single adopter or a handful of adopters (Mayer & Davidson, 2000). Further, it is extremely difficult to separate the impact of a program from the effects of other confounding variables that impact individual behavior. Threats to internal validity, like history, maturation, selection, make it difficult to establish a causal relationship between the social innovation and its consequences. For example, in evaluating the impact of a prejudice reduction

program on the participants, Neville & Furlong (1994) conclude that although positive, the findings could reflect students' preexisting desire and receptivity to learn about racism.

Despite these factors that inhibit a systematic study of consequences, the need for such studies cannot be overemphasized. In the absence of such studies, there is little clarity about the efficacy of social programs, and an understanding of the consequences it entails to its participants/adopters. As a result, the successful implementation of the third and the fourth stages as of purposive diffusion that depends on the efficacy of the previous two stages in Fairweather's model are threatened. In addition, it becomes increasingly difficult to obtain information on "best practices" (Dearing, 2002), that are vital in addressing social problems effectively, and replicating successful efforts.

#### Rogers's framework for the study of consequences – evaluating MRULE.

Rogers (1995) defines consequences as changes that occur to an individual or to a social system as a result of the adoption or rejection of an innovation. In the event of an innovation being a social innovation (innovative program or a policy), a study of consequences is an investigation into whether a program caused 'demonstrable effects' on specifically defined target outcomes. In other words, it is a judgment about the effectiveness of the effort, and an assessment of whether the program achieved its objectives. Outcome evaluations that examine the immediate effects of the program on the target audience in terms of the increased awareness of the content, changes in knowledge, attitudes and behavior of the participants mirror the studies of consequences of social innovations (Rossi & Freeman, 1985).



Rogers (1995) categorizes consequences of innovations in terms of the desirability of their effects, the directness of their impact, and the anticipation of effects that are associated with the innovation. Desirable and undesirable consequences refer to the functional and the dysfunctional effects of an innovation as perceived by the individual or a social system, which adopts the innovation. Direct consequences are the changes to an individual or a social system as a result of the “immediate response” to innovations. Indirect consequences are the changes to an individual or a social system that occur as a result of the direct consequences of innovations. Thus, according to Rogers, “they are consequences of consequences”. Lastly, Rogers distinguishes between anticipated and unanticipated consequences. Anticipated consequences refer to changes brought about by an innovation that are recognized and intended by members of a social system, while unanticipated consequences are changes in individuals that are neither intended nor recognized by members of a social system. According to Rogers, consequences are a summation of these components such that the undesirable, indirect and unanticipated consequences of an innovation go together with the desirable, direct and anticipated consequences.

Based on Roger’s categorization of consequences, an inquiry into the consequences of adopting MRULE is proposed. This study examines the direct and anticipated consequences of MRULE in terms of its impact on salience, knowledge, implicit attitudes and behavior of its adopters/students. MRULE is designed (anticipated) to achieve direct effects on its participants such that they exhibit enhanced levels of knowledge, higher salience towards racial issues, and positive attitudes and behaviors related to race. Therefore, an inquiry into the effects of MRULE on these four outcomes

(attitudes, salience, behaviors and knowledge) on participants is an examination of the direct and anticipated consequences of the program. Specifically, this study seeks to answer the following question:

RQ1. Are there significant differences between MRULE participants and non-participants in levels of knowledge, attitude, and behaviors and salience related to race?

## Chapter 2

### Method

#### Participants

One hundred and sixty-seven students (115 females, 48 males) at Michigan State University completed a questionnaire measuring attitude, salience, behaviors and knowledge related to race. Of these, data from three students were excluded from analysis because they failed to follow the instructions on the questionnaire. Of the remaining 164 participants, 53 students (32.32%) who were not a part of MRULE comprised of the control group (control group). The comparison group consisted of 76 students (46.34%) who had just joined the program two weeks prior to the administration of the survey (new recruits). Thirty-five students (21.34%) who had been participants of the MRULE program for two years (between 2000-2002) prior to the collection of data constituted the treatment group (MRULE participants group). This figure does not include student leaders of MRULE who did not participate in this study.

A detailed description of the demographics of participants in each group is presented in Table 1. The majority of participants in the study were seniors ( $n = 65$ , 39.6%), followed by freshmen ( $n = 41$ , 25%), juniors ( $n = 30$ , 18.3%), sophomores ( $n = 20$ , 12.2%), and graduate students ( $n = 5$ , 3.0%). Of the total sample, 101 students (61.6%) were Caucasians, 29 (17.7%), were African Americans, and the rest were Hispanics, Asians, Middle Easterners and students who identified themselves as biracial (Others). Five participants did not report their racial group affiliation, while five others reported that they belonged to the 'human race'.

The control group comprised of 20 males and 33 females. The majority of them were seniors ( $n = 47$ ), followed by juniors and graduate students ( $n = 5$ ). One participant in this group failed to report their school year. There were 41 Caucasians, three African Americans, two non-listed, and seven students who belonged to the 'other' category in the control group. In the New recruits group, which was comprised of 24 males and 51 females, (one unlisted) there were 41 freshmen, 26 sophomores and juniors, and eight seniors and graduate students. In this group, 42 participants were Caucasian, 16 African American, 16 belong to the 'other' category, and two who were unlisted. In the MRULE participants group, there were 31 females, and four males (one unmarked) who were juniors ( $n = 14$ ), seniors ( $n = 13$ ) and sophomores ( $n = 7$ ). One participant failed to indicate his/her school year. In this group, 18 participants were Caucasians, 10 students were African American, and six belonged to the 'other' category. One participant in this group failed to identify his/her racial category.

### Design

A three-group post test only quazi-experiment with an offset control group was designed to assess the anticipated and direct consequences of MRULE. The researcher examined the relationship between membership in MRULE (Independent Variable) and scores on a questionnaire measuring, race related salience, knowledge and behavior and attitudes (dependent variables) of non-participants and participants. Thus scores obtained by the control group, the new recruits and the MRULE participants were assessed for potential differences on measures of salience, knowledge, behavior and attitudes related to race.

## Procedure

Prior to the quazi-experiment, a preliminary analysis was conducted by the researcher to gather detailed information on the MRULE program, its purpose, history and approach. A qualitative technique of data collection was employed. The researcher went over artifacts, (Gazel, 2001), and conducted interviews with Dr. Gazel, the director of the program in summer, 2001. In addition, the researcher became a participant observer of the MRULE weekly round tables held in one of the dormitories in the campus of Michigan State University through the fall semester, 2001. Participants were not aware of the research interests of the experimenter. Based on the data obtained from these qualitative sources, the researcher was able to narrow down the thrust of the program, and evolve the criteria for evaluating MRULE. Four outcomes were decided upon for the evaluation of the program and scales devised to measure them were designed.

Next, the measures were pilot tested on MRULE student leaders ( $n = 11$ ), to determine if the items on the scales reflected accurately the thrust of the program, and whether items were easy to comprehend. Some scale items were reworded based on the feedback that was obtained.

In fall 2002, two weeks after the MRULE program was underway, the researcher along with a research assistant went into the MRULE meeting rooms in each of the five residence halls in which MRULE operates. These were either on Mondays or Tuesdays, depending on when each group met for their weekly round table discussions. In these round tables, participants who had been a part of the MRULE program (MRULE participants group) as well as students who were just beginning their experience (new recruits group) gathered together to discuss issues related to race. Prior to the start of their

discussion, the researcher introduced herself as a student who was interested in studying issues related to race. The researcher then requested the students present to fill out a 'survey on race relations'. The participants were not informed that this was an evaluation of the MRULE program. Though it was mentioned that it was not mandatory for them to fill out the survey, all participants came forward and completed the questionnaire. The participants were thanked for their time, and debriefed. Data were collected over a span of two weeks. The control group participants were drawn from an undergraduate class at Michigan State University. The procedure followed was similar to the new recruit groups and the MRULE participants group.

### Measures

In this study, salience is defined as the degree of importance that participants attribute to diversity related issues. Knowledge is conceptualized in terms of facts that deal with important historic and current race related issues. Racial attitudes are defined as the perceiver's evaluations, including thoughts and emotions, towards social objects that are deemed as either favorable or unfavorable (Greenwald & Banaji, 1995; Shuman, 1995). Behaviors are defined as overt day-to-day interracial actions and activities in which participants engage. A questionnaire measuring the four dependent variables was constructed (See Appendix A). The questionnaire draws in part from the Modern racism scale (McConahay, 1996), Discrimination and Diversity Scales (Wittenbrink et al., 1997), Student Racism scale (Boneicki, 1996), Anti Black and Pro Black Scale (Katz & Hass, 1988) and the Stephan's (2001) "Survey for use in evaluating dialogue programs".

The attitude scales consisted of 27 items. Three items were deleted because they failed to contribute to scale reliability and one item was excluded from the scale because

of lack of variance in responses. The attitude scale was assessed with a 3-point response format in which respondents were required to agree, disagree or mark 'unsure, against a set of declarative statements. The alpha coefficient for the attitude scale was .82. The salience scale which consisted of fifteen items is assessed with a 3-point response format, in which respondents had to choose between 'yes', 'no; or 'unsure' options in responding to a set of declarative statements. One item was deleted from the scale because it failed to contribute to item reliability. The coefficient alpha for the salience scale was .90. Two different measures were constructed to detect behaviors related to race. They were the reported frequency of activities with members of other racial groups, and a generic measure of behaviors related to racial issues. The behavioral scale was assessed with a Likert type 5- point response format ranging from 'strongly agree' to 'strongly disagree'. The coefficient alpha for the scale measuring reported frequency of activities with members of other racial groups was .95. The second measure designed to assess generic behaviors of participants related to racial issues, comprised of 22 items and had a reliability index of .89. The knowledge scale comprised of 18 items in which respondents chose between 'true' 'false' or 'don't know' options. The scale had coefficient alpha of .72. The distribution of responses to each of these scales approximated normality. In addition to the scales, the questionnaire also sought demographic information from the respondents. This included information on reasons why participants chose to join MRULE, percentages of members from different racial backgrounds that constituted one's school and neighborhood, and prior exposure to race.

## Chapter 3

### Results

#### Substantive findings

To test the impact of MRULE on the four dependent measures, data obtained from the three groups were subject to a one-way analysis of variance test examining the equality between means. Post hoc analysis with Tukey b was conducted to determine potential differences between groups. Table 2 provides a summary of the results.

#### Attitude

Significant differences between the three groups were found in attitude towards racial issues,  $F(2, 161) = 20.36, p = .0001, \eta^2 = .20$ . Participants in the control group ( $N = 53, M = 0.33, SD = 0.32$ ) expressed significantly less positive attitudes towards racial issues in comparison to participants in the new recruits group ( $N = 76, M = 0.57, SD = 0.25$ ), mean difference = - 0.23,  $p = .0001$ , as well as the MRULE participants group ( $N = 35, M = 0.70, SD = 0.27$ ), mean difference = - 0.37,  $p = .001$ . The differences between the new recruits group and the MRULE participants group were also significant, mean difference = -0.14,  $p = .02$

A supplemental analysis was conducted on the item that was deleted because of lack of variance. In responding to the statement ‘some races are genetically superior to others’ only 6 participants in the entire sample expressed agreement. Of the six who agreed, two participants belonged to the control group, four to the new recruits group. None of the participants belonging to the MRULE participants group.



### Salience

A one-way ANOVA revealed significant differences between groups in levels of salience attributed to issues dealing with race,  $F(2, 161) = 21.72, p = .0001, \eta^2 = .21$ . Participants in the new recruits group ( $N = 76, M = 0.54, SD = 0.43$ ) attributed significantly more importance to racial issues in various contexts when compared to participants in the control group ( $N = 53, M = .06, SD = 0.55$ ), mean difference = 0.48,  $p = .0001$ . Likewise, participants in the MRULE group ( $N = 35, M = .65, SD = 0.44$ ) also exhibited significantly more importance to racial issues than control group participants, mean difference = 0.59,  $p = .0001$ . While participants in the MRULE group attributed higher levels of salience to racial issues when compared to the new recruits, the differences in means between these two groups was not significant, mean difference = 0.11,  $p = .28$ .

### Behavior

The scores on the generic behavior scale that were subject to a one way ANOVA indicated significant differences between groups,  $F(2, 161) = 20.03, p = .001, \eta^2 = .20$ . In the control group, participants ( $N = 53, M = 2.82, SD = 0.55$ ) reported that they engaged in common actions and activities with members of different groups in their every day life significantly less often than participants in the new recruits group ( $N = 76, M = 3.24, SD = 0.66$ ), mean difference = - 0.42,  $p = .0001$ , as well as the MRULE participants group ( $N = 35, M = 3.63, SD = 0.54$ ), mean difference = - 0.81,  $p = .0001$ . The MRULE participants reported that they engaged in such behaviors more often than the new recruits, mean difference = - 0.39,  $p = .002$ .

For the scale measuring frequency with which individuals indulged in specific activities with others from different racial backgrounds, the ANOVA test revealed significant differences between groups,  $F(2, 161) = 5.51, p = .005, \eta^2 = .06$ . Compared to the new recruits ( $N = 76, M = 2.74, SD = 0.81$ ), MRULE participants ( $N = 35, M = 3.09, SD = 0.70$ ) were significantly more likely to engage in various types of activities with members of a different racial/ethnic background (mean difference = 0.35,  $p = .02$ ). Also, the control group participants ( $N = 53, M = 2.56, SD = 0.62$ ) were significantly less likely to engage in various types of activities with members of other racial backgrounds when compared to participants in the MRULE group, mean difference = -0.52,  $p = .001$ . There was no significant difference in means between the new recruits group and the control group, mean difference = 0.18,  $p = .17$ .

### Knowledge

Analysis of the knowledge scores obtained by participants revealed significant differences between groups,  $F(2, 161) = 23.86, p = .0001, \eta^2 = .23$ . The control group ( $N = 53, M = 0.20, SD = 0.29$ ) differed significantly in knowledge when compared to the new recruits group ( $N = 76, M = 0.34, SD = 0.27$ ), and the MRULE participants group ( $N = 35, M = 0.61, SD = 0.28$ ). Thus, participants in the control group were significantly less aware of facts related to race relations, in comparison to participants in new recruits group (mean difference = -0.14,  $p = .004$ ), and the MRULE group, mean difference = -0.41,  $p = .0001$ . Similarly, the difference in knowledge scores between the new recruits and the MRULE participants was also significant, mean difference = -0.27,  $p = .0001$ .

### Supplemental analysis

Additional analyses were conducted to determine if the three groups in the quazi-experiment were comparable on certain relevant attributes. Table 3 provides a detailed description of the differences in demographics between participants within each of the three groups.

For an assessment of potential differences in reasons for joining MRULE, the new recruits group was compared with the MRULE participants group. Chi-square test revealed that participants in the two groups were equally likely to join the program because of personal interests,  $\chi^2 (1, N = 111) = 2.91, p = .09$ , and were equally likely in both the groups to have been attracted to the program because their friend told them about it,  $\chi^2 (1, N = 111) = 0.068, p = .79$ . The between group differences among participants on their exposure to race prior to Michigan State University, was also not statistically significant,  $\chi^2 (2, N = 161) = 2.11, p = .35$ .

A one-way ANOVA to test for potential differences between groups in neighborhood demographics that participants belonged revealed significant differences,  $F (2, 150) = 3.08, p = .05, \eta^2 = .04$ . Post hoc analyses were conducted on responses to an item that asked participants to report approximate percentages of people belonging to different racial groups who occupied their neighborhood. A comparison of control group participants ( $N = 50, M = 17.14, SD = 25.00$ ) and the new recruits group ( $N = 70, M = 31.39, SD = 34.07$ ) revealed that the difference was significant (mean difference = -14.25,  $p = .02$ ). The difference between the new recruits group ( $N = 70, M = 31.39, SD = 34.08$ ) and MRULE participants group ( $N = 33, M = 27.67, SD = 33.81$ ) was not significant, mean difference = 3.72,  $p = .58$ . Likewise, the difference between the

MRULE participants group and the control group was also not significant, mean difference = 10.53,  $p = .14$ .

The three groups were also analyzed to assess potential differences in the demographics that characterized high schools that participants attended, to examine if participants attended schools in which most students were predominantly people of color, white, or multiracial. Participants reported their answers in a four- point response format, ranging from predominantly people of color, to predominantly white distribution. A one-way ANOVA revealed no significant differences between the three groups,  $F(2, 158) = .93$ ,  $p = .40$ ,  $\eta^2 = .01$ . Further, participants were also asked to self-report their racial affiliation. Based on the responses of the participants, eight categories were created (see Table 1). The differences observed in the racial demographics within each group were not significantly different from the demographics across the three groups,  $\chi^2(14, N = 164) = 16.96$ ,  $p = .26$ .

With regard to economic background of participants, differences in income levels (as measured by family annual income) were elicited on a 4-point response format ranging from 'under \$ 30,000' to 'above \$ 120,000'. The differences in income levels of families of participants between the three groups were statistically significant,  $F(2, 154) = 3.89$ ,  $p = .02$ ,  $\eta^2 = .05$ . Post hoc tests indicated that the control group participants ( $N = 51$ ,  $M = 3.49$ ,  $SD = 1.16$ ) were significantly different from the new recruits ( $N = 72$ ,  $M = 2.93$ ,  $SD = 1.24$ ), mean difference = 0.56,  $p = .01$ . The control group also differed significantly from the MRULE participants group on income levels, mean difference = 0.58,  $p = .03$ . The mean difference on income between the new recruits group and the

MRULE participants group ( $N = 34$ ,  $M = 2.91$ ,  $SD = 1.14$ ) was not statistically significant (mean difference = 0.02,  $p = .94$ ).

The proportion of males and females did not significantly differ between the three groups,  $\chi^2(4, N = 164) = 8.67$ ,  $p = .07$ . There was a significant difference between the three groups in the participants' year at school,  $F(2, 159) = 90.60$ ,  $p = .0001$ ,  $\eta^2 = .53$ . MRULE participants were at a significantly higher level in their undergraduate education than the new recruits (mean difference = 1.32) and were at a significantly lower level of undergraduate year in comparison to the control group (mean difference = - 0.80,  $p = .0001$ ). Further, the control group participants were at a significantly higher educational year than the new recruits (mean difference = 2.13,  $p = .0001$ ).

Finally, an Analysis of Covariance was performed controlling for reasons why people join MRULE, differences in income levels, levels of education, the proportion of racial exposure prior to college, and their neighborhood and school demographics. This test revealed that the effects of the MRULE program remained significant.

## Chapter 4

### Discussion

This paper offers a social change perspective of diffusion of innovations, and presents a synthesis of literature on diversity initiatives and diffusion. This synthesis is achieved by placing the problems associated with race relations on campus, and the lack of the study of consequences of diversity initiatives into Fairweather's (1986) experimental social innovation model. In the context of this model, the problem of race relations on college campuses, and the lack of clarity on the conceptual and operational definition of 'diversity' were discussed. In this study, diversity is defined in terms of the extent to which platforms for interactions across racial/ethnic lines are made available and utilized on college campuses. Solutions that promote interactional diversity are reviewed and the MRULE program is introduced as one alternative to bridging the racial divide. The rationale for MRULE being a social innovation in the field of race relations was presented.

In an attempt to bridge the gap in diffusion research and diversity studies, an inquiry into the consequences of participating in MRULE was explored. Roger's categorizations of the study of consequences is outlined, and based on this framework, an investigation into the direct and anticipated consequences of MRULE is conducted. Specifically, this study examined whether the levels of knowledge, salience, attitude, and behaviors (related to race), of participants who have undergone the MRULE experience are significantly different from participants who have not yet adopted the program. To answer this research question, students who have been part of the MRULE program for two years were compared to students who have just begun the program, on scores

obtained from a questionnaire measuring attitude, behavior, salience and knowledge related to racial issues. Further, a control group comprising of students who were not a part of the program was included in the design.

Data analysis revealed that the MRULE program did indeed make a positive difference on participants' racial attitudes, knowledge and behaviors. Evidence to this claim is demonstrated by data that indicated that program participants were significantly and substantially more knowledgeable on racial issues, more positive in their attitudes towards race, and also exhibited more pro-interracial behaviors, in comparison to those who were not a part of the program, as well as those who just begun their experience in the program.

Scores on the salience scale indicated that students in MRULE attributed higher levels of importance to race related issues in various contexts, in comparison to those who were not participants of the program (control group). However, attributions of salience to race related issues by MRULE participants was not significantly higher in than those indicated by the participants who were just beginning the program (the new recruits group). The non- significant differences in scores on the salience scales between the beginners of the program and the MRULE participants suggests that MRULE did not significantly impact students in terms of highlighting the importance of racial issues in the lives of participants.

The attitudes of students in the MRULE program were significantly more positive towards issues related to race, in comparison to non-participants and students who were just beginning the program. The robust effect size of 0.20 attests the impact of MRULE on the racial attitudes of students. Thus the MRULE program was successful in molding

students' attitudes positively towards race related issues. An analysis of the deleted item is consistent with this claim. No MRULE student agreed to the statement that endorsed biological superiority of certain races.

To examine if MRULE enhanced its participants' awareness and accuracy of knowledge related to racial issues, a knowledge scale comprising of 18 items was constructed. As observed from the scores obtained by participants on the scale, students in MRULE were much more accurately aware of facts related to racial history and current events in comparison to beginners and non-participants of the MRULE program. Thus MRULE students were more aware of the GI Bill and its implications, meaning of affirmative action and the differences between affirmative action and diversity, than the new recruits or the control group participants. Of the total variance in students' knowledge related to race, MRULE accounted for a substantial 23% of the variance.

To test for potential differences in overt behaviors that participants in the three groups engaged, the generic behaviors scale was constructed with items that tapped students' day-to-day actions/activities in relation to racial issues in various contexts. Post hoc tests indicated that students in the MRULE program engaged in such behaviors most often, in comparison to the new recruits as well as the control group students. The control group participants, who were not a part of the program reported to engage in such behaviors least often in comparison to the other two groups. The effect sizes that demonstrated the impact of MRULE on race-related behaviors was 0.20.

The second scale that was constructed to measure reported frequency of activities that students were involved in, with people from a different/racial ethnic background indicated strongly that the MRULE program students were proactively involved in multi-



racial and multi-ethnic interactions in comparison to the other two groups. For example, students of MRULE in general were more likely to work together in organizations to improve race relations in their communities, intervene if a member of a racial group was unfairly criticized or go out on dates, live together and visit homes of people from different racial ethnic backgrounds, in comparison to the control group and the new recruit participants. The differences in frequency of such behaviors between participants in the control and the new recruits group were not statistically significant. In other words, the new recruits group and the control group did not differ in their frequency of interactions with members of different racial groups and were both engaged in such actions significantly less often than the MRULE participants group. Therefore the yardstick employed to measure the crux of interactional diversity - the extent to which individuals engage in interactions with members of a different racial /ethnic background, strongly indicated that MRULE participants stood out in comparison to the incoming students and also the non-participants. This suggests that MRULE was successful in making the difference by building and fostering a climate in which these interactions were created and nurtured.

In short, results strongly indicate that the direct and anticipated impact of the MRULE program on the levels of knowledge, attitudes, and behaviors of participants are 'real'. MRULE appears to be highly successful in achieving its objectives. However, in order to claim unequivocally that it was indeed MRULE that 'caused' the effect on the dependent measures, it is important to rule out alternative explanations that might account for the pattern of data observed. One of the plausible alternative explanations that might be able to account for the data is selection bias. In the absence of random

assignment to the three conditions, it is plausible that participants who were attracted to MRULE groups self selected themselves, and therefore, the scores on the dependent measures could have been more positively associated with racial issues even without the program intervention. While an experiment that allows for random assignment would have ruled out this alternative explanation to a large extent, the use of a control group in this quazi-experiment, as well as the background information check attributes, allows for the assessment of this alternative explanation.

Assume for instance that the selection bias was not operating, and that it was MRULE alone that accounted for the differences in measures between the three groups. If this were the case, then the control group and the new recruits group should have had similar attitudes, behaviors, and knowledge related to race within sampling error. This is because both the groups were 'equally' unexposed to the program. This 'equality' is observed in case of the frequency of behavior scale, in which participants both the groups were not significantly different from each other, and were simultaneously lower in comparison to scores obtained by MRULE participants.

However, the significant differences between control group and the new recruits group on the other dependent measures suggests that a selection bias was operating, casting doubt on the 'real' effects of the program. These data suggest that students who chose to join MRULE were 'different' in that they were typically more positive in their attitude, and generic behaviors related to racial issues to begin with, and that these positive attitudes and behaviors could be created and sustained regardless of the program intervention. Thus the current data are consistent with self-selection effects. The question of relevance, however, is whether self-selection, or the 'differences' in students'

predetermined attitudes, generic behaviors and knowledge between the three groups implies that MRULE did not have any effect on the minds of participants. A comparative analysis of the scores obtained by participants in the comparison group, and the treatment group gives sheds light on this question.

Assume that MRULE did not make any difference to students' attitude, generic behaviors and knowledge related to race. If this were the case, then the scores of the new recruits group and the MRULE participants group on these dependent measures should have been more or less equal. This is not however the case. Participants who have undergone the MRULE program have significantly more positive attitudes towards race, engage more frequently in behaviors involving interracial interactions, and are more knowledgeable about facts related to current and historical race related issues, in comparison to participants who have just joined the program. The differences between the two groups, both of which self selected themselves to be a part of MRULE, reveals the impact of the MRULE program on the minds of the participants, in the relative absence of self-selection. Thus the current data are consistent with both self-selection effects and the effectiveness of MRULE. At a minimum, data suggests that MRULE impacts those who have self-selected to be a part of the program.

The question remains however, if there might be other factors associated with selection, that make the new recruits group different from the MRULE participants group, such that these factors, and not MRULE, account for the differences in results observed. First, because the comparison group is constituted by students who also volunteered to be a participant of the program (similar to the treatment group), self-selection as a bias in interpreting the results of the study is controlled to a considerable

extent. But how plausible is it for a group volunteering to join MRULE in one year to be significantly different from a group of student opting to be a part of MRULE the next year, on factors that might explain the pattern of data obtained. The background information elicited from participants provides further insight into this question. In this study, some factors associated with self-selection that could explain the differences in scores between the three groups were obtained from participants. These were reasons why people join MRULE, differences in income levels, levels of education (their year at school), the proportion of racial exposure prior to college, and their neighborhood and school demographics.

A comparison between the new recruits and the MRULE participants on reasons for joining MRULE indicated that participants in both the groups were more or less equally attracted to MRULE for personal interest in issues related to race. Counter-intuitively, majority of the participants in both the groups did not self-select to join MRULE because of personal interests in the content of the program, but rather because their friends informed them about the program. The data also revealed that participants in all three groups did not differ significantly from each other on their prior exposure to race, their neighborhood and high school demographics. Therefore, because equivalence on these attributes across the three groups can be assumed, the confidence in the claim that differences in scores across groups is 'caused' by the program, is enhanced.

However, the three groups differed significantly on levels of education, income, and neighborhood demographics. Significantly more MRULE participants were seniors, compared to the new recruits. This might suggest an alternative claim that as participants acquire higher levels of education, their attitudes behaviors and knowledge related to race

becomes increasingly more positive, regardless of any program intervention. If this were the case, then the MRULE students must have had more positive outcomes related to race, in comparison to the new recruits. The findings from the comparative analysis between these two groups reflect this identical pattern. However, the counter claim that differences in levels of education account for findings does not hold when the results from the control group are examined. If students acquire more knowledge about racial issues, develop more positive attitudes and express behaviors consistent with those attitudes as they acquire higher levels of education, then the control group which consisted of maximum number of seniors (and comprising of a significantly larger number of seniors in comparison to both other groups), should have scored highest on all the dependent measures. Interestingly, despite the fact that most students were in their senior year, they exhibited least positive attitudes, knowledge and behaviors in comparison to the new recruits group constituted mostly by freshmen and the MRULE participants group which was comprised mostly of their senior counterparts.

In regards to income, overall, participants in the control group appeared to belong to a higher economic bracket than participants in other two groups. Income then might explain the pattern observed in data. However, given that there is no significant difference in the income levels of participants in the two groups that have self selected to be a part of MRULE, significant differences between these two groups in the four dependent measures that were tested suggests that MRULE does make a positive impact on these four outcomes.

An analysis of neighborhood characteristics of participants across the three groups reveals a pattern similar to that observed in income. While the control group participants

belonged to neighborhoods that were lower in numerically diverse population in comparison to participants in the new recruits group as well as the MRULE participants group, the neighborhood characteristics of the latter two groups are more or less similar. Although this pattern observed might be an indication of selection bias, it does not however undermine the impact of MRULE on its participants. Assuming that neighborhood demographics is more or less constant between the new recruits group and the MRULE participants group, MRULE students still held more positive attitudes, more accurate knowledge and more interracial behaviors than the newly recruited students.

The lists of factors against which groups have been compared to determine equivalence are by no means exhaustive. Given the quazi- experimental nature of the design, an analysis of all potential differences is impossible. This leaves open the possibility for confounds that question the internal validity of the study. The absence of a pretest in the study also does not allow for a comparison of post test data with pretest measures. This approach would have been beneficial in tracking potential individual changes across time and providing a stronger case for or against the potential effects of the program. Despite the sensitive nature of the topic that would typically elicit social desirability, significant differences in self-report measures were found between the groups. Yet, students' reports might not accurately reflect their true attitudes and behaviors. Self-report measures might also have also distorted some of the demographic information elicited from participants (e.g. neighborhood/school demographics). Another limitation of the study is the small sample size, and the unequal cell sizes. Also, the range of responses elicited from participants in the study might be another limitation in the study. Participants were asked to agree, disagree or mark unsure to items on the

attitude and salience scale, rather than mark their response on a continuum. This restriction of range in response might have limited the covariation between independent variable and dependent variable. A wider range in responses might have resulted in an even stronger a relationship between the two.

This study offers theoretical and pragmatic implications for the field of diffusion and diversity initiatives. It is aimed at enriching literature on diversity initiatives by providing further clarity in the meaning and implications of the term ‘diversity’. Toward this, the distinction between different types of diversity and the implications of the resultant ambiguity in its application is highlighted. This study contributes to diffusion by emphasizing the post adoption stages of social innovations. This study attempts to fill the void in diffusion literature that is predominantly concerned with the study of innovation attributes that explain the rate of adoption of members in a social system.

Further, the methodology employed in this study provides an empirical test of an innovation – one that has often been ignored in diversity and diffusion literature. This study combines survey methods, with a quazi experiment in an attempt to provide a strong test of the direct, and anticipated consequences of adopting the social innovation. The inclusion of a control group in the design as well as an attempt to inquire into the equivalence between the groups on critical factors that might threaten the internal validity of the study provide confidence in the conclusions of the study.

The findings of this study bear direct and relevant implications to universities which are finding it increasingly difficult to set a tone for racial harmony, especially when many students who join universities have little exposure to other racial groups and cultures (Clements, 2000). The MRULE program is effective in molding students’

attitudes, enhancing knowledge related to race and expressing behaviors that are racially inclusive. A scientific test of this social innovation and its results could provide useful insights to universities faced with the task of integrating its diverse student population. Future research could explore the relationship between attitudes, behaviors, salience and knowledge associated with racial issues. The extent to which knowledge about an issue impacts attitudes, and the degree to which levels of salience, attitudes, and knowledge predict behaviors will be particularly informative. The relationships between the behavioral measures, and the attitudinal measures as observed in this study are worth exploring deeper. For example, if attitudes predicted behavior, then specifically what dimensions of behavior do they influence? In this study, the new recruits group differed significantly from the control group on attitude and generic behavior scores but not on scores related to frequency of interactions with members of another racial group. Further, future research might examine at greater depth the relationship between income levels and race related outcomes. It is possible that income interacts with other factors (that in turn influences outcomes) that have not been explored in this study.

Future research might employ a multi-method strategy that inquires into effects of social innovations, a strategy that incorporates the notion of time, a key component in assessing consequences of innovations (Rogers, 1995). Because of the complexities involved in the measurement of consequences, survey research methods often do not lend themselves to an exhaustive study of consequences as they do for the study of innovativeness (Rogers, 1995). Also, since consequences usually occur over extended periods of time, future research on these consequences will be meaningful. These studies might use extended observation over time, or in depth case study that provide a more



comprehensive and in-depth study of consequences. Rogers (1995) advocates a panel study in which respondents are interviewed both before and after an innovation. A thorough and detailed assessment of consequences might also include a study of the unanticipated consequences and undesirable consequences of an innovation that are equally important for research and practical purposes.

In conclusion, an assessment of whether the anticipated and direct effects of the program are 'real,' revealed that this indeed was the case. To the extent that MRULE aims at fostering interactional diversity on campus, data revealed that it has been highly successful. The 'acid-test' or evidence for the occurrence of interactional diversity attests to the efficacy of the program. This study therefore demonstrates that it is meaningful to bring diverse students on campus together under the platform of MRULE that is executing a sustained and coordinated effort towards building a multi-racial community on campuses, a need that is highly pertinent and valued by institutes of higher education.

## Appendix A

### Tables

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**Table 1**  
**Demographic Characteristics of Participants in the Quazi-Experiment**

Demographics	Group 1	Group 2	Group 3	Total
<b>Sex</b>				
Male	20	24	4	48
Female	30	51	31	115
Unmarked		1		
<b>Year</b>				
High School		1		1
Freshmen		41		41
Sophomore		13	7	20
Junior	3	13	14	30
Senior	47	5	13	65
Graduate	2	3		5
Unmarked	1		1	2
<b>Race</b>				
Caucasian	41	42	18	101
African American	3	16	10	29
Hispanic	2	4		6
Asian	2	3	1	6
Middle eastern	2	2	1	5
Biracial		4	3	7
Human	1	3	1	5
Unlisted	2	2	1	5
<b>Income</b>				
< \$ 30,000	4	6	2	12
\$ 30,000- \$ 59,999	5	27	13	45
\$ 60,000- \$ 89,999	14	17	9	40
\$ 90,000-\$ 119,999	18	10	6	34
> \$ 120,000	10	12	4	26
None listed	2	4	1	7
<b>Prior exposure to race</b>				
Yes	45	59	26	130
No	7	15	9	31
None listed	1	2	0	3

Table 2

Mean differences of participants' demographics between the three groups

Demographics	Group 1	Group 2	Group 3
Neighborhood	17.14a	31.39b	27.68
High school	2.15	2.04	1.94
Income	3.49a	2.93	2.91b
Year at school	3.98a	1.86b	3.18c

Note: Means with different subscripts are significantly different at  $p < .05$  with Turkey's b.

Table 3

## Mean Differences in Dependent Measures between the Three Groups

Dependent measures	Group 1	Group 2	Group 3
Attitude	.33a	.56b	.7c
Salience	.06a	.54b	.65c
Knowledge	.20a	.34b	.61c
Generic behaviors	2.82a	3.24b	3.63c
Frequency of activity	2.56a	2.74b	3.08c

Note: Means with different subscripts are significantly different at  $p < .05$  with Tukey b. Higher mean values indicate more positive racial attitudes, higher salience, higher levels of knowledge related to race, and more frequent pro-racial behaviors and activities.

## Appendix B

### Survey

Survey measuring participant's attitude, salience, behaviors and knowledge  
related to race

This is a survey designed to measure your response regarding issues relating to racial and ethnic diversity issues. This is an anonymous survey. Please answer as honestly and accurately as possible. You are requested to answer spontaneously (not to spend too much time answering each question), maintain the order of the questions, and avoid reverting back to answering previous questions. Thank you for your participation in this study.

*This section of the survey is designed to gain an insight into your views about race/ethnic diversity. There are no right or wrong answers to these statements. What you answer below should reflect your opinion. Please only choose the "not sure" option, if you are completely unsure of your own views!*

1. It is all right to date interracially.

AGREE

DISAGREE

NOT SURE

2. In the United States, if people work hard, success usually follows. Failure is just a matter of some people not trying hard enough. If they would only try harder they could be as well off as everyone else.

AGREE

DISAGREE

NOT SURE

3. When people talk about race relations, for the most part, they tend to whine about past wrongs.

AGREE

DISAGREE

NOT SURE

4. It is possible for people from different races to be both separate and equal at the same time.

AGREE

DISAGREE

NOT SURE

5. People are different because of their different cultural values. This has nothing to do with race.

AGREE

DISAGREE

NOT SURE

6. Many minority students who are admitted to universities in the name of increasing diversity are not qualified to be in school.

AGREE

DISAGREE

NOT SURE

7. One reason that marriage between people from different racial/ethnic background is wrong is because it would be hard on the children.

AGREE

DISAGREE

NOT SURE

8. I feel that discussions on race relations should be avoided, because they are very often too difficult to deal with.

AGREE

DISAGREE

NOT SURE

9. Being white in the United States means that one can benefit and enjoy unearned privileges associated with white skin.

AGREE

DISAGREE

NOT SURE

10. When assigned to group work I prefer to work with people from my same racial/ethnic background.

AGREE

DISAGREE

NOT SURE

11. If programs such as affirmative action were to end, it would have a negative effect on the learning environment on campus.

AGREE

DISAGREE

NOT SURE

12. To be diverse often implies being discriminatory against the white majority.

AGREE

DISAGREE

NOT SURE

13. Racism is mostly a thing of the past.

AGREE

DISAGREE

NOT SURE

14. Affirmative action is an unjust and discriminatory tool.

AGREE

DISAGREE

NOT SURE

15. People segregate because they prefer to hang out with people who are like them. In my view, this has nothing to do with racism.

AGREE

DISAGREE

NOT SURE

16. One reason I favor representation of diverse U.S race/ethnicities in universities is because it contributes positively to the quality of learning experience in school.

AGREE

DISAGREE

NOT SURE



17. Most minorities on campus are on special scholarships, “free rides” so to speak.

AGREE

DISAGREE

NOT SURE

18. Diversity should be highly valued.

AGREE

DISAGREE

NOT SURE

19. According to me, people are no longer judged by their skin color in the United States.

AGREE

DISAGREE

NOT SURE

20. If we just left people alone, they will gravitate automatically to those who they feel comfortable with, and if that is people who look, speak and believe like them, there is nothing wrong with it.

AGREE

DISAGREE

NOT SURE

21. People of color have jobs that white people should have.

AGREE

DISAGREE

NOT SURE

22. To be an advocate of equality often means caring more about people of color than the white majority.

AGREE

DISAGREE

NOT SURE

23. Some races are genetically superior to others.

AGREE

DISAGREE

NOT SURE

24. People from some racial/ethnic backgrounds are not very successful because they are taught values different from those required to be successful in the United States.

AGREE

DISAGREE

NOT SURE

25. Race relations in this country needs to be improved.

AGREE

DISAGREE

NOT SURE

26. Racial profiling is a necessary practice for crime prevention.

AGREE

DISAGREE

NOT SURE

27. Living with a person who belongs to a different racial/ethnic background in the place of residence can be very difficult.

AGREE

DISAGREE

NOT SURE

*The following questions seek to ascertain the importance/non importance you attribute to issues related to race/ethnic diversity as it pertains in various contexts. There are no right or wrong answers to these statements. Please mark YES if you agree with the statement, NO if you disagree. Please use the "UNSURE" option sparingly, only if you are completely unsure about the statement!*

1. The racial and ethnic diversity of my university is important to me.

YES

NO

UNSURE

2. I attach much importance to interacting with students from different racial/ethnic backgrounds in classrooms.

YES

NO

UNSURE

3. To encounter perspectives that I have not encountered before, I consider it crucial to interact with others of different racial/ethnic backgrounds.

YES

NO

UNSURE

4. Interacting with students from different racial/ethnic backgrounds is important in helping me examine my own perspectives and values critically.

YES

NO

UNSURE

5. To enrich the quality of discussions on course material, I attach importance to racial/ethnic diversity in classrooms.

YES

NO

UNSURE

6. It is important to me that I have a racially/ethnically diverse group of friends.

YES

NO

UNSURE

7. It is important to me that my teacher/ graduate assistants are aware of critical racial/ethnic issues.

YES

NO

UNSURE

8. It is important to me in my residence life that I live among a diverse group.

YES NO UNSURE

9. It is important to me that my significant other belongs to the same racial group as I do.

*YES NO UNSURE*

10. It is important that I interact with people from different racial/ethnic background so that my living experience in the residence hall is enriched.

YES NO UNSURE

11. Interacting with students from different racial/ethnic backgrounds is a significant factor in helping me develop my ability to think critically.

YES NO UNSURE

12. Race/ethnicity issues are important to me for my career and future.

YES NO UNSURE

13. It is important that I interact with students from a different racial/ethnic background in order that I develop leadership skills and abilities.

YES NO UNSURE

14. In general, I give less importance to issues of race and ethnicity.

YES NO UNSURE

15. The Racial and ethnic diversity of my university is one of the many important factors I considered while applying to universities.

YES NO UNSURE

*This section of the survey intends to gain some information on the common actions and activities you indulge in with members of different groups in your everyday life.*

Key: Never=1, Rarely =2, Sometimes =3, Frequently=4, Very frequently =5.

1. I use the “N” word with those I am comfortable with.

1	2	3	4	5
Never				Very Frequently

2. I hang out mostly with others of my racial/ethnic background.

1	2	3	4	5
Never				Very Frequently

3. I engage in discussions on racial/ethnic issues in groups wherein members are racially/ethnically diverse.

1	2	3	4	5
Never				Very Frequently

4. I engage in discussions on racial/ethnic issues in groups wherein members belong to the same race as I.

1	2	3	4	5
Never				Very Frequently

5. In the past one year I have

a) Conducted research or writing focused on racial ethnic diversity.

1	2	3	4	5
Never				Very Frequently

b) Attended racial cultural awareness workshops other than MRULE.

1	2	3	4	5
Never				Very Frequently

c) Participated in activities designed to integrate students of color with white students other than MRULE

1	2	3	4	5
Never				Very Frequently

6. I attempt to work with students across racial/ethnic lines in class assignments and group presentations.

1	2	3	4	5
Never				Very Frequently

7. I tend to pick my electives that will offer me more discussions and analysis of race related issues.

1	2	3	4	5
Never				Very Frequently

8. In my assignments, I tend to incorporate relevant racial and ethnic issues.

1	2	3	4	5
Never				Very Frequently

9. I fight against racial injustice and inequality.

1	2	3	4	5
Never				Very Frequently

10. I find myself questioning and re-examining my own ideas about race.

1	2	3	4	5
Never				Very Frequently

11. I participate in activities that are geared towards interracial unity.

1	2	3	4	5
Never				Very Frequently

12. I confront a member of my racial/ethnic group for making offensive jokes/offensive comments about people of different racial/ethnic groups.

1	2	3	4	5
Never				Very Frequently

13. I make it a point to reach out to others from different racial/ethnic backgrounds by initiating conversations with them in order to get to know them better.

1	2	3	4	5
Never				Very Frequently

14. I uphold my views on race even if it contradicts the opinion of my parents.

1	2	3	4	5
Never				Very Frequently

15. I question the views of my family members with regard to racial/ethnic issues.

1	2	3	4	5
Never				Very Frequently

16. I discuss race related issues with my friends.

1	2	3	4	5
Never				Very Frequently

17. My friends and I share similar perspectives on racial and ethnic issues.

1	2	3	4	5
Never				Very Frequently

18. I engage actively and honestly in discussions on race with my family members.

1	2	3	4	5
Never				Very Frequently

19. I respect teachers/ professors /TAs irrespective of their racial/ethnic orientation.

1	2	3	4	5
Never				Very Frequently

20. In any discussion, I try to affect the dynamics of the group in ways that integrate different racial/ethnic perspectives.

1	2	3	4	5
Never				Very Frequently

21. I am comfortable in interacting with members of different racial/ethnic groups, whom I don't know,

1	2	3	4	5
Never				Very Frequently

22. I reflect on what my parents taught me, or didn't teach me about people from different racial/ethnic backgrounds.

1	2	3	4	5
Never				Very Frequently

23. How often have you engaged in the following activities with members of the following race? Please fill the table accordingly:

***Never=1, Rarely =2, Sometimes =3, Frequently=4, Very frequently =5.***

	African Americans	Asians	Caucasians	Latinos	Native Americans
a) Invited as guests into your home					
b) Visited their home as guests					
c) Chose to work in the same work group					
d) Belonged to the same club					
e) Went out to restaurants					
f) Intervened if a member of their group was unfairly criticized					
g) Worked together in organizations or other efforts to improve race relations in your community					
h) Gone out on dates					
i) Gone out on vacations/trips					
j) Lived together					



*This section of the survey is designed to gain an insight into the level of knowledge you possess in the area of race relations. What you answer below is about actual facts pertaining to race relations in the United States. Please choose the "Don't know" option, if you are unsure of the facts.*

1. From a biological perspective, there are several different races in the world.

True

False

Don't know

2. The United States is a land that uphold meritocracy. Basically, if people work hard, then success is inevitable. The fact is people do not succeed because they do not try hard enough.

True

False

Don't know

3. Many students of color are admitted in the name of increasing diversity, even when they are not qualified to be in school.

True

False

Don't know

4. To be white in this country means that one can benefit and enjoy unearned privileges associated with white skin.

True

False

Don't know

5. In the U.S people are no longer judged by their skin color.

True

False

Don't know

6. Even today, people of color lose out on jobs and promotions in the United States because of their skin color.

True

False

Don't know

7. It is fact that most minorities on campus are on special scholarships, "free rides" so to speak.

True

False

Don't know

8. Latino/as, Asians, Native Americans, and African American experience discrimination at more or less the same degrees.

True

False

Don't know

9. After World War II the GI Bill that was introduced in the United States was a form of affirmative action for white people.

True

False

Don't know

10. The end of affirmative action in admissions will severely reduce the racial/ethnic diversity on college campuses. The segregation that will be reinforced in higher education will have an adverse effect on the learning environment on campus.

True

False

Don't know

11. All people in the United States are racialized.

True

False

Don't know

12. People segregate because they prefer to hang out with people who are like them. The fact is, it has nothing to do with racism.

True

False

Don't know

13. Race is not a biological reality, but a social construct.

True

False

Don't know

14. Based on history of the United States, it is safe to conclude that it is possible for races to be both separate and equal at the same time.

True

False

Don't know

15. The Civil rights movement has put an end to racial/ethnic discrimination in the United States.

True

False

Don't know

16. Affirmative action and diversity mean one and the same thing

True

False

Don't know

17. Affirmative action is a government policy aimed at opening doors for people who have been historically excluded.

True

False

Don't know

18. The biggest beneficiaries of Affirmative action historically have been white women.

True

False

Don't know

19. Discrimination against people of color is illegal in the United States, but the fact remains that it continues to be a major problem.

True

False

Don't know

**Background information**

1. Which year of MRULE are you in currently?      1<sup>st</sup>      2<sup>nd</sup>      3<sup>rd</sup>      4<sup>th</sup>

2. Have you been an active participant of MRULE? Yes / No / N/A / \_\_\_\_\_

3. Sex: M      F      \_\_\_\_\_

4. What year of college are you currently pursuing?

Freshman

Sophomore

Junior

Senior

5. When did you join MRULE? Please specify semester and year of joining (e.g. Fall, 2002).      \_\_\_\_\_

6. What percent of the group of people you consider to be friends constitute members of a race other than yours? \_\_\_\_\_

7. How would you name the racial/ ethnic category that you identify with?  
\_\_\_\_\_

8. Which figure best matches your family's annual income?

1. Under \$ 30,000

2. Between \$ 30,000 – \$59,999

3. Between \$60,000- \$89,999

4. Between \$ 90,000- \$ 119,999

5. Above \$120,000

9. Prior to MSU, what percent of your neighborhood did people other than your own racial background occupy? \_\_\_\_\_

10. I came to MRULE as a result of

a) Class

b) Personal interest

c) Friend told me about it

d) Professor told me about it

11. How would you characterize your High School?

1. Predominantly people of color (more than 60%) \_\_\_\_
2. Predominantly white (more than 60%) \_\_\_\_
3. Multi Racial (a relatively even distribution)
4. Other \_\_\_\_\_

12. Prior to MSU, have you been exposed to race/ethnicity related issues?

1. Yes
2. No

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