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Rational-emotive instruction as support for individual growth towards multicultural competence

Stacy Miller
The University of Montana

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RATIONAL-EMOTIVE INSTRUCTION AS SUPPORT FOR INDIVIDUAL
GROWTH TOWARDS MULTICULTURAL COMPETENCE

by

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B.S., University of Wisconsin – Green Bay, 2000

presented in partial fulfillment of the requirements
for the degree of Master of Arts

The University of Montana

2005

Approved by:

Chairperson

Dean, Graduate School

5.20.05

Date
Rational-Emotive Instruction as support for Individual Growth towards Multicultural Competence

Chairperson: Gyda Swaney, Ph.D.

Objective: To assess Rational-Emotive Instruction (REI) as a strategy for the development of increased multicultural competence. This study hypothesized that REI would address the inclination to critically think about one's own awareness and sensitivity levels towards adversity and diversity, leading to enhanced multicultural competence. Design: Mixed factorial ANOVA of Treatment X Class X Time (2 X 2 X 2). Method: Twenty-six undergraduate introductory multicultural course and psychology course college students were divided into 4 groups. The MC group (multicultural course students) and the PC group (psychology course students) received the basic educational format (control group) while the MT group (multicultural course students) and PT group (psychology course students) received additional participation in a seminar focusing on the REI approach to diversity (treatment group). The procedure measured critical thinking inclination (California Critical Thinking Disposition Inventory), multicultural sensitivity (Modern Racism Scale), multicultural awareness (College Student Experience Questionnaire), and multicultural open-mindedness (Quick Discrimination Index) in all groups. Results: The CCTDI revealed a significant Treatment X Class X Time interaction; the PT group showed an increase in scores at post-test while the MT group showed a decrease in scores at post-test. The MRS revealed a significant Class main effect; the psychology class had lower scores than the multicultural class. The MRS also revealed a Treatment X Time interaction; the treatment group showed an increase in scores at post-test while the control group showed a decrease in scores at post-test. Conclusions: Given the strong dispositions towards critical thinking, undergraduates may need more challenging curricula regarding multicultural issues. Furthermore, it can be suggested that higher sensitivity towards multicultural issues can be obtained through the integration of critical thinking skills and REI.
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Rational-Emotive Instruction as Support for Individual Growth
Towards Multicultural Competence

The increasing current immigration rates, birthrates among ethnic groups, and maintenance of cultural heritage in some groups have resulted in a rapid change in the demographic composition of the United States (Berg, 2002). Diversity increased across the United States, and rose as much as 34% in some states (American Psychological Association, 2003). It is estimated that the number of non-Caucasian citizens will equal or exceed the number of Caucasian citizens by the year 2050 (Potthoff, Dinsmore, & Moore, 2001). Furthermore, recent studies noted tremendous increases in students of color entering elementary schools (Potthoff et al., 2001) and colleges, finding that college enrollment of people of color increased up to 62% between 1988 and 1998 (APA, 2003). This reflects the urgency to implement culturally responsive training and services in the United States. The APA (2003) described multiculturalism and diversity as interchangeable terms and defined them as:

- aspects of identity stemming from gender, sexual orientation, disability, socioeconomic status, or age. Multiculturalism, in an absolute sense, recognizes the broad scope of dimensions of race, ethnicity, language, sexual orientation, gender, age, disability, class status, education, religious/spiritual orientation, and other cultural dimensions. All of these are critical aspects of an individual’s ethnic/racial and personal identity . . . each cultural dimension has unique issues and concerns. (p. 380)

A more ethnically diverse population has lead universities to consider improvement of the quality of multicultural-related education that has resulted in
increased faculty and student awareness (Potthoff et al., 2001). Universities have taken the first step and provided an awareness of diversity by offering classes focusing on multiculturalism. The next steps in this process are to understand the limitations of the current educational format and address barriers that hinder the sensitivity and critical thinking abilities of students who want a deeper understanding of diverse populations (Flowers & Howard-Hamilton, 2002; Hansman, Spencer, & Grant, 1999). Developing multicultural competence at a deeper level will prepare students for the future and will ultimately enhance their abilities to work and feel comfortable with individuals of different backgrounds.

**Perspectives on Multicultural Competence**

Multicultural competence involves awareness of one’s own attitudes or beliefs, knowledge, and skills; it is a developmental sequence beginning with openness and curiosity (Berg, 2002; Estrada, Durlak, & Juarez, 2002). Robbins (2002) described it as a developmental process moving from concrete beliefs to a more sophisticated and eventually integrated understanding in terms of respect, genuine communication, and mutual growth. It includes the understanding of power, privilege, and oppression, which are perceived differently among diverse groups, therefore leading them to operate psychologically apart (Hansman, Spencer & Grant, 1999). For example, Hansman, Spencer and Grant (1999) found that minorities who immigrated to the United States perceived that they would be able to achieve greater opportunities as compared to minorities who were involuntarily enmeshed into the dominant culture. Jones (1998) stated that multicultural competence is increased when there is an understanding that the idea of assimilation may be a mistake in some circumstances and a mistake to assume
that it is the desire of the minority to aspire to values, beliefs, and ideals similar to the dominant culture. Furthermore, Chang (2002) described enhanced competence occurring when students obtained abilities to adapt to different values through thoughtful reflection of arguments and facts. Webster (2002) believed the process of learning how to be multiculturally competent involved exposure and interaction between students of different cultural backgrounds; this forced reflection and interpretation of one's own beliefs. In addition, Flowers and Howard-Hamilton (2002, p. 122) stated, "learning and developing competence occurs best in communities that value diversity, promote social responsibility, encourage discussion and debate, recognize accomplishments, and foster a sense of belonging among their members." To summarize, multicultural competence is a developmental sequence involving the motivation to understand beliefs of oneself and others through respect, education, and experience.

**Multicultural Education**

Teaching multicultural awareness has consisted of different components being incorporated into the curriculum and has taken various forms. The single course approach is the most common method and usually focuses on major ethnic groups in the United States, dealing primarily with racism, identity, and acculturation issues (Locke & Kiselica, 1999, Sue et al., 1998). The infusion model is an approach that consists of having multicultural material infused in every course in a particular program (Berg, 2002).

There have also been different strategies implemented and designed in multicultural education. The Eco-strengths perspective (Viramontez Anguiano & Harrison, 2002) and the World Views perspective (Hansman, Grant, & Jackson, 1999)
have dealt more with the observance of differences in families, groups, and communities. They have examined positive aspects and have attempted to get the students to reflect on their own culture and differences. The Human Centric perspective (Webster, 2002) and the Ethical Levels of Consciousness perspective (Robbins, conference speaker, 2002) encouraged the student to look at multicultural issues as a growth process that involved a development of awareness and understanding starting from concrete, to sophisticated, and then to the integrated level. Robbins defined and described this growth process:

Respect on the sophisticated and integrated level is acknowledging and affirming cultural differences, and encountering the unique person within his/her culture.

Genuine communication on the sophisticated and integrated level is mirroring (comfort with silences, volume of voice, gestures) and promoting catharsis.

Mutual growth on the sophisticated and integrated level is knowing that they (members of a culture) will know more than anything you could excogitate about their world, to make clear to yourself what personal prepossessions you have to start with, and to realize the interconnectedness and being a part of the struggle.

Both Webster’s (2002) and Robbins’ (2002) perspectives focused on the student’s ability to rationalize thoughts and ideas that they were accustomed to, to think at a deeper level by processing experiences, and to develop a gradual growth in awareness. Robbins’ perspective is similar to the theoretical framework derived from Perry’s (1999) theory of ethical and intellectual development. Perry described cognitive development on a continuum of four stages: dualistic, multiplicity, relativistic, and commitment. Detailed descriptions of Perry’s stages are described in the following paragraphs.
In the dualism stage, Perry (1999) explained that the view of knowledge is based on certainty, meaning that everything has a right or wrong answer. According to Perry, the sense of self is incorporated into the evaluation process, leading to thinking that a "Bad – Wrong" answer equals a "Bad – Wrong" person. Challenges for a dualistic thinker are ambiguity, multiple perspectives, disagreement between authority figures, the concept of independent thought, and providing a personal interpretation.

In the multiplicity stage, Perry (1999) posits that all knowledge can be obtained through processes of applying oneself and working hard. The student realizes that knowledge itself is more than obtaining information from an authority figure. There still exists a belief that there is certainty, it's just a matter of finding it through time. Multiplicity thinkers evaluate themselves through focusing on quantity, such as the amount of hard work or effort achieved. Challenges in the multiplicity stage are views that uncertainty is temporary and quantity, not quality, is most important.

In the relativism stage, Perry (1999) argued that there are some areas of certainty about knowledge but in most areas nothing is known for sure. Students practicing relativism view instructors as people who are sharing their opinions, these opinions can be just as valid or invalid as all others. Independence and being able to think for oneself is valued, plus there is a demand to use evidence to support opinions. Relativistic thinkers evaluate themselves through focusing on their quality of work or effort. Challenges in the relativism stage are learning to accept responsibility in the learning process and learning to listen to what is being pointed out by authority figures.

In the commitment stage, knowledge is viewed as contextual (Perry, 1999). There is no absolute truth, but right and wrong can exist within a specific context. Students in
the commitment stage judge by using "rules of adequacy" through expertise of good thought processes. They are able to shift from context to context and apply rules of adequacy to information, perspectives, and judgments. They view authority figures as people who earned it through expertise. In an evaluation process, they understand that a good critique has both positives and negatives; it is seen as an opportunity to improve and learn something new. A challenge for a student in the commitment stage is practicing good role modeling because they may have not yet earned the expertise. Overall, Perry’s framework provided a clearer understanding about thinking processes and the student’s capability to address rational or irrational beliefs.

All of these perspectives have served as a foundation within a teaching regimen, but have they forced the student to target and confront his or her own issues at hand? In other words, instilling knowledge about multiculturalism and critical thinking skills is useful but could evoking motivation within a student be a beneficial addition to the teaching regimen? According to Miller and Rollnick (2002), evocation is eliciting or drawing out and it requires calling forth internal emotions in order to address internal beliefs and possible change within a person. The idea of evoking motivation could be addressed by incorporating a psychological component or a psychotherapeutic intervention to the current teaching regimen in multiculturalism.

**The Inclination to Think Critically**

As stated previously, multicultural competence involves the motivation to understand cultural beliefs other than one’s own. This motivation can be addressed by exploring the dispositional critical thinking process, or the inclination to think through situations in a methodical and persistent manner. A definition of the ideal critical thinker
(CT) given by the 1990 American Philosophical Association Delphi research project as cited by Facione, Facione, and Giancarlo (2000) is provided:

The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit (Facione, Facione, & Giancarlo, 2000, p. 9).

Rapps, Riegel, and Glaser (2001) described CT as consisting of four dimensions: skills, dispositions, cognitive development, and experience. They further explain that a person may have skills to think critically but use the ability infrequently in situations that called for careful thought and accurate judgment, leading to a need for a disposition or motivation to improve quality of thought. It has been proposed by some theorists that critical thinking skills are positively correlated with internal motivation, meaning that if the critical thinking skill is learned then motivation naturally follows (Facione, Facione, & Giancarlo, 2000). This idea, as Facione et al. (2000) state, leads to a narrow focus on the “skills” variable thus trivializing the complicated process of CT that involves forming judgment through purpose, reasoning, and evidence. Over-emphasizing the “skills” variable makes the conceptualization incomplete. Providing a larger scope of CT includes addressing the dimensions of personality that influence human behavior (Giancarlo & Facione, 2001). Giancarlo and Facione (2001) describe these dimensions of personality in CT as a conglomerate of attitudes, values and inclinations.
Skill and the inclination to think critically are necessary, but not sufficient, to fully understand people who think, judge, decide, and act in a careful and conscientious manner. An advanced level of cognitive development is needed to achieve this goal through education (Rapps, Riegel, & Glaser, 2001). During the complicated process of obtaining skills, utilizing inclinations, and receiving education – experience provides another facet to CT by refining, strengthening, elevating, and synthesizing these components to produce the true critical thinker (Rapps et al., 2001). The inclination to think critically about different beliefs and attitudes concerning multiculturalism was explored through using a psychotherapeutic technique, which aided in gaining insight about individual beliefs and evocation of emotions. Thus, providing the experience aspect of strengthening CT abilities.

**Rational-Emotive Training Incorporated into Multicultural Education**

Regarding variables of critical thinking, the connection between multicultural competence and awareness of rational and irrational beliefs needs to be explored. The reason the perspective of Rational-Emotive Therapy (RET) was chosen for this study was because it addressed rational and irrational beliefs and attitudes in an individual. It may also aid in evoking motivation to address internal emotions and beliefs. Lega and Ellis (2001) suggested that irrationality was universal and applicable to people from many cultures. They went on to explain that there is a tendency for all humans to view the world in a rigid, absolutistic manner, which seemed to be a central part of disturbance and stress. Results of multicultural studies done on participants from Colombia, Costa Rica, El Salvador, Spain, and the United States, who were administered a measure on their attitudes and beliefs, suggested that RET generally applied to many different
cultures (Lega & Ellis, 2001). However, Lega and Ellis point out that there were differences in the degree of “absolutistic demands” (things that must happen with the self, others, and the world) and there were also differences in the content and process of the inferences derived from the “absolutistic demands,” but not upon their presence.

The basic theory of RET has focused on the concept of irrational beliefs or illogical thinking about self, others, and the world in general. Irrationality was defined as that which prevented people from achieving their basic goals and purposes, e.g., absolutistic demands (Ellis & Bernard, 1985). The ABC Model is the framework of RET. It consists of the “Activating event” (A), “Beliefs” that are either rigid or flexible (B), and emotional and behavioral “Consequences” (C) that follow from beliefs about “A” (Dryden & DiGiuseppe, 1990). Consequences have been broken down into two types based on rigidity or flexibility of emotions. The first type is the “inappropriate negative emotions” (rigidity), which leads to the following: psychological pain and discomfort, motivation to engage in self-defeating behavior, and prevention from carrying out behavior necessary to meet one’s goals. The second type is the “appropriate negative emotions” (flexibility), which leads to the following: alerting that goals are being blocked but do not immobilize, gaining motivation to engage in self-enhancing behavior, and encouragement of the successful execution of behavior to reach goals (Dryden & DiGiuseppe, 1990).

Another reason the perspective of RET was chosen for this study was because it has already been used in the educational system. Ellis and Bernard (1985) took the RET approach and applied it in schools in an attempt to address both the regimentations and the loose structures of some school systems. This approach, named Rational Emotive
Education, was designed to help children develop frustration management skills, problem-solving skills, perspective-taking skills (seeing more than one side to a situation and envisioning alternative actions that can be taken), self-acceptance, and other cognitive states that limited the risk of developing rigid thinking or indifference.
Hypotheses

This study examines the impact of the RET perspective on multicultural competency. To investigate this issue, participants were grouped according to their class type: multicultural course students (MC, MT) and psychology course students (PC, PT). Each class type was divided into 4 sections and randomly assigned to one of two groups: control group (MC and PC) and treatment group (MT and PT). The treatment group received Rational Emotive Instruction (REI), which takes the perspective of RET and places it in an educational format focusing on multicultural issues.

In addition to these between-subjects factors, a single within-subjects factor is included in the analysis. Each participant’s multicultural competency level was measured at pre-test and post-test on four attributes: critical thinking disposition, sensitivity, awareness, and open-mindedness. Thus, time of measurement was the within-subjects factor in this design. The following hypotheses are presented below and included in Table 1:

Hypothesis 1: A Treatment X Time interaction for the CCTDI: The control group will remain in the same range from pre-test to post-test and the treatment group will increase in range from pre-test to post-test.

Hypothesis 2: A Treatment X Time interaction for the MRS: The control group will remain in the same range from pre-test to post-test and the treatment group will increase in range from pre-test to post-test.

Hypothesis 3: A Treatment X Time interaction for the CSEQ: The control group will remain in the same range from pre-test to post-test and the treatment group will increase in range from pre-test to post-test.
Hypothesis 4: A Treatment X Time interaction for the QDI: The control group will remain in the same range from pre-test to post-test and the treatment group will increase in range from pre-test to post-test.

Table 1: Overview of Hypotheses

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<td>MC</td>
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<td>2: Ambivalent</td>
<td>3: Strength</td>
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<td><strong>MRS</strong></td>
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<td><strong>CSEQ</strong></td>
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Method

Participants

Participants were recruited from introductory multicultural courses (Native American Studies, African American Studies, Women's Studies) and introductory psychology courses offered at the University of Montana. The reason multicultural course students were compared to psychology course students was because the motivation to learn more about diversity was assumed to be higher in students attending multicultural classes and the motivation to learn more about internal thoughts and feelings was assumed to be higher in students attending psychology classes.

The introductory psychology course students received two research credits for taking the pre-test measures, four research credits for attending the seminar, and two research credits for taking the post-test measures. The introductory multicultural course students were given $5 for pre-test attendance, $10 for attending the seminar, and $5 for post-test attendance. Volunteers were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychological Association, 1992).

Materials

Participants completed a series of questionnaires at each of the two data collection times at the beginning and at the end of the semester during the study. Questionnaire packets included the instruments detailed below.

*The California Critical Thinking Disposition Inventory.* The California Critical Thinking Disposition Inventory (CCTDI; Facione & Facione, 1992) is an attitudinal measure consisting of 75 *Agree – Disagree* items regarding participants' personal feelings of truth-seeking, open-mindedness, analyticity, systematicity, inquisitiveness,
confidence in reasoning, and cognitive maturity (Giancarlo & Facione, 2001). See Appendix A to view the CCTDI. Item cues were theoretically derived from the description of the ideal critical thinker articulated by the American Philosophical Association sponsored Delphi Project (Facione, 1990) and subsequently validated to create the CCTDI. The CCTDI uses a 6-point Likert-type response format, ranging from 1 (Strongly Agree) to 6 (Strongly Disagree). Completion time requires approximately twenty minutes (Facione & Facione, 1992; Insight Assessment California Academic Press, 2001). The CCTDI reports scores on seven scales: Truthseeking, Openmindedness, Analyticity, Systematicity, Critical Thinking Self-Confidence, Inquisitiveness, and Maturity of Judgment. Giancarlo and Facione (2001) state the following:

The Truthseeking scale on the CCTDI measures intellectual honesty, the courageous desire for best knowledge in any situation, the inclination to ask challenging questions and to follow the reasons and evidence wherever they lead.

Openmindedness measures tolerance for new ideas and divergent views.

Analyticity measures alertness to potential difficulties and being alert to the need to intervene by the use of reason and evidence to solve problems. Systematicity measures the inclination to be organized, focused, diligent, and persevering in inquiry. Critical Thinking Self-Confidence measures trust in one’s own reasoning and in one’s ability to guide others to make reasoned decisions. Inquisitiveness measures intellectual curiosity and the intention to learn things even if their immediate application is not apparent. Maturity of Judgment measures judiciousness, which inclines one to see the complexity in problems and to desire
prudent and timely decision making, even in uncertain conditions

(Instrumentation to Measure section, para. 2, p. 8).

Giancarlo and Facione (2001) reported that each of the seven scales on the CCTDI may range from a minimum of 10 points to a maximum of 60 points. Scores are interpreted by utilizing the following guidelines: A score of 41 points or higher indicated a positive inclination or affirmation of the characteristic; a score of 30 or less indicated opposition, disinclination or hostility toward that same characteristic; and a score in the range of 31 to 40 points indicated ambiguity or ambivalence toward the characteristic. An overall score on the CCTDI can be computed by summing the seven scale scores. Overall CCTDI scores may range from a minimum of 70 points to a maximum of 420 points. Similar interpretative guidelines are used when looking at overall CCTDI scores: A total score of 281 points or higher indicated a positive overall disposition or possessing strength toward critical thinking, whereas a total score of 209 or lower indicated the negative disposition or having a deficiency toward critical thinking. A total score in the range of 210 to 280 points indicated having an ambivalent disposition toward critical thinking. Cronbach’s alpha internal reliability indices of the seven scales that make up the CCTDI range from .71 to .80 (Giancarlo & Facione, 2001). Alphas in this range have been replicated in studies done from samples of undergraduate nursing students (Facione, Facione, & Giancarlo, 1998; Rapps et al, 2001) and Latino high school students (Giancarlo, 1996). Reviews from the Buros Institute of Mental Measurements (Close-Conoley & Impara, 1995) described the CCTDI as an instrument to be used with caution for high-stakes assessment because of the questionable predictive and constructive validity, stating that a researcher or evaluator should strive for a careful match between
the items and program outcomes in order for it to be a useful tool. In a more recent study, Rapps et al. (2001) stated that “construct validity was supported with significant correlations between individual subscales and established psychological measures” (p. 617). Current research suggests that critical thinking measures, such as the CCTDI, do not measure critical thinking as an outcome of formal education but rather they provide an indicator of the success of formal education (Giancarlo & Facione, 2001; Rapps et al., 2001).

*The Modern Racism Scale.* The Modern Racism Scale (MRS; McConahay, 1986) was revised in this study and used to assess the participant’s growth in their active thinking process in regards to multicultural sensitivity. See Appendix B to view the modified MRS. The MRS was originally designed to measure attitudes towards African Americans, but was adapted in this study to measure diversity in general by replacing the words African Americans with Ethnic Minorities. The MRS is a seven-item assessment device designed to measure more subtle contemporary attitudes in a non-reactive fashion. It includes more abstract questions, which indirectly relate to racial attitudes. Some examples are: “Over the past few years, ethnic minorities have gotten more economically secure than they deserve” and “Discrimination against ethnic minorities is no longer a problem.” On each statement, the participant is to indicate if he or she Strongly Disagrees, Disagrees, Neither Agree nor Disagree, Agree, or Strongly Agrees. The total score ranged from 0 to 30 with lower scores suggesting higher sensitivity and higher scores suggesting lower sensitivity toward different racial groups. Scores were interpreted by the author of this study using the following guidelines: A total score of 24 to 30 points indicated low sensitivity; a total score of 18 to 23 indicated moderately low
sensitivity; a total score of 12 to 17 indicated moderate sensitivity; a total score of 6 to 11 indicated moderately high sensitivity; and a total score of 0 to 5 indicated high sensitivity toward racial groups. The reason the MRS scores were set into 5 categories was because it allowed a more distinct comparison between the low sensitivity group and the high sensitivity group. The MRS is considered an explicit race attitude measure but has been found to be correlated with three measures of implicit race attitude; namely the Response-Window Evaluative Priming Test, the Implicit Association Test, and the Response-Window Implicit Association Test (Cunningham, Preacher, & Banaji, 2001). Previous research has attested to the reliability of the scores with Cronbach’s alpha at .81 (Chang, 2002).

The College Student Experiences Questionnaire. A portion of the College Student Experiences Questionnaire (CSEQ, Fourth Edition; Pace and Kuh, Fourth Edition, 1998) was used to assess the participant’s growth in their active thinking process in regards to multicultural awareness. See Appendix C to view the Student Acquaintances portion of the CSEQ. These questions represented a combination of items dealing with student experiences with diversity on campus. The participant’s responses are in a Likert-type format (e.g., Never, Occasionally, Often, Very Often). Scores were interpreted by the author of this study using the following guidelines: A total score of 0 to 5 points indicated low awareness; a total score of 6 to 11 indicated moderately low awareness; a total score of 12 to 17 indicated moderate awareness; a total score of 18-23 indicated moderately high sensitivity; and a total score of 24 to 30 indicated high multicultural awareness.

The Quick Discrimination Index. The Quick Discrimination Index (QDI; Ponterotto, Burkhard, & Greiger, 1995) was used to measure attitudes toward
multiculturalism, interaction with racial diversity, and women's equality. In all, it measured open-mindedness in reference to diversity. See Appendix D to view the QDI. It is a 30-item questionnaire in a Likert-type format ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) with some items reversibly scored. The total score ranged from 30 to 130 with lower scores suggesting that a higher open-minded approach was used in regards to understanding different racial groups and women's equality, while higher scores suggested a lower open-minded approach. In other words, lower scores indicated higher open-mindedness, while higher scores indicated lower open-mindedness. One important characteristic of this instrument was the intent to use it with a variety of racial/ethnic groups to measure prejudicial attitudes. Ponterotto et al. (1995) explained that the initial factor and validation studies supported the use of the QDI for these purposes and demonstrated that three factors emerged from a multiracial sample (i.e, cognitive attitudes, affective-interpersonal reactions, attitudes toward women). Ponterotto et al. reported the internal consistency for the three subscales across two samples as cognitive factor, .80 and .85; affective factor, .83 and .83; and women's factor, .76 and .65. Research done by Burkhard, Jones, and Johll (2002) noted that perhaps prejudice attitudes should not be treated as a universal construct that may have applicability across various ethnic/racial groups and to use caution in future investigations regarding appropriateness for samples drawn from different ethnic or age groups using the QDI. In other words, a researcher should take into consideration that his/her measure of prejudicial attitude or open-mindedness may or may not be generalizable across racial ethnic groups or age groups.
Demographic Survey. The demographic survey included age, gender, race, level of education, mother’s/father’s level of education, political preference, sexual orientation, religious or spiritual orientation, residential background, grade-point average, parents'/guardians' socio-economic status, and field of study. There was also a question asking if the student was previously or presently enrolled in a college multicultural course. See Appendix E to view the demographic questionnaire.

Cross-racial Exposure Questionnaire. The Cross-racial Exposure Questionnaire (Chang, 2002) was in a Likert-type format and estimated the number of people of participant’s race/ethnicity in the following groups; high school classmates, neighbors where he/she grew up, current close friends, and current neighbors. See Appendix F to view the Cross-racial Exposure Questionnaire –Revised. Larger scores indicated greater exposure to people of a different race or ethnic background. Total scores ranged from 0 to 16 with scores ranging from 0 to 5 suggesting low exposure, 6 to 11 suggesting moderate exposure, and 12 to 16 suggesting high exposure to diverse groups.

Procedure

The researcher passed out flyers in the introductory multicultural courses during the first and second week of the semester, providing information about the study. See Appendix G to view the flyer. The study involved completing pre-test and post-test questionnaires and the possibility of attending a seminar. See Figure 1 for an overview of the study.
At pre-test and post-test, students were told that there were no right or wrong answers and that they should try to answer the questions as truthfully as possible without feeling pressure that they must answer in any particular way. The packets contained a consent form along with the questionnaires. There were two separate consent forms; one was for the introductory psychology course students and the other was for the introductory multicultural course students. The consent forms were provided at the pre-test meeting only. See Appendix H to view the consent forms.

All participants were informed that they would be assigned a code number when completing pre-training and post-training measures to ensure anonymity, that their participation was voluntary, and that they could withdraw at any time. The students were
also informed that their performance on the measures would not affect their grade in their respective courses. Indeed, their instructors would never learn of their responses to these measures.

*Introductory Psychology Course Students.*

The researcher explained to the introductory psychology course students that participation in the study was voluntary and those who did participate would receive two research credits for pre-test completion, four research credits if selected to attend the seminar, and two research credit for post-test completion. The students were told that they would be randomly selected into the seminar at the pre-test meeting.

At pre-test, each participant received a coded packet of questionnaires. There were two types of packets: “PC” packets (questionnaires only; control group) and “PT” packets (questionnaires and seminar; treatment group). The “PC” and “PT” packets were handed out randomly to participants. If a participant received a “PC” packet, he or she was informed of the post-test date after filling out the questionnaires and then given a reminder flyer. See Appendix I to view the reminder flyers. If a participant received a “PT” packet, he or she was informed of the seminar date and post-test date after filling out the questionnaires and then given a reminder flyer. While handing in their questionnaires, the researcher asked the students to write their student identification numbers on their packets.

Participants who completed the “PC” packets at pre-test were reminded that they would be taking their post-test measures during week 13 of the semester and that they needed to bring their student identification cards. Participants who completed the “PT” packets at pre-test were reminded that the seminar would last 2 hours and it was similar
to an open discussion group addressing their beliefs in a non-judgmental manner. They were told that the seminar was scheduled during week 11 of the semester and to bring their student identification cards. Also, the researcher asked all of the students if they wanted a reminder phone call 1 – 2 days prior to the seminar and/or post-test attendance. All of the students, except one, wanted a reminder phone call.

*Introductory Multicultural Course Students.*

The researcher explained to the introductory multicultural course students that participation in the study was voluntary and those who did participate would receive $5 for pre-test and $5 for post-test completion. Furthermore, the students were told that they would be randomly selected into a seminar at the pre-test meeting and those who were selected would be given $10 for attending the seminar.

At pre-test, each participant received a coded packet of questionnaires. There were two types of packets: “MC” packets (questionnaires only; control group) and “MT” packets (questionnaires and seminar; treatment group). The “MC” and “MT” packets were handed out randomly to participants. If a participant received an “MC” packet, he or she was informed of the post-test date after filling out the questionnaires and then given a reminder flyer. See Appendix I to view the reminder flyers. If a participant received an “MT” packet, he or she was informed of the seminar date and post-test date after filling out the questionnaires and then given a reminder flyer. While handing in their questionnaires, the researcher asked the students to write their student identification numbers on their packets in order to match with their post-test measures.

Participants who completed the “MC” packets at pre-test were reminded that they would be taking their post-test measures during week 13 of the semester and that they
needed to bring their student identification cards. Participants who completed the “MT” packets at pre-test were reminded that the seminar would last 2 hours and it was similar to an open discussion group addressing their beliefs in a non-judgmental manner. They were told that the seminar was scheduled during week 11 of the semester and to bring their student identification cards. Also, the researcher asked all of the students if they wanted a reminder phone call 1 – 2 days prior to the seminar and/or post-test attendance. All of the students wanted a reminder phone call.

The Seminar.

To describe the treatment group in detail, the facilitator incorporated REI to the students’ regular course objectives by having them attend a seminar titled “Rational-Emotive Beliefs – Critical Thinking Dispositions.” The course objectives were mainly to raise awareness by reporting history, traditions and current lifestyles. The REI approach attempted to raise awareness of diversity by addressing assumptions and beliefs through rationality versus irrationality and the ABC framework (Activating event, Beliefs, Consequences).

The treatment group had the option of attending the seminar on either a Tuesday or Wednesday, whichever would work with their schedules. Both seminars had the same facilitator and a mixture of introductory psychology course students and introductory multicultural course students in each seminar. In all, 17 students attended with only one male participant at each meeting. The seminars were held in a classroom at the University of Montana psychology building (Skaggs). Participants needed to attend only one of seminars to be in the treatment group. The seminars were broken into 13 steps in accordance with the RET approach by Dryden and DiGiuseppe (1990), the Resilience
Training developed by Shatte (2003) and the Resilience Factor approach by Reivich and Shatte (2002). The power-point presentation and handouts developed for the Rational-Emotive Beliefs – Critical Thinking Dispositions seminar are included in Appendix J. An in-depth example of a treatment sequence by Dryden and DiGuiseppe was added to describe how the RET process was incorporated. An additional multicultural issue was placed into the example and is presented below (Dryden and DiGuiseppe, 1990, p. 12):

**Step 1: Ask for a problem.**

Ask for a problem regarding multicultural issues and diversity. Ask the group to choose the issue and encourage the group to identify feelings or behaviors they would like to decrease or increase, articulate a goal and ask for ways in which the goal is not presently being achieved (this may lead to a discussion of feelings and/or behaviors that the group identifies as impediments). If the group voices more than one problem, then develop a list and ask the group what they would like to start with and make it the target problem. The word “problem” may discourage some students to become engaged. If this is the case, use a term that is more acceptable such as “focus, goal, concern.”

**Step 2: Define and agree upon the target problem.**

An example would be: “I tend to avoid getting to know people of different cultural backgrounds or beliefs.” Distinguish between an emotional and a practical problem. Target inappropriate but not appropriate emotions. Help the group to understand the difference between these two types of negative emotions. The question “How is this a problem for you?” will often lead to a useful discussion and help identify and define an emotional problem. Operationalize
vague problems. Focus on helping the group change “C,” not “A.” Always be specific in assessing the target problem.

Step 3: Assess C.

The student feels uncomfortable which leads to social avoidance and avoidance of negative feelings. Check again for an inappropriate negative emotion. Focus on an emotional “C.” Clarify “C.” Understand that frustration is an “A” and not a “C.” Consider the students’ or group’s motivations to change “C.” Do not ask questions that reinforce the assumption that “A” causes “C” such as “How does the situation make you feel?” instead ask, “How do you feel about the situation?” Do not accept vague descriptions or statements of feelings.

Step 4: Assess A.

The student or group identifies the feeling of anxiety as the “C” in the situation. The next step is to use inference chaining to help him define the part of “A” that triggered his anxiety such as “They disapprove of me, which makes me feel ashamed and leads to my anxiety”. Be specific in assessing “A.” Identify the part of “A” that triggers “B.” Remember that “A” can refer to many things. Assume temporarily that “A” is true. Discourage the group or student from talking about several “A’s” at one time. Agree on goals by knowing when the time is to do so and by helping the student or group take a long term perspective. Do not accept goals if the wish is to experience less of an inappropriate negative emotion, e.g., “I want to feel less anxious.” Also do not accept goals if the wish is to experience indifference or positive feelings about a negative “A.” Do not accept vague goals.

Step 5: Identify and assess any secondary emotional problems.
Step 6: Teach the B-C connection.

Use an example unrelated to the student’s or group’s problem to help them understand with greater objectivity the distinction between rational and irrational beliefs. To change feelings, you need to change beliefs. Distinguish between two types of belief – one will lead to shame and other self-defeating emotions, whereas the other will lead to sorrow and other constructive emotions.

Step 7: Assess Beliefs.

Once sure that the student or group has distinguished between rational and irrational beliefs, they were encouraged to extrapolate to their own situation. Make a distinction between preferences and musts, e.g. “they must not look down on me and if they did then it means that I’m no good.” Questions were used to assess irrational beliefs.

Step 8: Connect irrational beliefs and “C.”

An example: If you demand that they must not look down on you and as long as you believe that you are no good if they do, then you will be ashamed and tend to avoid social contact with them. Attempt to solidify the relationship between the student’s or group’s irrational beliefs and their feelings at “C.”

Step 9: Dispute irrational beliefs.

An example: Demanding approval leads to anxiety if it will happen and shame if it doesn’t happen. Both of these lead to avoidance of a particular group that may seem different than you. Use a variety of disputing styles and strategies such as socratic, didactic, humorous, self-disclosing, and creative.

Step 10: Prepare your client to deepen conviction in rational beliefs.
Prepare the student or group to deepen their conviction in rational beliefs. Point out why weak conviction will not promote change. Dispute irrational beliefs repeatedly and forcefully, and to practice thinking rationally in relevant life contexts.

Step 11: Encourage your client to put new learning into practice.

Encourage the student or group to put new learning into practice. Use cognitive, imagery, emotive-evocative, or behavioral assignments. Ensure that the handout assignments are relevant. Collaborate with the group. Be prepared to compromise. Assess and troubleshoot obstacles. Use handouts at different times during the seminar.

Step 12: Check homework assignments.

Students are able to look over the handouts they have completed and process the information.

Step 13: Facilitate the Working-through” process

Suggest different strategies for the same irrational belief. Discuss the nonlinear model of change. Encourage the student or group to take responsibility for continued progress.

Design Description

The mixed factorial ANOVA Treatment X Class X Time (2 X 2 X 2) was employed in this study (Howell, 2001). The dependent variables were: the CCTDI, which measured critical thinking inclinations; the MRS, which measured sensitivity levels; the CSEQ, which measured awareness levels; and the QDI, which measured the level of utilizing an open-minded approach. The independent variables were the class
enrolled in and the implementation of psychotherapy to the educational approach of understanding multiculturalism. The control group received the basic lecture/educational approach and the treatment group received an additional Rational-Emotive therapy approach. Some of the covariates included information on the demographic survey such as race, gender, age, level of education, parent's level of education. The cross-racial exposure score by Chang (2002) was also used as a covariate. A covariate analysis was not conducted because of the small number of participants.
Results

Participants in the current study were categorized into four groups according to the following criteria: The Multicultural control group (MC) consisted of those individuals enrolled in an introductory multicultural course who completed pre-test and post-test measures, the Psychology control group (PC) comprised of individuals who were enrolled in an introductory psychology course and completed pre-test and post-test measures, the Multicultural treatment group (MT) was made up of individuals who were enrolled in an introductory multicultural course who completed pre-test measures, attended the Rational-Emotive Beliefs – Critical Thinking Dispositions seminar and completed post-test measures, and the Psychology treatment group (PT) was made up of individuals who were enrolled in an introductory psychology course who completed pre-test measures, attended the Rational-Emotive Beliefs – Critical Thinking Dispositions seminar and completed post-test measures. The reason multicultural course students were compared to psychology students was because the motivation to learn more about diversity was assumed to be higher in students attending multicultural classes and the motivation to learn more about internal thoughts and feelings was assumed to be higher in students attending psychology classes. Thus, the study attempted to compare the strengths of both groups in regards to multicultural competence.

The study began with 47 volunteers with 21 dropping out during the semester and 26 remaining to finish the entire study. Ten students from introductory multicultural courses and 13 students from introductory psychology courses were assigned to the treatment group (receiving REI). Six students from introductory multicultural courses and 8 students from introductory psychology courses dropped out of the treatment group. The
control group consisted of 12 students from an introductory multicultural course and 12 students from an introductory psychology course. Two students from the introductory multicultural course and 5 students from the introductory psychology course dropped out of the control group. The dropout rate was slightly larger for the psychology course students (38%) compared to the multicultural course students (32%). Also, there was a larger dropout rate for the treatment group (47%) compared to the control group (22%).

Demographics were collected to provide a description of the sample studied. The majority of participants in this study were between the ages of 18 to 20. Eighty-five percent were female (n=22) and 15% were male (n=4). Eighty-five percent of the participants were Caucasian (n=22), 8% were American Indian (n=2), and 8% were of other ethnic backgrounds (n=2). Fifty-eight percent were freshmen (n= 15), 23% were sophomores (n=6), 8% were juniors (n=2), and 12% were seniors (n=3). Mother’s level of education averaged around “having some college” and father’s level of education averaged around “having a BA/BS degree”. Participants’ political preferences were: 46% democrat (n=12), 35% republican (n=9), and 19% independent (n=5). Sexual orientations were: 81% heterosexual (n=21), 8% gay/lesbian (n=2), 8% bisexual (n=2), and 4% other (n=1). Twenty-seven percent of the participants wrote that they had no religious or spiritual orientation (n=7), 15% wrote they were Christian (n=4), 12% wrote Spiritual (n=3), 12% wrote Lutheran (n=3), and 34% wrote that they were a mixture of religious/spiritual orientations (n=9). Fifty percent of the participants were of a rural background (n=13), 27% were suburban (n=7), and 23% were urban (n=6). According to student responses, the average GPA level of all participants was between 2.8 and 3.8. Student responses for parent or guardian’s social-economic status: 8% were <$20,000
(n=2), 39% were $20,001 to $40,000 (n=10), 27% were $40,001 to $60,000 (n=7), 19% were > $60,000 (n=5) and 8% did not respond (n=2). Differences were not tested because of small n within groups.

Because multicultural competence could be influenced by the experiences students might have gained through exposure of living in a diverse area, the Cross-Racial Exposure Questionnaire asked participants about people of the same race/ethnicity in their high school, neighborhood, current close friends, and current neighbors. Participants total Cross-Racial Exposure scores ranged in the Low Exposure category. It should be noted that the sample studied were college students who may or may not be originally from this area. However, to provide a clearer picture of the racial population in Montana, the U. S. Census Bureau (2000) reported that 91% were White, 6.2% were American Indian/Alaska Native, 2% were Hispanic or Latino, .5% were Asian, and .3% were Black or African American.

Hypothesis results and descriptive statistics for scores on the four measures of multicultural competence between Treatment and Control groups are displayed in Figures 2.1 through 2.4. See Tables 2, 3, and 4 for mean scores and standard deviations of groups.

A 2 (Treatment) X 2 (Class) X 2 (Time) mixed design ANOVA was performed for the critical thinking disposition, multicultural sensitivity, multicultural awareness, and multicultural open-mindedness measures. Two classes of results will be reported. The first are those results in which significant levels at $p < .05$ will be examined and the second are those results involving trends, which will be defined as $p$ values between .05 and .10. It is important to note that this study was an exploratory process, which attempted to provide information on the effectiveness of applying a form of
psychotherapy to the training and development of multicultural competency. Because of no known prior studies on this topic, the examination of trends was deemed salient.

The ANOVA for the CCTDI revealed a significant Treatment X Class X Time interaction ($F(1, 22) = 4.636, p < .05, \eta^2 = .174$). See Figures 3.1 and 3.2. All other main effects and interactions were not significant. The psychology class in the treatment group showed an increase in the CCTDI score at post-test while the multicultural class in the treatment group showed a decrease in the CCTDI score at post-test. However, Tukey's HSD post hoc analysis revealed no significant differences for any pair-wise comparisons. See Figure 3.3. This is most likely the result of the low overall N and large differences in N between groups.
Figure 3.1. CCTDI Treatment X Class X Time Interaction

Multicultural Course Students/Treatment Group: • — •
Psychology Course Students/Treatment Group: • — •

$F (1, 22) = 4.636, p < .05, \eta^2 = .174$
The ANOVA for the MRS revealed a significant Class main effect ($F(1, 22) = 15.150, p < .05, \eta^2 = .408$) and a significant Treatment X Time interaction ($F(1, 22) = 4.736, p < .05, \eta^2 = .177$). See Figures 4.1, 4.2, 4.3 and 4.4. All other main effects and interactions were not significant. The psychology class had lower MRS scores than the multicultural class. The treatment group showed an increase in the MRS score at post-test while the control group showed a decrease in the MRS score at post-test. However, Tukey’s HSD post hoc analysis revealed no significant differences for any pair-wise
comparisons. See Figure 4.5. Again, this is most likely the result of the low overall N and large differences in N between groups. Additionally, a trend Treatment X Class interaction was revealed \( F(1,22) = 2.929, p < .1, \eta_a = .118 \). See Figures 4.6 and 4.7.

The multicultural class had a higher mean score than the psychology class in each group (Treatment and Control).

*Figure 4.1. MRS Class Main Effect*

\[
F(1, 22) = 15.150, p < .05, \eta_a = .408
\]
Figure 4.2. MRS Standard Deviations for Class Main Effect

Multicultural Course Students: ♦
Psychology Course Students: ⬊
Standard Deviation: SD
$F(1, 22) = 15.150, p < .05, \eta = .408$
Figure 4.3. MRS Treatment X Time Interaction

Treatment Group: • — — — — — — — — —
Control Group: • — — — — — — — — —

$F(1, 22) = 4.736, p < .05, \eta^2 = .177$
Figure 4.4. MRS Standard Deviations for Treatment X Time Interaction

Treatment Group: ⚪ ⚪ ⚪ ⚪ ⚪
Control Group: ⚫ ⚫ ⚫ ⚫ ⚫
Standard Deviation: SD

$F(1, 22) = 4.736, p < .05, \eta = .177$
Figure 4.6. MRS Treatment X Class Interaction Trend

Multicultural Class/Control Group: ♦—♦
Multicultural Class/Treatment Group: ♦—♦
Psychology Class/Control Group: ●—●
Psychology Class/Treatment Group: ●—●

$F(1, 22) = 2.929, p < .1, \eta = .118$
Figure 4.7. MRS Standard Deviations for Treatment X Class Interaction Trend

Multicultural Class/Control Group: •
Multicultural Class/Treatment Group: • — •
Psychology Class/Control Group: • — •
Psychology Class/Treatment Group: • — •
Standard Deviation: SD
\[ F(1, 22) = 2.929, p < .1, \eta = .118 \]
The ANOVA for the CSEQ revealed a Treatment X Class X Time main effect trend ($F(1, 22) = 3.028, p < .1, \eta = .121$). See Figures 5.1 and 5.2. All other main effects and interactions were found to be non-significant. The psychology class in the treatment group showed an increase in the CSEQ score at post-test while the multicultural class in the treatment group showed a decrease in CSEQ score at post-test. The CSEQ also revealed a trend Class main effect ($F(1, 22) = 3.448, p < .1, \eta = .135$). See Figure 5.3 and 5.4. The psychology class had lower CSEQ scores than the multicultural class.
Figure 5.1. CSEQ Treatment X Class X Time Main Effect Trend

Multicultural Class/Treatment Group: ♦
Psychology Class/Treatment Group: •  •

\[ F (1,22) = 3.028, \ p < .1, \ \eta = .121 \]
Figure 5.2. CSEQ Standard Deviations for Treatment X Class X Time Main Effect Trend

Multicultural Class/Treatment Group: ♦  ♦
Psychology Class/Treatment Group: ®  ®
Standard Deviation: SD

*F*(1,22) = 3.028, *p* < .1, *eta* = .121
Figure 5.3. CSEQ Class Main Effect Trend.

Multicultural Class/Treatment Group: ♦ — ♦
Psychology Class/Treatment Group: • — •

$F(1, 22) = 3.448, p < .1, \text{eta} = .135$
Finally, the ANOVA for the QDI revealed no significant main effects and interactions or trends.
Discussion

Recognizing the broad scope of multicultural issues, it is important to consider how the dimensions of race, ethnicity, language, sexual orientation, gender, age, disability, etc., can be placed at institutionalized, internalized, and personally mediated levels. At an institutionalized level, society provides differential access to goods, services, and opportunities based on these dimensions; at an internalized level, there is a personal acceptance of the stigma attached to the individual within these dimensions (Jones, 2000). This study acknowledges a personally mediated approach towards multiculturalism, meaning that it attempts to understand an individual’s manifestation of intentional or unintentional lack of respect, suspicion, avoidance, and/or devaluation towards others on the basis of their differences (Jones, 2000). Sue (2004, p. 767) stated, “On a personal level, people are conditioned and rewarded for remaining unaware and oblivious of how their beliefs and actions may unfairly oppress people of color, women, and other groups in society.” The current research looks at the manifestation of beliefs and challenges an individual to consider other worldviews and alternative realities.

The purpose of this study was to examine whether a REI seminar significantly predicted higher levels of critical thinking, sensitivity, awareness, and open-mindedness towards multiculturalism. The REI seminar taught participants new techniques to use when faced with adversities by exploring their motivation to think critically about diversity and evoking internal thoughts and feelings. Overall, the results of this exploratory study indicated that there were questionable significant differences in critical thinking and sensitivity levels, but it failed to show any change in awareness and open-
mindedness levels. The word “questionable” refers to the low number of participants and large number of differences between groups, which caused difficulty in interpretation.

This study tested hypotheses derived from the theory of Ethical and Intellectual Development (Perry, 1999), the ABC Model of Rationality (Ellis & Bernard, 1985), and the Ethical Levels of Consciousness perspective (Robbins, 2002) concerning critical thinking skills, emotion, and adversities regarding multicultural competency. An important key in this study involved interpreting this developmental process of understanding one’s emotions, the thoughts connected to those emotions, and the ability to question one’s own thoughts based on rationality and the inclination to explore at a deeper level. When viewed in this context, the relationship between critical thinking and rational emotions suggests that there would be an increased ability to develop higher multicultural competency or greater acceptance of diversity.

The hypothesis testing the critical thinking dispositions for within-subjects main effects and between-subjects main effects was not confirmed. It was found that all sections scored in the strength range at pre-test and remained in the strength range at post-test. Thus, a ceiling effect occurred resulting in range restriction. Since all participants in this study began and ended with strong inclinations to think critically, it is challenging to explain a relationship with multicultural competency.

The hypothesis testing multicultural sensitivity for between-subjects main effects and between-subjects interactions was partially confirmed. The multicultural course students showed higher sensitivity levels than the psychology course students. Furthermore, the group receiving REI showed higher sensitivity levels at post-test as compared to the group receiving no REI. Partial confirmation refers to the low N and
high differences in N between groups, causing difficulty with interpretation. It is possible that Rational-Emotive training may be more strongly predictive of developing higher sensitivity as compared to developing higher awareness and open-mindedness because it focuses mainly on evoking internal emotions – to be more sensitive.

A main effect trend on multicultural awareness for between-subjects by within-subjects showed that the psychology course students receiving REI had increased their level at post-test while the multicultural course students receiving REI had remained in the same range. Perhaps the psychology course students in the treatment group were more accepting of the "psychological" format of the training, leading them to increased acknowledgement of diversity and eventually meeting the level of the multicultural course students in the treatment group.

In summary, this study examined Rational-Emotive Therapy in the context of developing multicultural competency through the dynamic process of critical thinking and emotion models. These relationships had not yet been tested simultaneously in prior studies. When viewed together, it appears that the development of higher sensitivity has some relation. Given such information, it can be suggested that higher sensitivity towards multicultural issues can be obtained through the integration of high critical thinking dispositions and REI.

**Limitations and Strengths**

There are several limitations of this research that must be considered. First, twenty-one students dropped out of the study with fourteen of them belonging in the treatment group. The treatment group required meeting three separate times with a total of 8 credits for the psychology course students. Most of the psychology course students
who had dropped out stated that they had already received their required research credits for the semester and wouldn’t be returning to finish the study. Two of the multicultural course students who dropped out of the treatment group stated that it was because of family emergencies such as child-care issues. Second, testing effects would be another limitation; familiarity of questions may have caused some participants to “score” better at post-test. One participant stated that he would like to know his pre-test scores because he wanted to score higher on his post-test compared to his pre-test. A third limitation would be that participants who finished the study may have already had a high motivation to learn about diversity. In addition, the seminar was given twice, leading to possible variations in approaches. Finally, all measures analyzed in this survey were self-report and, therefore, subject to self-reflective distortion. Overall, the researcher believes the largest limitation, aside from the small number of participants, was the quality of the measures. Four participants stated that the questions on the measures did not provide an accurate reflection of their thoughts on diversity or racism. One participant mentioned that some of the questions were too “outdated,” stating that racism has changed somewhat to a more subtle form.

Looking at the strengths of this research, the findings lend support to the necessity of providing undergraduates with more challenging curricula regarding multicultural issues. Evidently, the majority of the students who participated in this study had strong dispositions towards critical thinking, suggesting a need for a more savvy approach to learning about diversity. Within the seminar training, students were offered an opportunity to critically examine the self and appeared to respond well to the approach. Participants were allowed to work on their own issues individually, generate other
alternatives, and ask the instructor for assistance if needed. Two female students and one male student stayed after the seminar to inquire further about implementing what they learned to their own situations. Because REI has a more direct and straightforward approach to understanding thoughts and emotions, the risk of students becoming too confused, upset, or overly emotional was not an issue within the training. Generally speaking, empirical evidence regarding the impact of diversity training on students' discriminatory attitudes and views is limited. These findings provide information about the sensitivity of the scales used in this study and the understanding one's own prejudicial views and assumptions through a process of using critical thinking skills and addressing underlying beliefs.

**Implications**

It is meaningful for individuals to be aware of the importance of cultural competency, not only because of the increasing ethnically diverse population in the United States, but also because cultures can be powerful forces affecting our thoughts, values and beliefs at personal levels. It is apparent that the impact of different cultures affects all of us in a global way, but how does diversity affect us personally? The book *That All People May Be One People* (Nez Perce Indians – Government Relations, 1995) provides a quote from Chief Joseph, which touches upon the idea of how cultural differences can affect us on a personal level:

I have carried a heavy load on my back ever since I was a boy. I learned then that we were but few, while the white men were many, and that we could not hold our own with them. We were like deer. They were like grizzly bears. We had a small country. Their country was large. We were contented to let things remain as the
Great Spirit Chief made them. They were not, and would change the rivers and mountains if they did not suit them. (p. 14)

This quote illustrates why emotions have powerful implications for understanding diverse thoughts and perspectives. Current multicultural competency training focuses on linear/logical/analytical worldviews to reduce the ambiguity of the dynamics between cultures. Subsequently, combining the “rational” perspective with an emotional/intuitive approach may expand an individual’s understanding of others’ diverse thoughts and perspectives. Thus, this convergence may lead to increased multicultural competency within an individual.

One of the goals of Rational-Emotive therapy is to encourage mastery of one’s thoughts related to emotions. It trains an individual to consider other options or alternatives to situations and discourages the use of a “right or wrong” thinking style. The results of this study indicated that multicultural sensitivity levels increased when exposed to Rational-Emotive therapy. Because a lack of sensitivity may create challenges in the process of developing higher multicultural competency, training should encourage an emotion-oriented outlook by addressing individual’s reactions to some type of personal adversity relating to multiculturalism.

In view of the high critical thinking inclinations and significance of sensitivity levels in this study, multicultural competency training should encourage individuals to think at a more sophisticated level while exploring their own emotions towards unfamiliar or uncomfortable topics. Furthermore, the examination of critical thinking inclination, sensitivity, awareness, and open-mindedness in relation to multiculturalism revealed a need for more accurate measures that provide a stronger reflection of an
individual's basic thoughts and feelings in this area. Future research should consider related topics, such as (a) whether REI can predict change in negative multicultural attitudes and increase multicultural competency through a more intense training process, (b) whether low critical thinking inclination is related to experiencing adversities with multiculturalism, (c) whether ethnicity of trainer has an affect on evoking competency, and (d) whether the results of this study are replicable in other populations such as employment agencies, law enforcement facilities, and graduate programs.
References


Champaign, IL: Research Press.


Nez Perce Indians – Government Relations (1995). *That all people may be of one people, send rain to wash the face of the earth*. Sitka, AK: Mountain Meadow Press.


Appendix A

The California Critical Thinking Disposition Inventory (CCTDI)
CCTDI

A Disposition Inventory

Dr. Peter A. Facione
Santa Clara University

Dr. Noreen C. Facione
University of California, San Francisco

Wait for the instruction to begin.
DIRECTIONS:

1. Put your name on the answer sheet and on the test booklet.
2. Indicate how much you agree or disagree with each numbered statement by filling in the appropriate place on the answer sheet. Read the two examples first.

EXAMPLE A: The best things in life are free.
EXAMPLE B: I'm always doing more than my share of the work.

The answer sheet shows the responses of someone who STRONGLY DISAGREES with EXAMPLE A and LESS STRONGLY AGREES with EXAMPLE B.

Begin with statement number 1 and continue through number 75. Mark your response on the answer sheet in the place with the corresponding number. If you erase a response, be sure the erasure is clean.

After you have responded to the 75 statements, fill in the information items printed at the bottom of page 5.

1. Considering all the alternatives is a luxury I can't afford.
2. Studying new things all my life would be wonderful.
3. The best argument for an idea is how you feel about it at the moment.
4. My trouble is that I'm easily distracted.
5. It's never easy to decide between competing points of view.
6. It bothers me when people rely on weak arguments to defend good ideas.

(c) 1992; Peter A. Facione, Norcen C. Facione, and The California Academic Press; Millbrae, California. All rights reserved.
7. The truth always depends on your point of view.
8. It concerns me that I might have biases of which I'm not aware.
9. I always focus the question before I attempt to answer it.
10. I'm proud that I can think with great precision.
11. We can never really learn the truth about most things.
12. If there are four reasons in favor and one against, I'd go with the four.
13. Men and women are equally logical.
14. Advice is worth exactly what you pay for it.
15. Most college courses are uninteresting and not worth taking.
16. Tests that require thinking, not just memorization, are better for me.
17. I can talk about my problems for hours and hours without solving anything.
18. Others admire my intellectual curiosity and inquisitiveness.
19. Even if the evidence is against me, I'll hold firm to my beliefs.
20. You are not entitled to your opinion if you are obviously mistaken.
21. I pretend to be logical, but I'm not.
22. It's easy for me to organize my thoughts.
23. Everyone always argues from their own self interest, including me.
24. Open-mindedness has limits when it comes to right and wrong.
25. It's important to me to keep careful records of my personal finances.
26. When faced with a big decision, I first seek all the information I can.
27. My peers call on me to make judgments because I decide things fairly.
28. Being open-minded means you don't know what's true and what's not.
29. Banks should make checking accounts a lot easier to understand.
30. It's important to me to understand what other people think about things.
31. I must have grounds for all my beliefs.
32. Reading is something I avoid, if possible.
33. People say I rush into decisions too quickly.
34. Required subjects in college waste time.
35. When I have to deal with something really complex, it's panic time.
36. Foreigners should study our culture instead of us always trying to understand theirs.
37. People think I procrastinate about making decisions.
38. People need reasons if they are going to disagree with another's opinion.
39. Being impartial is impossible when I'm discussing my own opinions.
40. I pride myself on coming up with creative alternatives.
41. Frankly, I am trying to be less judgmental.
42. Frequently I find myself evaluating other people's arguments.
43. I believe what I want to believe.
44. It's just not that important to keep trying to solve difficult problems.
45. I shouldn't be forced to defend my own opinions.

46. Others look to me to establish reasonable standards to apply to decisions.

47. I look forward to learning challenging things.

48. It makes a lot of sense to study what foreigners think.

49. Being inquisitive is one of my strong points.

50. I look for facts that support my views, not facts that disagree.

51. Complex problems are fun to try to figure out.

52. I take pride in my ability to understand the opinions of others.

53. Analogies are about as useful as a sailboat on a freeway.

54. You could describe me as logical.

55. I really enjoy trying to figure out how things work.

56. Others look to me to keep working on a problem when the going gets tough.

57. Getting a clear idea about the problem at hand is the first priority.

58. My opinion about controversial topics depends a lot on who I talk to last.

59. No matter what the topic, I am eager to know more about it.

60. There is no way to know whether one solution is better than another.

61. The best way to solve problems is to ask someone else for the answers.

62. Many questions are just too frightening to ask.

63. I'm known for approaching complex problems in an orderly way.

(c) 1992: Peter A. Picione, Susan C. Picione, and The California Academic Press, Millbrae, California. All rights reserved.
64. Being open-minded about different world views is less important than people think.

65. Learn everything you can, you never know when it could come in handy.

66. Life has taught me not to be too logical.

67. Things are as they appear to be.

68. If I have to work on a problem, I can put other things out of my mind.

69. Others look to me to decide when the problem is solved.

70. I know what I think, so why should I pretend to ponder my choices.

71. Powerful people determine the right answer.

72. It's impossible to know what standards to apply to most questions.

73. Others are entitled to their opinions, but I don't need to hear them.

74. I'm good at developing orderly plans to address complex problems.

75. To get people to agree with me I would give any reason that worked.
CCTDI

CAPSCORE Answer Sheet
The California Academic Press

Respond by filling bubble with a solid dark mark using a #2 soft lead pencil. These response forms are computer scored; make sure all your erasures are complete. DO NOT USE A PEN!

Name __________________________
Date __________________________

Identification Number

Group

Gender

Male
Female

College Students Only

Freshman
Sophomore
Junior
Senior

Graduate Students Only

 Credential Student
 Master's Student
 Doctoral Student

How do you identify yourself?

African American
Anglo American, Caucasian
Asian American/Pacific Islander
Hispanic, Latino, Mexican American
Native American
Mixed/Other

Eg. A  O O O O O O

Eg. B  O O O O O

1. Agree Strongly  O O O O O Disagree Strongly

2. Agree Strongly O O O O O Disagree Strongly

3. Agree Strongly  O O O O O Disagree Strongly

4. Agree Strongly  O O O O O Disagree Strongly

5. Agree Strongly  O O O O O Disagree Strongly

6. Agree Strongly O O O O O Disagree Strongly

7. Agree Strongly O O O O O Disagree Strongly

8. Agree Strongly  O O O O O Disagree Strongly

9. Agree Strongly O O O O O Disagree Strongly

10. Agree Strongly O O O O O Disagree Strongly

11. Agree Strongly O O O O O Disagree Strongly

12. Agree Strongly O O O O O Disagree Strongly

13. Agree Strongly O O O O O Disagree Strongly

14. Agree Strongly O O O O O Disagree Strongly

15. Agree Strongly O O O O O Disagree Strongly

16. Agree Strongly O O O O O Disagree Strongly

17. Agree Strongly O O O O O Disagree Strongly

18. Agree Strongly O O O O O Disagree Strongly

19. Agree Strongly O O O O O Disagree Strongly

20. Agree Strongly O O O O O Disagree Strongly

21. Agree Strongly O O O O O Disagree Strongly

22. Agree Strongly O O O O O Disagree Strongly

23. Agree Strongly O O O O O Disagree Strongly

24. Agree Strongly O O O O O Disagree Strongly

25. Agree Strongly O O O O O Disagree Strongly

26. Agree Strongly O O O O O Disagree Strongly

27. Agree Strongly O O O O O Disagree Strongly

28. Agree Strongly O O O O O Disagree Strongly

29. Agree Strongly O O O O O Disagree Strongly

30. Agree Strongly O O O O O Disagree Strongly

31. Agree Strongly O O O O O Disagree Strongly

32. Agree Strongly O O O O O Disagree Strongly

33. Agree Strongly O O O O O Disagree Strongly

34. Agree Strongly O O O O O Disagree Strongly

35. Agree Strongly O O O O O Disagree Strongly

36. Agree Strongly O O O O O Disagree Strongly

37. Agree Strongly O O O O O Disagree Strongly

38. Agree Strongly O O O O O Disagree Strongly

39. Agree Strongly O O O O O Disagree Strongly

40. Agree Strongly O O O O O Disagree Strongly

41. Agree Strongly O O O O O Disagree Strongly

42. Agree Strongly O O O O O Disagree Strongly

43. Agree Strongly O O O O O Disagree Strongly

44. Agree Strongly O O O O O Disagree Strongly

45. Agree Strongly O O O O O Disagree Strongly

46. Agree Strongly O O O O O Disagree Strongly

47. Agree Strongly O O O O O Disagree Strongly

48. Agree Strongly O O O O O Disagree Strongly

49. Agree Strongly O O O O O Disagree Strongly

50. Agree Strongly O O O O O Disagree Strongly

51. Agree Strongly O O O O O Disagree Strongly

52. Agree Strongly O O O O O Disagree Strongly

53. Agree Strongly O O O O O Disagree Strongly

54. Agree Strongly O O O O O Disagree Strongly

55. Agree Strongly O O O O O Disagree Strongly

56. Agree Strongly O O O O O Disagree Strongly

57. Agree Strongly O O O O O Disagree Strongly

58. Agree Strongly O O O O O Disagree Strongly

59. Agree Strongly O O O O O Disagree Strongly

60. Agree Strongly O O O O O Disagree Strongly

61. Agree Strongly O O O O O Disagree Strongly

62. Agree Strongly O O O O O Disagree Strongly

63. Agree Strongly O O O O O Disagree Strongly

64. Agree Strongly O O O O O Disagree Strongly

65. Agree Strongly O O O O O Disagree Strongly

66. Agree Strongly O O O O O Disagree Strongly

67. Agree Strongly O O O O O Disagree Strongly

68. Agree Strongly O O O O O Disagree Strongly

69. Agree Strongly O O O O O Disagree Strongly

70. Agree Strongly O O O O O Disagree Strongly

71. Agree Strongly O O O O O Disagree Strongly

72. Agree Strongly O O O O O Disagree Strongly

73. Agree Strongly O O O O O Disagree Strongly

74. Agree Strongly O O O O O Disagree Strongly

75. Agree Strongly O O O O O Disagree Strongly

PLEASE USE NO. 2 PENCIL
Appendix B

Modern Racism Scale (Revised; McConahay, 1986)

Definitions (The American Heritage Dictionary, 2001):

Ethnic: of or relating to sizeable groups of people sharing a common and distinctive racial, national, religious, linguistic, or cultural heritage (p. 295).

Minority: a racial, religious, or other group different from the larger group of which it is part (p. 540).

Indicate how much you agree or disagree with the following statements:

- Strongly Disagree = SD
- Disagree = D
- Neither Agree nor Disagree = N
- Agree = A
- Strongly Agree = SA

1. It is easy to understand the anger of ethnic minorities in America.
   SD   D   N   A   SA

2. Ethnic minorities have more influence upon school desegregation plans than they ought to have.
   SD   D   N   A   SA

3. Ethnic minorities are getting too demanding in their push for equal rights.
   SD   D   N   A   SA

4. Over the past few years, ethnic minorities have gotten more economically secure than they deserve.
   SD   D   N   A   SA

5. Over the past few years the government and news media have shown more respect to ethnic minorities than they deserve.
   SD   D   N   A   SA

6. Ethnic minorities should not push themselves where they're not wanted.
   SD   D   N   A   SA

7. Discrimination against ethnic minorities is no longer a problem in the United States.
   SD   D   N   A   SA
Appendix C

The College Student Experiences Questionnaire
(CSEQ, Fourth Edition; Pace and Kuh, 1998)

Directions: In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by circling an option by each statement.

1. Became acquainted with students whose interests were different from yours
   Very Often   Often   Occasionally   Never

2. Became acquainted with students whose family background (economic, social) was different from yours.
   Very Often   Often   Occasionally   Never

3. Became acquainted with students whose age was different from yours.
   Very Often   Often   Occasionally   Never

4. Became acquainted with students whose race or ethnic background was different than yours.
   Very Often   Often   Occasionally   Never

5. Became acquainted with students from another country.
   Very Often   Often   Occasionally   Never

6. Had serious discussions with students whose philosophy of life or personal values were very different than yours.
   Very Often   Often   Occasionally   Never

7. Had serious discussions with students whose political opinions were very different from yours.
   Very Often   Often   Occasionally   Never

8. Had serious discussions with students whose religious beliefs were very different from yours.
   Very Often   Often   Occasionally   Never

9. Had serious discussions with students whose race or ethnic background was different from yours.
   Very Often   Often   Occasionally   Never

10. Had serious discussions with students from a country different from yours.
    Very Often   Often   Occasionally   Never
June 16, 2004

Stacy Miller
Clinical Psychology Center
The University of Montana
1444 Mansfield Ave.
Missoula, MT 59812-1368

Dear Stacy,

This letter is written in confirmation of permission being granted for your use of and adaptation of the "Student Acquaintances" items from the College Student Experiences Questionnaire, 4th edition. Our agreement includes the following:

(1) That the survey form and any papers, reports, or publications generated with the survey data indicate that permission to borrow/adapt items from the CSEQ was granted by the Indiana University Center for Postsecondary Research.

(2) That such permission is granted for one-time use only, and only as indicated in your previously provided proposal request. A copy of this agreed upon proposal has been included with this letter.

(3) That you send copies of your dissertation and any papers, reports, or publications making use of the data to the IU Center for Postsecondary Research, attention: George Kuh

Many thanks and best regards for your study.

Sincerely,

Robert M. Gonyea
Associate Director and CSEQ Project Manager
Appendix D

Quick Discrimination Index
(QDI; Ponterotto, Burkhard, & Grieger, 1995)

Social Attitude Survey *

Directions: Please respond to all items in the survey. Remember there are no right or wrong answers, so please respond as honestly as you can. Also, do not put your name on the survey.

1. I do think it is more appropriate for the mother of a newborn baby, rather than the father, to stay home with the baby during the first year. **
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

2. It is as easy for women to succeed in business as it is for men.
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

3. I really think affirmative action programs on college campuses constitute reverse discrimination. **
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

4. I feel I could develop an intimate relationship with someone from a different race.
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

5. All Americans should learn to speak two languages.
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

6. It upsets (or angers) me that a woman has never been president of the United States.
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

7. Generally speaking, men work harder than women. **
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

8. My friendship network is very racially mixed.
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

9. I am against affirmative action programs in business. **
   Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

10. Generally, men seem less concerned with building relationships than women.
    Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree

11. I would feel okay about my son or daughter dating someone from a different racial group.
    Strongly Disagree    Disagree    Not Sure    Agree    Strongly Agree
12. It upsets (or angers) me that a racial minority person has never been president of the United States.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

13. In the past few years there has been too much attention directed toward multicultural or minority issues in education. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

14. I think feminist perspectives should be an integral part of the higher education curriculum.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

15. Most of my close friends are from my own racial group. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

16. I feel somewhat more secure that a man rather than a woman is currently president of the United States. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

17. I think that it is (or would be) important for my children to attend schools that are racially mixed.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

18. In the past few years there has been too much attention directed toward multicultural or minority issues in business. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

19. Overall, I think racial minorities in America complain too much about racial discrimination. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

20. I feel (or would feel) very comfortable having a woman as my primary physician.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

21. I think the president of the United States should make a concerted effort to appoint more women and racial minorities to the country's Supreme Court.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

22. I think White people's racism toward racial minority groups still constitutes a major problem in America.
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

23. I think the school system, from elementary school through college, should encourage minority and immigrant children to learn and fully adopt traditional American values. **
   Strongly Disagree  Disagree  Not Sure  Agree  Strongly Agree

24. If I were to adopt a child, I would be happy to adopt a child of any race.
25. I think there is as much female physical violence toward men as there is male violence toward women. **

26. I think the school system, from elementary school through college, should promote values representative of diverse cultures.

27. I believe that reading the autobiography of Malcolm X would be of value.

28. I would enjoy living in a neighborhood consisting of a racially diverse population (i.e., African American, Asian American, Hispanic, White, Native American).

29. I think it is better if people marry within their own race. **

30. Women make too big of a deal out of sexual harassment issues in the workplace. **

* The actual name of this survey is the Quick Discrimination Index.

** These items were reverse scored (Strongly Disagree = 1, Disagree = 2, Not Sure = 3, Agree = 4, Strongly Agree = 5).
Appendix E

Demographic Survey

1. Age

2. Gender

3. Race

4. Level of Education

5. Mother's level of education

6. Father's level of education

7. Political Preference
7. Sexual Orientation
   _____ Heterosexual
   _____ Gay/Lesbian
   _____ Bisexual
   _____ Other

8. Religious or spiritual orientation _______________________________________

9. Residential Background
   _____ Rural
   _____ Suburban
   _____ Urban
   _____ Other _______________________________________

10. GPA _________

11. Parent’s (s) or Guardian’s (s) Socio-economic status
    _____ < 20,000
    _____ 20,001 – 40,000
    _____ 40,001 – 60,000
    _____ 60,000 >

12. Field of Study _______________________________________________________

13. _____ I am currently enrolled in a college multicultural course (check if true)

   Class title (s) ____________________________________________

   ____________________________________________

14. _____ I was previously enrolled in a college multicultural course (check if true)

   Class titles (s) and year enrolled __________________________

   ____________________________________________

   ____________________________________________
Appendix F

Cross-racial Exposure Questionnaire Revised (Chang, 2002)

Please estimate the number of people of your race/ethnicity in each of the following groups by circling the percentage.

a. High school classmates

100%  75%  50%  25%  0%

b. Neighbors where you grew up

100%  75%  50%  25%  0%

c. Current close friends

100%  75%  50%  25%  0%

d. Current neighbors

100%  75%  50%  25%  0%
Appendix G

Multicultural Course Flyer
ATTENTION: STUDENTS ENROLLED IN ANY INTRO MULTICULTURAL COURSE – NO SPECIFIC BACKGROUND REQUIRED

VOLUNTARY STUDY/RATIONAL-EMOTIVE BELIEFS

PAID PARTICIPATION

Fill Out Questionnaires and Have

a Chance to be Selected to Attend a Seminar

The Seminar: Exploring Individual Beliefs,
Developing Skills in Addressing Adversities and Diversities

If Interested, Please Call 721-8611 before February 6th, 2004
for more Information

(have a pen and paper available for the recorded message)

Examples of multicultural courses: African Studies, Native Am. Studies, Foreign Lang., Women’s Studies, etc. – you don’t have to have a specific multicultural background to participate
Appendix H

Participant Information and Consent Forms
Title: Rational-Emotive Beliefs and Multiculturalism
Principal Investigator: Stacy Miller, B.S.
Clinical Psychology Trainee
Department of Psychology
University of Montana
Missoula, MT 59812
(406) 243 – 4723
Faculty Advisor: Gyda Swaney, Ph.D.
Department of Psychology
University of Montana
Missoula, MT 59812
(406) 243 – 5630

Purpose:
The purpose of this study is to examine rational and irrational beliefs in regards to facing adversities and diversities.

Procedures:
This study involves a pre-test and post-test meeting in which you will fill out questionnaires and may be randomly selected to attend a seminar. The pre-test meeting is during the 3rd week of the semester and includes filling out questionnaires only. It should take approximately 1 hour and will take place in a classroom on the campus at the University of Montana. The seminar is scheduled during the 11th week of the semester and includes addressing beliefs. Towards the end of the seminar, you will be asked to apply what you have learned to multicultural issues. It should take approximately 2 hours and will take place in a classroom on the campus at the University of Montana. The post-test meeting is during the 13th week of the semester and includes filling out questionnaires only. It should take approximately 1 hour and will take place on the campus at the University of Montana. The questionnaires will ask you about some general demographic information, as well as about aspects of general beliefs that you may hold about yourself, other people, and the world.

Voluntary Participation / Withdrawal:
This study is completely voluntary, and you are free to withdraw from participating at any time during the study without any prejudice or loss of benefits. In addition, you are free to decline from answering any of the questions asked in these questionnaires. The researcher will answer any questions you might have during the study. You are also free to contact us at a later time to discuss any concerns.

Risks and Discomforts:
Some people experience increased emotional discomfort when answering questions concerning potentially negative thoughts that they may have. If you feel distressed during this period, please let the investigator know how you are feeling if you are comfortable doing so. The investigator will talk to you about your feelings if you wish.

Benefits:
For your participation in this study, you will be given $5 for filling out questionnaires during the 3rd week of the semester, $10 for attending the seminar during the 11th week of the semester (if randomly selected), and $5 for filling out questionnaires during the 13th week of the semester.

Confidentiality:
All information that you provide will be kept strictly confidential. We ask you not to write any identifying information (such as your name or social security number) on your questionnaires. Your data will be stored in a locked filing cabinet, and only research staff will have access to it. No records connecting your name to your data will be kept after the data collection is over.
Compensation for Injury:
Although we do not foresee any risk of injury in taking part in this study, the following liability statement is required in all University of Montana consent forms:

"In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such an injury, further information may be obtained from the University’s Claims Representative or University Legal Counsel."

Questions:
If you have any questions about the research now or during the study, please ask the experimenter at this time. If you have questions or concerns after this appointment, please contact the Principal Investigator, Stacy Miller, B.S., at 243-4523, or Gyda Swaney, Assistant Professor of Psychology, at 243-5630. If you have any questions regarding your rights as a research participant, you may contact The University of Montana Institutional Review Board Chairperson, Office of Research at 243-6670. If you have questions or are at all bothered by your participation and wish to talk to someone other than the Principal Investigator, a list of resources is provided below:

Clinical Psychology Center
University of Montana
1444 Mansfield Avenue
243-2367

Curry Health Center
University of Montana
Counseling and Psychological Services
243-4711

Statement of Consent:
I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will be answered by a member of the research team. I voluntarily agree to take part in this study, and I understand that I will receive a copy of this consent form.

Printed Name of Participant

______________________________
Signature of Participant

______________________________
Signature of Investigator

Date

Date

[Approval stamp]
Participant Information and Consent Form
Introductory Psychology Course Students

Title: Rational-Emotive Beliefs and Multiculturalism

Principal Investigator:
Stacy Miller, B.S.
Clinical Psychology Trainee
Department of Psychology
University of Montana
Missoula, MT 59812
(406) 243 - 4523

Faculty Advisor:
Gyda Swney, Ph.D.
Department of Psychology
University of Montana
Missoula, MT 59812
(406) 243 - 5630

Purpose:
The purpose of this study is to examine rational and irrational beliefs in regards to facing adversities and diversities.

Procedures:
This study involves a pre-test and post-test meeting in which you will fill out questionnaires and may be randomly selected to attend a seminar. The pre-test meeting is during the 3rd week of the semester and includes filling out questionnaires only. It should take approximately 1 hour and will take place in a classroom on the campus at the University of Montana. The seminar is scheduled during the 11th week of the semester and includes addressing beliefs. Towards the end of the seminar, you will be asked to apply what you have learned to multicultural issues. It should take approximately 2 hours and will take place in a classroom on the campus at the University of Montana. The post-test meeting is during the 13th week of the semester and includes filling out questionnaires only. It should take approximately 1 hour and will take place on the campus at the University of Montana. The questionnaires will ask you about some general demographic information, as well as about aspects of general beliefs that you may hold about yourself, other people, and the world.

Voluntary Participation / Withdrawal:
This study is completely voluntary, and you are free to withdraw from participating at any time during the study without any prejudice or loss of benefits. In addition, you are free to decline from answering any of the questions asked in these questionnaires. The researcher will answer any questions you might have during the study. You are also free to contact us at a later time to discuss any concerns.

Risks and Discomforts:
Some people experience increased emotional discomfort when answering questions concerning potentially negative thoughts that they may have. If you feel distressed during this period, please let the investigator know how you are feeling if you are comfortable doing so. The investigator will talk to you about your feelings if you wish.

Benefits:
For your participation in this study, you will receive 2 research credits for filling out questionnaires within the 3rd week of the semester, 4 research credits for attending the seminar within the 11th week of the semester (if randomly selected to attend), and 2 research credits for filling out questionnaires within the 13th week of the semester.

Confidentiality:
All information that you provide will be kept strictly confidential. We ask you not to write any identifying information (such as your name or social security number) on your questionnaires. Your data will be stored in a locked filing cabinet, and only research staff will have access to it. No records connecting your name to your data will be kept after the data collection is over.
Compensation for Injury:
Although we do not foresee any risk of injury in taking part in this study, the following liability statement is required in all University of Montana consent forms:

"In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such an injury, further information may be obtained from the University’s Claims Representative or University Legal Counsel."

Questions:
If you have any questions about the research now or during the study, please ask the experimenter at this time. If you have questions or concerns after this appointment, please contact the Principal Investigator, Stacy Miller, B.S., at 243-4523, or Gyda Swaney, Assistant Professor of Psychology, at 243-5630. If you have any questions regarding your rights as a research participant, you may contact The University of Montana Institutional Review Board Chairperson, Office of Research at 243-6670. If you have questions or are at all bothered by your participation and wish to talk to someone other than the Principal Investigator, a list of resources is provided below:

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Printed Name of Participant ____________________________

Signature of Participant ____________________________ Date

Signature of Investigator ____________________________ Date

[Signature and date]
Appendix I

Reminder Flyers
REMINDER

Voluntary Study: Current Participants Only

Research Credits

Introductory Psychology Course Student

Rational-Emotive Beliefs Study

PLEASE BRING YOUR STUDENT IDENTIFICATION CARD WITH YOU

Questionnaires Only Group: 4 Research Credits
Fill out post-test measures
2 research credits for pre-test and 2 research credits for post-test
Post-test date (attend one): April 21st or 22nd, Skaggs building, room 303, 4-5 pm

THANK YOU FOR YOUR PARTICIPATION!
REMINDER

Voluntary Study: Current Participants Only

Research Credits

Introductory Psychology Course Student

Rational-Emotive Beliefs Study

PLEASE BRING YOUR STUDENT IDENTIFICATION CARD WITH YOU

Questionnaires and Attendance of Seminar Group, 8 Research Credits:

- Fill out post-test measures and attend seminar
- 2 research credits for pre-test and 2 research credits for post-test
- 4 research credits for attendance of the seminar

Questionnaires
Post-test date (attend one): April 22nd or 23rd, Skaggs building, room 303, 4-5 pm

Seminar
Explore individual beliefs
Develop skills in addressing adversities and diversities
Seminar date (attend one): April 6th or 7th, Skaggs building, room 246, 4-6 pm

THANK YOU FOR YOUR PARTICIPATION!
REMINDER

Voluntary Study: Current Participants Only

Introductory Multicultural Course Student
Rational-Emotive Beliefs Study

PLEASE BRING YOUR STUDENT IDENTIFICATION CARD WITH YOU

Questionnaires Only Group:
Fill out questionnaires
Date (attend one): April 19th or 20th, Skaggs building, room 303, 4-5 pm
$5 for post-test participation

THANK YOU FOR YOUR PARTICIPATION!
REMINDER

Voluntary Study: Current Participants Only

Introductory Multicultural Course Student

Rational-Emotive Beliefs Study

PLEASE BRING YOUR STUDENT IDENTIFICATION CARD WITH YOU

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THANK YOU FOR YOUR PARTICIPATION!
Appendix J

Rational-Emotive Beliefs – Critical Thinking Dispositions Seminar

and

Seminar Handouts
Rational-Emotive Beliefs

Critical Thinking Dispositions

Components to Critical Thinking

- **Skill**: A person may have the ability to think critically but may rarely use the skill in situations that call for careful thought and accurate judgment.
- **Disposition**: Inclination to think through situations in a methodical and persistent manner.
- **Experience**: Refines, strengthens, elevates, and synthesizes previous components to produce the true critical thinker.
Critical Thinking Dispositions such as humility, open-mindedness, and inquisitiveness influence the ability to tolerate different perspectives.

Factors of Critical Thinking Dispositions

- Developmental sequence
  - Concrete
  - Sophisticated
  - Integrated
- Flexibility of thought
  - Addressing Rationality vs. Irrationality
  - Understanding the Three Basic Demands (self, others, world)
Critical Thinking Skills – Purpose and Framework

• Develop increased awareness, sensitivity, and flexibility of thought to adversity and diversity
• Utilizing the ABC Framework
  • "A" refers to Activating event
  • "B" refers to Beliefs
  • "C" refers to Consequences (emotional and behavioral)

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Thinking Traps
Common Mistakes in our Thinking

- Jumping to Conclusions
- Tunnel Vision
- Over-generalizing
- Magnifying and Minimizing
- Personalizing
- Externalizing
- Mind Reading
- Emotional Reasoning
Understanding Beliefs

- **Surface Beliefs**
  - Occur on the surface of our awareness
  - Are the beliefs we identify with the ABC model
  - Have a direct impact on how we feel and behave
  - Are specific to the problem being experienced
  - Generally make sense of the consequences we experience
  - Don't account well for the consequences when a deeper Belief is fueling the situation

- **Underlying Beliefs**
  - Occur at a deeper level and are more difficult to capture
  - Often are general rules about how we believe the world ought to operate
  - Can fuel surface Beliefs
  - May be operating when an emotional or behavioral Consequence seems out of proportion to the Surface Beliefs identified
  - Can give you greater control over how you respond in a variety of situations, once you identify them

How to Detect Underlying Beliefs

- **Surface Belief in.......**
- **Ask**
  - "What is the most upsetting part of that for me?"
  - What does that mean to me?
  - What is the worst part of that of me?
  - Assuming that is true, why is that so upsetting to me?

Underlying Belief out
Challenging Beliefs

- Getting more flexible & accurate about causes
- The B-C connection
- Dispute irrational beliefs
- Develop new solution strategies

Putting it in Perspective

- “What Next” beliefs
- Worst Case implications
- Best Case possibilities
- Most Likely implications
Consider Critical Thinking Disposition Level

- Generate more accurate alternative beliefs
  - A more accurate way of seeing this is...
- Use evidence to prove the belief is false
  - That's not true because...
- Put it in Perspective
  - The most likely implication is... and I can...

Focusing and Practice to Deepen Conviction

- Cognitive Assignments
- Imagery Assignments
- Emotive-Evocative Assignments
- Behavioral Assignments
Critical Thinking & Multiculturalism

- What are your beliefs about differing cultures, ethnicities, backgrounds and gender?
- Are you practicing competence (knowledge, sensitivity, awareness) on a sophisticated or integrated level regarding diversity?

Multicultural Issues and Diversity Group Activity

- Ask for a concern regarding multicultural issues and diversity
- Define and agree upon the target concern
- Assess C (focus on an emotional C)
- Assess A (define the part of “A” that triggers “C”)
- Identify and assess any underlying beliefs
- The B-C connection
- Assess beliefs (can you distinguish between rational and irrational beliefs?)
- Connect irrational beliefs and C
- Dispute irrational beliefs
- Deepen conviction in rational beliefs and practice
**Identifying Adversities**

On a scale of 1-10, rate your effectiveness in dealing with the following types of situations. Put a “1” if you feel you are “not at all effective”, and a 10 if you feel you are “very effective”. Put an asterisk (*) next to situations you would like to handle more effectively.

- ______ Conflicts at work
- ______ Conflicts at school
- ______ Conflicts with peers
- ______ Interactions with authority figures
- ______ Interactions with family members
- ______ Success
- ______ Failure
- ______ Time alone
- ______ Difficult projects
- ______ Hectic schedule
- ______ Change
- ______ Social situations

Other: (list other important situations)

- ______ ____________________________
- ______ ____________________________

**Identifying Emotions**

On a scale of 1-10, rate your ability to handle the following emotions. Put a 1 if you feel you are “not at all able” to handle the emotion, and a 10 if you are always able to handle the emotion. Put an asterisk (*) next to emotions you would like to deal with more effectively.

- ______ Anger
- ______ Sadness
- ______ Anxiety
- ______ Embarrassment
- ______ Guilt
- ______ Boredom
- ______ Frustration
- ______ Shame

Other: (list other emotions)

- ______ ____________________________
- ______ ____________________________
The ABC Model

Activating Event
Any problem situation (big or small):
- A professor or student fails to acknowledge your contribution to a group project
- A big layoff is announced at work
- You receive a low grade on your paper

Beliefs
About what caused it:
- "She's out to get me"
- "Management blew it"
- "I'm not college material"

About the implications:
- "I'll receive a failing grade"
- "I'll get fired", "I'm going to be broke"
- "I'll never graduate from college"

Consequences
Emotions and behavior that result from Beliefs about the Activating Event:
- Anger, Sadness, Jealousy
- Giving up, Revenge
**ABC Practice Worksheet**

**Practice 1**
Adversity (who, what, when, where?):

Beliefs:

Consequences:

**Practice 2**
Adversity (who, what, when, where?):

Beliefs:

Consequences:

**Practice 3**
Adversity (who, what, when, where?):

Beliefs:

Consequences:

**Practice 4**
Adversity (who, what, when, where?):

Beliefs:

Consequences:
Thinking Traps

Common mistakes in our beliefs:

Jumping to conclusions: Settling on a Belief about Cause or Implications when there is little or no evidence to support it.

Tunnel Vision: Recognizing and attending to certain aspects of a situation while screening out other salient aspects.

Over-generalizing: Settling on global Beliefs about oneself or one’s situation without the evidence to support it.

Magnifying & Minimizing: Exaggerating the importance of certain aspects of a situation and underestimating the importance of other aspects.

Personalizing: The tendency to automatically attribute the Cause of an Adversity to one’s personal characteristics or actions.

Externalizing: The tendency to automatically attribute the Cause of an Adversity to another person or to circumstances.

Mind Reading: Assuming that you know what another person is thinking, or expecting another person to know what you are thinking.

Emotional Reasoning: Assuming that, in the face of Adversity, your emotions are accurate indicators of the nature of the Adversity (e.g., “I feel really depressed, so this problem must be uncontrollable”).
**Detecting Underlying Beliefs**

Use the following questions in any order and repeat them as many times as needed until the Beliefs are in proportion to the Consequences.

a. What is the most upsetting part of that for you?

b. What does that mean to you?

c. What is the worst part of that for you?

d. Assuming that is true, why is that so upsetting to you?

**Challenging Beliefs**

Choose an ongoing concern (Activating Event) and describe it objectively – Who, What, When, & Where.

Recall the time when you most recently faced the concern. Note down how the event unfolded:

Vividly imagine this specific time – this will help you identify the B's you had in that moment.

Capture your in-the-moment Beliefs. In the moment of the event, what were the “why” beliefs that went through your mind at the time. Causes/Explanations/ “why” beliefs:

Check for Thinking Traps

- Jumping to conclusions
- Tunnel vision
- Overgeneralizing
- Magnifying & Minimizing
- Personalizing
- Externalizing
- Mind reading
- Emotional reasoning
Describe the Consequences:
Your emotions:
How did you feel?

Your Behaviors:
What did you do?

If Beliefs do not make sense of the Consequences, funnel to detect underlying beliefs:
(What is the most upsetting part of that for you? What does that mean to you? What is the worst part of that for you? Assuming that is true, why is that so upsetting to you?)

**Putting it in Perspective**

1. Capture your catastrophic “what next” beliefs

2. List the worst case

3. List the best case possibilities

4. List the most likely implications of this event (between worst and best):

   Best preparation strategies for event:

   Ways to prevent worse things from happening or to make better things more likely:
Critical Thinking Inclination

1. Ask your partner to describe a situation in which he or she tends to think in a counterproductive way. Describe it here and read back the description to be sure you have it right:

2. Ask your partner for examples of the kinds of thoughts that usually arise in this situation. Ask for more detail if they are not clear to you. List five thoughts that are Beliefs about either the Cause of the situation or its Implications:
   1) 
   2) 
   3) 
   4) 
   5) 

3. Read the five Beliefs to your partner one at a time and allow your partner to practice these techniques:
   - Generate an alternative belief
   - Offer evidence that the belief was not accurate
   - Put it in perspective

   If you heard your partner:
   - Dismiss the Belief
   - Minimize the Belief
   - Offer an excuse

   Then ask your partner to try again until he or she generates an Alternative, offers Evidence, or Puts it in Perspective.

   Next to each Belief in item 2, mark which of these was used (A, E, or P) to respond to it.
Table 2: Means and Standard Deviations of Sections

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Figure 2.1. CCTDI Hypothesis Results

Treatment and Control Group: •—•
Figure 2.2. MRS Hypothesis Results
Figure 2.3. CSEQ Hypothesis Results

Treatment Group: ♦  ♦
Control Group: • -------•
Figure 2.4. QDI Hypothesis Results

Treatment Group: •——•
Control Group: •——•
Figure 3.3. Post-Hoc Analysis

**Tukey HSD**

*Treatment*×*Time*×*Class* FOR CECTDI

Means

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**Mserror** | 0.055
**n** | 5.773196
**q value** | 4.73

**Crit diff** | 0.461873
Figure 4.5. Post-Hoc Analysis

**Tukey HSD - Treatment X Time for MRS**

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Means

- *Mserror*: 0.199
- *n*: 11.77
- *q value*: 3.93
- *Crit diff*: 0.511012

Note: Values are rounded for clarity.