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IMPROVING RACE RELATIONS IN HIGHER EDUCATION

The Jigsaw Classroom as a Missing Piece to the Puzzle

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This article suggests that colleges and universities can improve intergroup relations on campus by implementing a cooperative learning technique known as the jigsaw classroom. What is argued is that use of the jigsaw classroom will facilitate a recategorization process by which members of racial-ethnic groups other than one's own ("them") will begin to be seen as being members of a more inclusive "we." Included in this article is an examination of on-campus racial discrimination, a discussion of some social psychological work that is useful in helping us understand why this discrimination exists, and a discussion of the ways in which the jigsaw classroom has the potential to reduce this discrimination.

Keywords: *race relations; higher education; intergroup cognition; prejudice reduction; cooperative learning*

The purpose of this article is to justify the need for institutions of higher learning to facilitate intergroup contact via the use of a cooperative learning initiative that will have the potential to improve intergroup relations on campus. What is argued is that the use of a cooperative learning technique called the *jigsaw classroom* will have the potential to improve intergroup relations by facilitating a recategorization process that compels individuals to recategorize

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members of different racial-ethnic out-groups in such a way that they are seen as being members of a superordinate in-group.

In rationalizing the need for this initiative, this article does the following: (a) highlights the various forms of racial discrimination that can be seen on the campuses of American colleges and universities, (b) draws on intergroup vigilance theory (Schaller, 1998) and some other social psychological findings in an effort to explain the existence of this discrimination, and (c) uses a social psychological framework to explain how the jigsaw classroom can be used to facilitate a recategorization process that has the potential to reduce intergroup prejudice and discrimination.

RACE RELATIONS IN HIGHER EDUCATION

Some say that institutions of higher education in the United States are microcosms of American society (e.g., Altbach, 1991; Delucchi & Do, 1996; Jackson, 1991). This is largely because the forms of discrimination that can be seen off campus (e.g., different rates of employment for Whites and minorities, housing segregation, and social separation along racial-ethnic lines) can also be seen on campus (Katz, 1991). This discrimination, combined with the pervasiveness of on-campus racial abuse, has led many minority students to perceive college campuses as being hostile and alienating environments (Aguirre & Messineo, 1997; Mack, Tucker, Archuleta, DeGrout, Hernandez, & Oh Cha, 1997; Moses, 1990; Sedlacek, 1999; Thomas, 1997).

Although a significant number of minority students have been enrolling in colleges and universities, only a small proportion of these students are staying on campus long enough to complete their studies (McCormack, 1998; Spaight, Dixon, & Nickolai, 1985). This low retention rate is believed by Spaight et al. to be due to the many forms of discrimination (overt and covert) that exist on campus.

Overt acts of discrimination on campus are easy to find. Farrell and Cloyzelle (1998), for instance, have identified at least 130 institutions of higher learning that have experienced racial inci-

dents since 1986. Thomas (1997) reported that there were 115 institutions in 1989 alone that experienced racial incidents. She also highlighted the fact that, as of 1989, 20% of the minority students who had enrolled in predominantly White institutions of higher learning had experienced race-related verbal or physical harassment. McCormack (1998) found that, in 1996, 30% of the minority students at a northeastern public institution had experienced some form of personal discrimination on at least one occasion. Clearly, a large number of individuals are experiencing the effects of these overt forms of discrimination. This fact is made astonishingly clear by Ehrlich (cited in Aguirre & Messineo, 1997), who estimated that more than one million incidents of ethnviolence occurred on American campuses between 1986 and 1993.

The primary targets of these types of incidents, which are initiated primarily by Whites (Farrell & Cloyzelle, 1998), are African Americans (Altbach, 1991). Not surprisingly, Thomas (1997) reported that only 25% of college administrators perceived their institution as being a good environment for African American students. It is also no surprise that Mack et al. (1997) found that African American students were more likely to perceive on-campus racism than any other racial-ethnic group. Many of these African American students were likely to agree that their campus was racially hostile, and that White students felt uncomfortable in the presence of Blacks.

Other minority groups (e.g., Latinos and East Asians) are also the targets of overt forms of discrimination on campus (see, e.g., Delucchi & Do, 1996). This becomes clear when one considers evidence cited by Thomas (1997), which suggests that minority students from virtually all racial-ethnic groups perceive subtle forms of prejudice and devaluation to be common campus experiences.

Worth noting is that, while an increasing number of minority students are enrolling in colleges and universities, a large number of low-income White students are gaining higher education opportunities via student loans, campus employment opportunities, and flexible admissions standards (Farrell & Cloyzelle, 1998). This is important to note because low-income White students tend to be

particularly racially intolerant (Farrell & Cloyzelle, 1998; Thomas, 1997). This intolerance, combined with a resentment for affirmative action programs (Altbach, 1991) and negative attitudes toward minorities (Sedlacek, 1999) among White students in general, is sufficient to create an on-campus social environment for minority students that is much less than hospitable.

Within this environment, minority students are likely to voluntarily segregate themselves into their own racial-ethnic groups (Thomas, 1997) and/or experience overt manifestations of prejudice and discrimination that vary in intensity from subtle to severe. An example of a more subtle manifestation of prejudice that minority students (African Americans, in particular) are exposed to on a regular basis, is an unspoken social rejection for being admitted to college via lowered standards (Sedlacek, 1999). According to Sedlacek, this rejection often leads to reduced self-esteem in the rejectees.

White faculty members are also perpetrators of these more subtle forms of prejudice and discrimination. Professors have been found to act quite differently toward minority students (Trujillo, cited in Thomas, 1997): They have lower academic expectations of minorities and respond to them accordingly (Spaights et al., 1985). Katz (1991), for example, indicated that certain minority students (e.g., African Americans) often report that their instructors display disbelief or surprise when minorities perform well. These lowered expectations often become a self-fulfilling prophecy for minorities who, as a result, are likely to experience reduced self-efficacy for classroom endeavors (Spaights et al., 1985).

White college professors seem to be particularly ambivalent to African American students, who consistently report that White faculty are prejudiced toward them (Sedlacek, 1999). These instructors have been found to avoid eye contact with African American students (Katz, 1991) and reduce the quantity and quality of communications with them (Sedlacek, 1999). This reduction in communication means that African American students receive less positive reinforcement (Sedlacek & Brooks, cited in Sedlacek, 1999) and less criticism of their work (Katz, 1991) than their White counterparts. Some instructors minimize the amount of criticism they

give to African American students to avoid appearing prejudiced, while others simply see African Americans as being intellectually inferior (Spaights et al., 1985), and feel that constructive criticism will be ineffective (Katz, 1991).

The same experiences are shared by minority students who make their way up into graduate programs. Thomas, Clewell, & Pearson (cited in Thomas, 1997), for instance, found that White professors in graduate programs at predominantly White institutions tended to have stereotypical views and lower academic expectations of African American and Hispanic graduate students.¹ Hence, it appears as though minority students are unable to shake their status as “intellectual inferiors” even when they ascend into the more-elite ranks of a graduate program.

However, it does not stop there. Minority scholars continue to experience these same problems even after they complete their Ph.D.s and become faculty members. Even among academics do we see majority group members and minority group members fulfill their roles as dominants and subordinates (Reyes & Halcon, 1991). Jackson (1991) found that minority faculty members (African Americans, in particular) tend to be socially isolated from White faculty members. This is at least partially due to the fact that minority faculty members, who are dealing with a legacy of tokenism, are seen as possessing inferior qualifications (Reyes & Halcon, 1988). As a result, these individuals tend to be overlooked when promotion and tenure decisions are made (this point highlights the existence of institutionalized forms of discrimination in American higher education, which are discussed shortly).

Reyes and Halcon (1988) give an interesting illustration of an overt form of discrimination directed toward a group of minorities (five Chicano scholars) who applied for faculty positions at a southwestern college (which is located in a community that was 40% Chicano at the time). During their interviews, each of these candidates drew large numbers of (predominantly White) faculty spectators who were, literally, seated elbow to elbow during each interview session; nonminority applicants, however, were much less popular. Reyes and Halcon suggested that many of these faculty members attended the Chicanos' interviews simply to find

fault with them as applicants. None of the five Chicano applicants were hired; four of the five positions were left vacant (Reyes & Halcon, 1988).

Parker-Jones (1991) pointed to some of the more-extreme racial incidents that have been seen on college campuses. Most of these incidents involve overt racial conflict that, according to Parker-Jones, refers to “unhidden racially contentious behavior, statements, or incidents rather than to mere differences of opinion or resentments expressed by or between members of different races” (p. 524).

Parker-Jones listed a number of noteworthy incidents that took place during the 1980s: racist remarks in an independent student newspaper at Dartmouth College (New Hampshire); a racist poem in a student magazine at Northern Illinois University; a racist cartoon in a University of Wisconsin (Eau Claire) campus newspaper that depicted two White males painting themselves black to reap the benefits of affirmative action; some leaflets that were designed to encourage African American students at the University of Michigan to kindly return to Africa (note that the actual request that appeared on these leaflets was much less cordial); a Debutramp Ball at Tulane University (New Orleans), where White students painted on black faces and harassed African American students, primarily by waving torches at them; a racial brawl at the University of Massachusetts–Amherst; the roughing up of an African American student by two gun-wielding White students in Ronald McDonald masks at the University of Texas at Austin; a racially motivated fight at Columbia University; as well as some other miscellaneous incidents including cross-burnings, arson, and the like.

Highlighting the existence of these overt acts is important because they point to the existence of other forms of discrimination (e.g., institutionalized racism). Mickelson & Oliver (1991), for example, suggested that overt acts of discrimination on campus are symptoms of more covert forms of on-campus discrimination. What is implied, here, is that the prejudice possessed by certain majority students and majority faculty members manifests itself in various forms of discrimination, overt and covert. After all, covert forms of discrimination can often be a product of decisions made by individuals in positions of power, whose biases compel them to

implement policies and practices that favor their group and/or maintain the status quo. Hence, individual members of the dominant group may be able to have a hand in overt and covert forms of discrimination, depending on their position in society.

Important to note, here, is that, even though overt acts do point to the existence of institutionalized forms of discrimination, they also detract attention away from them. By focusing on the overt acts that are carried out by a relatively small number of people, many individuals overlook, or fail to acknowledge, the institutionalized forms of discrimination that are being implemented on a much larger scale. These forms of discrimination are more significant because they affect the life chances of large numbers of people.

By focusing on a small number of overt acts, many individuals fail to acknowledge the most important perpetrators of discrimination, who use their positions of power to implement policies and practices, and/or turn a blind eye to existing policies and practices, that limit the life chances of those who fall outside their group.² However, even when portions of society *do* recognize these institutionalized forms of discrimination, there is not necessarily any action taken. When facing criticism, individuals in positions of power are able to disappear and blend into a depersonalized bureaucracy, which can then, collectively, maintain the status quo.

Institutionalized racism, then, can be considered to be the white-collar crime of social injustices: very few take notice of it; and even when they do, there is not much of a price to be paid.

According to Sedlacek (1999), institutionalized racism refers to “policies and procedures, either formal or informal, that result in negative outcomes for [minorities]” (p. 541). On campus, this form of discrimination affects minority students and minority faculty. University admissions standards, for instance, make it exceedingly difficult for minority students to get accepted into a school in the first place. Heavily weighted are high school grades and standardized tests, which have less predictive validity for some groups of minority students (e.g., African Americans) than they do for White students (Sedlacek, 1999). Hence, minority students with lower grades, and lower standardized test scores than their White counterparts, are more likely to be denied admission to a given school, even though they may be just as likely to perform well.

Some minority students, however, will not perform well. Although modified admissions standards allow some of these individuals to enter postsecondary institutions, inadequate academic preparation in inferior elementary and secondary schools leaves some of these students with certain academic deficiencies (Spaights et al., 1985). Although this becomes very clear in college classrooms, schools fail to offer these students remedial services (Katz, 1991; Spaights et al., 1985). Spaights and his colleagues argued that modified admissions standards for minorities and remedial services should go hand in hand.

This lack of assistance for minority students supports Farrell and Cloyzelle's (1998) contention that "universities . . . have made limited adjustments in their organizational and administrative structures and practices to accommodate the diverse and complex needs of their minority student populations" (p. 212). Moses (1990) took things one step further and suggested that institutions of higher learning are "structurally set up to 'devalue,' ignore, invalidate, or treat as peripheral the needs of [minority] students" (p. 400). Hence, it is not just about remedial services for the minority students who need them. It is also about the fact that minorities' cultures are not reflected in the curriculum (Moses, 1990; Spaights et al., 1985). This is an important issue to address because schools tend to lose students whose cultures are not validated on campus (Moses, 1990).

Schools are also likely to lose students who are consistently the victims of overt acts of on-campus discrimination. You would think, then, that schools would, in the very least, impose sanctions on those who are the perpetrators of such acts. Surprisingly, White students who commit severe overt acts against minority students frequently go unpunished (Aguirre & Messineo, 1997; Farrell & Cloyzelle, 1998).

Delucchi and Do (1996) provided a perfect example of this lack of concern for the ethnviolence that can be seen on numerous college campuses all across the United States. They present a case study in which a Vietnamese American student is assaulted (and subsequently harassed) by a White student on one of the University of California campuses. Following these events, the Dean of Stu-

dents reviewed the case and declared that the incident was not racially motivated; the matter was left in the hands of the local police.

Acting on the Vietnamese American student's behalf, the Asian Student Coalition on campus asked the editors of the campus newspaper to provide coverage of the assault. They refused. In fact, they would not even publish these students' concerns in the Letters to the Editor section of the newspaper. In the aftermath of the school's unresponsiveness to the assault, three East Asian students on campus received a wave of racially motivated hate mail from unknown sources.

Although Delucchi and Do's case study was intended to point to a developing sense of indifference toward East Asians as victims of ethnviolence (which they believe is largely due to their perceived status as model minorities who have managed to be successful despite a discriminatory past), it also illustrates the way in which institutions of higher learning fail to respond appropriately to discriminatory acts directed at minorities, in general. This lack of consequences for these actions serves as a form of reinforcement. By failing to act, a school implicitly indicates that it is tolerant of discriminatory behaviors (Farrell & Cloyzelle, 1998). This high level of tolerance quite often leads to repeat offenses (Farrell & Cloyzelle, 1998). This point is beautifully illustrated by Delucchi & Do's (1996) case study, where the university's lack of action led to further harassment in the form of hate mail.

Clearly, minority students in higher education deal with many forms of discrimination, overt and covert. Although the overt forms of discrimination receive the most attention, it is the covert forms of discrimination that have the largest impact on these individuals, African Americans in particular (Sedlacek, 1999). Policies and practices that make it difficult for minorities to get into school, and/or to stay in school, are sure to affect the life chances of a large number of ethnic minorities. These individuals are not only missing out on a postsecondary education that will open up doors for them in the future, they are also missing out on potential networking opportunities (Loewen, 1998) that will result in improved professional opportunities.

Minority faculty members are also affected by covert forms of discrimination on campus (though they are rarely the victims of overt acts). Being the victims of this more subtle form of discrimination means that these individuals' concerns are much less likely to get noticed. Noticed or not, these individuals are paying the price.

The most obvious form of institutionalized discrimination faced by minorities in academia is the lack of representation that can be seen in most faculties on campus (McCormack, 1998). Two minority groups that are most severely affected by this covert form of discrimination are African Americans (Jackson, 1991; Katz, 1991; Thomas, 1997) and Hispanics (Reyes & Halcon, 1988; Thomas, 1997). According to Mickelson and Oliver (1991), this underrepresentation is at least partially due to the fallacious assumption that "qualified" applicants for faculty positions can only be found in the graduate departments of elite institutions. This means that minority applicants, who are more likely to attend the least prestigious schools, are less likely to make the short lists of faculties that subscribe to this assumption (Mickelson & Oliver, 1991). By keeping the number of minority applicants on their short lists to a minimum (Mickelson & Oliver, 1991), many of these schools are minimizing the beneficial effects of affirmative action by exploiting its "availability pool" clause (Reyes & Halcon, 1991).

More interesting, Mickelson and Oliver (1991) conducted a study to see if the top minority applicants (in this case, African Americans) are, in fact, located in the most prestigious schools. After surveying a large number of African American students, collecting comprehensive information on their backgrounds, achievements, attitudes, and aspirations, Mickelson and Oliver concluded that high-caliber African American graduate students are found in higher and lower ranked schools. Hence, the assumption that the best applicants come from the best schools may very well be an unwarranted one.

Reyes and Halcon (1988, 1991) pointed to two other forms of institutionalized racism on campus that contribute to the underrepresentation of minority faculty: the *typecasting syndrome*

and the *one-minority-per-pot syndrome*. While the typecasting syndrome segregates minority faculty members into ethnically related fields (e.g., ethnic studies), the one-minority-per-pot syndrome ensures that all other departments will hire no more than one minority faculty member, unless there is some external pressure for them to do so. Both of these phenomena place certain constraints on where minority scholars are permitted to work, and how many of them are permitted to work there.

Another covert form of racism in academia discussed by Reyes and Halcon (1988) is the *hairsplitting concept*, which is “a pot-pourri of trivial technicalities, or subjective judgment calls, which prevent minorities from being hired or promoted” (p. 308). These hairsplitting techniques are particularly effective in denying minorities promotions and tenure because most minority faculty members are clustered into education (Mickelson & Oliver, 1991), the arts, and the humanities (Reyes & Halcon, 1988); these are all areas where the evaluation of research is highly subjective (Reyes & Halcon, 1988). Hence, any unwarranted devaluation of these minorities’ scholarly writing is very difficult to prove (Reyes & Halcon, 1988). Many minority scholars, then, have no choice but to grin and bear it, as they are passed up for faculty positions.

Clearly, there are a number of covert forms of discrimination on college campuses that are affecting the life chances of minority students and minority faculty members. These forms of discrimination, combined with the various overt forms of discrimination that can be seen in these schools, indicate that on-campus race relations are much less than harmonious. There always seems to be a certain amount of social distance between the various racial-ethnic groups at a given school, even on campuses that are relatively free from the more extreme forms of overt discrimination (Thomas, 1997). This is a problem because, as Altbach (1991) suggested, “The education process is diminished by racial tensions and conflicts” (p. 5).

Why is this the case? How have institutions of higher learning become front lines of racial-ethnic conflicts (Thomas, 1997)? To answer this question, I turn now to a theory of prejudice that is quite useful in helping us understand the existence of intergroup tensions in academic settings.

INTERGROUP VIGILANCE THEORY

Intergroup vigilance theory, developed by Schaller (1998), attempts to explain intergroup phenomena, such as prejudice and stereotyping, by delving into the tribalism of our evolutionary past. It suggests that evolutionary pressures put on our ancestors have led to the development of cognitive systems that influence intergroup cognition. In the past, while existing in hunting and gathering societies, our ancestors would have been in a certain amount of danger during intergroup encounters. Hence, any heritable characteristics that led to the avoidance of intergroup encounters would have become increasingly prevalent in the population (i.e., individuals with these heritable characteristics would have been more likely to survive and pass on their genetic materials to their offspring). These heritable characteristics are hypothesized to be “cognitive systems that facilitated the construction of categorical representations of in-groups and out-groups that amplified differences between groups and similarities within groups” (Williams, 1999, p. 5). Note that the amplification of between-group differences will produce *in-group bias* (a phenomenon associated with prejudice), whereas the amplification of similarities within groups will produce in-group and out-group homogeneity effects (phenomena that are associated with stereotyping).

These cognitive systems, however, are hypothesized to have been used selectively (Schaller, 1998). This is largely because representations of groups that amplified intergroup differences and intragroup similarities were likely to produce inaccuracies. It was best, then, for our ancestors to engage in these cognitive processes only when they would have been highly adaptive.

Schaller (1998) suggested that there were certain perceptual cues that indicated when these cognitive processes would have been most adaptive: cues associated with the likelihood of intergroup contact (e.g., physical proximity of an out-group, relative size of an out-group, frequency of intergroup contact in the past) and cues associated with the likelihood of intergroup harm (e.g., intergroup competition, scarcity of resources, evidence of out-group hostility).

Because there have been no evolutionary pressures to eliminate these cognitive structures, Schaller believes that cognitive representations of in-groups and out-groups are still being influenced by these cues to intergroup contact and intergroup harm.

Important to note, however, is that intergroup vigilance theory's predictions are applicable only to groups that fit a "tribal template" (Schaller, 1998, p. 26), not groups that differ based on other demographic characteristics such as gender, age, socioeconomic status (SES), and the like. Hence, in contemporary society, intergroup vigilance theory makes predictions about how people think about in-groups and out-groups that are distinguished from each other on the basis of their members' racial-ethnic identity.

An important qualification to make here is that intergroup vigilance theory cannot be considered to be an all-encompassing explanation for phenomena such as prejudice, stereotyping, and/or the acts of intergroup discrimination that they tend to be accompanied by. It is merely a tool for understanding that has the potential to assist us in understanding the very complex nature of intergroup cognition, which is clearly influenced by a broad spectrum of factors. Intergroup vigilance theory by itself can, in no way, provide us with an adequate explanation for intergroup tensions in any given setting. It does, however, have the potential to provide us with some insight into some of the processes that may be having an impact (whether small or large) on the ways in which individuals think about, and act toward, those who are different from themselves.

INTERGROUP VIGILANCE THEORY AND RACE RELATIONS IN HIGHER EDUCATION

Intergroup vigilance theory is important to the study of race relations in higher education for at least two reasons: (a) college life involves an "[inter-ethnic] interchange found nowhere else in our society" (Mack et al., 1997, p. 256) and (b) institutions of higher learning create an environment that provides individuals with numerous cues that intergroup vigilance theory would consider to be cues to intergroup contact and intergroup harm.

According to Aguirre and Messineo (1997) and Mack et al. (1997), the composition of the U.S. population is rapidly changing.

As we move into the 21st century, we are seeing a greater proportion of the U.S. population being composed of people of color. In fact, current estimates suggest that by the year 2010, a majority of the U.S. population will be people of color (Mack et al., 1997). This change in the composition of the U.S. population is rapidly becoming evident in higher education, where a significant number of minority students are making their way onto campuses all across the nation (Aguirre & Messineo, 1997; Mack et al., 1997).

Hence, we not only have groups that fit the tribal template specified by intergroup vigilance theory, we also have cues to intergroup contact. Because there is relatively little intergroup contact among minorities and Whites in residential communities and K-12 schools (Thomas, 1997), many White students are being exposed to minority students for the first time (Farrell & Cloyzelle, 1998; Thomas, 1997). The same is true for White staff and faculty, who also tend to have had minimal exposure to people of color prior to this recent wave of incoming minority students (Farrell & Cloyzelle, 1998; Katz, 1991).

This sudden exposure to individuals from different racial-ethnic backgrounds is likely to serve as a cue to intergroup contact. When a given out-group moves into close proximity of a given in-group and/or increases in size, it is much more likely that the cognitive mechanisms that amplify between-group differences and within-group similarities will be activated in in-group and out-group members. Hence, in this situation, we would likely see an increase in intergroup prejudice and intergroup stereotyping. This is exactly what was seen by Ross (1999), when Native Americans, Hispanics, and Whites were brought together into one school.

More interesting, Parker-Jones (1991) cited evidence that suggests that majority groups feel an increasing amount of threat as the presence of a minority group becomes larger. This point is well illustrated by Delucchi & Do (1996) who indicated that White students and administrators on numerous University of California campuses have expressed concern about an alleged "overenrollment" of East Asians. Clearly, the sudden presence of out-group members on campus (in this case, East Asians) is producing cognitive effects on members of an in-group (in this case, Whites).

Not only do institutions of higher learning present individuals with cues to intergroup contact, they also provide them with cues to intergroup harm, in the form of intergroup competition. In fact, all educational institutions (whether elementary schools, secondary schools, or postsecondary schools) have competitive environments (Aronson & Patnoe, 1997). Postsecondary schools, however, are particularly competitive. This is largely because a college education is becoming increasingly important for today's society members (Gordon, 1991); it is a valued resource (Aguirre & Messineo, 1997).

Hence, programs such as Affirmative Action are viewed by Whites as threats to their ability to access a college education (Aguirre & Messineo, 1997). In addition, minorities and Whites are now entering colleges and universities at a time when financial aid in the form of grants and scholarships is rapidly diminishing (Thomas, 1997). Hence, dominant group members (White students) see themselves as competing with minorities for a number of scarce resources. In fact, Aguirre & Messineo (1997) suggested that White students see minority students as being "illegitimate participants in higher education that seek to deprive [White students] of valued resources" (p. 28).

According to intergroup vigilance theory, this type of intergroup competition is likely to serve as a cue to intergroup harm. Hence, this level of competitiveness should activate the cognitive mechanisms that amplify intergroup differences and intragroup similarities, particularly in White students, who see themselves as competing (as a group) against minority students (an out-group). The activation of these cognitive mechanisms should result in increases in intergroup prejudice and stereotyping and, presumably, increases in overt forms of discrimination, particularly among Whites. Unsurprisingly, this is exactly what we are seeing on campuses today.

Gordon (1991) illustrated the effect that modern-day intergroup competition in higher education has had on intergroup tensions. He reported that from 1930 to 1950, a period during which Whites held a large number of negative beliefs about and attitudes toward minorities, there were no significant outbreaks of intergroup vio-

lence. It was not until the 1980s, when education became a valued (and scarce) commodity for Whites and minorities alike, that the more extreme forms of overt ethnoviolence began to occur on campus.

Clearly, the increases in diversity (a cue to intergroup contact) and intergroup competition (a cue to intergroup harm) on modern-day colleges and universities are having some significant effects on race relations in higher education. According to intergroup vigilance theory, this may be at least partially due to the ways in which these cues are compelling individuals to engage in cognitive processes that are increasing intergroup prejudice and stereotyping by amplifying the differences between, and the similarities within, their cognitive representations of “us” and “them.”

INTERGROUP VIGILANCE THEORY AND PREJUDICE REDUCTION

So what implications does intergroup vigilance theory have for the reduction of prejudice (and the acts of discrimination that this prejudice is often accompanied by)? Although this theory suggests that these cognitive mechanisms are somewhat permanent, and that they will always be activated by perceptual cues to intergroup contact and intergroup harm, it does leave open the possibility that individuals’ definitions of us and them can be changed.

This becomes clear when one considers the conditions under which these cues would have had to operate throughout history. In a natural environment, where one’s out-groups would have been from the same region of the world, and in very close proximity to one’s in-group, out-group members would have been very similar in appearance to in-group members (Williams, 1999). It is likely, then, that group boundaries would have been marked by subtle differences in appearance, such as clothing (Williams, 1999). In a contemporary multicultural society, however, group differences are based on differences in physical appearance and ethnicity, largely because of societal prescriptions. Hence, divisions between us and them likely depend on some level of input from the cultural context in which individuals find themselves (Williams, 1999).

If this is truly the case, then it may be possible to prevent the activation of these cognitive mechanisms (and the intergroup prejudice and stereotyping that they produce) by overriding this cultural input and compelling individuals to reconceptualize “them” as “us.” By changing the ways in which individuals draw these group boundaries, we should be able to reduce intergroup tensions.

IMPLICATIONS OF OTHER SOCIAL PSYCHOLOGICAL FINDINGS

Even if intergroup vigilance theory’s predictions are not valid, the importance of group boundaries to the existence of intergroup prejudice remains unchanged. Current social psychological research suggests that by creating group boundaries, we create prejudice.

This is best illustrated by those who use the minimal group paradigm to study intergroup prejudice. In using this technique, investigators normally divide their participants into groups based on fairly unimportant criteria. Participants may, for example, be asked to perform some simple task such as estimating the number of dots that are on a sheet of paper. Researchers would then assign these participants to different groups arbitrarily, while leading participants to believe that their performance was the basis for group selection. In the dot-estimating example, researchers may assign participants to groups such as “overestimators” and “underestimators” without even assessing participants’ performance.

What is consistently found in these minimal group situations is that, regardless of the nature of the group boundary, individuals often possess a certain amount of favoritism toward their group (Anastasio, Bachman, Gaertner, & Dovidio, 1997; Williams, 1999). This in-group favoritism, better known to social psychologists as in-group bias, is foundational to intergroup prejudice.

Worth noting is that, even in these minimal group situations, in-group bias is intensified by intergroup competition (see, e.g., Brewer, 1979). According to Brewer, this is largely because intergroup competition increases the salience of the intergroup boundary. So, even if intergroup competition is not activating the cognitive mechanisms specified by intergroup vigilance theory, it still

has implications for individuals' cognitive representations of us and them, and any prejudice that may exist between these two groups.

Hence, even if intergroup vigilance theory's assertions are incorrect, it is still essential to change or eliminate intergroup boundaries to reduce intergroup prejudice. To do this in academic settings, we may need to look to cooperative learning techniques that will foster intergroup contact and lead to the modification of intergroup boundaries.

THE JIGSAW CLASSROOM

According to Slavin and Madden (1979) and Slavin (1995), cooperative learning techniques are key to the reduction of intergroup prejudice in the classroom. These techniques foster intense intergroup interactions by putting students into learning groups that are composed of children from different racial-ethnic backgrounds (Slavin, 1995; Stephan, 1999; Stephan & Stephan, 2001). These interactions often lead to improvements in race relations (Slavin, 1995; Slavin & Madden, 1979).

One of the most effective cooperative learning techniques is the jigsaw classroom. This technique, which involves cooperation and interdependence (Aronson & Patnoe, 1997; Walker & Crogan, 1998), was developed to address the issues created by the desegregation of the schools in the United States, most of which took place between 1964 and 1974 (Stephan, 1999).

Although one of the primary goals of school desegregation was to improve intergroup relations, it was not very effective in doing so (Stephan, 1999). Its immediate effects were an increase in White students' prejudice toward minorities (Stephan, 1999), social separation into racial-ethnic clusters (Gerard & Miller, cited in Aronson & Bridgeman, 1979), and occasional acts of violence between white students and students of color (Aronson & Patnoe, 1997).

According to Slavin (1995), school desegregation did not succeed in improving intergroup relations because it was not accompanied by changes in school practices that were necessary to facilitate this goal. Schools failed to consider the fact that intergroup contact under the wrong conditions can lead to increases in intergroup con-

flict (Walker & Crogan, 1998). By throwing members of different racial-ethnic groups into a competitive classroom environment with superficial intergroup interactions, schools were running the risk of making intergroup relations even worse (Aronson & Bridgeman, 1979; Slavin, 1995). Unsurprisingly, they did (Aronson & Bridgeman, 1979; Aronson & Patnoe, 1997; Stephan, 1999).

To remedy the situation, a cooperative learning technique called the jigsaw classroom was created. It was designed to produce classroom conditions that would be more conducive to improving intergroup relations. In the jigsaw classroom, students are put into a situation where competition among individuals is incompatible with success (Aronson & Patnoe, 1997); individual outcomes are dependent on positive, nonsuperficial interactions with others (Slavin, 1995; Stephan, 1999).

Students in the jigsaw classroom are first divided into small groups of five to six students (Aronson & Patnoe, 1997), each of which is composed of individuals from different racial-ethnic backgrounds (Stephan, 1999; Stephan & Stephan, 2001). Each group is then given assigned material that is to be learned by the group as a whole (Aronson & Patnoe, 1997). The material, however, is split into sections; each section is distributed to an individual member of the jigsaw group. Each group member is responsible for learning his or her portion of the material, and teaching it to the rest of the group (Stephan, 1999; Stephan & Stephan, 2001).

To do this, each group member reads over his or her assigned material, breaks away from the jigsaw group, and joins an "expert group," where he or she meets up with all the other students in the class that have been assigned the same portion of the material (Aronson & Patnoe, 1997; Stephan & Stephan, 2001). When formed, expert groups review their assigned material and ensure that all group members are clear on the material (Aronson & Patnoe, 1997). They then discuss ways in which the material will be presented when students return to their jigsaw groups (Aronson & Patnoe, 1997). What is important, here, is that, within the expert groups, high-ability students are able to assist low-ability students (Aronson & Patnoe, 1997) and ensure that they are fully capable of presenting the material to their group. Hence, when students return

to their jigsaw groups, they are all truly “experts” (Aronson & Bridgeman, 1979).

Because members of each group are dependent on each other for learning (each student is tested, individually, on the material that is learned in the group), each member of the group becomes important and, according to Aronson and Patnoe (1997), well liked (regardless of their race or ethnicity). Hence, the jigsaw classroom produces a situation where members of different racial-ethnic groups come together and begin to look on each other favorably. But how does it work?

THE JIGSAW CLASSROOM AND THE CONTACT HYPOTHESIS

The jigsaw classroom was originally intended to reduce intergroup prejudice in the schools by meeting the requirements laid out by the contact hypothesis (Allport, 1954; see also Stephan, 1999). The idea was to create situations that would involve each of the following: (a) *cooperative interracial interactions* (Slavin, 1995), where students from various racial-ethnic backgrounds would be forced to work together and share a common fate, (b) *equal status interactions*, in which all group members would be considered experts, (c) *individualized contact*, where intergroup contact would be nonsuperficial (Stephan, 1999), and (d) *support from authority figures* (e.g., teachers, parents, administrators), which is believed to enhance the effects of intergroup contact (Allport, 1954).

According to Allport (1954), meeting these requirements will lead to the reduction of intergroup prejudice among the various groups involved in the intergroup contact situation. Hence, because the jigsaw classroom meets all these requirements, it should lead to the reduction of prejudice. According to Stephan (1999) and Stephan and Stephan (2001) it does.³ So what is the mechanism that underlies this prejudice reduction?

THE JIGSAW CLASSROOM AND THE COMMON IN-GROUP IDENTITY MODEL

Gaertner, Rust, Dovidio, Bachman, and Anastasio (1994) pointed out that the contact hypothesis (a list of loosely connected,

diverse conditions) fails to provide an explanation of how these conditions lead to the reduction of prejudice. These researchers are not suggesting that these conditions are ineffective, they merely wish to highlight the means by which they believe the contact hypothesis works. According to them, fulfilling the conditions prescribed by the contact hypothesis reduces prejudice by establishing a *common in-group identity* among the individuals involved (see also Anastasio et al., 1997; Dovidio, Gaertner, Isen, Rust, & Guerra, 1998; Gaertner, Dovidio, & Bachman, 1996). When the conditions prescribed by the contact hypothesis have been met, individuals' cognitive representations of us and them tend to transform into a more inclusive we (Gaertner et al., 1996).

Hence, creating a situation that meets the prerequisites prescribed by the contact hypothesis compels individuals to engage in a recategorization process that places former out-group members into one's in-group. This is important because intergroup bias is largely a product of in-group enhancement (Anastasio et al., 1997; Brewer, 1979). Placing out-group members into one's in-group, then, should lead to more positive evaluations of these individuals. And it does (Anastasio et al., 1997; Dovidio et al., 1998; Gaertner et al., 1996). This is largely because the categorization of an individual as an in-group member (rather than an out-group member) leads to greater perceptions of shared beliefs, increased interpersonal attraction, increased empathy, and enhanced memory for positive out-group information (Anastasio et al., 1997).

Note that this recategorization process leads to the greatest level of prejudice reduction when individuals maintain their subgroup identities (e.g., African Americans, Asian Americans, Whites, Latin Americans) while belonging to a common superordinate group (e.g., American citizens) that allows them to see themselves as being members of different groups playing on the same team (Anastasio et al., 1997; Gaertner et al., 1996).

PUTTING IT ALL TOGETHER

In light of the above information, we can now understand the process by which the jigsaw classroom goes about reducing intergroup prejudice. By meeting the prerequisites specified by the con-

tact hypothesis (cooperation, equal status, individualized contact, and support from authorities), the jigsaw classroom compels individuals to reconceptualize out-group members as in-group members, which leads to more favorable perceptions of those who were formerly known as them.

This recategorization process also has implications for the assertions made by intergroup vigilance theory. If individuals' cognitive representations of us and them are being modified in such a way that those who were previously classified as them are increasingly being classified as us, then it is much less likely that cues to intergroup contact (e.g., the relative size of an out-group), and intergroup harm (e.g., intergroup competition) will activate the cognitive mechanisms that produce intergroup prejudice and stereotyping.

Important to note here, is that the recategorization process that has individuals recategorizing former out-group members as in-group members is not necessarily being done at the expense of these individuals' racial-ethnic identities. As noted above, the prejudice reduction associated with this recategorization process works best when individuals maintain their subgroup identities. Hence, what is being suggested is that individuals maintain and cherish their racial-ethnic identities, while simultaneously seeing themselves as being part of a larger superordinate group that includes a diverse group of people (i.e., in terms of race and/or ethnicity).

OTHER POSITIVE OUTCOMES PRODUCED BY THE JIGSAW CLASSROOM

Interesting to note is that the jigsaw classroom, which was originally designed solely for improving intergroup relations, is also associated with a number of other positive outcomes. These include increases in students' self-esteem, increases in students liking for school, reductions in students' interindividual competitiveness, and increases in students' perspective-taking skills (Aronson & Patnoe, 1997)

THE JIGSAW CLASSROOM IN HIGHER EDUCATION

Although the jigsaw classroom was originally designed to be used in K-12 settings, it has also been used among college students and adults for a variety of purposes (Aronson & Patnoe, 1997).

There is no reason, then, why this learning method cannot be implemented in colleges and universities on a larger scale. In fact, some suggest that the use of cooperative learning methods on campus would be a very effective way to improve intergroup relations (see, for example, Katz, 1991). So why not give it a try?

Why do we not make the jigsaw classroom required course work for all students in colleges and universities? This could easily be done by integrating the jigsaw classroom into course work that is offered to undergraduates. Although there are a number of possibilities, here, one potential means of doing this would be to offer a course in cooperative learning, possibly from within the Education Department, where those doing scholarly work in the area of cooperative learning could be recruited to instruct such course work. This cooperative learning course work could then become required for all students who are completing undergraduate degrees. Students would be required to complete cooperative learning requirements (much like they are required to complete English and science requirements) to complete a degree.

This type of course would be very similar to any other course offered by the Education Department, the only difference being that the exclusive focus of the course would be cooperative learning techniques, such as the jigsaw classroom. In covering these topics, instructors could implement a practical component by having their students engage in the cooperative learning techniques that they are studying (using this strategy would make it necessary for institutions to ensure that course sections are not unmanageably large).⁴ These students would then have opportunities to be exposed to the jigsaw classroom, as well as a number of other cooperative learning activities that would involve various forms of intergroup contact.

In integrating the jigsaw classroom and other cooperative learning techniques into course work for undergraduates, institutions may have concerns about the role of the course instructor (vs. members of the class) in teaching course materials, and whether students would be inclined to attribute poor performance in the course to the relative insufficiency of their classmates' teaching abilities. Such concerns could be remedied by setting limits on the amount of course work taught by the students and/or by grading the course on a pass-or-fail basis. The primary goal of the cooperative learning

course work would be to facilitate intergroup interchange, reduce prejudice, and improve intergroup relations; test performance and the amount of material retained by students would be secondary. Hence, grading such course work on a pass-or-fail basis could potentially be a reasonable means of avoiding students' concerns about the quality of their classmates teaching and/or their performance in the course.

Making the jigsaw classroom a part of students' required course work falls in line with Thomas's (1997) suggestion that prejudice reduction should become part of the learning process in colleges and universities; she feels that it should be required course work for everyone.

According to Altbach (1991), however, colleges and universities have seen a certain amount of faculty resistance to curricular changes intended to improve intergroup relations (Altbach, 1991). Hence, it is possible that certain faculty members would object to endeavors to include the jigsaw classroom in the curriculum as a means of prejudice reduction. Universities' administration, however, would have the power to override these objections, and ensure that these curricular changes were made (Spaights et al., 1985). One can only hope that they would choose to use this power.

IMPLEMENTING THE JIGSAW CLASSROOM

Important considerations. If the jigsaw classroom were to be implemented in colleges and universities, there would be a couple of important points to consider. First, it is important to note that the jigsaw classroom works best when groups are assigned text-based material (Aronson & Patnoe, 1997). Hence, it would be best to make use of printed materials related to jigsaw groups' topic of study.

It is also important to note that the jigsaw classroom appears to reduce prejudice only toward groups whose members are represented in the jigsaw group (see, e.g., Walker & Crogan, 1998). Hence, positive attitudes will extend beyond jigsaw group members to their racial-ethnic groups as a whole, but these positive attitudes will not extend to all racial-ethnic groups.

There is, however, an important qualification to this point. Slavin (1995) suggested that, by meeting the requisite conditions prescribed by the contact hypothesis, cooperative learning methods such as the jigsaw classroom are likely to lead to interethnic friendships. This is an important point to consider because interethnic friendships usually lead to reduced intergroup prejudice that generalizes to all groups (Pettigrew, 1997).

Limitations. Although there is a fair amount of research evidence that points to the potential effectiveness of the jigsaw classroom in improving intergroup relations in classroom settings, there are definitely some gaps in this area. For one, most of the research on this topic is a little bit dated. There seems to be a dearth of recent research findings that provide us with conclusive evidence related to the effectiveness of the jigsaw technique. A second problem is that certain recommendations for future research that have been made in the past have remained unaddressed. Most notable among these is a need for longitudinal research that assesses the jigsaw classroom's long-term effects on intergroup attitudes, and intergroup relations. Hopefully, these gaps will be addressed in the very near future. Without this much-needed empirical support, it will likely be that much more difficult to gain support for jigsaw classroom initiatives in higher education settings.

CONCLUSIONS

Clearly, the current state of race relations in higher education is much less than ideal. College campuses are riddled with overt and covert forms of discrimination that affect minority students and minority faculty members. Although there have been numerous approaches to addressing issues of diversity in educational settings (e.g., introducing multicultural texts, establishing intergroup relations workshops for instructors), none have been found to improve intergroup relationships (Slavin & Madden, 1979).

This article argues that to improve intergroup relations, institutions of higher learning need to establish conditions that will facilitate a recategorization process by which students will begin to see

in-group and out-group members as being part of a more inclusive we. It is argued that this process can be facilitated by introducing the jigsaw classroom into the curriculum, and making it required course work for all students.

The jigsaw classroom has been shown to be effective in reducing prejudice in K-12 settings; there is no reason why it should not have the same effects in colleges and universities.

Important to note is that the jigsaw classroom is designed to improve intergroup relations among students only. Hence, it is not addressing the institutionalized forms of discrimination that affect minority students and minority faculty members, or the overt acts directed at these individuals by White faculty members. The jigsaw classroom will, however, affect the current generation and, hopefully, reduce the extent to which these other forms of discrimination occur in the future.⁵

This will be important because, as Spaight et al. (1985) suggested, "Only when [discrimination] of both overt and covert nature [has] been eliminated can an environment conducive to academic growth for all be developed" (p. 21). Implementing the jigsaw classroom in institutions of higher learning may be an important step toward establishing such an environment.

NOTES

1. Use of the term *Hispanic* will be used in this article to refer, collectively, to the large number of different ethnic groups in the United States that have Latin American heritage. The intent, here, is not to homogenize these different ethnic groups. The intent is to make use of a term that is as inclusive and appropriate as possible.

2. Institutionalized racism is certainly a much more complex phenomenon than this article would suggest. An oversimplified explanation is used to describe the ways in which this covert form of discrimination can operate at the level of the individual. This level of analysis is important within the context of this article, which is oriented toward affecting change at the level of the individual.

3. Evidence that points to the effectiveness of the jigsaw classroom is cited by Stephan (1999) and by Stephan & Stephan (2001). Stephan and Stephan (2001), however, also indicated that there are some studies on the jigsaw classroom that have found no positive effects on intergroup relations. Stephan and Stephan explained these mixed results by highlighting two important pieces of information: (a) many of the studies that found no changes in intergroup liking were conducted in settings where liking for all classmates was already very high during pretests and (b) results from other studies that found no changes in intergroup liking were likely due to problems with the implementation of the technique.

4. Instructors who require training related to the implementation of the jigsaw classroom would, presumably, be trained via the same means as K-12 teaching professionals who, according to Aronson and Thibodeau (1992), learn how to implement the jigsaw technique via in-service training workshops that include lectures and demonstrations.

5. What has been suggested in this article is that covert forms of discrimination such as institutionalized racism are, at least in part, the result of actions made by individuals in positions of power. What is being suggested, here, is that the reduction of intergroup prejudice at the level of the individual will have the potential to decrease the likelihood that new forms of institutionalized racism will be established, and increase the likelihood that pre-existing forms of institutionalized racism will be interrogated.

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