The mission of Arizona State University’s Academic Community Engagement Services (ACES) is to provide opportunities for civic engagement and experiential learning through academically-enriched service to the community. Student participants in this study were enrolled in a service-learning course either through the Department of Sociology (Soc. 484) or through the Department of English (Eng. 484). In order to satisfy course requirements, all participants attended twelve hours of training during the first two weeks of the semester on such topics as behavior management and assisting struggling readers, then met with the same two children (enrolled in second through eighth grade in a school located in an economically depressed area) for two-hour tutoring sessions three afternoons a week (totaling approximately 78 hours of contact over thirteen weeks). College student participants were assigned readings relating to social identity development (see Appendix) and were required to respond on a computer-mediated discussion group to questions relating the readings to their own lives and community experiences.

A growing body of research has indicated that engaging participants in these kinds of prolonged, reciprocally-beneficial, community partnerships stimulates participants’ social cognitive development (Dunlap, 1998; Eyler & Giles, 1999; Giles & Eyler, 1994; Myers-Lipton, 1996; Rhoads, 1998). However, beyond controlling for initial differences between service-learning and control groups, few researchers have examined how the influence of participant characteristics affects these outcomes. The present study takes steps toward understanding these relationships by evaluating how selected aspects of our participants’ histories and future plans influence their social cognitive development.

As a next step, we analyze how personal characteristics interact with program features to impact participants’ overall growth. Our results indicate that service-learning practitioners need to be cognizant of individual circumstances and group norms, since these dynamics may affect social cognitive development much more profoundly than the elements of program design that have traditionally received the most attention.

Service-Learning and Social Perception

In general, studies examining the impact of service-learning on social cognition have yielded encouraging results. For example, participants have reportedly become less racist (Myers-Lipton, 1996), less prone to stereotyping (Eyler & Giles, 1999; Giles & Eyler, 1994), and more aware of social inequality (Rhoads, 1998) as a result of service-learning experiences. The volume of research in this area does not negate the need to analyze the available data judiciously, however. Service-learning research has often been criticized for external validity issues of generalizability, and in some ways this criticism may be well founded. For example, self-report measures of personal growth and practitioners’ favorite anecdotes have not provided compelling evidence that cognitive changes are translated into new behaviors or that knowledge gained in one context is transferred to novel situations (Eyler, 2000). On the other hand, there is a clear trade-off between external and internal validity, especially in assessments of service-learning pedagogy. Large-scale projects have tended to gloss over important influences such as participant characteristics and group norms that play critical roles in the day-to-day practice of service-learning, when it may be that these

Characteristics of successful service-learning programs can be replicated, but this study provides evidence that participant characteristics also affect social cognitive development. The authors propose a research shift away from examining specific program qualities toward a focus on successful participant-program match in order to deepen our understanding of what leads to social cognitive growth.
important contextual factors actually have the most bearing on why some students benefit from service-learning more than others.

The need to examine carefully the role of individual differences has been underscored by practitioners who have observed that participants’ perceptions of community partners tend to be unduly influenced by past experiences and preliminary expectations (Chesler & Vasques Scalera, 2000; Coles, 1999). Researchers have responded to this concern by controlling for initial cognitive differences between participants and non-participants (e.g., Myers-Lipton, 1996). Although the use of statistical procedures (e.g., analyses of covariance) can offer added protection against selection bias and increase the likelihood of achieving statistical significance, fully understanding how individual circumstances affect service-learning outcomes requires additional, focused research.

The Case for Using Attribution Theory

With few notable exceptions, past research on social cognitive development via service-learning has assessed changes in behavior directly (e.g., racist attitudes) rather than detecting modifications of the thinking processes underlying those behaviors. Within this context, Brandenberger (1998) has called for inquiries into the ways that, “attribuational tendencies and other cognitive patterns are influenced by service-learning experiences” (p. 81). Empirical data confirming changes in a fundamental cognitive process (e.g., participants’ social attributional preferences, or their ability to recognize aspects of institutionalized racism) would bridge existing research and would allay the familiar criticism that students’ experiential knowledge is context-specific and, therefore, non-transferable (e.g., Eyler, 2000). Additionally, measures of social attributional preference may also be less transparent (i.e., less susceptible to social desirability bias) than many of the instruments currently being used in service-learning research.

Focusing on participants’ social attributional preferences also has practical advantages. For example, in facilitating our participants’ social cognitive development, we specifically discourage “schema substitution.” As ethical practitioners, we seek to go beyond merely replacing negative stereotypes with “positive” stereotypes by challenging students to grapple with the complexities posed by realistic inter-group relations embedded in the existing social hierarchy. The encouragement of sweeping generalizations such as “Blacks are intelligent” or “Mexicans are ambitious” would undermine the analytical skills we seek to foster.

The Psycho-Sociological Attribution Model

An expansive body of social psychological and sociological research has revealed that people socialized in most Western cultures tend to attribute others’ misfortunes to internal traits as opposed to external circumstances (Kluegel & Bobo, 1993; Ross, 1977; Ross & Nisbett, 1991). This attributional bias has been shown by researchers to be most pronounced when the target of the attribution is perceived to be a member of a stigmatized, socially-identifiable group and when the target’s actions perpetuate an existing stereotype (Duncan, 1976; Pettigrew, 1979; Taylor & Jaggi, 1974).

For the most part, social psychological researchers have relied on this internal/external dichotomy to classify attributions. However, in reviewing former participants’ reflection entries, we found that the traditional social psychological model consistently failed to capture the complexity of our participants’ attributional preferences. In particular, adhering to the traditional model meant grouping attributions together that were actually quite different under an ambiguous “external” label. Combining attributions this way obscures distinctions between specific social phenomena (e.g., one teacher’s discriminatory classroom behavior) and systemic injustices (e.g., unequal access to quality education predictable by racial assignment). Furthermore, attributions emanating from a cultural-deterministic perspective (e.g., all Mexicans place a high value on their families due to the way they were raised) did not fit comfortably in this binary scheme, since the individual may exhibit internal qualities that s/he is powerless to alter due to the influences of her/his culture.

Therefore, in order to refine research practices in this area, we abandoned the internal/external approach in favor of a four-dimensional model that more precisely describes how our study participants understand social interaction. Within our model, attributions are categorized as dispositional, cultural-deterministic, situational, or structural. Like most people socialized in individualistic cultures, our participants usually enter their service-learning experiences with tendencies to explain social inequality as individual traits, such as lack of motivation or insufficient aptitude. In our model, this would be termed a “dispositional” rather than an “internal” attribution, allowing us to draw a distinction between ascribing behavior to personality traits and other quasi-internal characteristics related to cultural affiliation.

Cultural-deterministic attributions, on the other hand, implicate culture as the dominant influence
on behavior. Whereas dispositional attributions assume free will, cultural-deterministic attributions assume that people (especially racial and ethnic minorities) are cultural automatons bound to a prescribed and limited set of assumed values and cultural scripts. Attributions of this type confuse “internal” qualities with cultural norms, and are often grounded in misinformed cultural stereotypes with little acknowledgment of within-group variation, multiple group membership, or the function of cultural values and behaviors as adaptations to natural and social environmental processes.

We also drew distinctions between two types of external attributions: situational and structural. Situational attributions imply that people confronted with a given situation act in a particular way; the situation is not viewed within the context of the larger social structure, and personal and cultural influences are seemingly irrelevant. For example, one participant suggested that her tutee was often tired and easily distracted in class because the tutee’s house had recently burned down. Thus, the tutee’s behavior was justified by the assumption that anyone displaced by a natural disaster would temporarily disengage from school activities.

Structural attributions can also account for how external factors guide behavior. However, unlike situational attributions, structural attributions answer the fundamental question: “Was this situation as likely to occur in anyone’s life or do situations like this one occur more frequently for members of certain social groups?” In service-learning environments, structural attributions can reveal participants’ proficiency in identifying common forms of social inequality and their awareness of overt and covert ways dominant hegemony are reified and safeguarded (Lopez, Gurin, & Nagda, 1998). Our goal as service-learning practitioners was to move our participants closer to this critical social perspective over the course of the semester.

The Role of Participant Differences

Can we teach our participants to recognize structural attributions, and if so, how? Service-learning practitioners and researchers have often cited the “contact hypothesis” (Allport, 1979) as the primary reason why students reap myriad benefits as a result of immersing themselves in unfamiliar settings. Unfortunately, many practitioners have interpreted the contact hypothesis to mean that the educational value of a service-learning experience is in direct proportion to perceived differences between the community member and the service-learning participant. The literature is loaded with examples of participants’ initial culture shock inspiring them to shed their encapsulated worldviews in favor of “multicultural awareness.”

This interpretation, however prevalent, is not consistent with Allport’s original thesis or current social cognitive theory because it fails to specify the conditions within which cross-cultural contact stimulates cognitive transformations. For example, participants must attend to contradictory evidence in order to experience cognitive change (Erber & Fiske, 1984). If they selectively attend to schema-consonant information and ignore schema-dissonant information, their existing schema will remain unaltered. It has been our experience that many participants still make dispositional attributions about the poor, despite being presented with compelling evidence of the connections between race and poverty.

Second, participants must be motivated to expend the cognitive resources necessary to change their functional schemata (Fiske & Neuberg, 1990; Hewstone, 1989). In other words, participants have to want to change, especially if they are charged with the tasks of accommodating new information and developing more complex views of their social worlds, instead of merely substituting one cognitively simplistic schema for another. If participants are not challenged to reconsider their existing beliefs or to see the personal relevance of the service-learning experience to their future goals, then they are unlikely to adopt more complex social perspectives.

These experiential and motivational differences may explain why some participants develop complex social perspectives during their service experiences, while others in the same service setting and program do not. In the present study, we explore how participant characteristics may also be responsible for whether or not participants will form complex attributional preferences.

Course Design

The ACES program aims to develop civic-minded citizens by offering undergraduate students the opportunity to tutor in elementary schools located in economically depressed communities. Most of our tutors are white, middle- to upper-middle-class women tutoring in predominately Hispanic, African-American, and Native American schools.

Like other service-learning programs, ACES relies on ongoing, critical reflection as a primary instructional tool. Although our program has always required students to interact with fellow interns and supervisors on a computer-mediated discussion group (Kelly, 1997), deepening our students’ civic and cultural awareness demanded more structured assignments than descriptive accounts of specific site-issue problem-solving. Thus, as part of their reflection exercises, participants were
assigned a series of readings that paralleled progressive encounters with class, ethnicity, and educational opportunity issues that previous years' students had reported confronting during service-learning experiences. The selection and ordering of the readings were inspired by white racial identity theory (Helms, 1995) and focused on the intersection of race, culture, and the American educational system, culminating with a Freirean-influenced article on student-driven social action and a chapter from Coles’ (1993) book, *The Call of Service* (see Appendix A).

Each week, students were asked to read one article or book excerpt from this reading series, and to respond in their online discussion groups to a series of pre-determined questions encouraging them to use higher-order analytical skills such as application, synthesis, and evaluation (Bloom, 1956). These questions challenged students to form connections among the readings, their own personal experiences, and their understandings of their tutoring sites and the children with whom they were working.

**Instruments and Methods**

A major goal of service-learning research is to measure cognitive development as it is applied in new contexts. For example, Batchelder and Root (1994) successfully demonstrated the transferability of cognitive skills to an unfamiliar context through the use of their Responses to Situations measure. Our goal was similar: we wanted to investigate whether service-learning participants would come to prefer structural attributions as the best explanations for individuals’ circumstances in situations distinct from, but related to, their tutoring experiences. With this in mind, we selected a scene from the PBS documentary, *School Colors* (Center for Investigative Reporting, 1994), as the experimental stimulus to tap into our participants’ experiences as tutors in economically disadvantaged schools and politically disenfranchised communities. The specific scene used in this study depicted a black male high school student (notably older than the children tutored by our participants), a white male teacher, and a white male administrator discussing a previous physical and verbal altercation that had occurred between the student and the teacher. The teacher and the administrator agree at the end of the clip that the student, not the teacher, acted inappropriately, usurping the student’s voice through their own administrative power. We administered the pre-test on the first day of training during the first full week of classes. Tutors had not been told anything about the course at that point and they had not yet made arrangements to tutor at any particular school.

Not having viewed the altercation directly, our participants were forced to make inferences based on their observations. As Gushue and Carter (2000) have demonstrated, pre-dispositions can affect attributions by guiding the perceiver’s attention toward certain aspects of the situation and by determining which aspects are remembered, so existing schemata informed by relevant experience can influence attributions for ambiguous events. Based on this research, we designed an attributional questionnaire to give us insight into participants’ attributional preferences and to allow us to track changes in their cognitive development over the course of the semester.

The participants were asked, “What caused the conflict between the teacher and the student?” and “What would have to change in order to avoid problems like these in the future?” After completing these two open-ended items, the participants responded to four closed-ended questions related to their attributions for the student’s and the teacher’s behavior. Each question presented participants with four attributional choices: situational, cultural, structural, and dispositional. Participants used a Likert-type scale (1 = most likely; 4 = least likely) to rate how likely each cause was to have contributed to the student’s and to the teacher’s behavior during the observed discussion and during the (non-observed) altercation discussed in the video. On subsequent pages participants were asked to assess how typical this sort of incident is in modern schools and to indicate the “current function of the American educational system.”

Participants then responded to a separate demographic survey that was designed to record: a) their motivation for participating in service-learning; b) their prior experiences with service-learning; c) the racial/ethnic composition of their high school; d) their family’s socioeconomic status while they were growing up; and e) their future plans to work or live in low-income neighborhoods. This identical procedure was repeated as a post-test follow-up at the conclusion of the semester.

**Results**

Thirty-six participants (28 women, 8 men) completed the pre- and post-test versions of the demographic survey and the attributional questionnaire. Participants tended to be young (*M = 19.3* years) and in their first two years of college (75%). Our sample was relatively racially/ethnically homogeneous (75% white/Anglo-American; 13.9% Hispanic/Latino(a); 5.6% Asian/Asian-American; and 5.6% biracial) and affluent (2.8% very wealthy; 47.2% upper middle class; 38.9% middle class; 11.1%
working class), reflecting typical enrollment figures for our program.

Participants were asked to select among possible reasons for participating in the service-learning experience. Most participants indicated that they wanted to: make a difference to specific children (80.6%); learn to understand others (72.2%); help children overcome cultural obstacles in gaining a quality education (66.7%); and use service-learning as a tool in learning their coursework (58.3%). Fewer participants enrolled in order to work with people in the community whom they saw as different from themselves (47.2%) or to earn course credit (30.6%). The fewest number of participants enrolled because they wanted to work with people in the community whom they perceived to be similar to themselves (19.4%).

Other items revealed our participants’ attitudes toward their prospective placement sites and the community members with whom they hoped to work. Most of our participants (72%) described community members as different from themselves. In fact, more participants admitted never having thought about potential cultural differences at the site (16.7%) than indicated that they perceived community members to be like themselves (11.1%). Only a small minority reported having lived in the community (11.1%), maintained friendships in the community (13.9%), regularly visited the community (5.6%), or performed other service-learning in the community (8.3%). Some participants planned to work in the community (22.2%) or in other communities perceived to be similar to their placement site (33.3%), but no participants planned to live in the community of her/his placement site, and only one (2.8%) planned to live in a similar community in the future.

Participants were asked to describe the racial/ethnic make-up of their high school in order to record their experiences as statistical minorities or majorities during their high school careers. Most participants remembered that the majority of their classmates and teachers were racially/ethnically similar to themselves (61.1% and 66.7%, respectively).

The attributional questionnaire contained the primary dependent variables (i.e., attributional preference scales). Participants’ questionnaire responses reflected their views of the scene depicted in the video but demonstrated their tendencies toward dispositional, cultural-deterministic, situational, or structural attributions in a situation with parallels to their service experience. A paired t-test was conducted on each attribution type to determine whether participants’ preferences changed as a result of participating in the service-learning course. The two questions were aggregated that focused on attributions for the student’s behavior. Likewise, the two questions directed at explaining the teacher’s behavior were aggregated. Thus, each attribution scale ranged from two (high preference) to eight (low preference). Using the Bonferroni procedure to control for Type I error rate across the eight paired t-tests, a p-value of less than .00625 was required to reach significance at the .05 level. Rejecting the null hypothesis in this case would mean that participants changed their attributional preferences over the course of the semester (see Table 1).

The results indicated no statistically significant differences between pre- and post-test scores for participants’ preferences for situational (t(35) = .659), cultural (t(35) = -1.665), structural (t(35) = .509), or dispositional (t(35) = .323) attributions regarding the student’s behavior. The data analyses did indicate a statistically significant increase in situational attributional preference for the teacher’s behavior (t(35) = 3.213, p < .05). However, none

Table 1
Mean Scores and Standard Deviations for the Pre- and Post-Test Administrations of the Attributional Preferences Measure and Paired t-test Results for Each Attribution Type.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test</th>
<th>SD</th>
<th>Post-Test</th>
<th>SD</th>
<th>t-score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Situational</td>
<td>6.44</td>
<td>1.58</td>
<td>6.25</td>
<td>1.80</td>
<td>-0.659</td>
</tr>
<tr>
<td>Cul. Deterministic</td>
<td>4.92</td>
<td>1.80</td>
<td>4.25</td>
<td>1.61</td>
<td>-1.665</td>
</tr>
<tr>
<td>Structural</td>
<td>4.08</td>
<td>1.40</td>
<td>4.25</td>
<td>1.61</td>
<td>0.509</td>
</tr>
<tr>
<td>Dispositional</td>
<td>4.14</td>
<td>2.00</td>
<td>4.28</td>
<td>1.68</td>
<td>0.323</td>
</tr>
<tr>
<td><strong>Teacher</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Situational</td>
<td>4.08</td>
<td>1.66</td>
<td>5.33</td>
<td>2.22</td>
<td>3.213*</td>
</tr>
<tr>
<td>Cul. Deterministic</td>
<td>5.69</td>
<td>2.03</td>
<td>4.81</td>
<td>1.88</td>
<td>-2.039</td>
</tr>
<tr>
<td>Structural</td>
<td>5.06</td>
<td>1.93</td>
<td>4.17</td>
<td>1.63</td>
<td>-2.190</td>
</tr>
<tr>
<td>Dispositional</td>
<td>4.89</td>
<td>1.77</td>
<td>4.92</td>
<td>1.73</td>
<td>0.790</td>
</tr>
</tbody>
</table>

Note: n = 36; * p < .05.
of the other t-scores of attributional preference for the teacher’s behavior achieved statistical significance [cultural \( t(35) = -2.039; \) structural \( t(35) = -2.190; \) and dispositional \( t(35) = 0.079 \)].

Next, we computed correlation coefficients to see how certain participant characteristics related to changes in structural attributional preference. In other words, we hoped to identify the specific features of those students for whom the service-learning experience “worked” (i.e., moved toward a preference for structural attributions between pre- and post-test). The correlational analyses revealed a statistically significant positive relationship between desire to work in a community similar to their placement site and changes in preference for structural attributions for the student’s behavior \( (r(34) = 0.334, p < .05) \). No other statistically significant correlations occurred between participant characteristics and changes in preference for structural attributions for the student’s behavior.

In addition to the attributional questionnaire, participants were also prompted to “mark the one statement that best describes the current function of the American educational system” (see Table 2). Our results suggest that participants were more likely to recognize schooling as connected to a socio-political context as a result of their service-learning experiences. Although no participants endorsed the notion that schools are unrelated to the larger social structure on either the pre- or the post-test, more participants indicated having thought about these issues after the service-learning course (+16.7%). Unfortunately, the conclusions our participants drew about the function of schooling were not entirely consistent with our programmatic goals. On the one hand, a higher percentage of participants indicated that schooling reproduces social inequality (+9.1%). There was also a decrease in the percentage of participants who indicated that schools maintain social equality (-8.4%). On the other hand, there was also a profound increase in the percentage of students who came to believe that schools challenge the existing social structure and equalize opportunity for all people (+13.9%). These results were especially discouraging considering that the cultural-awareness reflection manual was designed to expose the perpetuation of social inequalities in educational settings.

Finally, one item was included to gauge the extent to which participants accepted the experimental stimulus (i.e., the video) as a realistic scenario. Most participants believed that the incident was either very typical (35.5%) or somewhat typical (54.8%) in modern schools, suggesting that they thought that the video stimulus was a good example of a conflict situation.

Discussion

The present study was conducted to examine participants’ social cognitive development as a result of a service-learning course, and to relate the findings to specific participant characteristics. The overall results indicate that most participants did not come to prefer structural attributions as a result of taking this service-learning course, or think differently about schooling as a means of social reproduction. If such cognitive development did occur, the majority of our service-learning participants did not successfully apply what they had learned during a semester of tutoring and reflection to the related, but novel, situation depicted in the School of Colors scene. On the bright side, there was a statistically significant positive relationship between planning to work in communities perceived to be similar to placement sites and structural attributions. Participants were also less likely to associate situational factors with the teacher’s behavior after their service-learning experience than before, perhaps suggesting that they came to see the teacher as more responsible for his behavior. So some cognitive growth was occurring, but only in some participants, making individual characteristics a likely mitigating factor.

Table 2

Percentage of Participants Endorsing Each Perspective of the Function of the American Educational System as Related to Social (In)Equality.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>It maintains the existing social structure and reproduces social inequality.</td>
<td>27.8%</td>
<td>38.9%</td>
</tr>
<tr>
<td>It maintains the existing social structure and preserves social equality.</td>
<td>16.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>It challenges the existing social structure and equalizes rewards and opportunity for all groups.</td>
<td>19.4%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Schools are not related to the larger social structure.</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I have not thought about this issue.</td>
<td>36.1%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

Note: n = 36
These data also do not support the popular version of the contact hypothesis. Our participants clearly saw significant social distance between community members and themselves (e.g., few participants planned to live or work in the communities encompassing the placement sites or in similar communities). If the educational value of a service-learning experience is in direct proportion to perceived differences between the community member and the service-learning participant, then we should have witnessed significant group-wide effects. Instead, only those students whose future plans included life in the service community exhibited measurable change.

Of course, this popular translation of the contact hypothesis is a convenient misinterpretation of Allport’s original thesis. Erickson and O’Conner’s (2000) more accurate portrayal of the relationship between cross-cultural contact and service-learning can provide some possible explanations for our findings, and assist service-learning practitioners in designing service experiences that maximize the potential for those individuals, who are open to social cognitive growth, to experience positive change. According to Erickson and O’Conner, in order to reduce stereotypic thinking, service-learning experiences must provide participants with: a) opportunities to pursue common goals with community members; b) equal status contact with community members; c) contact that contradicts stereotypes; d) long-term contact; and e) a safe and supportive climate that supports cross-cultural contact and critical reflection. As we discovered, participant characteristics and group norms should direct how each of these elements is implemented.

First, Erickson and O’Conner (2000) warned that service-learning participants and community members need to share common goals. In most cases our participants wanted to help their tutees correctly complete academic assignments, but most did not enroll in the service-learning course to learn about social injustice and, therefore, lacked the motivation for substantive cognitive change. Participants who predicted that they would engage in prolonged collaborative community partnerships were motivated to learn about structural issues of social inequality whereas other participants (e.g., those who entered their placement sites with a charity orientation; Morton, 1995) may not have been as eager to learn new ways of seeing the world.

Second, due to the nature of the tutoring relationship, our participants may not have participated in equal status contact with community members. Virtually all cross-cultural contact occurred within an academic setting that placed the tutor in a position of real and ascribed authority. Community partnerships often parallel the same unequal status relationships operating at broader sociological levels (Coles, 2000), and the reality of these power dynamics can override the program’s attempts to facilitate social cognitive growth. While this problem is inherent in most tutoring relationships, there are ways service-learning practitioners can create more equitable relationships. For example, we can acknowledge community partners’ expertise by asking them to inform participants of community initiatives aimed at combating social inequality and/or inviting them to assist in tutor-training and support throughout the semester.

Third, cross-cultural contact in some contexts affirms stereotypes. In attending to the service-learning best practices approach of meeting community identified needs, the schools selected as placement sites were located in the most disenfranchised neighborhoods and served some of the most economically disadvantaged families. Within these schools, teachers and principles recommended the most “needy” students for tutoring, thus providing plenty of opportunities for perceived failure to be explained as personal or cultural deficiency.

One complementary explanation is that our participants intellectualized away tutees’ positive attributes on a case-by-case basis, thus compartmentalizing specific traits and preserving negative images of stigmatized socially-identifiable groups. Researchers have shown that since observers tend to make dispositional or situational attributions for behavior that contradicts stereotypes (Hewstone & Brown, 1986; Pettigrew, 1979; Rothbart & John, 1993) prejudice change rarely occurs because observers fail to generalize the actions of particular individuals to the social group as a whole (Rothbart & Lewis, 1988). Orientation activities can prepare participants to recognize how their own attributional biases insulate stereotypes and obstruct community partnerships.

Fourth, one semester of service-learning, even an extensive 78 contact-hour course, may not provide sufficient cross-cultural contact to reverse the effects of years of socialization. In our program, participants typically develop a critical social consciousness in their second and third semesters; however, these observations have not been evaluated systematically and may be confounded by selection bias (i.e., tutors who benefit the most from their service-learning experiences remain with the program).

Finally, and perhaps most importantly, social cognitive development is augmented by a supportive environment that promotes exploring social justice issues. Unfortunately, our participants formed a relatively racially and culturally homogeneous group, and there were few notable occasions when
group cohesiveness broke down over racial/cultural issues, as evidenced by our computer-mediated discussions. Group interaction is determined by group structure, participants’ levels of awareness, and coalitions that form throughout the group experience, and these climatic factors influence the degree to which participants allow themselves to be affected by the group (Helms, 1990). Within these contexts, practitioners must be prepared to recognize and negotiate difficult dynamics in order to preserve a safe climate for exploration of social justice issues.

Limitations and Future Research

Our study results should be interpreted cautiously. Correlation does not imply causation and we should be careful of interpreting our observations as causal effects. Future research can flesh out these relationships through experimental designs involving random selection and assignment.

Furthermore, our attribution instrument had unknown psychometric validity and reliability and had not been empirically linked to an identifiable construct. Our goal in this study was to provide a “snapshot” of social cognitive growth by assessing participants’ responses to a particular incident in a novel context. Additional research is necessary to connect behavior-based stimuli to valid and reliable instruments so we can be sure that the measurements we make are accurate and interpretable.

Participants were asked to rate the likelihood that each cause contributed to the teacher’s and the student’s behavior, and it is still possible that our participants identified socially desirable responses; however, in this case, the participants did not prefer structural attributions overall, suggesting that they were not aware of, or chose not to give, the most desirable response. Future researchers can code responses to carefully constructed open-ended items to add some protection against issues of social desirability bias and to complement questionnaires and surveys.

Researchers with access to larger sample sizes can perform multiple regression analyses and multiple analysis of variance tests to assess the relationships among various predictive variables and targeted outcomes. These analyses could indicate, for example, which demographic, attitudinal, and cognitive factors are associated with an individual’s social cognitive development. These large-scale evaluations should include descriptive accounts of program and participant characteristics to properly contextualize results.

Conclusion

In summary, we posit that satisfying the necessary conditions for social cognitive development through cross-cultural contact requires more than replicating “tried and true” service-learning course and program designs. Practitioners must also acknowledge that each individual participant’s previous experiences and future expectations, as well as group norms, will primarily determine how much cognitive growth will occur. In our study, participants who hoped to learn about people and social issues that have personal relevance to them benefited differently from our multicultural service-learning course than those who enrolled for other reasons (e.g., charity). Thus, practitioners should focus instead on adapting their pedagogy to allow participants at all levels of social awareness the opportunity for growth. The literature on racial identity development in counselor and teacher education can be useful in selecting appropriate strategies for reaching students at different levels of self- and social awareness (e.g., Carter & Goodwin, 1994; Helms, 1992; Pope-Davis, Breaux, & Liu, 1997; Thompson & Carter, 1997).

Service-learning pedagogy is generally considered to be a catalyst in developing a critical and responsible social consciousness. However, the traditional contact and reflection approach will affect each participant differently. Furthermore, groups form a collective identity that may or may not normalize critical consciousness. Practitioners are challenged to provide safe and provocative reflection opportunities matched to participants’ levels of awareness, while attending to group dynamics. If we are to be successful, best practice research should move beyond “What works?” to specify “Among whom?”

References


Helms, J. E. (1992). *A race is a nice thing to have: A guide to being a white person or understanding the white persons in your life*. Topeka, KS: Content Communications.


Appendix

Cultural Awareness Reflection Manual Readings
(in sequential order)


