Understanding the Identities of Mixed-Race College Students Through a Developmental Ecology Lens

Kristen A. Renn

Using an ecology model of human development (Bronfenbrenner, 1979, 1993), I frame the exploration of racial identities of 38 college students with multiple racial heritages. I map the influence of interactions within and between specific environments on students’ decisions to identify in one or more of five patterns of mixed race identity found in a previous study.

The identity development of mixed race college students, those students whose parents are from more than one federally designated racial or ethnic category, does not appear to follow the path outlined in traditional models of racial identity development (e.g., Atkinson, Morten, & Sue, 1979; Atkinson & Sue, 1993; Cross, 1987, 1995; Helms, 1990, 1995). The models’ inclusion of a stage or status of immersion in minority culture and rejection of majority culture does not reflect the experience of many multiracial individuals (Poston, 1990; Root, 1996). Even ethnic identity models (e.g., Phinney, 1990) fail to capture the complexity of multiracial identity. The experience of falling outside the monoracial norm assumed in the United States prompts many individuals of mixed heritage to question the validity of racial categories and the necessity of rigid identification within existing categorization schema (Kilson, 2001; Renn, 2000; Root; Wallace, 2001). Indeed, mixed race college students may identify differently depending on campus sociocultural contexts (Renn; Wallace), an outcome seen not as identity exploration, indecision, or diffusion, but as a healthy endpoint in itself (Root). The purpose of this study was to explore the influences of postsecondary environments on the identities of mixed race college students by examining the processes and contexts of racial or ethnic identity development through the lens of a developmental ecology theory.

Throughout this article, I use the words biracial, multiracial, mixed race, and multiple heritage interchangeably. In an effort to create parity between mono- and multiracial descriptors, I do not capitalize the names of racial categories (e.g., black, white, asian) except when a word relates specifically to a nation of origin (e.g., Samoan, Chinese). There is not general agreement in the multiracial literature as to terminology or conventions of capitalizing racial designators; my choices are designed to minimize to the extent possible the textual representation of racial categories as immutable entities. According to the Office of Management and Budget Directive 15 (1997), the federal government defines five racial categories as: American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or Other Pacific Islander; White. In addition, the government recognizes one ethnicity: Hispanic or Latino. Participants in my research have parents from more than one federal, racial, or ethnic designation (such as white and black or asian and latino).

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In the first section of the article, I discuss theoretical bases for the study of multiracial identity, including two recent studies—Wallace (2001) and Renn (2000)—of mixed heritage college students. I next introduce a conceptual framework, Bronfenbrenner’s (1979, 1993) ecology model of development, to explore the influence of postsecondary environments on multiracial identity. Drawing from my ongoing study of mixed race students, I analyze the influence of individual characteristics (such as race, gender, sexuality), family, peer culture, and larger social movements and mores on individual development. Finally, I suggest implications for higher education practice.

### Developmental Models and Research on Identities of Mixed Race Students

In the early 1990s, theorists posited biracial identity development models that roughly mirrored the existing stage models (see Kerwin & Ponterotto, 1995; Kich, 1992; Poston, 1990). Seeking an alternative to the “one schema fits all” approach and a theory that would better match the lived experiences of biracial individuals she encountered, psychologist Maria P. P. Root (1996) introduced a nonlinear model for biracial identity. Drawing on the notions of borderlands and border crossings (see Anzaldúa, 1987; Giroux, 1992), Root proposed a theory of identity formation that does not depend on an orderly progression through developmental stages, but rather relies on an individual’s ability to be comfortable with self-definition in, across, and/or in between categories. Root’s (1996) model of healthy biracial identity development describes how an individual resolves “other” status through one of four “border crossings.” She identified these border crossings as (a) having “both feet in both groups” (p. xxi, italics in original) or being able to hold and merge multiple perspectives simultaneously; (b) situational ethnicity and race, or consciously shifting racial foreground and background in different settings; (c) a decision to sit on the border, claiming a multiracial central reference point; and (d) creating a home base in one identity and making forays into others.

Using Root’s four-position model, Wallace (2001) studied the identity of 15 mixed heritage high school and university students, aged 15 to 30. Through extensive autobiographical interviews and the use of

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<tr>
<th>Both feet in both groups; hold and merge multiple perspectives</th>
<th>Situational ethnicity or race; consciously shift foreground and background</th>
<th>Sit on the border; claim a multiracial reference point</th>
<th>Create home base in one identity; foray into others</th>
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<td>5 (33%)</td>
<td>9 (60%)</td>
<td>6 (40%)</td>
<td>11 (73%)</td>
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*Note. Total is greater than 15 and percentages do not add up to 100 because some students identified in more than one position. For example, all 9 who fit the situational ethnicity or race position also indicated that they fit the home base/foray into others position.*
visual prompts, Wallace determined that 5 (or 33%) of the participants identified with Root’s (1996) position of being able to hold and merge multiple perspectives; 9 (60%) shifted racial foreground and background; 6 (40%) claimed a multiracial identity; and 11 (73%) held a primary identity and forayed into others (see Table 1). In a monoracial identity model or one of the linear biracial identity models (Kerwin & Ponterotto, 1995; Kich, 1992; Poston, 1990), students who fit more than one pattern of “border crossing” would appear not to have resolved their mixed heritage identity. In Root’s model and Wallace’s findings, any mode or combination of modes of border crossing is considered a healthy resolution of mixed-race identity.

In the first phase of an ongoing study of mixed-race college students, I, too, found that students identified in four patterns similar to those found by Root (1996) and Wallace (2001), but that a significant number of them also identified in a fifth pattern, choosing to opt out of racial identity categories altogether by deconstructing them (Renn, 2000). Among the 24 students in the first phase, which was a qualitative study conducted at three institutions in the Northeast, 7 identified with two or more monoracial categories (“I am Asian and Latino.”); 14 moved between or among the other identity patterns (“Sometimes I identify as black, sometimes as mixed. It depends on the situation.”); 20 identified as multiracial, biracial, mixed-race, or another related term (“I am mixed.”); 14 identified monoracially (“I am black.”); and 8 opted out of racial categories (“Race is socially constructed and I won’t participate in that system” or “I don’t check any boxes on forms.”) (see Table 2).

In addition to varying across the sample, students’ identity patterns varied within and across institutions. At each institution, students were spread across the range of patterns. There were, however, trends by institution. For example, at one institution 5 of the 8 participants were in the “opt out of race” category at times, but only 3 of the 16 students from the other two institutions fit this pattern. Similarly, only 2 of the 8 students at one institution identified situationally, moving among other identity patterns, but 75% of the participants at the other two institutions fit this pattern (Renn, 2000, p. 413). As Wallace (2001) found in her work, the majority of participants in the

**TABLE 2.**

<table>
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<th>Distribution of Students Across Identity Patterns in Phase One (Renn, 2000)</th>
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<tr>
<td>Two or more monoracial categories (corresponds to both feet in both groups; hold and merge multiple perspectives)</td>
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<tr>
<td>7</td>
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<tr>
<td>(29%)</td>
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*Note. Total is greater than 24 because some students identified in more than one pattern.*
first phase of my study engaged in more than one possible identity pattern.

In trying to determine what might influence students’ choices of identity patterns, I turned to peer cultures at the three institutions. There I found that in addition to important characteristics and knowledge that multiracial students brought with them to college, personal interactions with individuals and groups, as well as the interactions between and among those settings, were critical influences in students’ identification in the five patterns (Renn, 2000; Renn & Arnold, in press). The finding that psychosocial factors influence racial identity development is not new or unique to my work (see, for example, Atkinson et al., 1979; Atkinson & Sue, 1993; Chickering & Reisser, 1993; Cross, 1987, 1995; Helms, 1990, 1995; Root, 1996; Wallace, 2001). But the attempt to explore the cumulative, interactive influences of overlapping social settings, some or all of which may be sending contradictory messages regarding racial identity and identification, calls for more theoretical flexibility than the racial identity development models, with their inherent assumptions that race is a given and that there is a unitary racial identity outcome, can provide.

Urie Bronfenbrenner’s (1979, 1993) ecology model of human development meets the need for flexibility without sacrificing its powerful heuristic properties for examining identity development. Furthermore, although the identity development models focus more on the outcomes of development (racial identities) than on the processes that lead to those outcomes, the ecology model incorporates both processes and outcomes. This combination of outcomes and processes is useful in translating developmental theory to educational practice. To create environments most conducive to development and learning, it is not enough to know what outcomes are possible; educators must also know what processes lead to them.

Bronfenbrenner’s Ecology Model as a Conceptual Framework for Racial Identity Development

In response to his concerns that developmental psychologists paid inadequate attention to environmental influences on human development, Urie Bronfenbrenner wrote:

The understanding of human development demands more than the direct observation of behavior on the part of one or two persons in the same place; it requires examination of multiperson systems of interaction not limited to a single setting and must take into account aspects of the environment beyond the immediate situation containing the subject. (1979, p. 21, italics in original)

Although this emphasis on developmental environment is familiar to educators working in student affairs, Bronfenbrenner’s call for examination of “multiperson systems of interaction not limited to a single setting” and “aspects of the environment beyond the immediate situation containing the subject” challenges college student development theorists to look beyond false dichotomies of curricular versus extracurricular settings, precollege versus college influences, and peer culture versus faculty and administrative goals. Conceptualizing the development of individual students within a complex, dynamic, interactive web of environments, some of which do not even contain them, provides a rich contextual field for the study of cognitive, moral, and identity development. Although crafted from Bronfenbrenner’s work with early childhood devel-
opment, the model transfers easily across the lifespan and can be applied to college student development (Renn & Arnold, in press).

Bronfenbrenner (1979, 1993) attempted in his model to account for the influences of individuals (person), their interactions with the environment and the responses they provoke from the environment (process), their interactions within immediate settings (context), and changing sociocultural influences on development (time). The elements of person, process, context, and time (PPCT) create a developmental environment unique to an individual, though organizations such as college and universities provide shared settings where the unique developmental environments of hundreds or thousands of students overlap significantly and are influenced by institutional policy and programs.

**Person and process.** The Person component of Bronfenbrenner’s (1979, 1993) ecology model can be considered to be the personal experiences and characteristics that students bring with them to higher education, including socially constructed identities (race, ethnicity, gender, sexual orientation, socioeconomic class, abilities and disabilities, etc.), prior academic performance and academic self-concept, political and social ideologies, and family background (Renn & Arnold, in press). Bronfenbrenner (1993) posited that “the attributes of the person most likely to shape the course of development, for better or for worse, are those that induce or inhibit dynamic dispositions toward the immediate environment,” and he called these key attributes “developmentally instigative characteristics” (p. 11). These characteristics include students’ propensity to explore surroundings, engage or persist in increasingly complex activities, invite or inhibit particular responses from others, and view their agency in relation to their environments (Renn & Arnold).

By shaping individuals’ interactions with others in the environment, developmentally instigative characteristics influence the Process of, for example, identity development. But “Developmentally instigative characteristics do not determine the course of development; rather, they may be thought of as ‘putting a spin’ on a body in motion. The effect of that spin depends on other forces, and resources, in the total ecological system” (Bronfenbrenner, 1993, p. 14, italics in original). This “force-resource” approach resembles Sanford’s (1960) challenge and support approach to college student development, in that it calls for an environmental balance of forces (challenge) and resources (support) in the developmental process. Students’ willingness and ability to seek and explore increasingly complex questions about identity (e.g., What does it mean to be a lesbian? What is my identity as an African American man?) are functions, in part, of the developmentally instigative traits they bring with them to campus. The responses they receive to those explorations are a function of developmental context.

**Context.** Unlike some other ecology theories that address student socialization and integration into campus environments (e.g., Tinto, 1993; Weidman, 1989), Bronfenbrenner’s (1979, 1993) ecology model places the individual squarely at the center, with ever-more-distal developmental influences arrayed around him or her in a series of nested contexts called microsystems, mesosystems, exosystems, macrosystems. The four levels of environmental analysis are useful in examining the processes and contexts of identity development. From each of the four levels, the individual receives
messages about identity, developmental forces and challenges, and resources or supports for addressing those challenges. The systems themselves interact in important ways, as well, to create congruent, non-conflicting settings; incongruent, conflict-free settings; or something in between.

*Microsystems* are the face-to-face settings containing the individual. They are the location of the proximal processes of development (Renn & Arnold, in press), and are familiar to student affairs researchers as venues for the important faculty and peer interactions of Astin’s (1984) involvement theory. Microsystems for college students may include classrooms, laboratories, athletic teams, living situations, friendship groups, student organizations, on- or off-campus jobs, families of origin, partners or spouses, and possibly children.

Unlike environmental models based on the assumption that students study full-time and live on campus or commute from home, Bronfenbrenner’s (1979, 1993) model is flexible enough to fit any student situation, from a first-time, full-time, first-year student just out of high school and living in a residence hall to a re-entry, part-time adult learner with a full-time job and a family to support. Students of any description have multiple microsystems, though some students will have microsystems concentrated in the college setting, whereas others will have more diverse settings in which they participate. And the same microsystem—a particular psychology seminar, for example—will provoke and provide different developmental responses and stimuli to each student, depending on those students’ backgrounds and developmentally instigative characteristics.

*Mesosystems* occur when two or more microsystems interact, and “special attention is focused on the synergistic effects created by the interaction of developmentally instigative or inhibitory features and process-
es present in each setting” (Bronfenbrenner, 1993, p. 22). Similar to Weidman’s (1989) notion of “in-college normative pressure” (p. 310), these interactions in the mesosystem support the formation of campus peer culture. Students are embedded in interacting mesosystems of academic, social, and work life, and the mesosystems provide a variety of forces and resources that affect identity development. For example, the messages a student receives about what it means to be “really latino” in one microsystem (a friendship group of other latinos) may be supported or challenged by messages from another microsystem (the professor of his class on the cultures of Latin America). Still other messages may come from family, fraternity brothers, an athletic coach, or the director of the social service agency where he volunteers.

Micro- and mesosystem environments may conflict or converge in their developmental influences. Academic microsystems may demand certain kinds of responses from students (e.g., development of critical thinking), and work, family, or friendship groups might demand others (e.g., loyalty, uncritical participation). Where students receive competing or contradictory demands, developmentally instigative characteristics come into play in managing the conflicts. Given similar backgrounds and environmental presses, two students might develop very differently; one might become anxious and shut out certain messages or seek microsystems presenting less conflict (changing courses or friendship groups), whereas the other might use the conflict to develop cognitive skills necessary for analyzing competing epistemological stances. The two students might also react differently to being in an environment marked by converging micro- and mesosystem values; one might accept unquestioningly that these are the only possible values, whereas the other might resist the messages, however uniform they may be, and seek alternatives. Bronfenbrenner’s model (1979, 1993) holds that for development to occur, the individual must engage in increasingly complex actions and tasks. Both highly congruent and incongruent environments can provide settings for this increasing complexity, assuming that necessary forces and resources are present.

Exosystems exist when the individual’s developmental possibilities are influenced by a setting that does not contain her. For example, faculty decisions about curricula, federal financial aid policies, and decisions made in a parent’s or partner’s workplace might influence the environment of a college student. Exosystem factors are largely unaccounted for in student development and college impact research, except as they affect a measurable variable attached to students (e.g., academic major, financial aid awarded, parents’ income). Although the outcomes attributable to differences in these variables are important to understand, the developmental processes leading to these outcomes have remained invisible. Bronfenbrenner’s ecology model (1979, 1993) shines a light on these processes and asks what development influence they have on the student.

Macrosystems, the most distal levels of environmental influence, are also largely missing from traditional student development research. The macrosystem entails the overarching patterns of micro-, meso-, and exosystem characteristics of a given culture, subculture, or other extended social structure, with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options, and patterns of interchange that are embedded in such
overarching systems. (Bronfenbrenner, 1993, p. 25)

The macrosystem defines and is defined by patterns of developmental possibilities held in the face-to-face and second-degree influences of the micro-, meso-, and exo-systems, as well as the interactions between and among those systems. The macrosystem is dependent on time, place, and culture; “Who attends what college and on what terms might seem to be an individual or at least family-based decision, but the conditions that govern college-choice making are located in the macrosystem and only made manifest locally” (Renn & Arnold, in press). Macrosystem influences that a hundred years ago made a college education desirable and available to a very small percentage of the United States population have shifted significantly; postsecondary education is now more in demand and accessible than ever before, though economic and social factors in the macrosystem do not support the idea of higher education for all on an equitable basis.

Micro-, meso-, exo-, and macrosystems provide the context for developmental processes. If Bronfenbrenner’s (1979, 1993) ecology model can be seen as a nested series of increasingly distal influences (as I have attempted to picture it in figure 1), what is missing from that two-dimensional figure is the developmental trajectory. The nested systems represent one moment of a life, yet individuals’ environments change over time in response to developmental presses and personal decisions (e.g., leaving home for college, taking a new job, etc.). The necessary element for putting the model in action is time.

Time. In various iterations of his model, Bronfenbrenner included or omitted time as an essential component. In 1979 he acknowledged that, “development involves a change in the characteristics of the person that is neither ephemeral nor situation-bound; it implies a reorganization that has some continuity over both time and space” (p. 28). Later he added the chronosystem as an element of the ecology model:

The individual’s own developmental life course is seen as embedded in and powerfully shaped by conditions and events occurring during the historical period through which the person lives. . . . A major factor influencing the course and outcome of human development is the timing of biological and social transitions as they relate to the culturally defined age, role expectations, and opportunities occurring throughout the life course. (1995, p. 641)

The chronosystem thus operates at a sociohistorical level to make possible certain kinds of developmentally instigative opportunities (e.g., legal desegregation of public institutions or the admission of women to military academies), as well as at an individual level according to the timing of life events in the microsystems (e.g., a divorce, move, or sibling birth). Rounding out the Person-Process-Context-Time (PPCT) formulation, the chronosystem takes into account the cumulative effects of development before college, the course of events during college, and the larger effects of sociohistorical influences on identity and development. These elements of time and timing are critical to understanding identity development in college.

Because the ecology model does not represent specific developmental trajectories as, for example, the racial identity models are purported to do (e.g., Atkinson et al.,
1979; Atkinson & Sue, 1993; Cross, 1987, 1995; Helms, 1990, 1995), the ecology model is especially useful for examining both the processes and outcomes of college student development, a field which has become increasingly complex as the student population resembles less and less the homogeneous populations upon whom traditional student development models (e.g., Chickering & Reisser, 1993; Perry, 1968) were based.

Data Sources, Collection, Analyses, and Interpretation

The data used in this article come from my ongoing study of multiracial students. Data for the first phase of the study (Renn, 2000) were collected in the 1997-1998 school year at three private, residential, predominantly white institutions in the Northeast (one liberal arts college and two Carnegie research extensive universities). Eight students at each institution (24 total) participated in open-ended interviews and a written response exercise; 3 or 4 interviewees per institution also participated in a focus group. I conducted observations of campus racial climate and student events, and collected archival materials (student newspaper articles, event flyers, examples of identity-related academic work from participating students, etc.). In the 2000-2001 school year, I collected data using the same techniques from an additional 14 students in the rural southern Midwest, 6 from a predominantly white community college and 8 from a midsized public university (20,000 students; Carnegie research extensive); 2 of the 8 university students had transferred from the community college. Data presented in this article come from the first two phases of the study (Northeast and southern Midwest).

Students have come to the study by answering public postings, e-mail messages to campus organizations of students of color, announcements in student meetings and classes, and snowball sampling (Atkinson & Flint, 2001). Practicing maximum variation sampling (Miles & Huberman, 1994), I have selected students for participation based on gender identity, racial and ethnic heritage (including variation in combinations of white parents and parents of color and two parents of color), age, ability, sexual orientation, and class background. At each campus, I have sought samples that met the criteria of saturation and sufficiency of sample size (Seidman, 1991).

In the first phase of the study (Renn, 2000), I framed my interpretation through grounded theory methodology (Glaser & Strauss, 1967) and developed the five-pattern schema of multiracial identity. In subsequent analyses, I have compared data to the existing schema, refining and elaborating on the patterns when appropriate (for a discussion of using existing theories to guide data analysis, see Boyatzis, 1998; Coffey & Atkinson, 1996; Miles & Huberman, 1994; Strauss & Corbin, 1994).

APPLYING THE ECOLOGY MODEL TO AN ANALYSIS OF BI- AND MULTIRACIAL STUDENT IDENTITIES

The identities of mixed-race students in my study can be arrayed in five non-exclusive patterns (two or more racial categories, situational identity, multiracial, one racial category, opt out/deconstruct racial categories). Thirty-three of the 38 participants identified in more than one pattern, leaving 3 who identified only as one racial category and 2 who identified only as multiracial. The ability of students to move among identities,
or their decision not to, was related to two factors: (a) permeability of boundaries around social and physical spaces defined in part by racial and ethnic identity, and (b) the extent to which students felt like they fit in or belonged to those spaces (Renn, 2000). Students who experienced peer group boundaries as more permeable were more likely to identify differently according to their setting, whereas students who experienced those boundaries as rigid were more likely to identify in fewer patterns. Furthermore, the extent to which students felt welcomed and fully part of racially defined spaces (e.g., Black Caucus, La Fuerza Latina, etc.) influenced their motivation to move across peer group boundaries.

How, though, do the full range of environmental factors influence mixed-race identity and racial identification? What individual traits and developmentally instigative characteristics lead some students to one pattern of identity and some to one or more others? And can we as educators use this information to improve the quality of campus climate vis-à-vis bi- and multiracial identity development? In this section I will apply Bronfenbrenner’s (1979, 1993, 1995) PPCT model to understand more fully the influence of the college environment on multiracial identities.

Person

In examining racial identity development in college students, key elements in the Person component of the PPCT model (Bronfenbrenner, 1979, 1993, 1995) include family background and parents’ heritage, degree of cultural knowledge transmitted to the student before college, prior experiences with members of their own and other cultural groups, and physical appearance (Renn, 2000; Renn & Arnold, in press). Students’ unique characteristics, skills, and knowledge, combined with their propensity to seek or avoid explorations of racial identity (a developmentally instigative characteristic), led them to certain campus microsystems and away from others. David (all names are pseudonyms; a table indicating the identity patterns of quoted students is included in the appendix), a senior, said, “I think when I started [college] I was so into exploring my Japanese-ness that I hung around with a lot of Japanese people, like from Japan.” Similarly, Kayla signed up for a group independent study project to learn Tagalog, the native language of her Filipina mother, and found a new group of friends among the other Filipino-American students; four of them planned to room together for their senior year.

Process

Key to development is the increasing complexity of interactive Processes in which the individual is engaged (Bronfenbrenner, 1979, 1993, 1995). Cognitive demands placed on multiracial individuals to make sense of the artificial system of racial categorization in the United States usually begin well before college with the “What are you?” questions of schoolmates and curious adults (Kilson, 2001; Wallace, 2001). Many of the participants in my study arrived at college already able to explain, if not in these words exactly, the social construction of race; then features of the college environment caused them to think more and, often, more complexly about race, culture, and identity. Dan’s involvement with an orientation week activity prompted him to reflect on the idea of race:

We did an exercise dealing with race relations, and it was the first time a lot of people had gone through something
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like that so it was a very uncomfortable experience for a lot of people, but it definitely helped me formulate, like I actually went back to my room and wrote this thing, I don’t really know what it was, I just started thinking and wrote a couple pages about just, issues of race and institutionalized racism and so I just kind of went on this tirade for like an hour or 2, I wrote some things, this vision of me writing this question on “Dan’s Thoughts on Race.”

A required course on diversity led Audrey to the conclusion that “a lot of things that people consider race are more cultural differences than racial differences. And I think they have a problem drawing the line between that.” After a year abroad in Spain and Egypt, Dee Dee said:

Now that I’ve gone away, especially since going to two different countries, I came back with a much greater sense of culture. And not just necessarily race, and that’s a big thing, but what culture means to race and how it defines race. . . . It’s definitely about culture, you associate with being part of a culture.

Interviewed late in the process of writing his senior thesis on racial allegory and race mixing in the Star Trek television series, David said, “And I can do the whole refutation of race as a biological construct thing, and blah, blah, blah.” When asked to elaborate he provided a lengthy discourse on social construction theory, with multiple references to social scientists, philosophers, and literary critics working in postmodern theory. Kayla explained to a sociology class how she understood multiraciality:

I was saying that if you accept race as a social construction, that gives us even more legitimacy in the freedom to choose what you want to identify as, because there’s no, like, biological thing tying you to one or the other background.

Although peer groups (such as Dan’s orientation exercise) provided some opportunities for students to develop more sophisticated perspectives, the curriculum and related intellectual activities were important sites for this developmental process.

The identities, knowledge, and developmental characteristics that students brought with them to campus and the increasing complexity with which students were able to consider the concept of race illustrate the Person and Process elements of Bronfenbrenner’s ecology model.

Context

The micro-, meso-, exo-, and macrosystems of mixed-race college students’ environments provided rich settings for identity development. The face-to-face interactions in on-campus microsystems contained the “proximal processes” of student development, and sharply influenced students’ sense of where they fit in and how easily they could move from one identity-based space to another. Speaking of one microsystem, the Filipino Alliance on her campus, Kira said, Because I don’t have any easily identifiable Filipino traits, such as speaking a Filipino dialect, eating Filipino food at home, or even simply having a Filipino name, I often feel unsure that I share in [a common] Filipino experience, and I think that others in the group are feeling the same uncertainty about me.

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Kira also felt that she did not fit in with many white students on campus and said, “At times my race is a significant factor in this discomfort.” BJ described her experience with black women:
I’m not saying all African American girls, of course not, because I do have female friends that are black. But it was just sort of like a sense and a feeling, that when they’re in a group, they’ll know I’m half-black or something.

Feelings of incongruity in microsystem groups of monoracial peers led some students, like Kira and BJ, to question their legitimacy to claim a particular racial identity. Students spoke frequently of their experiences of feeling “singled out,” often telling stories about times when they had entered a meeting of a group of monoracial students and people had looked at them questioningly, as Jennifer put it, as if to say, “Are you sure you belong here?”

On the other hand, many participants found microsystems that contained other mixed-race students, and these microsystems supported the development of the “multiracial” identity pattern. Summer made a conscious decision to switch friendship groups from the predominantly white, monoracial group she lived with her sophomore year to a group of mixed-race students with whom she lived during her junior year:

At the very end of [my] sophomore year, that’s when I started to have my first half-asian friends here. I had met [X] and this other guy [Y], who’s half-Filipino and half-Spanish, and this girl [Z] who’s half-Filipino, half-white, amongst other people. This group of friends had a very different vibe. . . .

So I really bonded with this other group. . . . And they’re cool and I like them and I’ve learned a lot by living with them, and I’m so thankful for this group of friends because they are more laid back and they’re just more interesting. And we have our little half-asian jokes. It’s cool for me, so I’m definitely grateful for that.

The organization for multiracial students on one campus became a haven for several participants. Jeff said that in his first year the group “became my vent in a way . . . and it was just a good place to talk about things.” Julia, who was coordinating the group when she was interviewed for the study described how the experience contributed to her identity development:

And this year I’m cochair of [the group]. I just went and they needed a cochair. But I really feel like now my identity is so out there, because I’m cochair and most of the other people in the [monoracial student of color] groups, like all of those people know me, and I programmed Multiracial Heritage Week and doing all the stuff for that. I’ve thinking about [my identity] much more now, just because I’m doing things with it.

Being part of one or more microsystems that supported mixed-race identity was an important factor for the 34 students (of 38 total) in the first and second phase of the study who identified by one label or another as bi- or multiracial.

Although microsystems were critical settings for the development of racial identity, the mesosystems of campus culture had equal or greater influence on students’ choice of one or more racial identification patterns. The competing or complementary messages students received about racial identity across the mesosystem influenced both the degree of permeability of group boundaries and the desirability of identifying with various groups within the campus environment. In some cases, students were aware of the interactions within the mesosystem and their contribution to identity development:
I think [this college] has completely changed how I think about race. Especially since coming here freshman year, and that’s totally due to the atmosphere. I think also, experiencing the kind of people, like watching groups interact and having to be articulate and advocate for yourself. That’s something I’ve really been struggling with, just watching people. In terms of getting upset about something and feeling like I’ve got the backup to say, “Hey, this is wrong.” And everybody being involved in things they care about. And that’s totally [X College]. Like totally being with your group and talking to them constantly and doing all this stuff. So that’s what’s influenced me, I think. (Sina)

At another campus, Jennifer decided not to participate in any of the groups of monoracial students of color because of the interactions she saw among them and between them and the rest of the predominantly white campus culture:

I noticed that in the other groups, with students of color, and I don’t know what they would say about this, but in my opinion, from what I see and hear, I feel like they segregate themselves, and that is nothing that I wanted to be a part of. And so not that I’ve avoided those groups, but just that I’ve never felt comfortable with them. Not necessarily because I am only half Asian, but I don’t know; I don’t like the message I got from them, it wasn’t an appealing one.

I had a feeling that getting involved in those groups, if you have friends outside those groups, then each one is going to be pulling you one way. “Why are you doing things with them?” And that is just not something that I ever wanted to be a part of.

A concern that the mesosystem of peer culture created by participation in one of the groups ostensibly comprised of monoracial students of color would create conflict led Jennifer to be among the very few students in the project who identified primarily as white and only secondarily, privately, as biracial.

Students were adept at analyzing the influences of various clearly defined campus cultures. The “white, jock-y” peer culture of one Northeastern institution fostered the strongly separatist subculture of students of color to which Jennifer referred in the preceding quote. All but one of the students interviewed at her institution spoke of the delineation and the perceived need to “choose a side.” Fewer of these students moved easily back and forth across group boundaries than students at other institutions with more flexible racial and ethnic group distinctions in the mesosystem.

Exosystem influences played a role in students’ awareness of racial identity. With few exceptions, students described the experience of having to “check one box only” on institutional forms, state, and federal forms designed and distributed by administrators outside of students’ immediate settings. Alexandra decided not to identify in any racial categories as a result of being aware of the silliness of it all. . . . Those forms! If I checked the boxes I would be checking all of them. And that’s just ridiculous to me. Who cares? And what does it mean, anyway, that I check black, white, hispanic, and native? What are they going to do with me? Report me as .25 of a person in each group? So I don’t check anything. I leave it blank. If they want to know, they can come ask me to my face and
I’ll tell them what I think about the boxes.

Less dramatic, but no less important, faculty decisions about curriculum created exosystem influences that affected students’ cognitive development and exposure to the ideas of racial construction, the history of race and mixed race in the United States, and the exploration of racial identity in academic settings; four of the five institutions required students to take a “multicultural” or “cultural diversity” course. Of a first-year seminar, Jazz said,

So even though it was required and not everyone wanted to be there, we had interesting arguments about race and if there is still racism. And I said yes, because when I’m out with my [black, Egyptian] dad, people look at me one way, but when I’m with my [white, American] mom, it’s different. . . . And I was talking about this in that class and I think that having people ask me about my parents was a good chance for me to think more about what I am—and how I don’t really fit in America.

Some other participants who had access to courses on multiraciality in America, race in literature, the psychology of race, ethnic cultures, or languages of their heritage also described the influence of participation in these settings on their identity development. For example, Sina researched the history of the U.S. Census and how racial categories were established and changed over time; this knowledge changed how she viewed herself in relation to the history of mixed heritage people in the United States. Jeff left a literature course, “Jungle Fever: Reading Interracial Relationships,” with new cognitive skills and theory to deconstruct the racialized discourses of popular and classic literature; he also applied these new skills and theory to his identity and place in a predominantly monocultural campus culture. The exosystem in which curricula were determined and courses were planned did not include Jazz, Sina, or Jeff, but decisions relating to course requirements and course content influenced microsystems available to students and consequently their opportunities and abilities to consider mixed-race identities.

The influence of the macrosystem on mixed-race identity is not as concretely described as are the micro-, meso-, or exosystem influences, but it was present in the developmental ecology of participants. Bronfenbrenner (1993) defined the macrosystem as consisting of “developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options and patterns of social interchange” (p. 25). Among these belief systems were students’ ideas about race and culture, and imbedded in these ideas about race and culture were students’ ideas about who they were and who they might become. The possibility of a discrete “multiracial” identity was a function of macrosystem factors specific to the late 20th-century United States, as were the meanings that students made of the intersections of class, race, gender, and sexual identities in popular culture. The meanings of these intersections often came to the forefront in focus groups, as when one group discussed the recent commercialization, exotification, and commodification of multiracial identity through advertising campaigns featuring mixed-race celebrities like Tiger Woods and female models described by one student as “racially ambiguous, scantily clad, and sexually...
available to any and every man.” Social and cultural forces pressed on students and presented a variety of messages about what it meant to have mixed racial and ethnic heritage.

Students were aware of their developing identities, and although they did not use the vocabulary of the ecology model, they reflected on how the micro-, meso-, exo-, and macrosystems of their lives influenced their racial, gender, sexual, and class identities. Especially at the level of the mesosystem, where messages from different peer, family, academic, and other microsystems came together or competed, participants formed ideas about and critiques of racial categories, culture, and identity. Participants were aware sometimes of the opportunities available to them through their choice of college or university, and they sometimes wondered what would have happened had they chosen a different setting for their postsecondary education. Some wondered, too, how their lives would be different if they had lived a generation or two earlier. The element of personal and historical timing comprises the final component of the PPCT model.

Time
To a large extent, the macrosystem is determined by sociohistorical context. Participants in this study were significantly influenced by the historical development of the concept of race in the United States, specifically the timing of the 2000 U.S. Census and the debates about how to count people with more than one racial heritage. Interviewed in 1997-1998, nearly all participants in the first phase (in the Northeast) talked about how, for the first time, the upcoming census would allow individuals to self-identify in more than one category. By the second phase of data collection (rural southern Midwest), the census had been taken, but the results were not yet known. Since just before the beginning of a third phase (industrial northern Midwest), the results have been known; 2.4% of the total U.S. population indicated two or more races, with 25.7% of the population under age 18 indicating two or more races (U.S. Census Bureau, 2001). This population shift and its political implications are products of shifts in the macrosystem (yielding greater social acceptance of interracial partnerships) and will undoubtedly produce further shifts in social forces relating to cultural expectations around dating, partnering, and childbearing. As one participant remarked, “If I waited around for someone mixed exactly like me, I’ll never get a date. So definitely when I get married and have kids they’re going to be even more mixed than me.” Such a comment would have been far less likely prior to the 1967 Supreme Court decision ending antimiscegenation laws in the United States (see Spickard, 1989 for a discussion of interracial marriage in the U.S.). The developmental ecologies and consequent racial identities of the children of study participants will be different from those of their parents and grandparents.

The PPCT model (Bronfenbrenner, 1979, 1993, 1995) provides a useful framework for understanding how mixed-race identity is influenced by the developmental ecologies of college students. Across individual lifespans and the arc of history, each student’s unique network of micro-, meso-, and exosystems moves like a solar system, with planets, moons, and asteroids exerting interactive gravitational and developmental pulls on the star—the individual—at the
center. To what extent, and to what ends, can educators influence these powerful systems to promote student development? To what use can the ecology model be put in the service of student learning and development?

**IMPLICATIONS FOR EDUCATIONAL PRACTICE**

Theoretical frameworks are important devices for studying the influence of campus environments on student development, but if their utility ends there, they are little more than interesting tools for intellectualized discourse on the state of identity research. Putting Bronfenbrenner’s ecology model to work in service of improving educational policy and practice demonstrates that it is more than an heuristic device for exploring identity development; it provides a means to assess campus environments vis-à-vis racial identity and suggests areas where institutions could enhance opportunities for student learning and development. It is not, however, a flawless model for exploration of student development, nor is my research design without inherent limitations.

**Limitations of the Research**

A limitation shared by the Bronfenbrenner ecology model and my research design is that although they may illuminate individual identities at a given point in time, they do not capture the evolution of identities across time. Although Bronfenbrenner (1995) eventually included a chronosystem to provide a developmental dimension missing from the nested systems of the ecology framework, his model is much better suited to exploring the environments, processes, and outcomes of development than for tracking that development across time. Similarly, implications of my study are limited by its design; interviewing students once does not provide a meaningful frame of reference for their developmental trajectories. The interviews may allow for reasonably accurate portrayals of student identities at a given moment in their lives, and may even provide insight into past ways of identifying, but like the Bronfenbrenner model, the interviews are better suited to creating detailed still portraits than moving pictures of identities across time.

Implications of my research are also limited by the sample size and scope. The identities of 38 students from five institutions form the basis for these findings and implications. They cannot be considered to represent all mixed-race college students any more than five institutions can be considered representative of all colleges and universities in the United States. They can, though, provide a window through which to view the experiences of mixed-race students and glean meaningful information for the improvement of educational practice.

**Enhancing Curricula to Promote Student Identity Development**

Participants often remarked on how opportunities to engage in academic work in the area of identity provided meaningful settings to think, read, hear, and talk about important issues related to identity. Audrey, Dee Dee, David, and Kayla’s experiences led them to examine their ideas about race, culture, and identity in academic microsystems; Jazz, Sina, and Jeff took up projects or courses made available to them by decisions at the exosystem level of faculty decisions about curricula and course content. These findings reinforce those of other researchers who urge educators to ground teaching and learning in students’ experiences and lives (see, for example, American College Personnel
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Association, 1996; Astin, 1999; Baxter Magolda, 1999; Kuh, 1996; Terenzini, Pascarella, & Blimling, 1996). In the context of this study, the findings further suggest that the introduction of courses, texts, workshops, lectures, and informal learning experiences that deal directly with the mixed-race experience or with other aspects of socially constructed identity could provide more students—of any racial heritage—opportunities to explore racial and other identities on campus. The increasing presence of mixed-race students and discussion of the history and current prevalence of multiraciality expose the myth of “racial purity” on which social, economic, and political systems have operated in the United States. These findings further suggest that we have sold many undergraduates short in the widespread belief that postmodern theory is over their heads and that explicit discussion of the social construction of identities is less important than mandatory “diversity training” during new student orientation. Merely grounding learning in students’ experiences is not enough; purposefully providing them with language, theory, and cognitive tools (as illustrated by several participants in this study) to understand better the complexity of race, race relations, and raciality may facilitate individual development and could enhance identity development across the spectrum of undergraduate diversity.

Aligning Curriculum and Cocurriculum to Support New Ways of Thinking About Identity

It is not enough, though, to confine these messages to the classroom; congruent messages from academic and peer microsystems could support an ethos of critical examination of cultural assumptions about race, gender, class, and sexuality. One campus in the sample had particularly strong, congruent messages across the mesosystem that encouraged intellectual pursuits outside the formal curriculum. On that campus, Dan’s experience of an Orientation Week activity and Sina’s observation of how campus groups interacted in the cocurriculum supported their in-class opportunities to explore the construction of racial identity, for example. Capitalizing on the developmentally instigative characteristics of students inclined to pursue cognitive complexity will reach some students (like those in this study who sought opportunities to pursue identity-related academic or cocurricular projects), but saturation of the environment with congruent messages may be necessary to reach those whose inclinations lead them elsewhere. The size and nature of my sample limits the generalizability of this finding, but there is abundant literature pointing to the importance of creating similarly “seamless” learning environments in postsecondary education (see, for example, Kuh, 1996).

At the same time, the Bronfenbrenner (1979, 1993) model calls for attention to meeting individuals where they are with an appropriate force-resource balance; messages must be not only pervasive, but also addressed to multiple levels of cognitive complexity. The conscious addition of cocurricular elements that challenge accepted notions of monoraciality or binary gender identities, for example, might bolster faculty efforts to introduce the concept of socially constructed race and identity categories. On one campus in the study, an organization for mixed heritage students was a key factor in some participants’ (e.g., Jeff and Julia) identification as “multiracial,” interactions in this microsystem and between this microsystem and those created by
monoracial student organizations provided opportunities outside of academic work to explore questions of racial construction. The organization also formed a critical resource (or support, in the language of Sanford, 1960) as students negotiated various development forces (challenges).

Challenging assumptions of the validity of social constructs through the co-curriculum, however, entails risks. Asking questions about what it means to have a black cultural center or women’s center, and how those physical spaces might include and exclude individuals based on sociohistorically constructed ideas of race and gender, may be construed as lack of support for students of color or for women; transporting postmodern theory out of the classroom into campus culture may prompt questions about constructed identities, identity politics, and institutional support for members of historically disempowered groups. And although some of these questions may benefit students who are inclined to take up complicated issues of racial identity construction (like the study participants who deconstructed racial categories or identified situationally), they may lead many other students—monoracial and multiracial alike—to question the strength of institutional support for students of color.

**Engaging Peer Culture to Promote Boundary Crossing**

Peer cultures with the greatest permeability of microsystem boundaries supported the greatest diversity of mixed-race student identities. The ability to move freely between and among academic and social microsystems enhanced students’ degree of exploration of multiple identity patterns, including the option not to identify along racial lines. Although the efficacy of attempts to alter student peer cultures is limited (see, for example, Dalton & Petrie, 1997), educators can take steps to enhance students’ ability to move between microsystems. For example, on the campus where students reported the greatest degree of freedom to move between settings, the residential system was designed to promote annual redistribution of all on-campus students among all halls through mixed-class housing and a “no squatting” policy requiring every student to enter the housing lottery; a student living on campus for 4 years would share a residence hall with a substantially different 10% of the student population each year, encouraging new acquaintanceships and potential peer groupings. Distribution of students across required courses and activities (e.g., orientation, advising, etc.), creative use of physical spaces for the scheduling of courses and meetings, and attention to architectural and design decisions in public spaces can influence the mesosystem by causing microsystems to encounter one another physically as well as intellectually or emotionally.

Finally, drawing students’ attention explicitly to the mesosystem and the contradictions or complementarities it offers is a powerful means to engage these developmental forces. Discussions with individuals and groups of students about what it means to be a diverse community, made up of multiple microsystems, many of which never interact, provide a powerful opportunity to frame student development as a community issue as well as an individual one. Indeed, the exercise of mapping representations of one’s own environmental systems and the interactions—or lack of connections—between systems provides a useful prompt for discussions of self, identity, and peer culture. Figuring out what it means to
different peer groups that “all the Black kids sit together in the cafeteria” (see Tatum, 1995) is an important step in figuring out what campus environments mean for identity, for diversity, and for community. Actively engaging students in these questions and in examination of their own and others’ developmental ecologies opens the window for larger discussions of self, other, difference, and commonality. The ecology model provides these, and undoubtedly other, windows for exploring the implications of campus environments for student learning and development.

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APPENDIX.

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<th>Two or More Monoracial Categories</th>
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<th>Multiracial Identity</th>
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Note. Identity patterns of participants quoted in the text. It is important to note that quotes from students who identify in the “situational” and “deconstructs race” patterns are somewhat overrepresented and those who identify in the “one monoracial category” pattern are somewhat underrepresented as compared to the sample of 38 students. Student quotes were selected for their ability to represent data from other students in a particular identity pattern rather than for their proportional representation of the total sample.

a Moving Between or Among the Other Patterns
REFERENCES


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