In their recently published book reviewing research that appeared during the 1990s, Pascarella and Terenzini (2005, chap. 2) continued the pattern established in their previous volume (Pascarella & Terenzini, 1991, chap. 2) of identifying two broad clusters of conceptual frameworks that are important for understanding change in college students: developmental theories and college impact models. Developmental models of student change address “the nature, structure, and processes of individual human growth. They focus primarily on the nature and content of individual change, although interpersonal experiences are often salient components of these models” (Pascarella & Terenzini, 2005, p. 18, emphasis in original).

College impact models of student change focus more “on the environmental and interindividual origins of student change . . . [and] emphasize change associated with the characteristics of the institutions students attend (between-college effects) or with the experiences students have while enrolled (within-college effects)” (Pascarella & Terenzini, 2005, p. 18, emphasis in original). College impact frameworks may include characteristics of individuals (e.g., gender, ethnicity, socioeconomic status), higher education institutions as organizations (e.g., size, type of control, selectivity, mission, resources), or environment (e.g., academic, social, cultural, or political climate) created by faculty and students on a campus. Developmental and college impact frameworks are not mutually exclusive, and as the following discussion of a particular stream of research within each type suggests, there can be considerable overlap of both conceptions and contributing authors.

This chapter treats the notion of “college impact” under the broad concept of socialization, relying on the classic definition by Brim (1966): “the process by which persons acquire the knowledge, skills, and dispositions that make them more or less effective members of their society” (p. 3). Society is not necessarily a

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unitary construct given that individuals are normally thought of as participating in multiple social groups and structures (e.g., families, peer groups, occupations, organizations) simultaneously, each presenting more or less discrete and distinct expectations for their behavior (Clausen, 1968, p. 4). Hence, socialization can be thought of as having both individual (cognitive developmental) and organizational (affective interpersonal) dimensions linked through patterns of acquisition and maintenance of memberships and participation in salient groups (Weidman, 1989, p. 294). Organizational aspects of socialization are the focus of this chapter because their design and modification of an institution’s social and material structure are more under the control of colleges and universities than are personality characteristics of students and, hence, are more “policy relevant” in the sense of broad usefulness for institutional reform (p. 290).

The two volumes by Pascarella and Terenzini (1991, 2005) are encyclopedic in their coverage, and interested readers are referred to their work for comprehensive inventories of research studies. Although Pascarella and Terenzini (1991, 2005) provide excellent descriptions of the developmental and college impact streams of research, their discussion of research tends not to link results to theoretical and conceptual implications. Rather, both books are organized in terms of types of outcomes. Hence, in the current chapter, two streams of research having particularly sophisticated conceptual underpinnings as well as rigorous research methods have been identified for emphasis.

The first research stream (Feldman, Ethington, & Smart, 2001; Feldman, Smart, & Ethington, 1999, 2004; Smart, 1997; Smart & Feldman, 1998; Smart, Feldman, & Ethington, 2000) is grounded in the developmental perspective of person–environment interaction (Pace, 1979; Stern, 1970), as reflected in the work on the psychology of vocational choice and the typology of academic environments developed by Holland (1966, 1997). Focusing on the socialization of students in academic majors, the research reflecting this perspective extends the framework by incorporating the broader, more sociological orientation championed by Feldman (1972; see also Feldman & Newcomb, 1969). This extension suggests important parallels between the more psychologically and more socioculturally oriented frameworks that are addressed in a systematic comparison of college impact models.

The second research stream is grounded in a college impact perspective, as reflected in organizational sociology (Antonio, 2004, Berger & Milm, 2000b; Carter, 1999; Tierney, 1997; Weidman, 1989). It focuses on the socializing impacts of institutional diversity, especially the diversity of peer groups, in higher education.

**ACADEMIC ENVIRONMENTS AND STUDENT SOCIALIZATION**

*Academic Disciplines* (Smart et al., 2000) presents a thorough and convincing empirical study of certain effects of academic majors on students during college that is grounded in the theory of career choice developed by Holland (1966, 1997). The authors’ rationale for the study is described as follows:

Holland’s theory is basically a theory of person–environment fit, based on the assumption that there are six personality types and six analogous academic environments and that educational persistence, satisfaction, and achievement of students are functions of the congruence or fit between students and their academic environments. Thus, if one wants to know more about what colleges and universities might do to facilitate the retention, satisfaction, and learning of their students, then one must understand the inherent diversity of academic disciplines and the distinctive academic environments that their respective faculties create. (p. 2)

After empirically validating the theoretical typology of academic environments for faculty (using data from the 1989 Carnegie study of the American professoriate) and students (using data from the 1986 freshman survey and a 1990 follow-up conducted by the Higher Education Research Institute at the University of California, Los Angeles [UCLA], Smart and colleagues (2000) systematically test the Holland model. They focus on three underlying assumptions of the Holland model: *self-selection*, where students choose academic environments compatible with their personality types; *socialization*, where
academic environments reinforce and reward different talents; and congruence, where people flourish in environments congruent with their personality types (pp. 51–54). Longitudinal data from 2,309 students who were enrolled in the same 4-year college in 1986 and 1990 were used in the analysis of change due to Holland environments. Dependent variables in the change analysis were scales reflecting ability and interest in each of four personality orientations: Investigative (self-ratings on intellectual self-confidence, possessing academic and mathematical ability, having drive to achieve, making a theoretical contribution to science), Artistic (self-ratings on artistic and writing ability, becoming accomplished in one of the performing arts, writing original works, creating artistic work, developing a meaningful philosophy of life), Social (influencing the political structure, influencing social values, helping others who are having difficulties, becoming involved in programs to clean up the environment, participating in a community action program, helping to promote racial understanding), and Enterprising (having leadership ability, being popular, displaying social self-confidence, becoming an authority in one’s field, obtaining recognition from colleagues for contributions to one’s special field, having administrative responsibility for the work of others, being very well-off financially, being successful in a business of one’s own, becoming an expert on finance and commerce) (pp. 66–67).

All analyses employ appropriate statistical adjustments to control for any underlying problems with the data as well as for relevant student characteristics such as gender. Smart and colleagues (2000) also look at differences in outcomes based on whether students were primary recruits (similar disciplines in both surveys) or secondary recruits (dissimilar disciplines) into their academic majors.

Results generally support the self-selection assumption, but with some gender differences. Both the socialization and congruence assumptions are also supported, but with some differences by gender and major field. Smart and colleagues (2000) conclude their book by discussing the importance of theoretically based schemes for classifying important dimensions of academic environments as well as for understanding more fully student learning, patterns of change and stability in college students, alternative schemas for curriculum design, and organizational diversity.

Overall, the presentations of findings and their implications in Academic Disciplines are far too rich for a brief review to do them justice. Of particular importance, however, is Smart and colleagues’ (2000) discussion of the differences in knowledge gained about college impact by research drawing from psychological models focusing primarily on individual learning and cognitive development as opposed to those drawing from sociological and anthropological models focusing primarily on social, organizational, and cultural processes affecting both cognitive and affective outcomes of college. They are careful not to pit one conceptual approach against the other, but they do recommend future research that would extend this particular study by drawing on other, more sociologically oriented conceptual frameworks.

Certainly, the outcomes of interest (e.g., cognitive vs. affective, knowledge vs. values) play a strong part in determining the conceptual approach that is likely to be taken in research. The stakeholders being served also influence the conceptual approach being used. Student affairs professionals responsible for residential and co-curricular programming might be better served by more sociologically oriented studies of how various types of group and organizational activities might facilitate student integration into college, whereas professors concerned with having students develop knowledge of their disciplines might be better served by more psychologically oriented studies of teaching and student learning. Of course, context is always a factor no matter what the outcomes of interest are.

The work reflected in Smart and colleagues’ (2000) book also serves an important heuristic function—Feldman and colleagues (1999), written while the book was in progress and containing findings addressed in Chapter 7; Feldman and colleagues (2001), written immediately after publication of the book and including a more comprehensive framework for Chapter 8 as well as a test for statistical significance; and Feldman and colleagues (2004), written after publication of the book and including data and interpretations comparing experiences and involvement of noncongruent and congruent students in their colleges. The most recently
published article (Feldman et al., 2004) concludes with the assertion that the results from the book and related articles reflect a much stronger socialization effect of students’ experiences in an academic major over the course of college than does previous research that placed more emphasis on psychological effects of self-selection. Feldman and colleagues (2004) argue that further research should pay closer attention to understanding the organizational and interpersonal dynamics of academic environments in higher education, particularly those reflected in the Weidman (1989) framework for understanding undergraduate socialization:

Weidman’s is one of the rare higher education models that explicitly incorporates academic environments (i.e., departments), and his discussion of the components of the normative contexts and socialization processes of academic environments and institutions could provide substantial assistance in understanding similarities and differences in exactly how the disparate academic environments in Holland’s theory seek to socialize students to their respective norms and values. (Feldman et al., 2004, pp. 548–549)

Of course, there are other frameworks that have been used even more widely for the study of college impact. Given the apparent overlap of conceptions and approaches to the study of college impact, it is instructive to identify similar elements among models as applied to understanding the process of student socialization. The next section presents a conceptual framework illustrating analogous constructs that appear in different models. The chapter then concludes with a description of two lines of research that use an organizational perspective grounded in the work of Tinto (1975, 1993) and Weidman (1989) for studying peer group influence and the effects of diversity in higher education.

MODELS OF COLLEGE IMPACT: COMMON THEMES

Figure 14.1 shows a general framework for socialization in higher education that incorporates major elements of college impact models of student change developed in the work of four authors (Astin, 1970a, 1970b, 1991, 1993; Pascarella, 1985; Tinto, 1975, 1993; Weidman, 1989; Weidman, Twale, & Stein, 2001) discussed by Pascarella and Terenzini (1991, pp. 50–58; 2005, pp. 52–60). The figure includes central concepts from each framework and encompasses additional constructs suggested by research on graduate and professional students (Weidman & Stein, 2003; Weidman et al., 2001). Elements that are parallel conceptually across frameworks are also identified. Dotted lines are used to suggest that boundaries across dimensions are permeable rather than fixed.

On its horizontal axis, the model shown in Figure 14.1 reflects a basic inputs–environment–outcomes (I–E–O) structure that parallels what is described by Astin (1970a, 1970b, 1991). It is worthy of note that Astin, whose orientation is primarily psychological, also had a hand in the development of the Holland typology of majors and careers (Astin & Holland, 1961). The I–E–O structure is shared by the human capital theory in economics (Becker, 1975) and status attainment theory in sociology (Sewell, Haller, & Portes, 1969). The student inputs to higher education are family background, beliefs and values (predispositions to influence), and prior academic preparation. Environment represents the organizational structures and institutional culture with which students interact. Following Weidman (1989), the model suggests that socialization occurs through processes of interpersonal interaction, learning, and social integration (Tinto, 1975, 1993) that link students with salient normative environments in higher education. Socialization outcomes are the resultant changes (values, beliefs, and knowledge) that occur in students. In arguing for the use of an ecological model of college impact for the study of peer culture, Renn and Arnold (2003) provide a particularly good analysis of conceptual similarities and differences between the models of Weidman and Tinto.

The bottom lines in Figure 14.1 highlight four main stages of the socialization process that can be assumed to occur during the period when students are enrolled in higher education institutions and that continue as they move into professional careers. Although socialization is construed as a temporal process, the distinct stages do not necessarily occur in a strict
sequence but rather are interactive with movement in both directions (Thornton & Nardi, 1975). Prior to their entry into a higher education institution, students anticipate what might occur based on prior experience but incomplete knowledge. During their passage through academic programs, students encounter the normative influences of peers and faculty in both formal and informal settings (e.g., majors, peer groups, co-curricular activities), ultimately personalizing those experiences by either changing or maintaining perspectives held at entrance to higher education at either the undergraduate or graduate level. Students are influenced in various ways, particularly through learning (Pascarella, 1985) or knowledge acquisition, again via both formal instruction and informal interaction with faculty and peers. The processes are reflected by involvement (Astin, 1984) in both the formal and informal structures of college environments. Engagement (Kuh, Schuh, Whitt, & Associates, 1991; Zhao, Kuh, & Carini, 2005) occurs as students develop attachments to persons and environments within higher education institutions.

Involvement and engagement are also fundamental dimensions of integration (Tinto, 1975, 1993) into the social and academic spheres as
well as personal *investment* into what each sphere represents. These *investments* result in particular *outcomes*, notably *knowledge, skills,* and *dispositions,* including commitment to institutions (Tinto, 1975, 1993), careers, and other personal orientations that also shape individual *identity* along a variety of dimensions. The notions of *investment, involvement,* and *engagement* also appear in the “college impress model” of Pace (1979, p. 126). In the Pace framework, *involvement* is reflected in the “amount, scope, and quality” of effort that students invest (p. 127).

Finally, Figure 14.1 includes a vertical dimension that reflects the importance of communities external to higher education institutions for student socialization. Colleges and universities are not, after all, encapsulated environments. *Professional communities,* for example, have important influence on the curriculum in higher education through the promulgation of standards for professional practice and licensure. Accreditation agencies play a similar role at both the institutional and academic program levels. *Personal communities* represent significant others with whom students continue to be in contact throughout the time they are enrolled in higher education. Reference groups, both within and external to higher education institutions, can also influence change and stability in students.

Personal and professional communities often provide strong normative contexts for human social behavior. Figure 14.1 shows them as external to the higher education institutions, but they may also spill over. Normative contexts are fundamental parts of a higher education institution’s organizational structure and, as such, play a key role in the socialization of students.

**Organizational Socialization in Higher Education**

One of the most influential lines of research on organizational impacts of higher education is reflected in the work of Vreeland and Bidwell (1965, 1966; see also Bidwell & Vreeland, 1963). They use the classic essay by Parsons (1959) as the starting point for arguing that organizational units of colleges can serve as climates for the technical (acquisition of knowledge and skills) and moral (acquisition of values, beliefs, and commitments) socialization of students. They apply this framework to the classification of both residences (Harvard houses) and academic departments, showing that these units vary both in the emphases of members (faculty and students) on technical and moral dimensions of socialization and in their corresponding impacts on students’ values and attitudes. More recently, Hermanowicz (2005) shows how conceptions of institutional culture manifested by members can be useful in classifying departments according to their normative climates represented along three dimensions: elite, pluralist, and communitarian. These two approaches are alternatives to the Holland typology, but they share an emphasis on the importance of organizational structure and normative dimensions of academic majors for understanding student outcomes.

Berger and Milem (2000b) provide a particularly insightful discussion of organizational approaches to the study of college student outcomes. Drawing from the Tinto and Weidman models, as well as from other relevant literature on organizational sociology and college impact, Berger and Milem present a comprehensive review of literature leading to a conceptual model of organizational impact on student outcomes. Structural–demographic features of organizations (e.g., size, control, selectivity, Carnegie type, location) and a typology of organizational behavior (e.g., bureaucratic, collegial, political, symbolic, systemic) are also included. These authors emphasize the importance of the peer group as an important mediator of organizational influences in higher education in that peer groups serve as a locus of personal, behavioral, and structural influences. They also use their framework to assess change related to participation in various types of higher education institutions, including historically black colleges and universities (Berger, 2000; Berger & Milem, 2000a). In fact, the types of organizational perspectives reflected in this work permeate other analyses of issues related to improving campus climates for racial/ethnic diversity in higher education (e.g., Hurtado, Milem, Clayton-Pedersen, & Allen, 1999).

Two other recent studies related to issues of diversity in higher education draw on the
foregoing models of college impact and suggest particularly fruitful lines of research. Carter (1999) uses the data set from the Beginning Postsecondary Students (BPS) project (1990/1992) to investigate effects of individual and institutional characteristics, student experiences, and financial aid on African American and white college students’ degree aspirations. The main theoretical foundations for this study (pp. 20, 22) are sociological models of status attainment (Sewell et al., 1969) and undergraduate socialization (Weidman, 1989). Using multiple regression techniques, Carter (1999) finds many similarities between the two groups of students such as the positive effects on degree aspirations of their mother’s education, their degree aspirations prior to entering college, and the size and type (e.g., 4-year) of institution. There are also notable differences such as intellectual self-confidence (positive for whites, negative for African Americans), faculty contact (positive for African Americans), percentage of African American enrollment at the institution (positive for African Americans), and peer contact (positive for whites). Effects of financial aid on students’ degree expectations were not significant. Carter concludes,

The socializing influences on students’ degree aspirations differ within institutions and between institutions. Also, the socializing influences on students’ degree expectations differ for African-American and white students. Theoretical models of African-American and white students should be tested separately for each group because African-American and white students begin college with different backgrounds, attend different types of institutions, and have different experiences in college. (p. 38, emphasis in original)

Antonio (2001a, 2001b, 2004) presents a related line of empirical research on the influence of peer and friendship groups on a student’s educational aspirations and intellectual self-confidence. In the most recent of these studies (Antonio, 2004, pp. 452, 455–456), the research is grounded explicitly in the college impact models of Astin (1984, 1993) and Weidman (1989) as well as in related research on peer influences by Dey (1996, 1997) and Milem (1998). Antonio’s (2004) study addresses the effects of the interpersonal environment reflected by the academic abilities and degree aspirations of students’ friendship groups on members’ intellectual self-confidence and aspirations. It also explores the importance of the diversity of students’ best friends for change in these two areas. Longitudinal data for the study came from 2,222 third-year students at UCLA. Three indicators of interaction among students—a primary mechanism of socialization described by Weidman (1989)—are included in the analysis. Variables are entered into the regression equations in blocks reflecting the longitudinal process of college impact specified in the conceptual models underlying the research.

Similar to the findings of Carter (1999), Antonio’s (2004) study suggests that “the peer factors that influence students’ intellectual self-confidence and degree aspirations operate differentially by race” (p. 464). Furthermore, Antonio argues that the factors producing these “differential patterns of effects on self-concept may originate in the frequently unmeasured interpersonal environment of students” (p. 464). The findings also extend his previous research showing the relationship of the diversity of friendship groups for commitment to racial understanding and diverse interaction outside of friendship groups (Antonio, 2001a), although in the 2001 study friendship group diversity was positively related to intellectual self-confidence only for students of color. Antonio raises interesting questions about these different patterns of effects by race, concluding with a call for both methodological and conceptual elaboration of the research.

The research mentioned in this chapter to this point, although grounded in similar theoretical perspectives, has been empirical. Virtually all of the authors argue, in one way or another, that findings based on quantitative studies could or should be extended by focusing more explicitly on the specific mechanisms of socialization processes through the use of qualitative research techniques. Hence, it seems appropriate to bring in a recent qualitative study co-authored by a long-term contributor to the study of higher education (Kaufman & Feldman, 2004). True to Feldman’s persistent plea for the use of sociological approaches as a way of extending the knowledge about college beyond that generated
by psychologically oriented research (Feldman, 1972; Feldman & Newcomb, 1969; Feldman et al., 2004), the study by Kaufman and Feldman (2004) describes the dynamics of social interaction among college students that influence the constitution of their newly formed or modified felt identities in the domains of intelligence and knowledgeability, occupation, and cosmopolitanism. This study is based on data from 82 semistructured, open-ended interviews with a randomly selected sample of college students attending a large, diverse public university in a suburban environment approximately 60 miles from a major metropolitan area. The authors describe their objectives in the in-depth interviews as follows:

We were particularly interested in students’ interpretation of their experiences in college, how they saw themselves in comparison with other individuals, groups, and categories (social comparisons), and how they believed others viewed them. . . . In the context of a semistructured interview, respondents were able to be reflexive, to challenge their own taken-for-granted notions, and to elaborate on their newly constructed felt identities. Without allowing students to express their felt identities and place them in an appropriate context, researchers may overlook some of the nuances of the college experience and its consequences for the individual. (p. 468)

Kaufman and Feldman’s (2004) carefully crafted study describes the feelings reported by students about their experiences with peers and others in the college environment that are perceived to have influenced the students’ perceptions of themselves in the intellectual and occupational domains. It identifies college-sponsored, but off-campus, experiences such as studying abroad that affirm the importance of noncollege peers for socialization in higher education. The research suggests elements of anticipatory socialization in that the students describe developing symbolic commitments to professional occupations and careers. It also describes how students expand their horizons, moving toward more cosmopolitan views of the world through their negotiation of interaction with students who encompass social worlds very different from those to which they had been accustomed prior to their university experience. Throughout their article, the authors focus their interpretation of results on exploring “the extent to which the social environment impacts the formation of individual felt identity” rather than “how students do or do not ‘develop’ in college” (p. 490). In so doing, Kaufman and Feldman conclude that there is considerable variability in student change during college and that change in one domain may overlap with change in another domain. They also argue that the college “charter” or mission can be a particularly important, but difficult-to-measure, source of influence, a finding supported by the work of Pike, Kuh, and Gonyea (2003) and Hermanowicz (2005).

In short, socialization processes are complex, can be complementary, and vary according to both individual characteristics and the variety of students’ experiences within higher education institutions. Furthermore, as Figure 14.1 illustrates, conceptual approaches to the study of socialization in higher education institutions as organizations share commonalities across disciplines and frameworks. Hence, it is reasonable to expect that research in this area should reflect both broadly based conceptual grounding and rigorous methodological approaches to elaborate, extend, and expand our knowledge of socialization in higher education. Far too often, studies merely pay lip service to conceptual models and wind up addressing a very limited set of variables and failing to draw implications for the models when discussing results. Paying attention to stakeholders in research, whether academic or not, can also provide important clues about the types of conceptual frameworks (and their disciplinary underpinnings), as well as the types and targets of resulting recommendations, that might be used.

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