The Impact of Interaction with Peers on College Student Development

Yi-Hui Ho, Lecturer, Dep. of International Business, Chang Jung Christian University

ABSTRACT

Since most college student development models take students’ interaction with peers as an important influential factor, by reviewing an amount of related literature, this paper summarized the impact of interaction with peers on college student development in the eight areas categorized by Pascarella and Terenzini. Based on a body of research conducted by analyzing national samples or some small particular samples, using meta-analysis, experiments, or statistical analysis, and controlling potential confounding variables or not, it can be found that interaction with peers have effects in varying degrees on college student development in various aspects.

INTRODUCTION

The student’s peer group is the single most potent source of influence on growth and development during the undergraduate years (Astin, 1993). This paper will synthesize the impact of interaction with peers on college student development. A number of studies on student development have revealed the importance of interaction with peers. Based on Astin’s I-E-O model, people and experiences that students encounter in college are some elements of the environment affecting student change or growth (Astin, 1991). Chickering and Reisser (1993) identify that friendships and student communities will influence student development and interaction with peers provide powerful learning experiences and help shape the emerging sense of self. Tinto (1993), in his student departure model, has suggested that extracurricular activities and peer group interactions form a social system that leads to student integration. According to Pascarella’s general causal model for assessing student’s development, interactions with the faculty and peers will affect the quality of student effort and students’ learning and cognitive development (Pascarella, 1985). In Weidman’s model of undergraduate socialization, interaction with peers can expose students to normative pressures that will influence students’ socialization outcomes (Weidman, 1989). Since most college student development models take students’ interaction with peers as an important influential factor, this paper will synthesize the affect of interaction with peers on college student development in the areas categorized by Pascarella and Terenzini (2005).

THE INFLUENCE ON THE DEVELOPMENT OF VERBAL, QUANTITATIVE AND SUBJECT MATTER COMPETENCE

Knowledge is most effectively acquired through social or group interactions in which students actively engage in knowledge construction (Palinscar, Stevens, & Gavelek, 1989). Therefore, students’ interaction with peers should affect the acquisition of subject matter knowledge and academic skills. A substantial amount of evidence has suggested that the nature of an institution’s social or relational environment as well as students’ interaction with peers will affect students’ acquisition of subject matter knowledge and academic skills.

Kuh, Pace and Vesper (1997) found that friendly, approachable and helpful relationships with peers would have positive effects on students’ self-reports of gains in general education skills, and understanding the arts, literature, and humanities. Several studies of collaborative learning revealed that participating collaborative learning has a positive influence on self-reported gains in problem solving and design skills, understanding science, arts and humanities, and acquiring general education knowledge (Astin, 1993; Light, 2001). Springer, Stanne and Donovan (1999) found that the course achievement of students working in small groups was greater than that of students who did not work cooperatively. Therefore, we can say that peers play a central role in how much students learn in formal classroom settings. Learning can be enhanced when students can work with and teach peers.
In addition to interactions with peers in classroom, an amount of evidence also showed that extracurricular involvement influenced learning; certain kinds of nonclassroom interactions with peers have a net positive impact on learning. Whitt, Edison, Pascarella, Nora, and Terenzini (1999) found that nonclassroom interactions including discussing issues related to policies, religious, arts, and so on, had significantly positive effects on knowledge acquisition and academic skill development. However, student extracurricular involvement less related to academic program might have negative effects on student learning (Astin, 1993; Kuh, 1995).

In summary, the development of verbal, quantitative and subject matter competence is influenced by students’ involvement in activities related to interactions with peers, such as small-group learning, learning communities, extracurricular activities, and so on. The more the nature of students’ interaction with peers is related to academic program, the more is the development of verbal, quantitative and subject matter competence.

**THE INFLUENCE ON COGNITIVE SKILLS AND INTELLECTUAL GROWTH**

Students’ peers play a substantial role in general cognitive growth and intellectual development in college. A body of evidence suggested that a student’s quality of involvement in in-class or out-of-class activities related to interaction with peers will have influences on student development of cognitive skills and intellectual growth. Karabenick and Collins-Eaglin (1996) suggested that collaborative or cooperative learning might facilitate the development of general cognitive skills and intellectual development during college because students would like to use higher-order learning strategies of elaboration, comprehension monitoring, and critical thinking. A meta-analysis conducted by Qin, Johnson and Johnson (1995) revealed that cooperative learning gave a greater advantage over individualistic or competitive learning on problem-solving skills requiring cognitive representation.

In addition to in-class activities, students’ peers sometimes have greater influences than in-class experiences on cognitive skills and intellectual growth (Terenzini, Springer, Pascarella & Nora, 1995). Analyzing data from National Study of Student Learning and controlling potential confounding factors, several researchers found that out-of-class interaction with peers, including out-of-class discussion with peers and involvement in college clubs, organizations, and diversity activities, had a significant, positive influence on standardized measures of critical thinking skills during college. Students’ self-reports of their cognitive skills or intellectual growth were also significantly, positively influenced by interaction with peers outside of class. However, a small amount of research concluded that participation in some extracurricular activities, such as Greek affiliation, would have negative effects on critical thinking (Pascarella, Edison, Whitt, Nora, Hagedorn & Terenzini, 1996); but, due to analyzing only based on a single sample, this conclusion still needs to be proved based on more evidence.

In summary, we can conclude that interaction with peers that can extend and reinforce broad ideas and confront students with diverse interests and values, either in or out of class, will have positive influence on students’ cognitive skills and intellectual growth.

**THE INFLUENCE ON PSYCHOSOCIAL CHANGE**

A body of evidence indicated that the frequency and nature of students’ interpersonal experience with peers were the more likely sources of influence on psychosocial changes including identity development, self-concept and self-esteem, autonomy, independence, locus of control and self-efficacy, interpersonal relations and leadership skills, and general personal development. Johnson, Johnson and Smith (1998) revealed that cooperative and group learning boosted self-esteem by increasing student interest in learning and the quality of their social adjustment and support. Smith and Griffin (1993) found that peer relations and participation in extracurricular activities had a positive influence on students’ sense of autonomy. Astin (1993) found that the frequency of interaction with peers showed positive net effects on students’ development of academic and social self-concept. Leadership skill formation was associated with students’ interaction with peers, which included fraternity or sorority membership, intramural sports participation, and active involvement in the classroom. Grayson (1999), Kuh (1995), and Martin (2000) indicated that the frequency of students’ interaction with peers is associated with reported gains in interpersonal skills.
In addition to frequency of interaction, interaction with peers of different races and discussion of racial issues with others had influences on psychosocial change (Chang, 1999). The effects may be particularly powerful when the interaction involves discussion with peers of another racial-ethnic group or on issues relating to race and ethnicity. Dukes, Johnson and Newton (1991) found that interaction with peers from a racial-ethnic or cultural background different from their own had a long-term impact on students’ intellectual self-confidence.

In summary, students’ interaction with peers plays a central role in how students thinking about themselves, and is the dominant force on general personal development. Interaction with peers of diversified interests, races, and backgrounds have the potential to stimulate reflection on students’ knowledge and currently held beliefs and values and, perhaps, lead to new ways of thinking about and understanding the world, the other peers, and themselves.

THE INFLUENCE ON THE DEVELOPMENT OF ATTITUDES AND VALUES

Although some studies found no significant net effects of the peer environment on students’ openness to diversity, and understanding differences in cultures and philosophies of life (Pascarella, Edison, Nora, Hagedorn & Terenzini, 1996; Ethington, 2000), a body of research suggested that students’ interpersonal associations with peers are the dominant factors in attitude and value changes across topical areas (Pascarella & Terenzini, 2005). Berger (2000) found that the values held by students’ peers had important influences on community attitudes and humanistic values. Gurin, Dey, Hurtado and Gurin (2002) indicated that students’ interactions with peers have significant effects on changes in various dimensions of their sociopolitical orientations. Students with more frequent interaction with peers were more likely to pay attention to social and political issues, and to participate in community action programs.

The nature of interaction also influences attitudes and values. Attending a racial or cultural awareness workshop, discussing political and social issues, or socializing with students from another racial-ethnic background would positively affected students’ attitudes and values (Sax, 2000; Villalpando, 1996). Having friends of another race and being a member of an interracial friendship group has positive net effects on racial-ethnic attitudes and values. Geller (1991), and Kardia (1996) suggested that contact with gays, lesbians, and bisexuals may be a primary mechanism in reducing negative attitudes toward homosexuality. Some studies indicated that membership in a fraternity or sorority, or Greek-letter organization has a positive effect on community service (Hayek, Carini, O’Day & Kuh, 2002). However, some found that fraternity members were less supportive of gender equality and feminism, and more willing to male dominance and sexual aggression than others (Korn, 1993).

In summary, peer context has positive net effects on students’ attitudes and values in various aspects. Interaction with peers more frequently can help student development in attitudes and values. Peers of diverse races, culture, or gender can reinforce the development.

THE INFLUENCE ON MORAL DEVELOPMENT

Only a small body of evidence showed the impact of interaction with peers on moral development. McCabe and his colleagues (McCabe & Trevino, 1993, 1997; McCabe, Trevino & Butterfield, 1999) found that students were significantly less likely to admit to academic dishonesty if they perceived that close student acquaintances would disapprove of cheating behavior. Peer behavior formed a normative context for cheating. McNeel (1994b) suggested that, if one were first taught the basic skills of moral reasoning, the impact of moral problem solving with peers would be an even more powerful incentive to growth in principled thinking.

Extracurricular activities also played a significant role in moral development. Different kinds of extracurricular involvement might have different impacts on moral development. McNeel (1994a) indicated that participating in off-campus learning programs showed greater growth in principled reasoning during college than others without off-campus learning experiences. Finger, Borduin and Baumstark (1992) found that frequency of extracurricular activities during college is an important factor related to principled moral development. Kilgannon and Erwin (1992) found that fraternity or sorority members showed less growth in principled reasoning than others who did not joint fraternities or sororities. Derryberry and Thoma (2000) indicated that students’ principled moral reasoning levels were
inversely related to the density of their friendship networks in college. Interaction with diverse peers with divergent intellectual and social perspectives tended to enhance growth in principled moral reasoning. Individuals with high levels of principled reasoning were simply more open to diverse or low-density friendship networks and tend to enter into them more frequently.

In summary, in- or out-of-class interaction with peers will influence moral development. Interaction with peers of different ideas, values, and experiences can help moral development.

**THE INFLUENCE ON DEVELOPING EDUCATIONAL ATTAINMENT AND PERSISTENCE**

Peers constitute a potent socializing agent in shaping educational persistence and degree completion (Astin, 1993; Pascarella & Terenzini, 1991). Bank, Slavings and Biddle (1990) found that the influence of both peers and parents on student persistence exceeded that of faculty. Several studies indicated various ways the importance of peers in student decisions relating to educational attainment and persistence. Peer groups both encouraging homogeneity and discouraging heterogeneity influenced students’ persistence behaviors (Astin, 1993).

Pascarella, Wolniak and Pierson (2003) suggested that the educational aspiration of peers was a significant factor influencing persistence behavior. Living in an on-campus residence hall, which facilitated students’ social involvement with peers as well as student peers interaction, increased the likelihood of persistence and degree completion (Pascarella & Trenzini, 1991). However, peers’ perceptions of racial-ethnic prejudice, discrimination or tension had statistically significant and negative net effects on minority students’ educational attainment and persistence (Cabera, Nora, Terenzini, Pascarella & Hagedorn, 1999). Such negative influences might be counterbalanced or compensated by some formal components of the peer environment, such as an integrated living-learning community and ethnic-racial student organizations, groups or theme houses.

In summary, peers’ influence is a significant and positive force in students’ persistence decisions. The extent and quality of students’ interaction with peers were particularly influential on students’ educational attainment and persistence.

**THE INFLUENCE ON CAREER AND ECONOMIC RETURNS**

Some studies found that students’ career choice might be influenced in the direction of the dominant peer groups in college (Astin, 1993; Sax, 1994). Astin (1993) found that certain dimensions of extracurricular involvement might contribute to career choice in business or law, and some might inhibit that choice. Cooperative learning in the classroom might significantly influence seniors’ career choices, which enhanced the likelihood of choosing a career in business or engineering, but inhibited the choice of a career in law, or college teaching. Being a fraternity or sorority member would prefer to choose a career in business or the law; however, involvement in diversity activities negatively influenced seniors’ choice of a business career.

In addition to career choice, Astin (1993), and Kezar and Moriarty (2000) also found that involvement in students clubs and organizations, and group class projects during college had significantly positive influences on students’ career-relevant skills, such as leadership skills, public speaking abilities, and ability to influence others. Some related evidence also indicated that cooperative collaborative learning experiences have a net positive influence on ability to work effectively in groups, and some indicated that interaction with peers from different racial and ethnic groups would positively influence students’ growth in job-related skills. Whitt et al. (1999) found that students’ nonclassroom interaction with peers, including discussions with religiously, politically, nationally, and philosophically diverse students, had a positive impact on self-reported gains in preparation for a career.

In summary, involvement in activities related to interaction with peers will affect students’ career choice and career-related skills. However, although consistent evidence can be found that interaction with peers had effects on students’ career, there is no consistent evidence of the impact on economic returns.
THE INFLUENCE ON QUALITY OF LIFE AFTER COLLEGE

Only a few studies reported the impact of interaction with peers on quality of life after college, which merely revealed the impact on alcohol use and involvement in community service activities after college. Wechsler, Davenport, Dowdall, Grossman and Zanakos (1997) suggested that participating in a fraternity or sorority was a significant predictor of binge drinking among students in college, and the effects persisted after college. Sher, Bartholow and Nanda (n.d.) found that students joining in Greek affiliation drank more heavily during college than the counterparts; however, this influence might diminish rapidly once an individual was removed from that context and confronted with more adult roles.

As to involvement in community service activities after college, although the effects might be different among White, African-American and Latino young adults, Gurin (1999) found that young adults’ self-reported involvement in community service activities after college was significantly, positively influenced by a range of diversity experiences during college, such as having college friends of a different race, taking an ethnic studies course, attending a racial-cultural awareness workshop, and socializing with someone of another racial-ethnic group during college. However, due to lack of controlling for potential confounding variables, Gurin’s results may simply reflect the possibility that students who enter college with a high propensity for involvement are more likely to participating both in diversity activities during college and in the communities after college. It is still questionable to conclude that diversity experiences during college have significant influences on the involvement in community service activities after college.

In summary, except the impact on drinking behaviors and involvement in community service activities after college, there is still lack of clear evidence of the impact of interaction with peers on a student’s quality of life after college.

SUMMARY

This paper summarized the impact of interaction with peers on college student development in the eight areas categorized by Pascarella and Terenzini (2005). Based on a body of research conducted by analyzing national samples or some small particular samples, using meta-analysis, experiments, or statistical analysis, and controlling potential confounding variables or not, it can be found that interaction with peers have effects in varying degrees on college student development in various aspects, which may be due to the differences in samples being selected or methodologies being used. However, clear and consistent evidence can be still concluded that the better quality and more extent of interaction activities students participate in as well as the more diversity of peers students interact with, the more positive impact on college student development will be. This conclusion is similar to the hypothesis postulated by Chickering and Reisser (1993, p.275), “When students are encouraged to form friendships and to participate in communities that become meaningful subcultures, and when diversity of backgrounds and attitudes as well as significant interchanges and shared interests exist, development along all seven vectors is fostered.” Therefore, to help student development in college, higher education institutions should provide friendly, supportive, and diversifying social environments to advance students’ interaction with peers.

REFERENCES


