Should I Stay Or Should I Go?:

The Impact of Retention

Jeromy A. Koffler

University of Portland

Abstract

This literature review examines the impact of retention on higher education. The language of retention has evolved from focusing solely on the student, to focusing on the institution’s responsibility, to a relationship between the student and the institution. As the language has evolved, so have the theoretical approaches to explaining why some students stay in college and complete degrees and why others leave before a degree has been attained. Astin’s Theory of Involvement and Tinto’s Theory of Departure are central to the discussion, but significant contributions have been made from many others including Bean, Kuh, Braxton, Pascarella & Terenzini, Seidman and Habley et al. and from a variety of perspectives. Student characteristics that contribute to retention and can predict departure are a focus in the literature as well as institutional capacities to intervene, support, and enhance a student’s chance to graduate. The impact of retention will be explored as it pertains to the individual, the institution, and the society. Finally, the review will examine implications for future retention studies.

*Keywords*: college, university, undergraduate, student, retention, impact, attrition, persistence, departure, transfer, involvement, integration, economic, incongruence, prediction

**Should I Stay or Should I Go?: The Impact of Retention**

One of the most widely researched topics in American higher education over the past forty years is the concept of student retention (Berger, Ramirez, & Lyons, 2012). Much time and effort is dedicated to the search to learn why some students stay and others leave (Tinto, 2012). The answers to those questions are significant to educators, policy makers, and influential stakeholders throughout the profession because of the collective impact of those individual decisions. A decision to leave impacts the student, the institution, and the society (Habley, Bloom, & Robbins, 2012).

Retention ultimately is about success or failure (Braxton, Hirschy, & McClendon, 2004; Habley et al., 2012; Seidman, 2012; Tinto, 2012). When a student earns a degree there is success, and everyone benefits. When a student fails to complete their attempted degree, there are costs, and there is enough blame to go around for everyone involved. As the demographics of the United States change, the supply of students to American colleges and universities shifts, and the need to manage enrollments increases (Berger et al., 2012). Thus, institutions of higher education are investing time, energy and money in understanding their students, specifically their unique characteristics, needs, behaviors, and learning capacities, and they are dedicating more and more resources to intervention programs and services to prevent students from falling behind or leaving (Tinto, 2012).

This literature review will explore the terminology surrounding the concept of retention, theoretical models for departure and persistence, student and institutional characteristics that can predict those outcomes, and the impacts of retention on the students, the institutions they attend, and the society.

**The Language of Retention**

Habley et al. (2012) and Berger et al. (2012) describe how the language of retention has changed over time. Student failure to graduate from college was once perceived almost entirely as a student problem. Students *withdrew* because they were not able to keep up or were *dismissed* because of their substandard behavior. *Mortality* rates were used to describe the rates for which students failed to remain in college. Then, gradually the focus shifted away from the student’s failure to perform to the institution’s failure to meet the student’s needs, and the burden of the responsibility for retention was placed upon institution. Today, the terminology has further evolved and reflects more of a joint responsibility, where the interactions between the student and institution are focused upon as predictors for student success.

According to Habley et al. (2012), when the language of retention primarily describes the behavior of the student, it often refers to the concepts of *persistence* or *departure*. Depending upon the degree that is being pursued, students who persist are students who enroll full-time and continuously pursue their degrees until they graduate. Normally persisters are undergraduates who complete their degree in two to four years. Students who withdraw, depart or *drop out* are students who are not enrolled and are no longer pursuing a degree. It is important to distinguish that there are both voluntary and involuntary withdrawals (Habley et al., 2012). Some students choose to depart; others may not be permitted to re-enroll due to action taken by the institution. This action may be the result of poor academic performance, disciplinary problems, or a combination of both. Students who leave, but persist elsewhere are described as *transfer* students. There are also students who are making progress toward accomplishing their educational objectives but are pursuing those goals in different ways. Some of these students are referred to as *part-time* or *non-matriculating* students. Others who have stopped out or are returning after a hiatus are often described as *non-traditional* or *adult students*. There are also students who *swirl*, by attending two or more institutions simultaneously as a route to attaining a degree.

When the language of retention describes the behavior of the institution, it frequently shifts to describe ways in which calculations are made for the rates for the students who persist (Mortenson, 2012). Retention is usually expressed as a percentage of students who return from one enrollment period to another. In this way, retention is viewed by Berger et al. (2012) as “the ability of a particular college or university to successfully graduate the students that initially enroll at that institution” (p. 8). In contrast, Hagedorn (2012) defines *attrition* as “the diminution in numbers of students resulting from lower student retention” (p. 85).

Habley et al. (2012) explains that due to a wide degree of variance in how retention is defined and measured the conversation can easily become confusing. The concept of retention is often connected to interchangeable terms that express the rate for which students complete a degree within a specific time period. However, that time period can vary from two to four to six years. Some institutions might suggest that a student has been retained if they completed a degree at any point after they began pursuit, even if they stopped out for significant lengths of time or only pursued the degree part-time for many years. Whereas other institutions would have more rigid definitions and measurements of retention where a student could be considered retained only if they remained continuously enrolled full-time from the point of matriculation to the completion of his or her degree. Habley et al. (2012) also suggests that the concept of *progression* is often overlooked. Students who progress are those who enroll as degree-seeking students on a first-time, full-time basis and then re-enroll after achieving a class standing commensurate with the number of years they have attended and remain on track to graduate on time. Those who do not progress are those who fall behind academically and are considered at-risk of dropping out for not keeping pace with their original cohort.

**Theoretical Perspectives for Departure and Persistence**

When the language of retention describes the interaction between the student and the institution it often involves the discussion of a theoretical perspective that is being proposed or tested (Habley et al., 2012). In the 1970s, Astin (1999) first introduced the concept of *involvement*, theorizing that when students invest energy in their academic experience, they are more likely to persist. It is the responsibility of the student to commit to devoting time studying and participating, and it is the responsibility of the institution to provide high quality and meaningful experiences for students that promote learning and growth. Astin (1999) uses an input-environment-output model. Students represent the input. The environment has a variety of involving factors that impact the student experience. A changed student is the output.

To describe the core concepts of his theory, Astin created five basic assumptions or postulates about involvement (Astin, 1999; Milem & Berger, 1997; Morrison & Silverman, 2012). First, Astin argues that involvement requires an investment of psychological and physical energy. Students need to devote time and dedicate effort to be involved. Second, involvement is continuous while the amount of energy invested may vary. Patterns of starting and stopping, or ricocheting, between opportunities without actually sticking with any of them can thwart involvement. Third, aspects of involvement can be measured qualitatively or quantitatively as they are behavioral. Involvement refers to what a student does, rather than the student’s thoughts or feelings (Morrison & Silverman, 2012). This measurement can be in the form of units of attendance, positions held, or work performed. How many times a student did something associated with the seriousness with which they approached it can also be measured. Fourth, for Astin (1999) what a student gains developmentally from involvement is directly proportional to the extent to which he or she is involved. As involvement increases, so does learning. Lastly, academic performance is positively correlated with involvement. “Students had a better chance of staying in college if they were more involved in their academic experience” (Morrison & Silverman, 2012, p. #). The more students are involved outside the classroom, the more invested they are with their institution and their learning and the better they perform inside the classroom (Astin, 1999). Thus, involvement in peer social groups and extracurricular activities is a pathway for students to connect socially and perform better academically.

Out of Astin’s research came the concept of *involving colleges* (Kuh, 1991). Because learning takes place both inside and outside of the classroom, involving colleges are those institutions that pay special attention to the role of extracurricular and co-curricular activities in supporting the academic mission. Kuh (1991) described involving colleges as institutions that actively and intentionally impact the culture of their campus through the implementation of strategies for maximizing involvement and by blending “curricular and out-of-class learning experiences” (p.4). Colleges identified as involving colleges are seen as positive benchmarks for utilizing best practices that increase retention rates.

Tinto (1993) expanded built upon the concept of involvement and introduced the concept of *integration*. His model is described as *interactionalist* (Berger et al., 2012; Braxton et al., 2004; Laden, Milem, & Crowson, 2000; Milem & Berger, 1997). Interactionalism is a theoretical perspective that derives social and developmental processes such as identity formation from human interaction; it is the study of how individuals act and interact within society. To be successful in progressing toward degree completion, college students must integrate both academically and socially into the culture of the institution (Berger et al., 2012).

For Tinto (1993), the academic and social systems are described as both formal and informal. Formal academic systems refer to a student’s selection of major and related courses of study, accessing of advising and tutoring resources, overall academic performance, research projects, class presentations, and other assigned tasks. Informal academic systems would include a variety of loosely defined faculty/staff interactions such as visiting a professor during his or her office hours, discussing with professors internship or practicum opportunities, participating in study groups or online course management platforms such as Moodle or Blackboard, or meeting with an advisor to plan and develop a research project. For Tinto (1993), formal social systems would include college-sponsored extracurricular activities such as student government, recognized clubs or campus organizations as well as residence hall activities, campus ministry retreats, service learning immersions, intramurals and outdoor pursuits programs. Informal social systems might include time spent in peer groups socializing and participating in a variety of group activities not sponsored by the University. For example, a group of friends decide to take a day trip together to the beach or go into the city for dinner and a comedy show, and these informal gatherings are included as part of the social system of the college. Therefore, administrators need to pay close attention to the academic potential of their incoming students, their time on task, grade performance and intellectual development as well as their involvement in peer groups and systems of friendship and support (Tinto, 1993). Further, Tinto diagramed a longitudinal model for departure, citing adjustment and learning difficulties, incongruence, isolation, finances, and external obligations as primary reasons for dropping out (Habley et al., 2012). Tinto (1993) also recognized that different groups of students had different circumstances that required more group-specific retention policies and programs. For instance, administrators should take different approaches to meeting the needs of student athletes, honors students, transfer students, commuter students, first generation college students, and students with learning or physical disabilities.

Tinto’s model of academic and social integration has been the foundation for discussions throughout higher education about retention best practices and the basis for further research over the past twenty years (Morrison & Silverman, 2012). Revisions to Tinto’s interactionalist theory of departure (Braxton et al., 2004) have included the impact of organizational characteristics and environmental attributes, the impact of student preparedness and ethnic diversity, rites of passage, economic variables, and more clear definitions of factors that constitute social integration.

Braxton (2000) started by critically examining the concept of academic integration and asserting that it may perform a different role than Tinto had envisioned. Braxton’s empirical study revealed that Tinto’s conclusions were only strong when multi-institutional appraisals were used, but single-institutional tests did not show the same results. Possible explanations for this difference include institution type and the student’s failure to appropriately find and select a major that fits his or her abilities and career goals (Braxton, 2000; Braxton et al., 2004). So, while students could feel supported within both social and educational communities and competent academically to progress toward an educational goal, they may still choose to transfer to another institution because the college does not offer the exact major of study they are looking for or because their career goals change and a technical degree may become more appealing to pursue.

Milem & Berger (1997) modified Tinto’s model by drawing a closer connection to Astin’s work, describing involvement as a facilitator of *incorporation*. As students transition from high school to college, they adapt to that college’s culture through attending orientation programs and becoming familiar with various academic opportunities and social activities. During adaptation, they make decisions about involvement and about how much energy they will invest. When a student’s behavior changes to conform to the norms of the environment, he or she is incorporated into the college’s academic and social systems. Once incorporated, students can then become more integrated (Milem & Berger, 1997).

Gamson, Paulson, and Chickering (1987) developed seven overarching principles of good practices in undergraduate education. Kuh (2001) advanced Astin and Tinto’s work by consolidating these best practices into the concept of student *engagement* through the examination of the data collected from the National Survey of Student Engagement (NSSE). Kuh (1991) asserts that student success is more likely to occur as students increase their involvement in their academic program and other activities and when the institution focuses resources on organizing intentional learning opportunities and then encouraging students to participate and benefit from such opportunities. Students are not just involved in certain activities or integrated into the culture, but are hence fully engaged in the learning process. Kuh (2003) summarizes:

The engagement premise is deceptively simple, even self-evident: The more students study a subject, the more they learn about it. Likewise, the more students practice and get feedback on their writing, analyzing, or problem solving, the more adept they become. The very act of being engaged also adds to the foundation of skills and dispositions that is essential to live a productive, satisfying life after college. That is students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development (p. 25).

Habley et al. (2012) argues that there needs to be an even broader, more complex perspective on student success and that the sociological retention frameworks are based upon two faulty assumptions. The first assumption is that achieving an educational objective is linear (a student attends only one institution) and temporal (a course of study occurs only within a defined time frame). According to a study by Berkner, He, Cataldi and Knepper (2002) as referenced in Habley et al. (2012), 41% of undergraduates attend more than one institution in pursuit of their degree and 11% attend two institutions simultaneously at some point in their journey. For a variety of reasons, students are also taking more time to complete their degree requirements. ACT’s (2010) study on college readiness found that only 39.6% of undergraduates complete a four year degree in four years and only 13.6% of undergraduates completed a two year degree in two years.

Another faulty assumption is that every student who enrolls is actively pursuing a degree (Habley et al., 2012). Some attend to upgrade their work skills or retrain by taking a course on a particular subject. Other students plan to transfer or swirl. Some may just have an intellectual curiosity that motivates them to take a particular course or two. Habley et al. (2012) describes that the existing framework for reporting and discussing retention on college campuses has three major limitations. First, institutions are held accountable for retention outcomes over which they have some influence but very little control. Second, the framework doesn’t account for the variety of institutional types and missions. Third, colleges and universities compare and compete against each other for students. “Students are a renewable yet finite commodity. Thus, institutional success is predicated on how well a college attracts and keeps students” (Habley et al., 2012, p. #).

As retention and degree completion rates have had little change in the past four decades, educational researchers have also turned to the various disciplines in an attempt to find answers (Braxton, 2000; Braxton et al., 2004; Habley et al., 2012; Tinto, 2012). Bean & Eaton (2002) began with the premise that participation in higher education was voluntary and that institutional policies, practices and environments could impact a student’s decision to persist or leave, but that it was still ultimately the student’s decision. Therefore, they attempted to identify a variety of psychological characteristics and mental processes that might contribute to or predict that decision.

By building upon Tinto’s (1993) sociological concepts of academic and social integration and seeing them as outcomes of psychological processes, Bean & Eaton (2002) developed a psychological model of retention that operated regardless of gender, ethnicity or age. The flow of the model starts before a student enters college, identifying a series of entry characteristics and pre-existing attributes shaped by their prior experiences and abilities. These characteristics include past behavior, personality, initial self-efficacy, initial attributions, normative beliefs, coping strategies, motivation to attend, and skills and abilities. Then, the student attends and interacts with the bureaucratic, academic, and social aspects of the institution as well as continuing to interact with people (parents, siblings, spouses, employers, old friends, faith communities) that are outside of the institution. While interacting with various constituents, Bean and Eaton (2002) suggest a student naturally employs a number of self-assessments, described as psychological processes, that help either connect or disconnect them with the institution. One of these processes is described as positive self-efficacy, or the way that an individual perceives his or her ability to act in a certain way to assure certain outcomes. Another process is coping behavior or how an individual student is able to deal with stress and adapt to different environments or expectations. The last process for Bean and Eaton (2002) is described as locus of control, or the extent to which students believe that they are in control of their own success and failures. The combination of these three processes help students shape their perceptions of college life and affects their attitudes of institutional fit and institutional loyalty. According to Bean and Eaton (2002), “Institutional fit and loyalty lead to the intention to persist which leads to actual persistence” (p. 77).

If institutional fit and loyalty are significant, an organizational perspective of retention examines different factors that related to how a student is either compatible or incompatible with the college of his or her choice (Habley et al., 2012). Habley et al. (2012) references Bean’s (1985) development of a causal model that was adapted from historical models of organizational turnover. Bean argued the background characteristics of students must be taken into account in order to understand their interactions within the environment. As the student interacts with the college, their perception of the objective measures of their success—such as how they are graded and how they are accepted into student organizations—as well as the subjective measures—such as the quality and practical value of their education—will play a role in their decision to stay or leave because these variables are expected to influence their satisfaction with the college. The higher the level of satisfaction for a student, their level of commitment increases, and strong levels of institutional commitment will decrease the likelihood of a student leaving. Thus, the most influential variables influencing institutional commitment are the quality of the educational experience and the opportunities to engage (Bean, 1985).

The ways in which students choose to engage vary dramatically and can depend upon institution type and types of activities offered. For example, Jones (2010) explored the connection between varsity athletics and retention and found that freshman attendance at NCAA Division 1A football games was significantly related to that institution’s freshman retention rate, but the relationship was not as significant for Division 1AA schools.

When it comes to student satisfaction, the picture is more incomplete. There are gender differences in how satisfaction with the educational experience leads to institutional commitment. For example, Rosenthal, London, Levy, Lobel, and Herrera-Alcazar (2011) examined how societal stereotypes and sexism in relation to a strong belief in the Protestant work ethic can be associated with female disengagement in the experiences of the STEM majors and be contributing to increasing expectations for dropping out. Ahlqvist, London, and Rosenthal (2013) took the issue one step further and described how a perceived incompatibility can develop with women if they are not as stable in their identity development or strong in their gender rejection sensitivity. Thus, the college could be providing a quality educational experience with great perceived value and be providing sufficient opportunities to engage, but still could see less than expected attrition rates because of socialization attitudes and climate issues. Bean (as cited in Habley et al., 2012) concluded that “a student’s peers are more important agents of socialization than is informal faculty contact and students may play a more active role in their socialization than previously thought” (p. 24).

While the relationship between student retention and the organizational structures of higher education remains somewhat inconclusive, research has examined the more concrete realities of economics on retention. If a student cannot afford to continue to attend college, they will have no choice but to leave, regardless of their own preparedness and other institutional characteristics that might contribute to their decision. Long (2007) reviewed the literature on the impact of economics on college access and college success, citing the human capital model developed by Becker in the 1960s as the primary framework for economic perspectives. The human capital model simply states that individuals will compare the costs of education to the benefits and make decisions accordingly. Of course, there are a number of monetary and non-monetary considerations, as well as individual uncertainty and risk aversion that affect the formula, but generally students will assess the costs of tuition, fees, books, room and board, commuting costs, lost wages against the perceived economic benefits of attendance. Long (2007) emphasizes the role of parents and families in the decision and how their financial resources affect both academic preparation and perceptions of degree attainability.

Astin and Oseguera (2004) analyzed three decades of data from national samples of entering college freshmen and found financial inequities are impacting access further stratifying higher education socioeconomically. Higher income students are gaining better access, particularly at more selective institutions. Hu and St. John (2001) studied how the cost of higher education disproportionately impacts minority students. As the burden of financing the pursuit of a college degree shifts from the public to students and their families, those with lower socio-economic status are disadvantaged. As tuition increases, Hu & St. John (2001) found that the probability of persistence decreases, especially for non-aid recipients. High tuition and high aid approaches also lead to an erosion of persistence rates in minority populations as minority students are more sensitive to price and less willing to use educational loans.

Walpole (2007) confirms that students with lower socioeconomic status enrollments were very sensitive to tuition increases and found that “financial aid was one of the most important reasons low-SES students cited when asked why they chose to attend a particular institution (p. 33).” Walpole also reports that students with lower socioeconomic status are less likely to finish college than their peers and are less likely to finish in four years. While they may be highly motivated, students from this population are less likely to live on campus and also less likely to attend and complete graduate school. According to Walpole (2007), financial aid programs also have an indirect effect. For students with higher financial need, there is less involvement in campus life than their more advantaged peers. They have less time and energy to devote to their educational experience because of the need to work while attending to offset expenses and may be less comfortable participating in social activities that have perceived costs. Graduate students are impacted similarly as undergraduates. Gururaj, Heilig & Somers (2010) report that while a variety of funding sources might be available and that assistantships beneficially promote academic and social integration, increases in tuition still decreased persistence. An increase of $1,000 in aid received in the forms of grants, loans, or assistantships positively increased the chances of a student persisting.

While there are economic challenges disproportionately impacting attrition rates, there are also a number of cultural perspectives and beliefs that also lead to departure. Ishitani (2006) found that for first generation college students there was a greater risk for attrition. “Compared to students whose parents graduated from college, they were 8.5 times more likely to drop out (Ishitani, 2006).”

Kuh & Love (2000) developed eight cultural propositions about premature student departure that pertained to racial and ethnic minority and traditionally underrepresented students as well as international students. First, a student’s decision to leave is impacted by their meaning-making system which is comprised of their values, assumptions, and beliefs of what to expect during their college experience and the overall value of a college degree. Students with vague or inaccurate expectations may be committed to getting a degree but have inaccurate or false information about the institution and depart when they learn the truth. Second, Kuh & Love (2000) propose a student’s culture of origin has an impact on the importance they place on degree attainment. When a student’s culture values the goals of higher education, family members are more likely to encourage persistence and support a student’s resilience when faced with challenges. Third, in order to navigate higher education, a student must be able to understand how their culture of origin and their prior experiences will either assist or hinder them from accomplishing their goals (Kuh & Love, 2000). Students who understand how to access resources and what it will take to succeed can better prepare for immersion into a new culture. Fourth, Kuh & Love (2000) propose the probability of persistence is inversely related to the cultural distance between a student’s culture(s) of origin and the culture of immersion. Cultural distance is not the same as geographical distance. It is when aspects of the culture of origin conflict with or are incongruent to the college’s culture or subcultures. Therefore, Kuh & Love’s (2000) fifth proposition is that in order for student to traverse a long cultural distance they must either become acclimated to the dominant culture, also known as acculturation, or must join one or more enclaves. As a part of the socialization and adjustment process, students need to acculturate and one prominent “way to negotiate cultural distance is to join a group or subculture that has values, attitudes, beliefs, and assumptions that are congenial with one’s culture of origin (Kuh & Love, 2000, p. #).” Kuh & Love’s (2000) sixth proposition states that there is a positive relationship between cultural stress and the amount of time a student spends in their culture of origin. For instance, students who live at home and are immersed in the obligations of their culture of origin or have greater cultural distances to travel, have a higher probability that they will have difficulty in persisting. For others with fewer familial pressures and stressors and more accessible campus support systems, the cultural distance is easier to manage. The seventh proposition developed by Kuh & Love (2000) states that a student will be more likely to persist if their sociocultural connections to the academic program and to their affinity groups are sufficiently intense. This relates directly back to Tinto’s (1993) concept of integration. For Kuh & Love (2000), there needs to be a sense of belonging to one or more groups that share systems of meaning-making. Socially this happens through interactions and relationships with peers and faculty members. Academically this happens through the pursuit of an academic discipline that matches the student’s interests, beliefs, talents, and abilities. Finally, Kuh & Love’s (2000) eighth proposition asserts that students who belong to more than one enclave are more likely to persist, especially if the members of the cultural group value achievement and persistence.

**Integrated Retention Models**

While the national quest to explain retention rates has trended toward looking at different perspectives and disciplines, more recently researchers have shifted to an integrated approach. This integrated approach as described by Habley et al. (2012) blends psychological, sociological, economic, organizational, and cultural perspectives with additional idiosyncratic beliefs, attitudes, and circumstances of individual students. This is a result of the common understanding that no one theoretical perspective is comprehensive enough to explain why a student chooses to leave college (Habley et al., 2012). Additionally, the generalizations that come from the conclusions of those perspectives are not as effective in predicting behavior as stakeholders demand. It is more likely that each of the perspectives play a role and that the primacy of each perspective varies from student to student and can change over time. For example, giving an additional scholarship to a student who is not satisfied with their academic experience or their peer cohort may not get the desired results. Whereas, a student who has a low socio-economic status may have sufficient academic support systems, social and cultural integration, but simply not enough financial resources to continue. There could also be a student who fits with the school institutionally, has the sufficient means to pay for the experience, and family support to succeed, but suffers from an illness or perhaps has an unexpected pregnancy and chooses to depart because of these other personal circumstances.

Braxton (2004) attempted to integrate perspectives by building on Tinto (1993) and emphasizing institution type, developing separate models for residential and commuter colleges and universities. These models account for variances in entry characteristics and the role of social integration. Pascarella & Terenzini (2005) developed a causal model that demonstrated student characteristics and precollege preparation and the structure of colleges of choice have a direct impact on student performance. This causal model is an attempt to understand a more comprehensive pattern of influences on socialization, learning, and cognitive development.

While Tinto’s integration model provides a foundation for understanding why students depart, Seidman’s (2012) retention formula provides institutions with a method for achieving retention goals. Seidman’s formula for retention is early identification plus early, intensive, and continuous intervention. Seidman (2012) argues that colleges and universities need to have systems in place to identify and assessment student skill levels at the time of application. This allows educated decisions about college readiness and the best placement for each student to remediate a specific skill area where they might be deficient. In this way, profiles of unsuccessful students can be developed so that when a student with similar characteristics applies in the future, the college can anticipate difficulties and take more direct action to help overcome them.

Seidman (2012) stresses the importance of interventions. Interventions must be early, preferably as soon as challenges are identified, perhaps even while they are still in high school and in the summer months leading up to their first term. For example, admission for some students can be held contingent upon the completion of a particular course or until they have overcome a particular deficiency. Interventions must also be intensive (Morrison & Silverman, 2012; Seidman, 2012). It has to be strong enough to create the desired change in skills, academic performance, or behavior. Finally, interventions must be continuous, persisting until the change is complete (Morrison & Silverman, 2012; Seidman, 2012). There should be no time limits on intervention programs. Institutions should be forming relationships with all of their students, but there should be a greater commitment to the relationship between the college and any student who is at-risk of departing (Habley et al., 2012; Kuh, Kinzie, Schuh, & Whitt, 2005; Seidman, 2012; Stage & Hossler, 2000).

Habley et al. (2012) provides an alternative integrated retention model, outlining eight overarching causes for attrition: institutional mismatch, irrelevance/relevance, boredom/academic stimulation, level of concern for each student, E x A to R ratio, health concerns, personal problems, and financial needs. Habley et al. (2012) explains the first five of these causes are interrelated continuums that can be dramatically influenced by institutional interventions. The E x A to R ratio is described as the degree to which students effort and abilities are fairly rewarded. The resulting ratio can also be described as the student’s return on investment. According to Habley et al. (2012), the last three of the causes for attrition are common reasons for leaving college that cannot always be influenced by institutional interventions.

**Student Characteristics & Institutional Capacities**

With the large amount of time, attention, and resources dedicated to the college selection process, an assumption is made by many stakeholders that students, with parental guidance and support, will intentionally select the “right” institution for them. Yet, *incongruence* is still a prevailing issue in higher education today (Tinto, 1993). Tinto (1993) defines incongruence as “the mismatch or lack of fit between the needs, interests, and preferences of the individual and those of the institution (p. 50).” Consequently, across the nation, many colleges and universities have formed retention task forces or other committees similarly focused on exploring the data on student persistence and evaluating the specific characteristics of the students that enroll. Astin & Oseguera (2012) performed a longitudinal study of pre-college attributes and institutional influences on degree attainment. The goal was to provide two practical applications: *prediction* and *control*. Prediction is the ability for colleges to estimate the rates for students in various populations to complete degrees, which has substantial value to college officials who are tasked with admitting students or for designing specialized programs for students who may have greater risk to depart. Control is the capacity for institutions to enhance the chances for a student to complete their degree.

Astin & Oseguera (2012) began by examining a wide variety of variables related to prospective students for their predictive power. Several variables were found to have direct and positive influence on retention: parental income level, parental education level, parents alive and living together, gender (female), self-identified as Catholic or Jewish, student initial aspirations and goals, self-rated emotional health, foreign language experience, social integration, quality peer to peer relationships, satisfaction with social life, plan to participate in service to the community, and time spent in extracurricular activities. Some variables, such as standardized test scores, were found to have not as much influence as previously thought. Some variables were found to have influence for different ethnic groups, but not for others. For example, SAT scores and high school grades were stronger predictors for white students, but showed little difference for black students. Hedonistic activities such as frequently smoking and drinking beer were shown to negatively affect a student’s chances of persistence. Parker, Hogan, Eastabrook, Oke, & Wood (2006), examined the relationship between emotional intelligence and student retention and found that students who had higher quotients had more success in transitioning from high school to college. The College Learning Effectiveness Inventory (CLEI) was built specifically to identify personal and circumstantial factors that could influence student success (Kim, Newton, Downey, & Benton, 2010).

Nora & Crisp (2012) synthesize the research finding of attrition beyond the first year and find that seven factors are found to increase the odds of student departure: demographic characteristics, financial assistance, pre-college behaviors/experiences, social and academic experiences, environmental pull factors, student commitment, and institutional characteristics. Demographic characteristics include gender, ethnicity, parental education, socioeconomic status, student/parent educational goals, delayed enrollment, transfer status, and size of the student’s hometown. According to Nora & Crisp (2012), environmental *pull factors* are described as factors that can pull students away from engaging in their educational experience. Pull factors include, living off campus, working more than twenty hours per week, and enrolling part-time.

While it is important to focus on each incoming student’s characteristics to predict how they will succeed in college, it is equally important to review each institution’s capacity to support student growth and learning. For example, Hartley (2012) estimates that 30% of all college students enter with psychological problems and studied how the ability of all students to cope with stressors, resilience, can positively contribute to their success in college. A student’s inability to manage stress compounds pre-existing psychological problems and often leads to their departure. Institutions that can develop mental health support policies and practices to bolster resilience can better support student success (Hartley, 2012). Beck & Davidson (2001) call attention to the need for the development of early warning systems to address psychological problems. Within the environment of distance education, Deimann & Bastiaens (2010) study how colleges can expand and strengthen the concept of *volition*. Volition is described as a student’s ability to avoid distractions and stay focused on educational tasks.

Tinto (1993) began this institution-focused conversation by identifying three basic principles that apply to retention. Effective retention programs require institutional commitment to student welfare with less emphasis on formal programs and more on underlying attention to students and how they are active, a commitment to educating all students without leaving learning to chance, and “the development of supportive social and educational communities in which all students are integrated as competent members (Tinto, 1993, p. 147).”

According to Astin & Oseguera (2012) college and university type also had an effect. Institutions that invested a higher percentage of its resources in student services experienced higher retention rates. Similarly, colleges that enrolled a higher percentage of graduate students, student majoring in the physical sciences, and Catholics also had more success. Whereas, colleges that had larger overall enrollments, higher percentages of males, and greater numbers of commuter students had lower retention rates. Webster & Showers (2011) conclude that colleges and universities that give personal attention to specific student needs, problems, and concerns have the most substantial effect on persistence and advocate for institutions to provide concentrated programs designed to provide individualized services.

Kuh, et. al (2005) worked to define a set of characteristics for a group of twenty colleges and universities that had higher than predicted retention rates. They labeled these colleges as Documenting Effective Educational Practice (DEEP) schools. These colleges were not necessarily the most engaging or have the highest graduation rates, but these schools experienced healthy retention because they excelled in both areas by adding value to their student’s experiences. Kuh, et. al (2005) observed that DEEP colleges accomplished this by first cultivating an assessment and data-driven, improvement-oriented ethos. Next, they set and funded priorities that were consistent with their living mission and educational purposes and created effective learning environments and clear pathways for student success. Finally, DEEP schools had an unshakeable focus on student learning and shared responsibility for educational quality (Kuh et al., 2005).

Thus, the literature comes full circle. Chickering & Gamson (1991) discussed applications of their seven principles of good practice in higher education. These principles increase student learning and suggest that effective instruction encourages contact between faculty and students, develops reciprocity and collaboration between students, encourages active learning, gives prompt feedback, emphasizes time on task, communicates high expectations, and respects diverse talents and ways of learning.

As Morrison & Silverman (2012) wrote, “No single intervention strategy will adequately prevent all students from departing college (p. 77).” Different types of institutions require different types of retention policies and programs. Valentine et al. (2011) systematically reviewed college retention programs and suggests that student participants earn small, but important gains on short-term retention rates and grades earned. Specifically, programs and interventions designed to help at-risk college students were relatively more intensive and more effective (Valentine et al., 2011). To ensure even greater success levels, colleges can augment their retention programs by adopting effective practices as modeled by the DEEP schools, providing academic challenge, active and collaborative learning techniques, high levels of student and faculty interaction, and high quality peer to peer relationships (Kuh et al., 2005).

Institutions with successful retention rates are assertive to intervene when a student is struggling. Tinto (2012) outlines a framework for institutional action necessary to improve a college’s ability to promote student success and improve retention rates. The framework states that institutions need to set good expectations for student success, provide adequate support structures that enable students to navigate the environment successfully, invest in assessment to pinpoint aspects that need improvement, and develop ways to increase student involvement. Seidman (2012) recommends implementing his retention formula by taking such actions as facilitating a smooth transition and post-enrollment orientation to college life, providing advice and counsel that helps student identify and commit to a program of study, assessing entry level academic skills that result in placement of courses consistent with demonstrated academic skills and providing learning support for those who are at risk, and focusing on student learning as an active, collaborative, and challenging process.

**Impacts of Higher Education on Individuals and Society**

Nineteenth century American educational reformer Horace Mann once said that education was the great equalizer of the conditions of men, the balance wheel of social machinery, implying that no matter what socioeconomic class a person was born into, that person could acquire the skills necessary to success through education (Mann, 1868). Today, educational prognosticators, still refer back to this concept (Seidman, 2012). Education is considered a bridge to a better life offering economic gains, possibilities and elevating the status of families from one generation to the next. Thus, federal and state governments and a range of public and private organizations have invested heavily in programs to increase access to higher education and spend time and energy legislating and mandate accessibility for all citizens (Ishitani, 2006; Valentine et al., 2009).

There are a number of reasons why nations benefit from college educated citizens. College education advances society and prepares citizens for making substantive contributions and innovative discoveries (Seidman, 2012). It increases the ability for a country to be viable in the global marketplace. “A nation that values and promotes the educational attainment of its citizens is a nation that is concerned with its ability to compete in the global economy (Seidman, 2012).” Tinto (2012) concurs, “A college educated workforce is critical to our nation’s ability to remain competitive (p. 2).”

The benefits of higher education that extend to individuals and society are outlined in a comprehensive report, *Education Pays*, prepared by the College Board (Baum, Ma, & Payea, 2010). The authors show that economically, the public earns many benefits. There are increased tax revenues and overall consumption patterns. There is greater workforce flexibility and productivity amongst populations with higher percentages of college graduates. There is evidence that there is overall less reliance on the government for financial support as there are lower unemployment rates and less participation in public assistance programs (Baum et al., 2010). Because of the amount of consumption of goods and services, college and universities make a positive impact on the economy.

For individuals who earn a degree, median and lifetime earnings are substantially increased. “A typical bachelor’s degree recipient can expect to earn about 66% more during a 40-year working life than the typical high school graduate earns over the same period” (Baum et al., 2010). College graduates not only have higher salaries, they qualify for higher benefit packages and more favorable health insurance coverage. Baum et al. (2010) also report that college graduates collectively enjoy higher saving levels, improved working conditions, and greater personal satisfaction with their work.

Economically, Tinto (2012) suggests what matters is not simply attending college, but completing a four-year degree. Starting and stopping yields little earnings benefits. According to Baum et al. (2010), students who go to college and earn a four year degree earn more than one million dollars more in their lifetime than who do not attend college. The data show the gap is increasing. The gap in lifetime earnings between those who complete high school and do not attend college is much closer to those who complete some courses and drop out. Valentine et al. (2009) came to the same conclusions, “mere postsecondary enrollment is insufficient (p.8).”

“The evidence is compelling that postsecondary education not only provides valued credentials, but also increases skills and knowledge and changes the way people approach their lives (Baum et al., 2010).” Baum et al. report how the benefits to a college degree extend past the attainment of increased personal status to an improved health and life expectancy and an improved quality of life for children. College educated citizens are more prone to pursue activities and promote lifelong learning, are generally better at consumer decision-making, and enjoy more hobbies and leisure activities (Baum et al., 2010).

In addition to social and economic benefits for the individual student, earning a bachelor’s degree has proven to have many public social benefits as well (Baum et al., 2010; Valentine et al., 2009). Habley et al. (2012) states populations of college graduates have reduced crime and incarceration rates. There is more social cohesion and appreciation for diversity amongst the population, as “those with more than a high school education have significantly more trust in social institutions (Habley et al., 2012).” McMahon (2009) discusses how there are increased levels of environmental awareness, charitable giving and community service activities amongst college graduates than the rest of the population. College-educated citizens vote more, make more substantial contributions to democracy and governance, and have an improved ability to adapt to and use technology (McMahon, 2009). McMahon (2009) found that college graduates also have smaller families and better prepare their own children for school environment. “Unfortunately, postsecondary education enrollment and completion patterns do not reflect this ideal (Valentine, et al., 2009, p. 7).”

**Implications for Future Study**

While it is well documented that (a) there are significant personal and societal benefits from attaining a college degree, (b) certain student, institutional, and environmental factors contribute to increased student retention rates, and (c) institutional interventions that contribute to student success can be pinpointed, overall retention rates have remained stagnant (Habley et al., 2012). Berger, Ramirez, & Lyons (2012) concur, “Retention rates remain lower than most campus officials would like on a majority of campuses across the country (p. 28).” Tinto (2007) admits that most institutions have not been able to translate theory and knowledge regarding retention into practices or actions that have produced measureable gains. This leaves much room for future study.

Tinto (2007) outlines three major areas of concerns that call for future exploration and study. First, Tinto argues that the complexity of institutions of higher education has provided significant challenges in operationalizing the knowledge of why students leave into practical interventions to prevent them from doing so. Academic and social engagement matters, but it can look like very different things within different campus cultures with diverse student populations. While there has been an expansion of programs to enrich the freshman year experience, the bulk of retention work has fallen upon student affairs professionals. “Faculty were largely absent (Tinto, 2007).” Thus, Tinto calls for a model for action that provides more clear guidelines for the development of effective programs and practice inside the context of the classroom as well as outside the classroom environment. These guidelines could inform faculty and staff development activities and other resource allocations.

Second, Tinto (2007) asserts that once effective guidelines, programs, and practices can be identified, they must be implemented and that implementation should be tested and studied for effectiveness. Tinto discusses how often retention strategies and ideas are not implemented fully or not allowed to endure. Institutions must prioritize student retention and commit the necessary resources, even reward systems, to address departure issues (Tinto, 2007). Valentine et al., (2011) systematically reviewed college retention programs and are optimistic about the benefits and short-term effects of these programs to positively influence at-risk students to stay in college; however, they were skeptical of many of the designs of the research they reviewed and noted that there were not enough details in the reporting that could allow interpretations and assessments of different interventions methods. Therefore, the studies were too ambiguous to have comparative value, and had too many gaps for understanding the effectiveness of specific programs. Morrison & Silverman (2012) also see a need for individual institutions to seek a broader, more rigorous understanding for how intervention strategies that produce results actually work, “each college must create and implement its own program uniquely designed to meet its own available resources and institutional purposes (p.77).”

Finally, Tinto (2007) suggests that more work needs to be done to understand how economic stratification affects retention and what types of policies and programs will help promote a higher retention rate for students with lower socioeconomic backgrounds. This matters because “how one goes to college influences the likelihood of college completion (Tinto, 2007).” Berger, Ramirez, & Lyons (2012) call for more study within specific underrepresented groups in different institutional contexts. A closer look at group similarity and differences as well as individual and collective student characteristics would help institutions understand how mainstream retention models can be applied to diverse sub-populations.

As an alternative mode of instruction, on-line and distance learning educational programs need to be examined for how engagement and models of retention might differ from traditional academic experiences. Nora & Snyder (2009) investigate the impact of technology on the teaching and learning process and argue there is a wide gap in the literature devoted to the link between technology and various performance and persistence indicators. They predict that the urgency to produce better retention rates may encourage researchers to turn to investigating the benefits and drawbacks for technological solutions to traditional retention problems.

Retention is a prevailing issue on college campuses today and there is much at stake. Institutions can no longer blame the student and students can no longer blame the institutions for the failure to complete a degree. However, colleges and universities can focus knowledge on retention into implementing appropriate policies, programs and practices that are designed to engage each of its students in the academic and social life of the campus (Tinto, 2012).

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Hi Jeromy,

You have done an excellent job. Thanks.

A few thoughts.

1. I wonder if the section on the economic benefits to graduates could have served as a nice introduction, establishing the importance of the rest of the discussion.
2. Another approach to the introduction, which is barely in the paper at all, would be to use statistics on attrition rates. I am sure they are out there and I kept thinking about the real numbers as I was reading various sections of the paper.
3. I was surprised not to see a discussion of the high cost to the institution of attrition. It is one of the main reasons that institutions are so anxious to keep attrition rates low.
4. You mentioned retention in online programs once (volition). I know this is a separate topic but it is current and important. Much has been written on this topic and I wondered if data from those programs showed much difference from “brick and mortar” programs.

A few style issues:

1. Think carefully before you include direct quotations. Most of the ones you included could have been easily paraphrased.
2. If you do include direct quotations, there must ALWAYS be a page number citation.
3. For direct quotations with a reference at the end (including page number citations), the quote marks go before the citation.
4. Throughout the paper you have made pronoun antecedent agreement errors. It is just something to which you have to pay attention.
5. Overall there a number of minor grammar errors. I would suggest you take advantage of having a reader for your writing. I never submit anything without having it read by others—many times.
6. I have never seen a perfect APA reference list. I admit I went through yours fairly quickly but I found no errors. Nice.
7. Also, you have selected excellent work to review. There is almost no *fluff* in the reference list.

I enjoyed reading this. Thanks again,

Dr. Carroll