Understanding and Improving Community College Student Retention: A Review with Recommendations for Developing Institutional Attachment

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Higher education has established a historical base of research related to college student retention. This essay examines research especially focused on the retention of community college students who have been underrepresented in the literature (Fong et al., 2017). Retention equates to success. The essay reviews developmental instruction, personality characteristics, faculty and support staff challenges, financial support, intervention, and institutional attachment. Recommendations focus on developing institutional attachment, as it represents the single strongest predictor of retention (Crede & Niehorster, 2012). This includes understanding the role of developmental instruction, the paradoxical faculty/staff-student relationship, embedding retention efforts within classes, developing a specific intervention for minority and working-class students, addressing finances, and gaining a better understanding of attrition. Students need to view college as an experience rather than as a collection of courses.

Institutions of higher education have established an emphatic history of research concerned with college student success (Tinto, 1988; Tinto, 2012). Crede and Niehorster (2012) conducted a meta-analysis that examined 100 years of scholarship concerned with college student retention. As a population, community college students have been underrepresented in college student retention research literature (Fong et al., 2017). In the end, institutional attachment is the single strongest link to grades and retention (Crede & Niehorster, 2012). The present article examines research related to college student attrition and retention, emphasizing the community college experience, and then offers recommendations for instructional innovation and institutional best practices directed at developing institutional attachment.

Prior to reviewing specific scholarship, a few key terms of general knowledge in retention literature will be defined. Conceptually, reten-

tion enjoys a different connotation in higher education as compared to K–12 education. In higher education, retention equates to success. Retention measures progress toward degree completion and is commonly operationalized as the percentage of students returning to study at the same institution for a second year. Persistence, a subset of retention, commonly refers to course completion or moving from one semester to the next semester. Generally, attrition amounts to leaving the institution. It is a measure of the student body that does not return for a second year of study at the institution of origin. Achievement is commonly defined using grade point average (GPA) and sometimes defined using course grades (Fong et al., 2017). Attachment involves identifying with the institution; it equates to a sense of belonging. Institutional attachment amounts to a perception wherein the students envision themselves as being a part of the new community. Tinto (1988) argues that students move from a separation stage (leaving high school) to a transition stage wherein they become part of the new establishment (college).

A central issue related to all the above involves understanding the goal. Community colleges are often scrutinized for low retention, persistence, and graduation rates (Chronicle of Higher Education, 2020). Most institutions would like to improve those outcomes. However, expecting a 100% retention rate or graduation rate is not a realistic or even desirable goal. Reasons behind attrition support this view and deserve examination.

Understanding College Student Attrition

Some students leave college due to a lack of academic performance. One key mission of community colleges involves admitting students who have marginal academic skills. Community colleges are institutions of opportunity. Many students are placed in developmental courses and first-year courses designed to create a pathway for success (Pruett & Absher, 2015). Indeed, by definition, the student's academic history brings the prospect of success into question. Research correlations between retention and developmental coursework make sense; that is, succeeding in developmental coursework points to persistence while failing developmental coursework points to attrition (Pruett & Absher, 2015; Watson & Chen, 2019).

Yet academic skills alone do not compute to degree completion. Maturity, for example, is developmental (Hudson & Fraley, 2015). It would be naive to expect all students to be equally mature and ready to meet the responsibilities needed to succeed in college. A positive adjustment requires a new level of managing independence and self-responsibility. Adult students need to attend class, complete assignments, and meet other life demands.

Lack of academic performance and maturity fail to explain all attrition (O'Keefe, 2013; Pruett & Absher, 2015; Watson & Chen, 2019; Xu & Webber, 2016). Some students leave college because a credible employment opportunity arises. Others struggle financially, often dropping to part-time status in exchange for full-time employment; part-time status then often leads to attrition (Yu, 2017). Some students graduate high school and enroll in college, truthfully, as a response to societal pressure (family and friends) rather than for a definitive academic purpose. After a brief experience, they come to realize that college is not their goal. Family obligations sometimes lead to departure from college, and transferring is a common motive. For example, a student who succeeds at the community college only to transfer for their second year technically constitutes as attrition for the community college. Furthermore, working-class students might choose to drop out because they struggle to make meaningful connections with faculty (Grice-Longwell & Grice-Longwell, 2007–2008).

It is also important to remember that community colleges serve a wider audience than traditional college-bound students. Community members enroll in classes for specific purposes (e.g., to learn how to play a musical instrument, to draw or paint, to develop computer literacy, or to study a second language) without the intention of degree completion. Others take a course at the direction of an employer or enter at a nontraditional age, having been displaced from employment or from other circumstances.

To summarize, attrition reasons in combination explain why a 100% retention rate is not realistic or practical. The institution's goal should be one of continuous improvement with respect to persistence, retention, and program completion. Improving retention requires understanding factors related to retention.

College Student Retention Research

While college student retention research has largely been conducted at four-year institutions, some research has focused on community colleges. Fong et al. (2017) conducted a meta-analysis on research among community college students, noting that community colleges enroll a higher percentage of minority students and that community college students are underrepresented in the national data pool of retention research. Their analysis included 174 studies completed between 1971 and 2014 (over 75% of which were dissertations), accounting for nearly 80,000 students. Persistence was largely defined as returning to college for the next semester (rather than program completion), and achievement was typically measured using course grades and grade point averages (Fong et al., 2017).

Overall, Fong et al. (2017) noted that community college students and university college students share many similarities. Correlations to retention were weakly significant (below 0.30). Self-perception and student motivation correlated to persistence. Likewise, self-perception, student motivation, attributions, and self-regulation were correlated to achievement. No significant gender differences emerged. Minority students reported higher levels of anxiety about college success than other groups but no differences in other factors. Black males reported the highest levels of anxiety. For all students, anxiety appears to cut two ways: some students use it as a motivator to perform while others find it demotivating. In the end, Fong et al. (2017) found motivation and self-perception to be the strongest predictors of achievement and persistence for community college students.

Another meta-analysis on research literature concerned with the adjustment to college examined 700 studies representing 237 samples that had been conducted over the last century at two-year and four-year institutions (Crede & Niehorster, 2012). Six personality characteristics were correlated to success: conscientiousness, agreeableness, extraversion, positive self-esteem, self-efficiency, and an internal locus of control. Crede and Niehorster (2012) found that students with problem-solving coping skills tended to report a positive adjustment while students with emotional coping skills reported a poor adjustment. Furthermore, these authors found institutional, faculty, and parental support to be moderately correlated to a positive adjustment. Students look to faculty for academic support and to peers for social support. College grade point average was found to be the strongest single link to retention and, most importantly, institutional attachment was the strongest link to grades and retention.

Support for the assertion that community college students share similarities with students who attend four-year institutions (Fong et al., 2017) can be found in research by D'Amico et al. (2014) who conducted a longitudinal study that employed Tinto's (1988) model of institutional departure by examining three cohorts (years) of community college students. Those who experienced academic success at the community college realized the same level of success when transferring to the four-year institution. Transfer grade point average (GPA) was a significant predictor of the four-year GPA while persistence was not affected by transfer GPA. Most encouraging, students who succeeded academically at a two-year institution were likely to succeed at a four-year institution. Perceived academic fit was the most consistent outcome predictor. For community college students, the strongest source of institutional attachment occurs in the classroom. The challenge for the community college transfer students at

the four-year institution was more social than academic. Socio-academic integration was not related to academic performance but was related to social fit (peer group integration). On the whole, community college transfer students arrive with the academic skills needed to succeed at the four-year institution; the primary challenge involves social attachment to the new environment (D'Amico et al., 2014).

Many approaches to understanding college student retention and persistence center on academic engagement and on social engagement (O'Keefe, 2013; Morrow & Ackerman, 2012). A few studies have dwelled specifically on community college students (Fong et al., 2018; Grice-Longwell & Grice-Longwell, 2007-2008; Hafer et al., 2021; Watson & Chen, 2019; Yu, 2017). Logically, GPA serves as a predictor variable. Achieving that is one goal. Fong et al. (2018) studied community college students by applying goal orientation theory to academic persistence and retention: performance (ego involvement), mastery (learning/skill), approach (pursuit of outcome), and avoidance. Moderation was correlated to success; students who demonstrated medium levels (a balance) of performance, mastery, and approach goals were most likely to persist and be retained. Surprisingly, students who were high in all goals were least adaptive (lowest GPA and retention rate). Standing alone, mastery goals were not enough to predict retention. Maladaptive students were low in mastery and high in avoidance.

Early intervention is central to success (Pruett & Absher, 2015; Tinto, 2012) and should be targeted rather than employing a one-size-fits-all approach (Fong et al., 2018). Social belonging is salient to academic fit and is more challenging for minority students (Xu & Webber, 2016) and for working-class students (Grice-Longwell & Grice-Longwell, 2007-2008; Soria & Stebleton, 2013). Walton and Cohen (2011) found significant success with a belongingness intervention for African American students at a four-year institution. Minority students frequently experience more uncertainty with respect to institutional belonging. Walton and Cohen (2011) had veteran university students write narratives about their experience in a way that framed adversity and common aspects of being new as being normal and temporary. After reading these peer-authored essays, incoming students were then asked to compose their own essays. This process was repeated over three years for each student cohort. The GPA trajectory for African American students in the treatment group (compared to a control group) was effective over a three-year period and the impact was striking; the achievement gap was cut by 79% and tripled the African American student representation in the top 25% of the graduat-

ing class. Peer support was key to retention and academic success (Walton & Cohen, 2011).

Understanding the role between financial support and retention is complex. Yu (2017) did not find a relationship between tuition and fees. Pruett and Absher (2015) found a positive relationship with student loans. Watson and Chen (2019) identified a positive relationship with need-based government financial support for underserved students. Wills et al. (2018) found a positive relationship with grants and merit-based scholarships at a four-year institution. There is evidence to suggest that a lack of financing explains attrition at community colleges. For instance, financial concerns (student worry) have been associated with lower retention (Xu & Webber, 2016) and with shifting from full-time to part-time status (Yu, 2017).

Paying for college falls short of ensuring success. Mertes and Jankowiak (2016) recognized attendance attenuation after Pell Grant disbursements were completed. Most concerning, Li (2019) revealed a negative consequence of state governments using funding as a retention performance metric at four-year institutions; the funding metric encouraged college administrators to become more selective in recruiting students who are more likely to succeed, curtailing opportunity for marginal students. Given open admission policies, this would not bode well for community colleges.

Recommendations and Best Practices

Being a new student is challenging; institutional attachment is the single strongest link to grades and retention (Crede & Niehorster, 2012; Morrow & Ackerman, 2012). Attachment needs to occur academically and socially. While community college students share many similarities with students at four-year institutions (Fong et al., 2017), one difference is that community college students tend to make their strongest connection in the classroom (D'Amico et al., 2014; Droogsma-Musoba & Nicholas, 2020). From an academic standpoint, students who succeed at community colleges have the skills to succeed when transferring to a four-year school (D'Amico et al., 2014; Droogsma-Musoba & Nicholas, 2020). Students need to envision college as an experience rather than a collection of classes. As institutional attachment is a multifaceted phenomenon, recommendations on six topics will be addressed: developmental coursework, personality traits, faculty and staff support, embedded retention and early intervention, finances, and attrition.

First and foremost, academic skills (reading, writing, and arithmetic) are required for college success. There is not a substitute for academic skills. This finding should be reassuring, as it serves as a quality control indicator for higher education. Lowering expectations fails to improve retention (Tinto, 2012). Developmental coursework is necessary for students with marginal college-level academic skills. Attrition is associated with poor skills; retention and persistence are associated with skill development (Pruett & Absher, 2015; Watson & Chen, 2019).

Accordingly, students placed in developmental courses are, by definition, likely to have difficulty succeeding in college. Negative retention research correlations function to validate these placements (Pruett & Absher, 2015; Watson & Chen, 2019). By design, developmental coursework creates an opportunity to succeed. It would be naive to expect that all students who enroll in developmental coursework will realize equal outcomes. Providing opportunity will not always result in success. While community colleges should continue to innovate and monitor the progress of students enrolled in developmental coursework, program expectations should be tempered. Progress should be monitored without expecting 100% success. Baier et al. (2019) found that wraparound peer-based learning communities were effective for students in developmental coursework at a four-year institution. Successful peers guided students in study sessions, serving to form a support network. This strategy might function well in a community college environment as students look to make connections in the classroom. Colleges need to continue developing innovative approaches and investing institutional resources in developmental coursework. Is the pathway working? How can it be improved? Do students form institutional attachment?

Second, research offers a moderately clear profile of a successful student based on personality characteristics. Numerous studies have associated personality variables concerned with self-perception, self-esteem, internal attribution, conscientiousness, extraversion, and self-regulation/efficacy with retention and achievement (Crede & Niehorster, 2012; Fong et al., 2017). Traits are similar for students at both four-year and two-year institutions.

The potential of volitional (personal choice) personality change is an issue of debate in psychology. Generally, psychologists agree that personality traits are developmental and that traits like agreeableness and conscientiousness emerge with age and maturity (Hudson & Fraley, 2015). Some evidence supporting volitional change exists, although there is not a clear demarcation between the desire to change and the natural

developmental process of change (Hudson & Fraley, 2015). Successful students demonstrate self-directedness, agreeableness, and conscientiousness (Crede & Niehorster, 2012). Can these traits be taught and learned? Should institutions invest in these efforts? Community colleges should offer opportunities for volitional change in the form of workshops or elective coursework.

The third recommendation concerns understanding the role of the paradoxical relationship between student retention and the role of faculty and support staff. There appears to be a moderate relationship between student retention and faculty/support staff connectivity (Crede & Niehorster, 2012; Fong et al., 2017; Morrow & Ackerman, 2012). Being the best possible teacher, the greatest counselor, librarian, tutor, director, or similar professional role, does not guarantee a positive student adjustment. The connection is not nearly as strong as desired or expected. However, to complete the paradox, students will not succeed without those connections. More succinctly, faculty and staff do not make students succeed; at the same time, students cannot succeed without faculty and staff. Strikingly, parental influence parallels this relationship (Love & Thomas, 2014). That is, parental support positions a student to succeed, but success or failure ultimately comes down to individual student actions. Likewise, faculty and support staff play a vital role in success. Faculty and staff need to understand that their role is to position a student to succeed and that success or failure, ultimately, is a student responsibility. Since community college students make their strongest connection in the classroom, faculty are well positioned to foster institutional attachment and encourage students to envision college as an experience.

This leads to the fourth recommendation: embedded retention and early intervention targeted toward fostering institutional attachment. Joyce and Morelli-White (2015) articulated an interdisciplinary approach in teaching community college students by incorporating critical thinking and cooperative learning communities within composition courses. This concept deserves expansion. To date, much of the research has dwelled on constructing services and environments designed to promote academic and social engagement. Embedding retention means talking about and integrating it within classes. For instance, instructors commonly ask students to introduce themselves on the first day of class. Obviously, each student chose to attend the given institution. Instructors could ask each student to share one or two reasons why they chose to attend this institution or to share a personal story about joining the institution (e.g., a story from their first-year student orientation). This, in effect, encourages verbal institutional attachment and may help students

to identify with each other (peer support). Faculty should also take time to communicate about support services, emphasizing the message that college is an experience rather than a collection of classes: successful students make use of some but not all services.

Other retention and persistence knowledge could be embedded within some existing courses. A course in general psychology, for instance, could easily identify college success personality characteristics as a part of the unit on personality theory. Courses in related disciplines could do something similar (e.g., education, communication, sociology). Learning about it in class will raise awareness. As mentioned above, institutions would be well served to offer optional self-help workshops since volitional change is rooted in self-motivation and since some students already exhibit these traits (not needing the training).

It is one thing for colleges to make support services available to students (tutoring, library services, advising, multicultural centers, childcare, recreation) and another thing to have students utilize those services. Getting students to use these services promotes institutional attachment. Again, since community college students make their connection in the classroom, faculty should embed retention and persistence assignments that require an interface with student services. Introductory first-year student classes in composition, communication, and sociology, for example, could require written reports or presentations focused on learning about these services. Clearly, this would require coordination with support staff. Specific assignment expectations might entail interviews with support staff and/or a visit to the service. Similar strategies could be applied to other institutional organizations (e.g., the childcare center, recreation director, student clubs, or even some organizational student leaders). Political science courses could have students read or write about legislative funding for students, connecting to persistence and retention outcomes. Math teachers could generate content that uses institutional retention and persistence data as context. Retention and persistence need to become an ongoing community-based conversation with the student body.

Institutions should also consider embedding a specific intervention directed to all students knowing that it would especially benefit minority students and working-class students. To review, the attachment challenge for these students tends to be more social than academic (Soria & Stebleton, 2013; Xu & Webber, 2016). They frequently interpret institutional messages as being directed at their person rather than being temporary and simply a function of being a newcomer. A lesson should be learned from Walton and Cohen (2011) where veteran students are asked to com-

pose essays focused on how to face challenges and to succeed. Those essays then get read by the next group of incoming students who then compose their own essays. The cycle continues for each incoming class. This kind of class activity would articulate a peer-based pathway to success and could easily be part of a first-year composition or humanities course. It is easier to become part of a community when you are asked to assist others in the community.

When it comes to funding, grants and scholarships have been weakly linked to persistence and retention. However, funding alone falls short of a guaranteed outcome. Attempts to make retention an institutional funding metric work against a core community college mission: opportunity-based admission standards. As students worry about funding (Xu & Webber, 2016), financial advising to students must continue. Funding based on individual student performance (merit scholarships and progress-based grant funding) offers promise. Work by Ortagus et al. (2021) revealed that a text message campaign coupled with a three-credit course tuition incentive increased the return rate of nontraditional community college dropouts who had earned over 30 credits of coursework by 21%.

Finally, in terms of recommendations, what we know about retention is grounded in research based on perceptions and performance data from students who succeed. To improve retention, we need a deeper understanding of attrition. Limited student access presents a roadblock in attrition research. We might know, for instance, that transcripts were requested to be sent to another institution, but we do not know if that means the student was accepted and then enrolled. Departing students do not have the same motivations to participate in research as those retained. Mertes and Jankowiak (2016) identified seven themes of departed community college students to explain attrition: student motivation, quality issues with college faculty and staff, bureaucracy, finances, class scheduling, life balance, and understanding the challenge of college coursework. Although completed at a four-year institution, Turner and Thompson (2014) found that 80% of first-year students and 50% of non-returning students identified academic/support and counseling as an issue.

Given this circumstance, community college administrators should conduct personalized exit interviews as a form of outreach (e.g., phone conversation, video conference, face to face), attempting to understand each student's case. Lashure et al. (2019) found that a postcard and phone call approach was effective at getting community college students to re-enroll and that attrition was especially likely after the first semester. Specific institutional knowledge of this nature would be valuable with

respect to making changes in student support programs. Furthermore, credible successful transfer data would more accurately reflect the institution's performance. This effort would convey an attachment message from the institution to the student.

Conclusion

College student retention is challenging. Tinto (2012) noted that, nationwide, we have doubled the access from 9 to 20 million students over the previous four decades without achieving any significant gain in retention. While that is true, Tinto's (2012) claim contains an unstated accomplishment that deserves recognition. Institutions of higher education have held ground on student retention even after doubling the number of students who have attempted college over the previous four decades. All told, this means that the sheer number of students who have completed college increased without a decline in retention rates.

Community colleges will continue to play a pivotal role in student persistence and retention. The goal must be realistic: one of continuous improvement, involving strategies that promote institutional attachment. College needs to be understood as an experience rather than as a collection of classes.

Developmental coursework is instrumental for success (Pruett & Absher, 2015; Watson & Chen, 2019). Personality characteristics help to predict retention but do not assure success (Crede & Niehorster, 2012); volitional change deserves exploration (Hudson & Fraley, 2015). Faculty and staff face a paradoxical relationship in achieving that goal. Since community college students connect in the classroom, retention rates stand to be improved through coordinated innovative efforts between faculty and support staff. Certain developmental classes and first-year student classes should embed retention-focused assignments. Additionally, community colleges should consider peer-based interventions that cater to minority and working-class students designed to enhance their interpretation of institutional messages. Community college administrators and researchers can improve retention by developing a better understanding of attrition. Developing institutional attachment requires a campus-wide effort.

Acknowledgment

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