THE APPLICATION OF A FAMILY TREE MODEL IN STUDENT SUCCESS AND RETENTION

Chun-Fang Frank Kuo

Central Michigan University kuo1c@cmich.edu

Lindsay P Meyers

Eastern Virginia Medical School meyerslp@evms.edu

Abstract

Gaps in graduation rates may be related to perceived deficiencies in the learning environment that can lead to student departure. Lower perceptions of social connectedness and satisfaction in relationships with faculty and peers can negatively impact students' learning experiences. Lack of collaboration between student affairs and academic affairs can present challenges for universities in providing comprehensive services to students. The Family Tree Model aims to bridge the gap between the student affairs and academic affairs of the university. The application of a Family Tree Model honors relational integration within higher education. Specifically, the Family Tree Model reinforces social and academic support by means of an infrastructure that provides continuous care for incoming students through graduation.

Keywords: higher education retention, student success, connectedness, belongingness

Introduction

Students enter higher education with their own anticipations of learning experiences. These expectations influence how students connect to their environments and also act as predecessors as students make intellectual decisions, such as choice of major

(Pike, 2006). Notably, the six-year graduation rate for most public institutions in the United States is around 62% (Institutional Retention and Graduation, 2017). Gaps in graduation rates may be related to perceived deficiencies in the college environment including peer interactions, classroom environment, and physical environment that can lead to student departure (Fleming et al., 2005). Specifically, lower perceptions of social connectedness and satisfaction in relationships with faculty and peers can negatively impact students' learning experiences. When students do not feel connected to their student peers and faculty, they tend to withdraw themselves from the academic setting (Lockhart, 2004; Tinto, 1975, 1982, 1988).

Tinto's theory of student departure (Tinto, 1975, 1993, 2005) is the most influential theory in the field of retention research. Different from the previous work by psychologists which focused only on students, Tinto's research identified that the degree to which a student interacts with academic and social communities at a university corresponds with retention. Subsequent research in higher education has continued to explore the impact of interactions in academia. For example, Lane, Martin, and Henson (2015) examined university attachment in a multidimensional comparison of traditional, transfer, and online students. Notably, the authors discovered that students who experienced greater separation from the institution were more likely to identify as having less sense of belongingness and increased perceptions of isolation (Lane et al., 2015).

The crucial point of whether to remain in certain fields of study, or college in general, depends on how closely students relate to their academic surroundings (Bosch, Hester, MacEntee, MacKenzie, Morey, & Nichols, 2008; Buch & Spaulding, 2011; Grillo &

Leist, 2013; Kuh, Gonyea, & Williams, 2005; Peck, 2011; Pike, 2006; Purdie & Rosser, 2011; Schwebel, Walburn, Klyce, & Jerrolds, 2012). Institutions can increase students' sense of belongingness and decrease perceptions of isolation by providing structure for students and faculty to engage in activities outside of the classroom. Although academic advising is essential in students' decision to persist in degree acquisition, students would likely benefit from both formal and informal interactions with faculty in promoting meaningful faculty-student relationships. The greater connection a student has with a faculty member, the better chance that individual has in persisting until graduation (Pascarella & Terenzini, 2005).

Cabrera, Nora, and Castañeda (1993) and Thomas (1990) suggested that institutions incorporate an integrative approach in higher education. The authors identified student social integration, academic integration, goal commitment, and confidence in the quality of the institution as factors that increase the likelihood of student persistence. Overall, students' social and psychological reassurance with their institutions' surroundings, relationships with common groups of students, and a sense of belonging to the institution guarantee acceptance and reassurance (Kuh & Love, 2000). Students with perceptions of acceptance and reassurance are more likely to connect with other students to accomplish common objectives, one of the most important aspects to carry on until graduation (Kuh & Love, 2000).

Additionally, Buyer and Connolly (2006) discussed factors shown to affect retention, such as admission criteria/practices, social support, academic support, caring, and student/faculty involvement. The factors can be categorized into three areas: student

activity engagement, student/faculty interaction, and student/staff involvement. Student activity engagement included the use of cohorts, peer advising, lounges/gathering places, student mailboxes, student clubs, and study groups. Student/faculty interaction included identification of at-risk students, performance feedback, early and frequent contact, student recognition and awards, academic involvement, non-academic involvement, full time student/faculty ratio, availability of program director, and availability of faculty. Student/staff involvement included referral to counseling (as appropriate), tutoring, linked courses, advising structure and availability, course availability, student handbook (program-level), program orientations, type and comprehensiveness of orientations, and intrusive advising. Buyer and Connolly (2006) also identified 11 factors that significantly distinguished between the high and low retention programs. The 11 factors were required orientations, use of cohort model, student participation in program governance, student mailboxes, and early contact with students, student recognition/awards, intrusive advising (not waiting for students to request advising), academic involvement of faculty and students outside of the classroom, active student clubs/organizations, performance feedback outside of courses, and additional admission criteria. Among the 11 factors, there were three related to student activity engagement: use of cohort model, student mailboxes, and active student clubs/organizations, There were four related to student/faculty interaction: student participation in program governance, student recognition/awards, academic involvement of faculty and students outside of the classroom, and performance feedback outside of courses. There were four related to student/staff involvement: required orientations, early contact with students, intrusive advising, and additional

admission criteria. Essentially, a comprehensive model that integrates student activity engagement, student/faculty interaction, and student/staff involvement is the key for student success and retention in higher education.

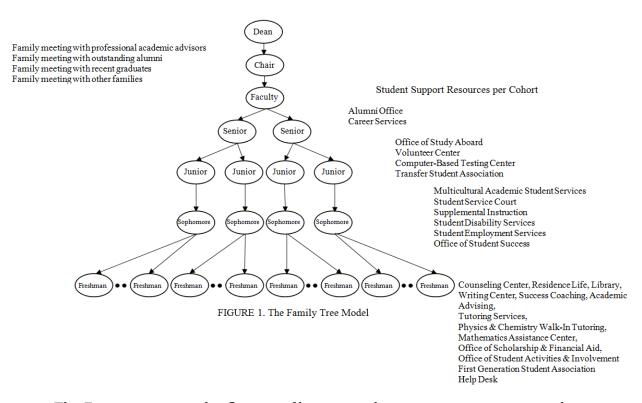
The Family Tree Model as an Approach to Student Retention

An investigation of case studies of effective retention programs at small, private, four-year institutions demonstrated that the most successful efforts by institutions utilized to increase retention and academic performance involved the following:

"...the use of intensive or intervention-based advising programs, learning communities, freshmen orientations or seminars, special programs for high-achieving students, faculty development programs designed to improve teaching and advising, peer mentoring/advising programs, and other programs designed to enhance the relationship between students, the institution, and the broader community" (The Hanover Research Council, 2010, p. 3).

The Hanover Research Council (2010) suggests that intentional programming aimed to promote the holistic development of students through the building of relationships promotes success. Specifically, models that encourage connectedness through a multifaceted approach (i.e., peer-to-peer and faculty-student relationships that are fostered within classroom and program interactions) demonstrate greater effectiveness in promoting student retention. Conversely, lack of collaboration between student affairs and academic affairs can present challenges for universities in providing comprehensive services to students. The Family Tree Model aims to bridge the gap between student affairs and academic affairs of the university.

A Family Tree (see Figure 1) consists of students from each academic year (i.e. freshmen, sophomore, junior, and senior) and a faculty member (who serves as the "parent"). Incoming freshmen are introduced to their Family Tree from their academic departments through the orientation process. The Family Tree aims to connect students immediately with support systems within their departments to aid them in quickly adjusting to their new academic environment. It is recommended that "The Family" meet twice a semester to discuss their concerns, problems, and experiences. Prompt assistance, advising, mentoring, and referrals will be provided during these informal meetings. "The Family" can also communicate with one another through e-mails or social media for continuous support throughout each semester.



The Figure is a general reflection of how most departments can structure their families. Depending on the number of students in each cohort, the families may need to

adopt different compositions. For example, a Family Tree may consist of more juniors than sophomores, or a faculty member may be responsible for leading two families to accommodate student-faculty ratios. A Family Tree can be adjustable due to the number of faculty and students in each cohort. Ultimately, institutions are encouraged to develop Family Trees that attend to their individual program needs. Ideal student to faculty ratio in college is 10:1 to as low as 5:1 compared with the average national student to faculty ratio be 14:1 (Hyman & Jacobs, 2013). Ideally and practically, if one faculty has 1-3 seniors ("children/families") in "The Family Tree" and "each family" includes juniors, sophomores and freshmen depending on the number of students at each cohort, "The Family Tree" would have four generations of students ranging from 4-12 or more.

The Family Tree Model honors relational integration in higher education in bolstering student retention. Specifically, the Family Tree Model integrates social and academic support through an infrastructure that provides continuous care and support for incoming students until they graduate. Unlike programs that focus on first-to-second year retention strategies, this model creates useful short-term and long-term retention, development, and achievement goals.

The Family Tree Model promotes student success and retention by (a) helping students declare or change their majors sooner, (b) strengthening support systems and knowledge of campus resources, and (c) bolstering academic/personal skills that actuates timely graduations. The Family Tree Model can be utilized by other academic and student services programs, such as student teaching, student disability services, undecided students, international students, graduate students, first generation students, transfer

students, the English Language Institute, student-athletes, etc. For example, the coaches and/or assistant coaches can be the parents in the Family Trees of each athletic team. "The Family" would include student athletics from each academic year (i.e. freshmen, sophomore, junior, and senior). Notably, the Family Tree Model suggests a tiered system of support in which each cohort is connected to academic and student services. Rather than overwhelming incoming students with all the numerous resources available to them on campus, the Family Tree Model suggests accessing resources that are relevant to their presenting needs. The faculty "parent" can invite speakers to join "The Family" and share information about their resources. For example, when speakers join "The Family" to discuss resources from academic advising, tutoring services, or the campus writing center, "siblings" can share their personal testimonies and thus, strengthen incoming students' propensity to utilize such resources. The speakers could also be professional academic advisors, outstanding alumni, and recent graduates to share the current trends in the field and their career exposures and development experiences.

An underpinning of the Family Tree Model is its emphasis on students' interactions. The Family Tree Model utilizes a peer advising structure; that is, students benefit from support that they, in turn, provide in helping other students succeed at the institution. Senior peers serve as liaisons and resource persons. Importantly, these relationships have the potential to develop into mentoring relationships, which further contribute to student success and retention. Ward, Thomas, and Disch's (2014) qualitative research in identifying mentor service themes in a holistic, undergraduate peer-mentoring project developed by two faculty members found that mentees experienced enhanced general self-

confidence, personal growth, self-empowerment, and social integration into academic settings. Moreover, peer mentors experienced mentoring as an opportunity for the development and practice of leadership skills, resourcefulness, and developing character (Ward et al.). The Family Tree Model provides mutual benefit to "The Family" members in receiving and providing support. For example, new students benefit from the knowledge of advanced students, whereas advanced students may experience greater motivation to graduate on time as a result of helping freshmen and sophomores.

The Family Tree Model has a similar structure to Ward et al. (2014) mentoring program by providing opportunities for "The Family" to revise strategies, monitor goal progress, and address strengths and weaknesses. "The Family" also has a unique role in providing positive and individualized approaches to support each members' unique developmental needs while strengthening help seeking behaviors in identifying and accessing campus resources. Accordingly, the Family Tree Model has the potential to help students solidify their academic trajectory while providing the support needed to complete their degrees. Faculty and staff members serving as role models to the students in the process would be a rewarding experience because it allows them to make a difference in students' lives.

Academic and scholarly interactions among faculty, staff and students may increase the student academic success. Students who had dropped out from schools had statistically significant lower perceptions of faculty/staff approachability than those students who did not (Pascarella & Terenzini, 2005). Therefore, universities must improve efforts to promote student-faculty contact with these at-risk students. Effective faculty-student

interactions can be structured via Family Trees which will help establish an environment where students feel that faculty members truly care about them as individuals and are invested in their academic process. Hill and Woodward (2013) examined how involvement in learning communities predicted student retention and achievement. A learning community is a group of people who share common academic goals and attitudes, who meet semi-regularly to collaborate on classwork. Such communities have become the template for a cohort-based, interdisciplinary approach to higher education (Goodyear & Lally, 2006). Results indicated that learning communities improved retention rates; that is, students experienced greater investment in their education and learning environment and they were more likely to gain from their experience at the university (Hill & Woodward). Essentially, a Family Tree offers a safe learning community for students to gain insights, develop new skills and expertise, and hone meaningful connections within the campus community.

The Family Tree Model offers faculty informal opportunities to engage with students that may not otherwise occur outside of the classroom. Universities can schedule Family Tree events where programs host informal gatherings that promote student/faculty engagement via structured icebreaker/team building activities. Universities may also provide incentives for faculty/student luncheons (Kuh et al., 2005) or provide funding for food and materials when faculty run Family Tree meetings. Universities demonstrate their investment in the development of meaningful interactions between students and faculty by providing different services/events that serve as forums for engagement. The

students and would reverse the dominant relationship between professors and students.

These types of initiatives would enhance student contact with faculty members.

Additionally, the flexible structure of the Family Tree Model offers creativity for faculty and students to connect and learn. Faculty can use technology to create learning opportunities while also offering quality academic and social experiences for their students. Kuh et al. (2005) concluded that locating spaces for students near faculty offices to meet in small groups and implement programs would help the students become accustomed with campus learning culture. When proposals such as these are consistently implemented, student and faculty interactions will become routine. Jones (2001) suggests that regular mutual interaction between professors and students maximize the effect of services. For example, the incorporation of support services or other accommodating resources into class programs would help students utilize the services and resources to enhance their academic performance. Class visits to diverse service centers on campus or simply encouragement to make frequent use of support services would embolden students to seek help and make the best use of ongoing services.

Conclusion

Essentially, the Family Tree Model provides integration of Student Affairs and Academic Affairs services in supporting student success and retention. The Family Tree Model offers immediate partnership between students and their faculty which increases the propensity for access to peer and faculty mentoring relationships. This partnership also helps students promptly connect with information, resources, and opportunities offered by their departments; thereby, reducing perceptions of isolation. In general, the Family Tree

Model serves as an early and continuous intervention that promotes academic success and retention via community integration of peer, faculty, and program support.

References

- Bosch, W. C., Hester, J. L., MacEntee, V. M., MacKenzie, J. A., Morey, T. M., & Nichols, J. T. (2008). Beyond lip service: An operational definition of "learning centered college." *Innovative Higher Education*, *33*, 83-98.
- Buch, K. & Spaulding, S. (2011). The impact of a psychology learning community on academic success, retention, and student learning outcomes. *Teaching of Psychology*, 38(2), 71–77.
- Buyer, L. S. & Connolly, C. H. (2006). *Identifying the Most Important Factors Affecting Retention*. Retrieved from:

 https://www.researchgate.net/publication/268049078_Identifying_the_Most_Important_Identifying_the_Most_Important_Factors_Affecting_Retention_Factors_Affecting_Retention
- Cabrera, A. F., Nora, A., & Castañeda, M. B. (1993). College persistence: Structural equations modeling test of an integrated model of student retention. *Journal of Higher Education*, 64, 123-139.
- Fleming, W. J. B., Hoard, K., Perkins, E., & Pesta, M. (2005). The College Environment:

 Factors Influencing Student Transition and Their Impact on Academic Advising. *The Mentor: An Academic Advising Journal* (July 13).

Retrieved from: www.psu.edu/dus/mentor/050713bf.htm

- Goodyear, P., De Laat, M., & Lally, V. (2006). Using Pattern Languages to Mediate Theory-Praxis Conversations in Designs for Networked Learning. ALT-J, *Research in Learning Technology*, *14*(3), 211-223.
- Grillo, M. C. & Leist, C. W. (2013). Academic support as a predictor of retention to graduation: new insights on the role of tutoring, learning assistance, and supplemental instruction. *Journal of College Student Retention: Research, Theory and Practice*, 15(3), 387–408.
- Hill, W., & Woodward, L. S. (2013). Examining the impact learning communities have on college of education students on an urban campus. *Research in Brief, 54*(6), 643-648.
- Institutional Retention and Graduation Rates for Undergraduate Students. (2017, April).

 Retrieved from: https://nces.ed.gov/programs/coe/indicator_ctr.asp
- Jacobs, L. F., & Hyman, J. S. (2013). The secrets of college success: Over 800 tips, techniques, and strategies revealed (2nd ed.). San Francisco: Jossey-Bass.
- Jones, C. (2001). The relationship between writing centers and improvement in writing ability: An assessment of the literature. *Education*, 122, 3-20.
- Kuh, G. D., Gonyea, R. M., & Williams, J. M. (2005). What students expect from college and what they get. In T. Miller, B. Bender, J. Schuh, and Associates (Eds.), *Promoting reasonable expectations: Aligning student and institutional views of the college experience* (pp. 34-64). San Francisco, CA: Jossey-Bass.
- Kuh, G. D., & Love, P. G. (2000). A cultural perspective on student departure. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 196-212). Nashville, TN: Vanderbilt University Press.

- Lane, F. C., Martin, G. L., & Henson, R. K. (2015). A multidimensional comparison of traditional, transfer, and online students' university attachment. *Journal of College Student Development*, 56(7), 746-751.
- Lockhart, P. (2004). *An Investigation into the causes of Student Drop Out Behaviour.*Retrieved from: http://www.psy.gla.ac.uk/~steve/localed/docs/lockhart.pdf
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: John Wiley & Sons, Inc.
- Peck, A. (2011). Peer involvement advisors improve first-year student engagement and retention. *About Campus*, 16(3), 22–25.
- Pike, G. R. (2006). Students' personality types, intended majors, and college expectations: Further evidence concerning psychological and sociological interpretations of Holland's theory. *Research in Higher Education, 47*, 801-822.
- Purdie Ii, J. R. & Rosser, V. J. (2011). Examining the academic performance and retention of first-year students in living-learning communities and first-year experience courses. *College Student Affairs Journal, 29*(2), 95–112.
- Schwebel, D. C., Walburn, N. C., Klyce, K., & Jerrolds, K. L. (2012). Efficacy of advising outreach on student retention, academic progress and achievement, and frequency of advising contacts: a longitudinal randomized trial. *NACADA Journal*, *32*(2), 36–43.
- The Hanover Research Council- Academy Research Practice. (2010). *Best Practices in Student Retention*. Retrieved from: http://www.algonquincollege.com/student-success/files/2014/12/Best-Practices-in-Student-Retention.pdf

- Thomas, R. O. (1990). Programs and activities for improved retention. In D. Hossler & J. P. Bean (Eds.), *The strategic management of college enrollments.* San Francisco, CA: Jossey-Bass.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research.

 *Review of Educational Research, 45, 89-125.
- Tinto, V. (1982). Limits of Theory and Practice in Student Attrition. *Journal of Higher Education*, *53*(6), 987-700.
- Tinto, V. (1988). Stages on Student Departure: Reflections on the Longitudinal Character of Student Leaving. *Journal of Higher Education*, *59*(4), 438-455.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Tinto, V. (2005). Moving from theory to action. In A. Seidman (Ed.), *College student retention* (pp. 317-333). Westport: Praeger Publishers.
- Ward, E. G., Thomas, E. E., & Disch, W. B. (2014). Mentor service themes emergent in a holistic, undergraduate peer-mentoring experience. *Journal of College Student Development*, 55(6), 563-579.