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What Happens after Transfer? Engagement and
Success of Transfer Students at UNC Charlotte

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Introduction

With the recent emphasis on college completion in institutions, states, and higher education policy environments (see, e.g., Lee et al., 2011; Reyna, 2010; Shapiro et al., 2012), it is important that colleges and universities work to ensure the success of all incoming student groups. Although the traditional group of interest based on federal reporting mechanisms is first-time, full-time students, it is becoming increasingly important to consider the success of transfer students and those who may "swirl" (Adelman, 1999; de los Santos & Wright, 1990; McCormick, 2003) through higher education. Rather than merely looking at the traditional 150% of time graduation rate, the field is now looking to some of the broader college completion goals, such as the College Board's "55 by 25," which seeks to have at least 55% of those aged 25-34 with a college degree by 2025 (Lee et al., 2011). These significant goals document the need for a more holistic view of student success that includes all populations, including transfers. Documented figures support the importance of transfer. Approximately one-third of first-time students transfer to or enroll at one or more higher education institutions before earning a degree (Hossler et al., 2012). Additionally, 22.4% of students complete their first credential at an institution other than where they started (Shapiro et al., 2012).

Purpose and Conceptual Framework

The purpose of this study was to identify how pre-entry attributes, goals, and institutional experiences related to the early engagement of transfer students attending UNC Charlotte. There is a significant body of literature addressing transfer student outcomes. While some work focuses on the comparison of "native" students with transfers (e.g., Carlan & Byxbe, 2000; Glass & Harrington, 2002), other studies address specific barriers and facilitators of transfer student success (Luo, Williams, Vieweg, 2007; Wang, 2009; Zhai & Newcomb, 2000). The present study expands on previous work related to transfer student integration and success in a way that is specific to UNC Charlotte. As the top destination for transfer students in North Carolina (University of North Carolina General Administration, 2012), UNC Charlotte is an ideal setting for this type of analysis.

Tinto's (1993) Longitudinal Model of Institutional Departure provides a theoretical framework upon which the authors selected variables for the analysis among the theory's key elements (pre-entry attributes, goals, institutional experiences, and integration). Further, this study used pre-entry attributes, goals and commitments, institutional experiences, and perceived early academic and social integration to predict multiple student success outcomes (see Figure 1).
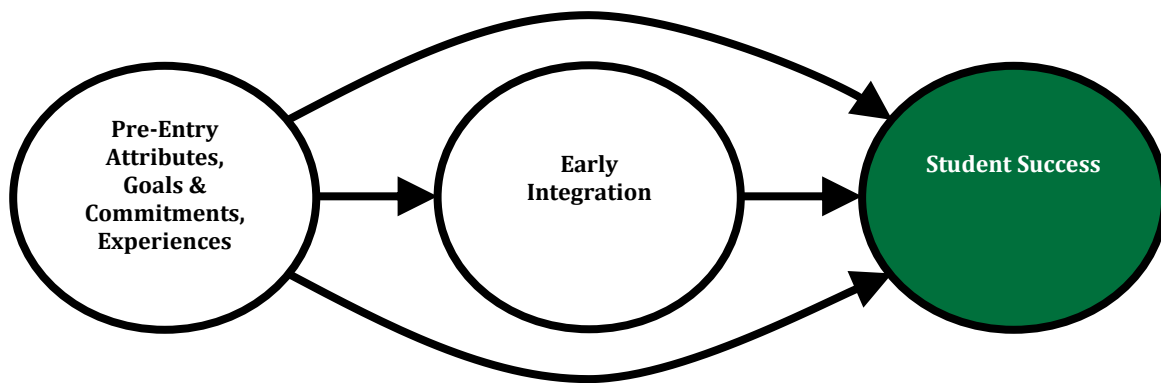

Figure 1: Conceptual Framework

Method

Research Questions

The following research questions guided this study:

1. To what extent are elements from Tinto's (1993) Longitudinal Model of Institutional Departure related to indicators of academic and social fit for transfer students at UNC Charlotte?

2. To what extent are elements from Tinto's (1993) Longitudinal Model of Institutional Departure, including early academic and social integration of transfer students, predicting student outcomes measured by second and third semester enrollment, first and second semester GPA, and first and second semester earned hours ratios at UNC Charlotte?

Sample and Variables

The sample consisted of 1,819 transfer students who completed the Evaluating Academic Success Effectively (EASE) survey administered by UNC Charlotte's Division of Student Affairs, provided data on new transfer students six weeks after arriving at the University in the fall semesters of 2008, 2009, and 2010. The sample consisted of 56% women; 48% of students were 24 years of age or older; 66% of were White and 16% were African American; 69% worked 15 or fewer hours per week; 30% lived greater than 20 miles from campus; 49% had completed a two-year degree; and 56% had been enrolled in another institution within the previous year.

The locally-developed 50+ item survey measures early academic and social integration to aid in targeting interventions and includes topics based on retention research involving academic preparedness, peer group interactions, interactions with faculty/staff, involvement in transition programs, academic goals, self-appraisal of academic performance, social integration, employment, family support, and financial resources (see e.g., Tinto, 1993; Astin, 1996). Survey data were matched with student records to capture first-year outcomes. The specific variables selected for inclusion can be viewed in Table 1.

Data Analysis

First, all variables were examined using both descriptive statistics and frequencies. Second, regression analyses were used to predict early academic and social fit based on the pre-entry attributes, goals and commitments, and institutional experiences. Then, both multiple linear (GPA) and logistic (earned hours, reenrollment) regression analyses were utilized to predict the student success outcomes at the end of the first semester, second semester, and at the one-year enrollment period. Statistical tests were assessed at the α=.05, .01, and .001 levels.

Results

Early Integration

Table 1 displays the predictors for perceived early academic and social fit. The statistically significant positive predictors of academic fit were age (24 or older), gender (male), perceived preparation in math and writing, family support, class participation and participation in a club or sport. For social fit, math preparation, family support, participation in a club or sport, and studying with peers outside of class were all positive predictors, while age (24 or older) was a negative predictor.

Student Outcomes

Table 1 also displays the statistically significant predictors for the six student success outcomes. Transfer GPA, while not significant in predicting early social or academic fit, was a significant predictor of five out of six outcomes. Age (24 or older), a negative predictor of social fit, had a positive impact on GPA and earned hours ratios. Being African American was a negative predictor of GPA and earned hours. It is interesting to note that neither age nor ethnicity was significant in predicting second or third semester retention. Working up to 15 hours was a positive predictor of two outcome variables, as was class participation. Studying with peers outside of class was a positive predictor of both second and third semester enrollment, and aside from transfer GPA, the most significant predictor of student success was perceived early academic fit.

Table 1
Prediction models on early integration and student outcomes

		First Six Weeks		First Semester		Second Semester			Third Semester
		Early Academic Fit	Early Social Fit	Fall GPA	Fall Earned Hours	Spring Enrollment	Spring GPA	Spring Earned Hours	Second Fall Enrollment
	Model R^2	0.09	0.13	0.17	0.13^1	0.07^1	0.16	0.08	0.05^1
Pre-entry Attributes	Transfer GPA			+++	+++		+++	+++	+
	24 or older	++	---	+++	++		+++	++	
	African American			---	---		---	--	
	Male	+	+++						
	First generation			-	--				
	Distance from campus					-			
	Preparation in math	+++	+						
	Preparation in writing	+++							
Goals	Work up to 15 hours			+				+	
	Work more than 15 hours								
	Family support	+++	+++	+					
Institutional Experiences	Participation in class	++		++		+			
	Ever met with faculty member								
	Ever talked with academic advisor						+		
	Participation in club or sport	+++	+++						
	Study with peers outside class		+++		+	+			+
Integration	Early academic fit	NA	NA	+++	+++	+	++		+
	Early social fit	NA	NA	---			-		

^{1}Nagelkerke R^2 + or -, $p<.05$ ++ or --, $p<.01$ +++ or ---, $p<.001$

Discussion

When considering pre-entry attributes as grouped in Tinto's model, transfer GPA and age (24 or older) are the most significant positive predictors of success. As the primary measure of prior academic performance, the transfer GPA finding confirms the notion that successful students at prior institutions will continue that success at UNC Charlotte. It is possible that age (older) signifies a high level of commitment at this stage in one's academic career. Another important finding on age is that older students were more likely to report academic fit and less likely to report social fit than younger students. Also, while perceived preparedness in math and writing were positive predictors of academic fit, and math preparedness predicting social fit, these items were not significant for any of the six academic outcomes. In limited cases, first-generation status and living farther

from campus were negative predictors, but there is no consistent effect pattern on student outcomes from either variable over the 12-month period.

For the next construct, goals, which includes two primary variables that demonstrate commitment to and support in college, working had no impact on perceived social and academic fit, but working up to 15 hours was a positive indicator in predicting first-semester GPA and second semester earned hours ratio. Family support's significance for fit and fall GPA demonstrates the relationship between feeling supported and feeling connected, but neither work nor family support translated into broader influence on academic outcomes. This may also tell us that students eligible for transfer have demonstrated some measure of success in college already and have developed necessary commitment and support systems to continue that success.

The findings on institutional experiences perhaps have the greatest potential to influence college practices, since these are elements that can be influenced in the higher education setting. Among these, studying with peers outside of class provided social connections but was also significant in predicting second- and third-semester retention. In addition, participation in class contributed to academic fit, first-semester GPA, and second-semester retention. This shows us that engaging both formally and informally around class material and assignments is relevant for transfer students, and that academic connections are critical to success. While the items on meeting with faculty and advisors do not show statistical significance across models, the timing of the survey and structure of questions may influence the findings. First, the faculty item involves meeting with a faculty member "about an academic difficulty or other issue." The interpretation of this question may not have provided an opportunity to capture data on all faculty meetings. Second, at only six weeks into the semester, many students would not have taken an opportunity to meet with an academic advisor about scheduling for next semester's classes.

Overall, even with the prevalence of transfer GPA, age (older), studying with peers, and perceived fit as the primary indicators of transfer student success, items within each of the major constructs of Tinto's theory are relevant to some degree for transfer students. In addition, this study confirms that academic fit is far more relevant than social fit for the transfer student population. Therefore, it is the primary recommendation of the authors to consider the prevalence of academic connections when employing strategies for transfer student success.

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