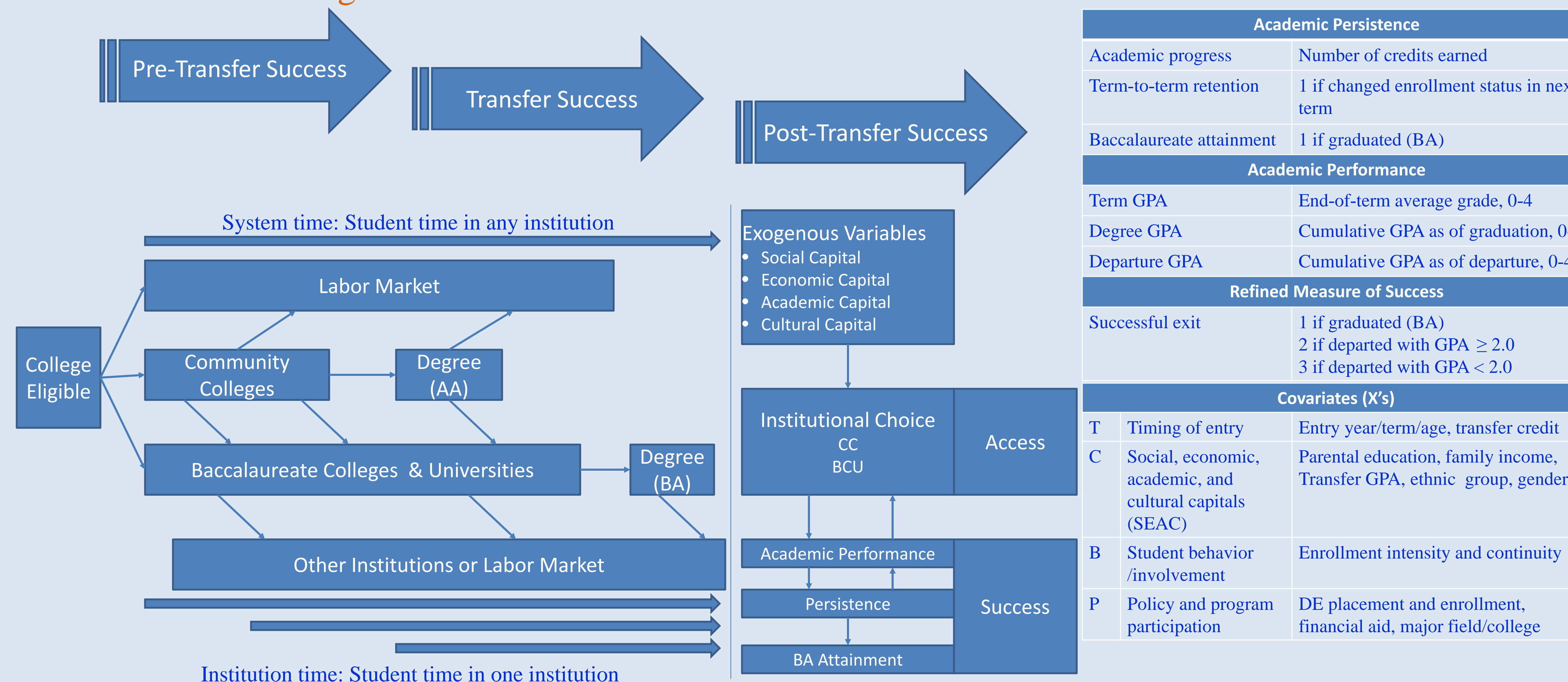


# Educational Attainment and Performance of Transfer Students in Minority-Serving Institutions: What Factors Matter at What Time?

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## A Longitudinal Process of Persistence and Performance for Transfer Students



## Analytical Models

Outcomes	Models
Academic Persistence	
Term-to-term retention	Discrete-time logistic regression
Baccalaureate attainment	Binary-outcome logistic regression
Academic Performance	
Term GPA	Multiple linear regression
Cumulative GPA at exit	Multiple linear regression
Refined Measure of Success	
Successful exit	Competing-risk proportional hazards models

## Descriptive Summary

Class Level	N (%)	Categories	N (%)
All	7,069 (100)	Female	4,037 (57.1)
Freshman	1,681 (23.8)	Hispanic	5,043 (71.3)
Sophomore	2,335 (33.0)	First Generation	2,595 (45.6)
Junior	2,366 (33.5)	Low Income	1,486 (31.0)
Senior	460 (6.5)	EPCC	4,132 (58.5)

## Research Question 3: Sending Institution

• EPCC transfers are more likely to persist, whether the mediating effects of academic performance are controlled or not. The advantage decreases over time enrolled, and it is stronger among those who transferred at a later stage (i.e., with more transfer credits).

• EPCC transfers are much more likely to graduate in six years; however, among all transfer students who left UTEP, EPCC transfers are more likely to leave with GPA below 2.0.

• The EPCC effect on graduation is stronger for those who transferred at a later stage, and is not statistically significant among freshman transfers.

• The patterns found for the combined sample is consistent across entry cohorts as defined by their calendar year (and semester) of entry at UTEP.

## Implications

• For transfer students with different timing of transfer, as measured by their number of transfer credits, it is important to examine their outcomes based on both system and institution time. Transfers who made the institutional transition at later stages may appear to be more likely to persist and graduate from the receiving institution's perspective; however, this may not be true from the student or the system perspective.

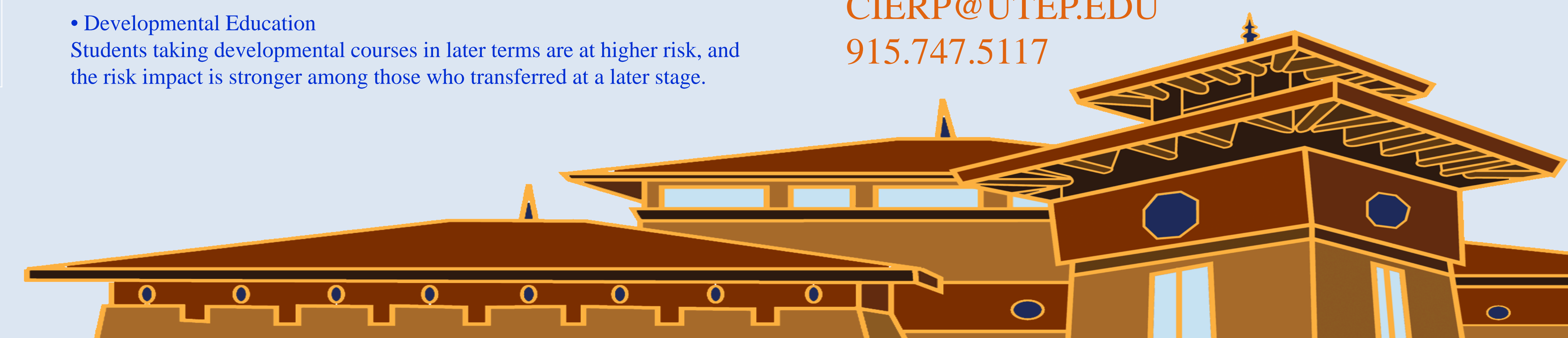
• Academic performance in post-transfer stage (term GPA) is a strong mediating factor. Its inclusion and exclusion from a particular model should be conceptually consistent with the specific question that the model seeks to answer.

• Enrollment intensity has nonlinear impact on student success. As a measure of involvement it is a success factor; however, it may have a smaller effect as a risk factor that affects academic performance. Policies that intend to increase students' semester hours need to consider both effects.

• Financial aid matters in general; its cost-effectiveness may be improved when the differential impact of different types and timing of financial aid offering is considered.

• An articulation relationship between the sending and receiving institutions is likely to be an important success factor for post-transfer outcomes, particularly for students who transfer at later stages.

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## MSIs

Minority-serving institutions (MSIs) collectively serve a large proportion of underrepresented minority students and provide supportive, nurturing academic and social communities where students are encouraged and empowered to succeed, despite the challenges posed by their families' lack of social, economic, academic, and cultural capitals and the larger socioeconomic structure that may systematically impair their chances of success.

MSIs, including Hispanic-Serving Institutions (HSIs), Historically Black Colleges and Universities (HBCUs), and Tribal Colleges and Universities (TCUs), educate more than 2.3 million students. However, the contributions of these institutions are not well understood or appreciated. In addition, these institutions are often in dire needs of financial and human resources that drive the widespread definition of "academic excellence" and "quality." As a result, they often have to abide by rules that favor resource-rich institutions in the accountability movement and in the competition for further resources.

## Lumina-Funded Student Success Projects

In recognition of the critical mission served by MSIs and their achievement in spite of limited resources, through its MSI-Models of Success program, Lumina Foundation has dedicated resources to support initiatives that foster both innovation and sustainability of effective programs that serve underrepresented students attending these institutions.

UTEP and its collaborating institutions (Texas A&M International University, Prairie View A&M University, and El Paso Community College) have been working together to build synergetic and campus-specific student success knowledge infrastructures. The main components include:

- Study of first-time-in-college students' success at three MSIs
- Study of transfer-student success, focusing on transfers between two collaborating MSIs
- Study of student success within major fields of study (next step)

## Abstract

Studies of transfer-student success have largely focused on the point of transition. But what happens to students after they transfer? To address the lack of understanding of post-transfer success of at minority-serving institutions, this study tracks multiple cohorts of students who transferred to a large minority-serving research university.

We examine both student and institutional factors that influence persistence, progress, mobility, and success. In addition to conventional models that focus on the "final" outcome of graduation, we also examine the timing of multiple outcomes.

Students who transferred from a minority-serving community college in the same metropolitan area were more successful than other transfer students. Students with more transfer semester credit hours (TSCH) were more likely to persist and to graduate; however, the advantage of additional transfer credits faded after approximately 60 TSCH. We discuss findings and policy implications of both pre-transfer and post-transfer factors and provide recommendations for institutional and public policy makers.

## Research Questions

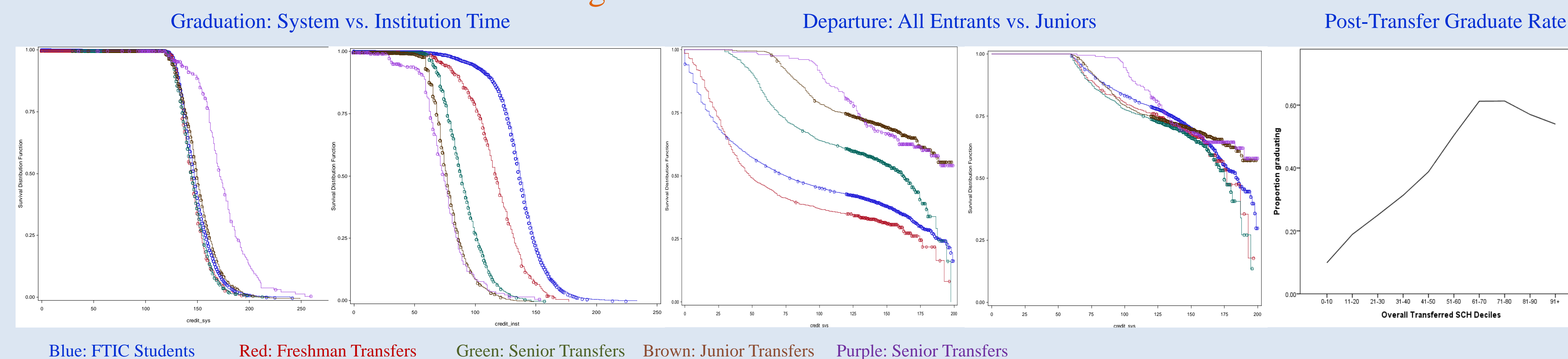
- What **actionable** factors are the best predictors of student post-transfer success as defined by academic performance, persistence, and baccalaureate degree attainment?
- For the success and risk factors that have changing effect sizes over time, what factors matter at what time?
- Controlling for confounding success and risk factors, are students from the sending institution that has the strongest articulation relationship with the receiving institution more successful?

## Institution and Student Sample

The study uses student-level data retrieved from multiple records databases at UTEP. A significant share of its transfer students come from EPCC, a minority-serving community college located in the same metropolitan area in the southwest US-Mexico border region, where more than 80% of the population are Mexican-Americans. Both institutions have the official designation of HSI.

The entire sample consists of all students who transferred to UTEP for the first time between Fall 1999 and Spring 2004, including students who transferred from EPCC, other community colleges, and baccalaureate-granting institutions. Students are tracked from their entry term to the censor term of Spring 2010, so that all students have at least six-year longitudinal data.

## Longitudinal Views of Student Outcomes



## Research Question 1: Actionable Factors

	Departure	Attainment	Performance
Transfer Credit Hours	.752	1.835	.091
Semester GPA	.523	1.923	
Semester Credit Hours Attempted	.656	1.509	.207
Developmental	1.717	.552	-.447
Financial Aid	Scholarship Work Study Grant Loan	Work Study	Scholarship
College	Education Engineering Nursing	Education Nursing Science	Science Engineering Business Education

## Research Question 2: Changing Effects

- **Loans**  
Students with loans are more likely to persist in early semesters, and this effect is stronger among those who transferred at an earlier stage. It is a stronger predictor for persistence in the fall semesters than in the spring.
- **Grants**  
Students with grants are more likely to persist and the effect increases over time.
- **Semester Credit Hours Attempted**  
Students with higher enrollment intensity are more likely to persist. The effect increases over time, is stronger among those who transferred at a later stage, and is stronger among spring entry cohorts.
- **Developmental Education**  
Students taking developmental courses in later terms are at higher risk, and the risk impact is stronger among those who transferred at a later stage.