Ecological Validation Model of Student Success: A New Student Support Model for Promoting College Success Among Low-Income, First-Generation, and Racially Minoritized Students

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This 5-year, longitudinal, multimethod qualitative case study draws on data from the Promoting At-Promise Student Success (PASS) project examining a comprehensive college transition and success program called Thompson Scholars Learning Community (TSLC) that serves low-income college students, many of whom are first-generation and racially minoritized. The study presents a new, empirically grounded model for promoting college student success among these student populations called the ecological validation model of student success, where educators validate students' multiple assets, strengths, and innate capabilities for college success across multiple aligned and coordinated support contexts over time. The study extends prior quasi-experimental work demonstrating the effectiveness of TSLC by exploring how educators in the program supported student success and providing a model for other educators, student support programs, colleges, and universities seeking new approaches to better serve an increasingly diverse postsecondary student body.

For several decades, policymakers and educators have been testing approaches to improve the college success of low-income, first-generation, and racially minoritized college students (a group we have chosen to call *at-promise students*).[1] Despite significant investments in a variety of initiatives over the years, progress toward increasing at-promise student success leaves much to be desired. For example, the six-year graduation rate for students who entered four-year colleges and universities was only 45.9% for Black students and 55% for Latinx students, far below that of their White (67.2%) and Asian (71.7%) peers (Shapiro et al., 2019). Further, only 10% of degrees awarded go to students whose families earned under $35,000 a year, and first-generation students depart college at higher rates than their continuing-generation counterparts (Cataldi et al., 2018). These seemingly intractable disparities have led to renewed scrutiny in how higher education approaches at-promise student support (Kezar, 2019; Tinto, 2012).

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[1] We elected to use the term *at-promise* to shift focus away from deficit language like *at-risk* and to emphasize the strengths, assets, and potential of these student groups (Harper, 2010). See Cheese and Vines (2017) for more information about the origins of the term.

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Scholars have offered at least three explanations for why many student support initiatives have failed to meaningfully increase at-promise student success. First, a lack of coordination and alignment of support efforts to meet students' multifaceted needs has led to difficult-to-navigate, fragmented, and ultimately ineffective support (Pendakur, 2016; Tinto, 2012). Second, many student support offices take a unidimensional approach to support rather than holistically engaging students' multiple identities, assets, and experiences (Page et al., 2019; Pendakur, 2016). Third, many initiatives and approaches to at-promise student support are deficit-oriented, assuming students' lack of success is a result of deficiencies in their knowledge, experience, and capabilities rather than due to systemic issues (Harper, 2010; McNair et al., 2016; Quaye et al., 2020). These explanations suggest the need for a fundamental shift in how postsecondary educators (e.g., staff, instructors) approach at-promise student support (Museus, 2014; Pendakur, 2016; Tinto, 2012).

In response to this need, several comprehensive college transition programs have been introduced in the past decade and a half, such as the Dell Scholars Program, Accelerated Study in Associate Programs (ASAP), Carolina Covenant, and Stay the Course (Dawson et al., 2020). Educators in these comprehensive college transition programs coordinate multiple, holistic forms of support (e.g., financial, social, academic, major/career support) to meet at-promise students' multiple needs and enhance their success. Robust quasi-experimental studies of these programs have shown promising results, suggesting the educators' comprehensive, coordinated, holistic approach to student support is an effective way to increase at-promise student success (Clotfelter et al., 2017; Kolenovic et al., 2013; Melguizo et al., 2021; Page et al., 2019).

This study focuses on the approach educators take in one successful comprehensive college transition and student success program called Thompson Scholars Learning Community (TSLC), which serves at-promise students in the University of Nebraska system. Recent quasi-experimental studies of TSLC have shown that the program's approach to support increases at-promise students' sense of belonging, mattering, and major and career self-efficacy when compared with a control group of students from similar backgrounds (Hypolite et al., 2020; Melguizo et al., 2021). Considering the success of TSLC, we sought to understand and describe the student support offered by program educators to provide a potentially transferable at-promise student success model. While other research has documented the program experiences from the student perspective and how it bolstered their success (Cole et al., 2020a; 2020b; Kitchen et al., 2021a; 2021b; Perez et al., 2021), this paper focuses on the perspectives of the educators who facilitate the TSLC program. Our research question was: How do educators in TSLC enact student support to promote success among at-promise students?

LITERATURE REVIEW

Traditional campuses are structured and organized such that each functional area operates in a restricted fashion, focusing on the delivery of a fixed set of services to students (Manning, 2013). Campuses historically developed into bureaucratic units separated into different tasks, such as student support services, academic units, and administrative units focused on finance or alumni affairs. Many of these units developed their own deficit-oriented subcultures and siloed work structures, with little institutional incentive to collaborate across units and a managerial culture that is task- and goal-oriented rather than focused on a shared commitment to student success (Kezar & Lester, 2009; Kuh et al., 2006; Manning, 2013). As such, traditional campus organizations and structures were designed to serve students with high college

knowledge, minimal need for remediation, who lacked financial stress, or had low family needs or responsibilities (Kezar, 2010). In these settings, the student must seek out the services provided by separate offices and functional areas dispersed across campus on their own. Moreover, students are often expected to integrate, assimilate, and appropriately navigate the institution to succeed rather than experiencing environments that adapt to better support their success (McNair et al., 2016).

Scholarship has commonly focused on student deficits, rather than institutional deficiencies, as the reason why higher education has done so poorly in supporting at-promise student success (Museus, 2014; Quaye et al., 2020). However, scholars have long known that traditionally siloed campus organization and non-collaborative bureaucratic structures, fragmented student support, and the resulting culture can present difficulties to students navigating the complex web of offices and prevent student learning and success (Kezar & Lester, 2009; Kuh et al., 2006). Moreover, scholars have identified how the deficit-oriented approach to student support adopted by these fragmented units or silos often frames students and accompanying issues as problems to be fixed rather than whole people with promising strengths and assets from which to build future success (McNair et al., 2016). These siloed campus structures and support services are especially difficult for at-promise students to navigate and succeed in. To address deficiencies in campus environments and increase at-promise student success, there have been calls for more holistic, comprehensive, coordinated, and student-centered support (Tinto, 2012).

One-stop shops gained popularity decades ago and were intended to create more student-centered learning environments where student support services are coordinated in a single place with the intention of enhancing convenient access to services (Altieri, 2019;

Walters, 2003). More recently, several comprehensive college transition and support programs were introduced and explicitly sought to improve at-promise student success by coordinating comprehensive, holistic support that meets the multiple financial, social, academic, and career needs of at-promise students. Dell Scholars, ASAP, and Carolina Covenant are three examples of successful comprehensive college transition programs, with evidence suggesting they promote increased degree attainment (Kolenovic et al., 2013; Page et al., 2019; Scrivener et al., 2015), increased credit accumulation (Scrivener et al., 2015), and higher GPAs (Clotfelter et al., 2017; Page et al., 2019). See Dawson et al. (2020) for a recent review of comprehensive college transition programs and their impacts on student success.

The focus in this study is TSLC, a 2-year comprehensive college transition and success program and 5-year scholarship that serves several hundred at-promise students at the University of Nebraska at Kearney, Omaha, and Lincoln. The program coordinates a comprehensive suite of support, including peer mentoring; proactive advising; shared courses with other TSLC students; student–staff advisor meetings; a first-year seminar; and a range of social events and activities and other forms of academic, social, and career support designed to promote a successful college transition and psychosocial outcomes associated with persistence, such as sense of belonging, mattering, and major and career self-efficacy. The program is supported by a director, professional staff advisors, designated shared course instructors, and a faculty coordinator. Quasi-experimental studies have shown that participants have higher levels of mattering, sense of belonging, and major and career self-efficacy (factors associated with success) when compared with a group of control students (Hypolite et al., 2020; Melguizo et al., 2021).

Emerging evidence has suggested the efficacy of this recent crop of comprehensive

college transition initiatives, including TSLC, for at-promise students (Dawson et al., 2020; Melguizo et al., 2021). A common feature of these initiatives is that they take a comprehensive, multifaceted, holistic approach to supporting student success that goes beyond strictly financial, academic, or social/personal support alone. Still, much of the literature on these initiatives has focused on whether they have an effect on a particular student outcome vis-à-vis a set of control students rather than focusing on *how* educators deliver support. How the processes that occur within these initiatives and the qualities of the support educators deliver engender student success also deserve our attention. By exploring this gap in the literature, scholars, practitioners, and policymakers can come to a fuller understanding of how educators can achieve similar outcomes by implementing analogous approaches to student support. Rather than asking why at-promise students are not succeeding and placing the blame on the student, we follow Harper's (2010) anti-deficit framing in this study and ask instead, how do educators enact support to promote at-promise student success? Specifically, we explore TSLC educators' perspectives on how they promoted college success among at-promise students.

CONCEPTUAL FRAMEWORK

We began our study using Astin's (1984) input-environments-outcomes (IEO) model as a primary theoretical framework. As qualitative findings emerged over the course of the 5-year study (discussed further below), the research team's sense-making of the findings suggested the IEO model did not fully capture the complexity and dynamism of TSLC educators' approach to student support. Moreover, IEO's focus on quantity and quality of involvement as it relates to student success did

not foreground the key role of educators in promoting at-promise student success. We explored several other theories, and no other single theory captured our emergent understanding of how the program supported students nor provided the explanations and language necessary to frame our emergent findings. A blend of two theories—Person-Process-Context-Time (PPCT; Bronfenbrenner, 1994) and validation theory (Rendón, 1994)—better captured the nuanced complexity and dynamism of the TSLC approach to at-promise student support and success than either theory alone (or Astin's IEO) could. These theories were thus selected as a result of our emergent understanding of how the TSLC program supports students gleaned from the data described in more detail later.

Bronfenbrenner's (1994) PPCT model sensitized us to student engagement with the multiple immediate coordinated support contexts in TSLC as an important driver of student success. He posited that human development is best understood through an ecological lens and is a result of "proximal processes" or interactions between people or groups within multiple, connected environments. When PPCT is applied to higher education, student success and development are framed from a systems-based perspective, acknowledging the synergistic effects of student experiences across multiple contexts on student success. Thus, *Person* would describe the characteristics, identities, and experiences that students bring with them to college as well as those present during college. *Context* would refer to the series of environments that shape students' experience and success during college, with the more proximal contexts exerting the most influence on students' success. The contexts closest to the student include the multiple microsystems where the student is most directly engaged (e.g., classrooms, advising meetings, campus events). The mesosystem describes interactions between microsystems that do not

necessarily directly involve the student (e.g., instructor–advisor communication; instructor–staff communication) but that can still affect students' success. *Process* entails the interaction between the person (i.e., their characteristics, identities, and experiences) and the educators they encounter within the series of environments in which they are most directly involved (i.e., microsystems). These processes are the central and primary drivers of development, according to Bronfenbrenner (1994), and, in this case, of student success. *Time* accounts for success as a longitudinal process.

Validation theory is the second component of our conceptual framework (Rendón, 1994; Rendón & Muñoz, 2011). Validation is an active, inclusive process consisting of proactive support and messages from educators that recognize, affirm, and enable students' innate capacities for learning and college success both inside and outside the classroom. It is characterized by empowering, genuine, and meaningful care, support, and assurances from educators, and it is necessary for students to succeed. The onus is on educators to validate students' backgrounds, identities, and college capabilities to help them realize their assets, strengths, and potential to achieve college success. Validation theory assumes a holistic perspective, recognizing that both academic and interpersonal validation foster academic and personal or social success. The act of validation is an example of what PPCT would refer to as a "process" and the primary process addressed in this paper. Validation theory is anti-deficit and posits that students come to college with assets, strengths, and capabilities for success. The theory was created to describe the development and success of traditionally underserved low-income, first-generation, and racially minoritized college students (Rendón, 1994). As such, it is an appropriate choice for understanding a program serving at-promise students.

METHOD

Our case study examined TSLC, a comprehensive college transition program serving several hundred at-promise students across three campuses of the University of Nebraska system. Qualitative data were collected as part of a longitudinal (2015–2020), parallel mixed-methods study of the TSLC program called the Promoting At-Promise Student Success (PASS) project (see https://pass.pullias.usc.edu/ for study design details). To answer our research question, we employed a multimethod interpretivist case study approach to understand how educators in TSLC enacted student support to promote success among at-promise students (Bartlett & Vavrus, 2017; Stake, 2005). The interpretivist case study approach is a flexible design rooted in the social constructivist paradigm and seeks to understand how study participants make sense of a particular phenomenon or experience—in this case, how educators approach student support in the TSLC program (Bartlett & Vavrus, 2017; Stake, 2005). We sought to provide rich theoretical explanations for how TSLC promotes student success and to develop a model that could potentially "transfer to other times and places" (Bartlett & Vavrus, 2017, p. 34). The TSLC program was our case and the a priori bounded setting for our study (Stake, 2005). Given the focus of our research question, the case study data sources included (a) 42 one-on-one interviews with 26 TSLC staff (i.e., program directors, faculty coordinators, and staff advisors), (b) 29 one-on-one interviews with 28 TSLC shared course instructors (one instructor interviewed twice), (c) more than 600 hours of TSLC course, event, and activity observations conducted over 4 years, and (d) document analysis of annual program reports produced by TSLC staff each year from 2008 through 2019. Staff interview participants were 65% women and 42% racially

minoritized. Instructor participants were 54% women and 14% racially minoritized.[2]

We used semi-structured interview protocols for staff and instructors that were administered to collect comparable data across the three University of Nebraska campuses where TSLC is implemented (Bartlett & Vavrus, 2017). Interviews, lasting 30–60 minutes each, were audio-recorded and professionally transcribed. Staff and instructors were given generic labels (i.e., "instructor," "staff") to reduce the potential for deductive disclosure. Staff and instructor interview protocols elicited information about the structure of TSLC; their views of and interactions with students; the purpose, goals, and intended outcomes of the student support they offered; and perspectives on their approach to student support. For example, the staff questions included, "How would you describe TSLC students?", "How does the program address student needs?", and "What are the most important program components?" Instructor questions included, "How would you describe your in- and out-of-classroom interactions with TSLC students?" and "How would you describe their level of college readiness?"

We conducted more than 600 observation hours of TSLC programming run by educators across the three campuses where the program exists (Spradley, 2016). We observed TSLC's shared classes, first-year seminars, orientations, welcome events, major/career seminars, multiple social activities (e.g., group dinners, outings), college knowledge and preparation activities, staff and instructor meetings, peer mentor training, and program graduation and celebration events, among others. We used a common observation template to document field notes describing the nature and content of the activity, interactions between students and educators, and students' responses to the activities. We also collected annual reports produced by the TSLC program staff each year between 2008 and 2019. These documents provided hundreds of pages of information about the purpose and goals of the staff support and activities provided by the program, a description of the program and students, and staff's internal formative (e.g., student satisfaction) and summative (e.g., year-to-year retention) assessments of program outcomes.

Analysis Procedures

We analyzed the multiple qualitative case study data sources described above separately and then synthesized them (Bartlett & Vavrus, 2017; Stake, 2005). We first describe the separate analyses conducted and then how we synthesized across the data sources to develop our findings. First, to develop case study themes (Stake, 2005), we analyzed staff and instructor interview data together using the process proposed by Boyatzis (1998), including both inductive and deductive thematic analysis. We first inductively coded, identifying a set of preliminary codes that included "affirmed capabilities," "holistic support," "asset-orientation," "cross-context collaboration," and "coordination of student support." Then, we reviewed the data deductively to code using key terms related to validation theory and the PPCT model that we employed ex post facto based on our emergent findings (Boyatzis, 1998). Deductive codes included "interpersonal validation," "academic validation," and "ecological support."

We compared and contrasted codes with one another, collapsed further, and developed seven preliminary themes. Emerging themes included "Educators adopt a systems-based approach to support across multiple contexts," "Educators adopt a longitudinal developmental perspective to student support," "Educators

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[2] Full detailed descriptions of qualitative data collection, participant recruitment processes, and participant demographics from this 5-year study can be found here: https://pass.pullias.usc.edu/.

share a commitment to validating approaches to support across academic and social contexts," and "Educators take an asset-based approach to student support that responds to students' backgrounds and experiences." Preliminary themes and accompanying quotations were first organized in an Excel matrix. Then, we wrote detailed memos of each preliminary theme with supportive quotations. Preliminary theme memos were compared once again, and we noted that each preliminary theme ultimately related to different dimensions of validation theory (Rendón, 1994) and the PPCT model (Bronfenbrenner, 1994). For instance, "Educators adopt a longitudinal developmental perspective to student support" was mapped on to the Time element of PPCT, and "Educators take an asset-based approach to student support that responds to students' backgrounds and experiences" was mapped on to both the Process element of PPCT and validation theory. We thus collapsed themes further and organized them into the model presented in our findings.

Next, field notes documented in the observation templates were analyzed to seek information that shed light on (a) the ecological approach to support espoused by instructors and staff across contexts in TSLC and (b) instances of the validating approach to student support described by instructors and staff across program contexts. The staff-prepared annual program reports were further reviewed to provide additional context and information about the characteristics of the students served by TSLC and the structure, purpose, and intent of program activities from the perspective of staff who create and implement the programming. The annual report documents were reviewed primarily for descriptive and contextual information about program structure and the intent behind the support provided.

We synthesized these analyses in a final case study across (a) the themes that emerged about the characteristic approach to supporting students from the perspective of TSLC instructors and staff, (b) observations of how TSLC staff and instructors supported at-promise students across the program's ecology of support contexts (e.g., class, advising meetings), and (c) document review of the annual program reports. Our synthesis of data centered on two prevalent themes that related to how TSLC enacts support and promotes student success: (a) the ecological nature of TSLC support and (b) the validating approach to at-promise student support adopted by educators in the program (Bartlett & Vavrus, 2017; Stake, 2005).

Credibility and trustworthiness were enhanced in several ways (Jones et al., 2014). First, prolonged engagement with the program for four years contributed to credibility and trustworthiness, allowing us to build relationships and conduct ongoing interviews with TSLC educators and in-person observations of TSLC activities. Second, we conducted member checks to ensure our interpretations and emerging findings were consistent with the intent behind what was communicated during the interviews with educators. Third, we triangulated multiple data sources. Fourth, the broader mixed-methods study enabled us to draw on quantitative data sources to complement and inform the present study, including our studies documenting program effects on student success and the positive effects of validation on student success (Cole et al., 2020a; 2020b; Hypolite et al., 2020; Kezar et al., 2020; Melguizo et al., 2021). Fifth, we were a part of a larger, compositionally diverse research team in terms of race/ethnicity, nationality, first-generation status, class, and gender identity. We regularly consulted with the broader team to make sense of our emergent findings.

FINDINGS

Prior research from the broader mixed-methods PASS study demonstrated that the TSLC

program increased at-promise student success when compared to a control group and that validation from staff and instructors increased at-promise students' success (Cole et al., 2020a; Hallett et al., 2020; Hypolite et al., 2020; Kitchen, 2021; Melguizo et al., 2021). This analysis focused on how TSLC supported at-promise students' success from the perspective of the educators who structured and enacted it. We identified a unique phenomenon that extends beyond the approaches discussed in other studies of comprehensive college transition programs: the ecological validation model of student success. Briefly defined, the model represents an approach to at-promise student support and success that is ecological in nature and validates students' multiple identities, assets, strengths, and innate capabilities for success in a web of multiple coordinated student support contexts over time. We describe the model we developed in terms of what was being validated (i.e., Person or characteristics, experiences, identities), how validation occurred (Process), the multiple curated environments where validation occurred (Context), and when validation happened (Time).

Person

TSLC supports a rich diversity of at-promise students in terms of race, personalities, gender identity, academic preparation, immigrant/immigration status, culture, life experiences and interests, social capital, work status, family backgrounds, health conditions, and major or career aspirations. In the ecological validation model, these at-promise students' experiences, characteristics, and identities are validated as assets and strengths.

Educators in TSLC commonly reflected that "[at-promise students' backgrounds] are somewhat challenging, but I think also assets." A staff member reinforced the notion that at-promise students came into college with assets and strengths and that they

have true value in their abilities and experiences . . . the experiences they're bringing can make them really, really good students . . . we need to be valuing every experience . . . no matter if it's 'I come from a low socioeconomic background or I'm first-generation,' or whatever.

Staff members noted that the at-promise students they serve are "determined" and "have a really good ability to work in teams with others, so I think it's definitely a strength . . . that really does help them [succeed]" and that "the students are very goal-driven . . . they have a sense of wanting to do better for their families." Instructors similarly noted that TSLC students came to class with "respect and work ethic" and "strengths of some of [their] different cultures" that had a valid place in the TSLC community.

Most educators saw at-promise students' experiences, characteristics, and identities as assets and strengths that could be built upon and leveraged to help students realize their innate capabilities for success. As one instructor noted, this perspective stood in contrast to many other kinds of educational support contexts where educators are often "working from a deficit model" if "students are . . . from low-income backgrounds or underrepresented backgrounds." In ecological validation, educators did not view students from a deficit perspective (i.e., they lack what is necessary to succeed); rather, as an instructor shared, "[at-promise students] are people who have skills, talents, interest, drive, ambition to do something with their lives that is the classic American dream or at least something better than what they came into this world with." The perception among educators that at-promise students' backgrounds were assets and strengths stands in stark contrast to the deficit-oriented approaches commonly adopted by educators serving at-promise students (Harper, 2010). In sum, in ecological validation, at-promise students' experiences, characteristics, and identities

are assets and strengths that, through the process of validation described in the next section, can be built from to help students realize their innate potential for success.

Process

Educators' acts of recognizing, affirming, and validating at-promise students' multiple assets and strengths—like those described in the preceding section—represented a key mechanism for how validation occurred in the ecological validation model and drove at-promise student success across the multiple contexts that make up the TSLC (e.g., classrooms, events, advising sessions, mid-way graduation ceremonies). Validating at-promise students' assets, strengths, and capabilities, rather than focusing on problems, reflected an anti-deficit approach to promoting at-promise student success.

Educators consistently took the initiative to provide *academic validation* and help at-promise students achieve success. For instance, an instructor commented, "[I] think that it's highly valuable for us to give special attention, provide some extra opportunities to these [at-promise] students because they have untapped potential that may not be realized if we don't." He proactively told students in class,

> I'm excited with the fact that you come in with all these different perspectives. Most of you are first-generation students. But that gives you a unique perspective and could really drive some interesting conversations in here. So share. Just say what you think.

He verbally affirmed the value of their perspectives in the class to "get them to come out of their shells, and then they usually do." The instructor illustrated how he validated students' perspectives as first-generation students as academic strengths and assets and encouraged them to be an active part of the group's learning in an effort to affirm the value they brought to the classroom and to promote their engagement in

the class. The instructor reflected, "once they've been empowered," they will be successful.

Another instructor echoed this sentiment. Instead of simply lecturing in class, he encouraged students to participate as valid contributors and holders of knowledge with important experiences and perspectives—assets that could be brought to bear in course discussions. He told students, "I'm not a sage on the stage. I'm a guide on the side." and adopted

> a Socratic seminar [approach] where students actually sit and debate a topic related to an article . . . It takes them a minute because they're [like], 'I have to talk? You're not just going to talk?' No, *you* contribute [to our learning].

Other instructors recognized that fully engaging their students meant adapting their pedagogy to build from students' cultural assets in the classroom and facilitate their learning:

> [it's] not that they were less smart . . . but that [their] background and the context was completely, completely different. Because of that, I started to look around for any type of pedagogy that could be useful for them . . . because of the culture.

In ecological validation, educators affirmed the value of the experiences, characteristics, and identities students brought with them. Viewing students' experiences and identities as assets and strengths and communicating that to students in an academic setting represented an act of academic validation that empowered students to learn and succeed.

Interpersonal validation also was an important process in the ecological validation model. Educators built relationships with students and verbally affirmed that students mattered (i.e., interpersonal validation). Commenting on TSLC's efforts to interpersonally validate students, one staff member stated, "it starts with us learning their names and their faces and validating that they're part of us and our

community and that they matter from the very beginning and that's for each and every student." Staff did not treat students like a number or an appointment they needed to quickly finish; they validated students as individuals and assets to the community. Instructors also interpersonally validated at-promise students' assets and strengths to promote success in their classrooms. For instance, an instructor reflected:

> [getting to know] them personally, which was also part of the [TSLC] paradigm . . . that's huge to be able to draw [out] somebody who might normally be a little afraid, or shy, or not confident, and I can say, 'You, remember how we were talking about how you like to knit?' I'm going to create a connection here . . . and that person is all the sudden involved in this class in the same level of interest as somebody who academically understood the content . . . just came at it from a personal [rather] than an academic [angle].

Instructors in TSLC, like the one noted above, consistently described how they interpersonally validated strengths and assets that could be leveraged to promote student success in the classroom. For example, the student's personal interest in knitting was recognized as an asset the instructor could use to form a personal connection and subsequently promote classroom engagement and learning. Educators affirmed and recognized students in an interpersonal way, even though "it isn't a line item on [our] job description." A staff member noted that "students have told me that . . . they don't get that [kind of interpersonal support] from every other office" on campus, suggesting the interpersonal support TSLC educators provided was qualitatively different from support provided in other campus contexts. Educators across the TSLC ecology frequently engaged in academic and interpersonal validation as a process to leverage at-promise students' assets and strengths and to help them achieve college

success—representing how ecological validation supported at-promise student success.

Context

Thus far, we have described how interactions between educators and students validated the assets and strengths of at-promise students. Here, we illustrate that the program curates multiple support contexts (e.g., classes, advising, career events, orientations) where students were exposed to many opportunities to have their assets and strengths validated by educators in the TSLC program ecology.

Our observations and review of annual program reports revealed that the TSLC program was a comprehensive first- and second-year program that took a holistic, student-centered approach to support across multiple program contexts, including staff advisor meetings; proactive staff advising sessions; academic, social, and career development activities; required program events; shared program space; peer mentors; shared academic courses taught by TSLC instructors; and a first-year seminar. Each student had a primary staff point of contact who built a relationship with the student and was responsible for curating a set of relevant support contexts for the student in the program ecology. Students interacted with a number of program staff, instructors, and peer mentors within these multiple curated contexts. TSLC took a holistic approach to supporting students with each of these coordinated contexts intended to provide multidimensional living and learning opportunities with the goal of promoting interpersonal and academic development and success.

In contrast to siloed, fragmented student support, these multiple program support contexts were interconnected and coordinated by program staff in what Bronfenbrenner (1994) called the "mesosystem," helping to create an ecology rather than a series of disconnected stand-alone support contexts. A staff member said:

> [T]here's us . . . [we are] almost kind of like the crank. Kind of makes it all mush together. Because we communicate with faculty, which interacts with our students. And then we communicate with mentors about what the faculty said about the students [and so on]. So, we have to blend these two very different worlds. This academic 'I'm going to care about teaching this curriculum' and how our students are . . . and then this [social] community.

Operating from the assumption that students could succeed with the right support, the communication channels across contexts in the program ecology (i.e., the mesosystem) were crucial mechanisms for information sharing, connecting students to appropriate support across contexts, and as one staff member put it, "eliminating the barriers that we [in higher education] often impose unintentionally, to help them succeed." TSLC instructors confirmed the connections across contexts. One instructor commented how she was "in close communication with [TSLC staff] about a lot of students on a regular basis" and how these connections helped her "get a feel for if there's any students that might need extra support [or] this person is struggling with family stuff." Communication across contexts allowed for collaboration to support student success. In ecological validation, a web of coordinated, connected support contexts sets the stage for the validating processes to unfold and be reinforced in multiple contexts where educators take the initiative to affirm student assets, strengths, and capabilities for success.

Time

Time is the final aspect of the model, describing when validation occurred. Our observational data and interviews indicated that the validating processes described earlier took place across the multiple curated TSLC program contexts over time. Educators acknowledged the importance of taking a longitudinal perspective in validating at-promise students and promoting their success, and they consistently communicated this to students: "We're always gonna be there to help you and be a guide and connect you to the right resources." An educator reflected, "It's that concept of validation . . . we do so much of that [in our ongoing meetings with students]. We're gonna figure it out together, and you're capable and you're gonna graduate." The ongoing validating support and assurances this staff member noted reflect the ongoing nature of educators' commitment to each student's success and their efforts to validate students' capabilities over time.

Observations of multiple curated program contexts revealed that educators in the program regularly validated and affirmed students over time. For example, two events bookend the program: (a) orientation at the start of college and (b) celebration or recognition events that occur at the end of the 2-year program. While many other instances of validation occurred in contexts between these two events, they nonetheless illustrate the ongoing, longitudinal approach to validation that the educators used. We observed TSLC orientation sessions at the beginning of the program where multiple educators affirmed students had what it took to achieve success and communicated that students would have a community of support to help them realize and achieve their goals. Orientation included community-building activities to foster relationships between students as well as between students and staff with the goal of affirming each of the students as important members of the community of learners (i.e., interpersonal validation). The program staff also communicated they were there to support students' success and connect them to resources that would help them realize their potential of achieving a degree—focusing on when, not if, students graduate (i.e., academic validation).

At the end of the two-year program, the staff, instructors, and administrators acknowledged and celebrated the accomplishments and successes of students, which validated students and affirmed their beliefs that students would graduate from college and do great things with their lives. At Second Year Launch, an event at the end of the program, students were handed pins and told that the pins represented "that you belong here, and that you'll complete your degrees"—an act of interpersonal and academic validation that symbolically and verbally affirmed students' continued potential for success in earning their degrees. At a similar event at another campus, a program administrator congratulated students on their success to date, saying that the students had "proven they can be successful." An instructor from the program also told the students they were "legacy makers" who would go on to graduate and "make a difference" in the world, also acknowledging that many of them would be the first in their families to earn a degree. TSLC educators then handed out awards to students and verbally acknowledged their academic and personal accomplishments in the community. Each affirmation validated students' capability for ongoing success. In terms of *when* validation occurred in the ecological validation model, educators took the initiative to validate students at multiple time points over the course of their college experience. They recognized students' capabilities for success, strengths, and assets starting at orientation and continuing until the program ended.

DISCUSSION AND IMPLICATIONS

Most prior research on comprehensive support programs for at-promise students has focused on outcomes. Few studies to date have documented how educators structure and enact support in programs that effectively increase at-promise students' success. The present study

illustrated how educators in one such program supported at-promise student success through an ecological and validating approach, resulting in the identification of a new anti-deficit model for promoting at-promise student success that we have termed the ecological validation model of student success.

This study is the first to identify an approach to student support framed through a combined validation and ecological lens, which we believe will emerge as an essential anti-deficit model for promoting at-promise student success. While Rendón (1994) called for embedding validation into structures in higher education to increase at-promise student success, to date, there has been very little guidance about how to go about structuring or implementing this process or what validating student support systems in higher education might look like. We provided a data-informed model for higher education that illustrates how to structure opportunities for validation through an ecological lens. Specifically, the ecology provided multiple, coordinated support contexts where educators engaged students in validating practices and messages to support their success in multifaceted ways—immersing at-promise students in a web of learning environments where their many assets, strengths, and capabilities were affirmed and reaffirmed over time. This study thus extends Rendón's (1994) theory of validation by identifying how educators across campus environments and programs can approach at-promise student support by engaging in ecological validation. Rendón's theory was framed in terms of individual educator–student interactions that rely on caring individual educators to validate at-promise students. Within the ecological validation model, students experience validating support across multiple contexts in their ecology, not just through an interaction with a single or a few caring individuals. The synergistic effects of validation across the multiple support contexts

from multiple educators over time, in turn, facilitate student success (cf. Bronfenbrenner, 1994).

The ecological validation model builds on the work of other scholars who have critiqued prevailing models of student success as deficit-oriented and insufficient to explain the success of at-promise students (Harper, 2010; Museus, 2014; Quaye et al., 2020; Tinto, 2012). Ecological validation is distinct from one-stop-shop models described in the literature review that primarily focus on the way institutions have streamlined access to services in a single location as a matter of student convenience and satisfaction, with little attention to how support is delivered in those spaces (Altieri, 2019; Walters, 2003). Moreover, our model complements and expands on Museus' (2014) culturally engaging campus environments (CECE) model of racially diverse student success, which emphasizes the importance of holistic, proactive support that is anti-deficit, culturally responsive, and connects racially diverse students to culturally relevant support. The ecological validation model is distinct from CECE in that we posit a model of student success that elevates the importance of educators engaging in the process of validating a broad range of multiple at-promise student characteristics, identities, and experiences as assets and strengths across multiple, interconnected, coordinated student support contexts. We extend the CECE model by describing how educators can structure and implement validating support that cuts across multiple domains (e.g., academic, social), which previous quasi-experimental evidence has shown is effective in promoting at-promise student success (Melguizo et al., 2021). Our model also emphasizes the importance of educators creating validating environments that support students over time in a way the CECE does not, acknowledging and emphasizing that supporting at-promise students' success through validation is a longitudinal, ongoing process (Rendón, 1994).

The implications for practice are quite important as this study signals the need for new approaches to support at-promise student success. Many initiatives serving at-promise students focus on outcomes associated with a single support context (e.g., a first-year seminar, an advising intervention) rather than how the support postsecondary educators provide within and across contexts promotes at-promise student success. Our model fills this gap in the research and practice literature. Further, our findings shift the underlying thinking and approach to at-promise student support. The model's focus on validating approaches of educators across contexts, rather than the implementation of a particular program or intervention, suggests the possibility for educators to scale up the ecological validation model and embed this practice across student support contexts institution-wide. In other words, ecological validation reflects a shift in how support is delivered by educators across student support contexts rather than calling for the introduction of myriad new services, offices, or programs—a common response to addressing student success in higher education.

Validating practices emerged as a key mechanism (or process) enacted by educators in our study that prior quantitative research has shown positively impacts at-promise student success (Cole et al., 2020a; Kitchen, 2021). Validation is likely something that many educators espouse or would argue they do. However, without the comprehensive, coordinated web of educational contexts to support validation (i.e., the ecology), it is not likely to be experienced by students consistently, from all angles, over time, or in any lasting way. By focusing on enacting *ecological* validation, there is a greater shift toward a systemic approach that places the onus on educators to coordinate across support contexts and communicate across those contexts to facilitate meaningful, informed, and validating interactions with students. This new approach has the

potential to foster cumulative, synergistic effects (Bronfenbrenner, 1994) on at-promise student success by strengthening and reinforcing validation and thereby sustaining students' beliefs in their capabilities for success.

Educators must work together across contexts to support students, and institutional leaders must incentivize this kind of collaboration to set the foundation for and sustain ecological validation. Such efforts may necessitate a broader structural or cultural change. Educators and leaders must also reflect on their practices and shift their perspectives toward asset-based (rather than deficit-oriented) student support and pursue opportunities to learn how to validate students across support contexts. Such reflection might include careful consideration of the kind of language one uses when addressing student challenges and successes and how to recognize, identify, and leverage at-promise students' multiple assets from an anti-deficit perspective (Harper, 2010; Museus, 2014). This may also require a shift in educator mindsets and practices. For instance, instead of faculty viewing students' first-generation status as a deficit and problem that needs to be addressed, faculty need to see it as an asset that can lead to richer classroom discussions if only faculty proactively invite those students to bring their varied perspectives into the conversation. Educators must also intentionally initiate getting to know the at-promise students they serve so that they can discover and build from students' assets (e.g., identities, experiences) through validation, and this should be done across support contexts in the ecology over time.

Because how support is delivered is critical in the model, another important implication relates to hiring and socializing educators who support students across contexts and to the culture of college contexts. The TSLC program is intentional in its hiring of staff and instructors, and they are socialized to the norms, values, and practices of the TSLC culture and approach to supporting at-promise student success. Such norms and values include being identity-conscious, holistic, strengths-oriented, and proactive. The culture of the program is an important foundation that sets the stage for ecological validation to occur within the TSLC. Those seeking to facilitate ecological validation should carefully attend to opportunities to leverage or foster an asset-based, student-oriented, identity-conscious, affirming culture. Future explorations should consider how leaders onboard newcomers to adopt an ecological validation mindset through training and socialization. Some potential opportunities could include educators participating in workshops where they are given student–educator scenarios that depict potentially validating and invalidating conversations to help participants think through how they might reframe their approach or support. To fully realize the potential for ecological validation, such workshops, training, and learning opportunities must span contexts and reach educators of all kinds, from advisors to instructors to student affairs personnel.

The ecological validation model addresses many of the critiques in the literature about common deficit-oriented approaches to student support initiatives that have failed to increase at-promise student success (Harper, 2010; McNair et al., 2016; Pendakur, 2016). Ecological validation emphasizes students' assets and strengths, holistically engaging identities, assets, and experiences of diverse students and coordinating student support rather than placing the onus on students to navigate traditional campus structures not set up with their success in mind. Future studies might examine other comprehensive transition programs serving at-promise students (e.g., Dell Scholars) to determine whether their success is also attributable to the ecological validation phenomenon we identified in this study. While ecological validation was evident in the TSLC program, we

imagine other comprehensive college transition programs may have analogous features and processes in place that achieve similarly positive outcomes. Future research could describe and document different models of ecological validation in other contexts that would be helpful for practitioners seeking options for implementing this approach. This line of research may be particularly fruitful to pursue in other institutional contexts given the make-up of the University of Nebraska system where the TSLC program is situated. Moreover, there may be additional broader institutional and policy contexts to consider when implementing ecological validation. Finally, other studies might examine how educators and institutions go about exploring, creating, and sustaining ecological validation to promote at-promise student success to provide additional insight into the change process required to bring ecological validation to scale.

The ecological validation model of student success described in this paper builds on and extends prior quasi-experimental work demonstrating the impact of comprehensive college support programs on student success by identifying and illustrating a new model for supporting at-promise students. As such,

it answered calls for new, fresh, anti-deficit perspectives and empirically grounded models for at-promise student success (Museus, 2014; Pendakur, 2016). In exploring the underlying mechanism driving student success in TSLC, we identified the central role of both validation and an ecological approach to student support in shaping at-promise student success, suggesting new directions for practice as higher education marshals efforts to better serve increasingly diverse college students. In doing so, we also respond to calls for additional frameworks to explain how postsecondary environments can be reimagined with at-promise student success in mind (Museus, 2014). The perspective of our model is one that foregrounds how campus environments and educators can promote at-promise student success. It is the environments and approaches to support that should be manipulated such that educators embrace at-promise students and leverage multiple support contexts to validate their potential and propel them toward college success.

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