



The Power of Belonging:

Learnings from evaluation of the Ready to Rise program



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Introduction

The Ready to Rise (RTR) program was developed by Degrees of Change, a nonprofit in Tacoma, Washington, supported by College Spark Washington. Degrees of Change is dedicated to preparing diverse students to succeed in college and careers and return to their home communities as leaders, to build more vibrant and equitable communities. The program utilizes a cohort-based design to strengthen relationships, develop leadership and psychosocial skills, and increase college persistence and completion as well as career preparation.

Ready to Rise aims to address the challenges leading to a high college attrition rate by supporting low-income and underrepresented students, particularly those who are the first in their families to attend college, with programming geared toward college attainment and degree completion. According to Castleman and Page (2014), 10-40% of students who were admitted to college failed to enroll in the fall. Further research in this area reveals that over a fourth of the first-year students (26%) at four-year universities and two-year colleges do not return to the campus the following year. This figure is even higher for underserved groups, with 30% of Hispanic and 34% of Black students dropping out before their second year of college (National Student Clearinghouse Research Center, 2019). The Ready to Rise program aims to increase college enrollment, retention, and completion through cohort-based programming, college mentorship, and leadership training.

Study Purpose

This study builds on a set of key findings from a rigorous, five-year developmental evaluation of the RTR program conducted by the Claremont Evaluation Center (CEC). The Ready to Rise program was developed by Degrees of Change and supported by College Spark Washington. This innovative college access and success program is aimed specifically at supporting first-generation students of historically or currently marginalized groups to make the transition from high school to college, complete college, and return back to their home communities in meaningful careers that make contributions toward social justice and equity.

During the five-year evaluation of the RTR program, the CEC evaluation team discovered the program had a strong impact on the development of both peer and adult relationships among program participants (“scholars”). Scholars reported very strong and trusting relationships with peers and adults in their RTR campus cohorts and positive relationships with their community cohorts. The strength of these relationships was reported to be related to the opportunities provided by RTR for continued and meaningful interactions. Both campus cohorts and community cohorts provide RTR scholars a sense of belonging and help them develop personal networks and friendships during their higher education.

Building on these and other findings, the current study tested the role that scholars’ sense of belonging to the RTR program played in strengthening scholars’ positive and trusting relationships with college faculty and, in turn, the predictive power of these elements in scholars’ college self-efficacy and college outcomes. The evaluation findings support these associations qualitatively. In this study, we tested these relationships quantitatively. This is important because of the need to identify which factors will help underrepresented students who are the first generation in their family not only to attend college, but to succeed there and return to their home communities in careers that support social justice and equity.

Study Team

This study was conducted by the original evaluation team at the Claremont Evaluation Center’s Education, Development, and Evaluation Lab (EDEVAL), led by Dr. Nazanin Zargarpour, in collaboration with colleagues at Capacity To Impact. The EDEVAL Lab is dedicated to integrating responsible transdisciplinary scholarship and evidence-based best practices in serving the continuous improvement and advancement of educational organizations through applied research and evaluation. The EDEVAL Lab’s evaluation approach is highly stakeholder-engaged, including iterative cycles of program implementation and evaluative reflection. Such a collaborative approach optimizes the rigor, relevance, and utility of findings and recommendations. The evaluation team’s commitment to rigorous knowledge generation and

dissemination informs professional presentations and publications, including the current white paper. Capacity To Impact (CTI) is a consulting corporation that provides services to strengthen the organizational capacity of clients for positive social impact. Like EDEVAL Lab, CTI utilizes a strong stakeholder-engaged approach to organizational improvement through applied research and evaluation. By implementing a developmental framework, CTI promotes evidence-informed practice, evaluation, reflection, and improvement processes, to strengthen programming that improves social and economic equity in communities.

Study Approach

The study team conducted the current analyses and prepared the current paper at the request of Degrees of Change and Ready to Rise leadership, while maintaining rigorous independence from any program leadership influence and refraining from any communication with the program. The team conducted additional research and analyses beyond the scope of work included in the program evaluation, to quantitatively test the relationships that led to college and career self-efficacy and college outcomes. Methods consisted primarily of mediation analyses.

Findings from this study point to the importance of a sense of belonging to the program in fostering the development of strong relationships with faculty on college campuses, which, in turn, mediates college attainment. This is particularly true for underrepresented and low-income students, as is well documented in the existing research. These findings are published with the hope that they will prove valuable for both researchers and practitioners in designing and implementing college access and success programming, as well as educational and developmental supports for adolescents and young adults more broadly.

Significance and Perspectives

Importance of boosting college enrollment and completion rates for low-income and first-generation students

The benefits of participating in higher education are numerous and have been documented in the literature for decades. Individuals with higher education generally have higher rates of employment, higher earnings, a lower chance of being in poverty or unemployed, better health, and a longer life (Ma et al., 2016). Furthermore, the advantages in earnings for those with a college education have been increasing since the mid-1970s (Carnevale & Rose, 2015).

The opportunity, however, to attain the benefits that come with higher education is unequal as evidenced by continuing differences in attainment across groups. College enrollment and completion rates are significantly lower in the United States for students who are the first generation in their families to attend college; are from lower-income families; and are Black, Hispanic, and American Indian or Native American (Cahalan et al., 2018; Ma et al., 2016; Page et al., 2019). These differences in college attainment perpetuate the social and economic stratification of U.S. society and impede social mobility (Perna & Finney, 2014).

Providing all individuals with the opportunity to participate in higher education is essential to break the cycle of these systemic inequities, as well as to advance the social and economic prosperity of historically disinvested communities and the country as a whole. The U.S. needs increased levels of educational attainment to meet today's workforce needs and global competition. The necessary levels of attainment cannot be met without increasing the attainment of the groups that have been traditionally underserved by educational systems and structures (Marcus, 2019; Perna & Finney, 2014). The ongoing differences in educational attainment can be attributed to unequal access to resources and other support needed to promote college opportunity and success. Programs that seek to increase higher education

attainment for individuals from groups that have been historically underserved are critical to the well-being of their communities and of our nation.

Research on key characteristics of college attainment programs that decrease student dropout (Webb et al., 2017) and increase college persistence and degree completion for underrepresented students points to developmental strategies that foster social-emotional learning, engagement, and belongingness (Cohen & Garcia, 2014). Specific interventions can increase retention by up to 10%. A variety of strategies, however, are necessary to address differing contexts (Thomas, 2012). Furthermore, research supports the importance of targeted programs which intervene at key moments with the appropriate assistance or incentives to result in large impacts on marginalized students (Carrell & Sacerdote, 2017).

Key factors in boosting college enrollment and persistence: sense of belonging and adult relationships

Research suggests that cultivating and supporting a sense of belonging to a campus is connected to performance, which may lead to increased retention and persistence (Davis et al., 2019). Based on current research, RTR designed a supportive, multi-year, cohort-based college attainment program model to encourage the development of relationships, resourcefulness, socio-emotional and psychosocial competencies, academic mindsets, self-efficacy, and leadership skills among its scholars. The intended outcome is to increase the rates of college completion, career placement, and community leadership for underrepresented students at public institutions of higher education in Washington State, by implementing a variety of evidence-based, cohort support strategies (Zargarpour et al., 2018).






Another important supportive factor aiding young people in college success is the presence of developmental relationships with peers or adults (Boat et al., 2020). Having people who can guide students through academic challenges and increase their confidence in managing those

difficulties has been found particularly pivotal for navigating new academic expectations in the first-year experience (Hoffman et al., 2002; Means & Pyne, 2017).

When provided by parents, such relationships are associated with socio-emotional outcomes (self-awareness, emotional competence, openness to challenge, and personal responsibility); academic strength (mastery motivation [i.e., growth mindset], academic control [i.e., self-efficacy]); civic commitment and prosocial behavior (Syvertsen et al., 2015). Students with developmental adult relationships have also shown more resilience in the face of stress and trauma (Farrington et al., 2012). Beyond these psychosocial effects, supportive adult relationships have been found to benefit students' academic motivation and future self-expectations (Lecy, 2021), as well as their intention to persist in college (Hausmann et al., 2009).

The Search Institute has found that supportive relationships are most beneficial when they serve five key functions: express care, challenge growth, provide support, share power, and expand possibilities (Roehlkepartain, et al., 2017). Supportive relationships which fulfill these functions may be referred to as developmental relationships. The elements that go into each of these functions are outlined below in Figure 1.

Figure 1. The Search Institute's Developmental Relationships Framework

Elements	Actions	Definitions
Express Care 	Be dependable Listen Believe in me Be warm Encourage	<ul style="list-style-type: none"> • Be someone I can trust. • Really pay attention when we are together. • Make me feel known and valued. • Show me you enjoy being with me. • Praise me for my efforts and achievements.
Challenge Growth 	Expect my best Stretch Hold me accountable Reflect on failures	<ul style="list-style-type: none"> • Expect me to live up to my potential. • Push me to go further. • Insist I take responsibility for my actions. • Help me learn from mistakes and setbacks.
Provide Support 	Navigate Empower Advocate Set boundaries	<ul style="list-style-type: none"> • Guide me through hard situations and systems. • Build my confidence to take charge of my life. • Defend me when I need it. • Put in place limits to keep me on track.
Share Power 	Respect me Include me Collaborate Let me lead	<ul style="list-style-type: none"> • Take me seriously and treat me fairly. • Involve me in decisions that affect me. • Work with me to solve problems and reach goals. • Create opportunities for me to take action and lead.
Expand Possibilities 	Inspire Broaden Horizons Connect	<ul style="list-style-type: none"> • Inspire me to see possibilities for my future. • Expose me to new ideas, experiences, and places • Introduce me to more people who can help me grow.

Although developmental relationships are a growing area of research and practice, much is still unknown about them. Questions include how developmental relationships form, are sustained, and produce beneficial effects. In the Search Institute report referenced above, Roehlkepartain et al. (2017) specifically point out several areas for future inquiry:

- *How might strengthening developmental relationships contribute to reducing inequities in opportunities and supports for young people who are marginalized in society?*

- *How are different relationships (e.g., parent, teacher, peer, mentor) developmental in different ways? How do these different relationships complement each other?*
- *To what extent do developmental relationships enhance social-emotional strengths in domains of identity, agency, and commitment to community, which in turn predict success in school, work, and other areas of life? (p. 16)*

Potential answers to these questions and possible future directions may be found in the learnings generated from evaluation of the RTR program, which was explicitly designed to build developmental relationships for first-generation, low-income college students. The evaluation of the RTR program demonstrated a strong association between program participation and increased psychosocial competencies and mindsets related to college attainment.

Ready to Rise cohort-based program model: cultivating a sense of belonging and developmental relationships

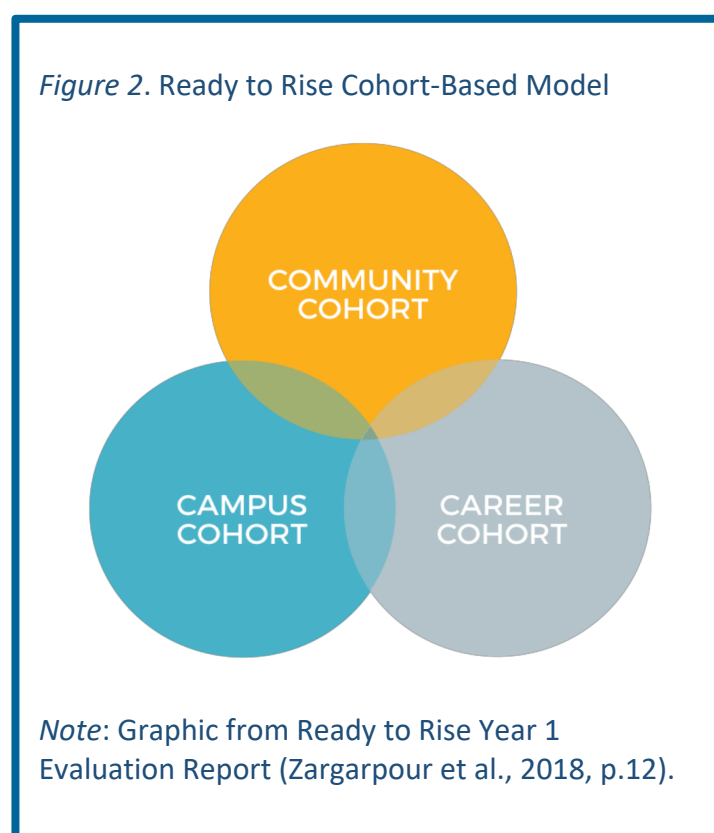
The following is a summary of key features of the Ready to Rise program design as they relate to the program's focus on belonging and developmental adult relationships.

Program Logic

Ready to Rise has a complex and detailed program logic model. The basic premise of the program is that a combination of intensive retreats, workshops, and cohort-based supports will help RTR scholars develop psychosocial competencies and mindsets. Through these activities and the cohort system, scholars are also provided with social supports from peers and adults on their campuses, in such a way as to develop a sense of belonging to the program and to campus. Finally, the program aims to help scholars develop a practical knowledge of college success strategies to navigate the challenges of academic life and career development. The development of psychosocial competencies, supportive relationships, and college success strategies is intended to improve scholars' success in college with regards to persistence and degree attainment.

Cohort-Based Support

One of the key elements of Ready to Rise was its cohort-based approach to providing a sense of belonging and social support for scholars. Participating scholars were assigned initially to a community cohort with other scholars from the same home region, and once they arrived at their campus, they were placed in a campus cohort with other RTR scholars at their institution. A model of this cohort-based approach is shown in Figure 2.



RTR scholars began the program with their community cohorts by participating together in summer trainings and retreats with peers from their local communities. Throughout the program they were encouraged to stay connected with these community cohort peers, especially when they returned home during school breaks. Next, the scholars were grouped into their campus cohorts as they prepared to transition to their selected colleges and

universities and into their first year of college. Once on campus, they met with their RTR coaches monthly and participated in workshops and social events with their campus cohorts. From their first year of college through completion, RTR encouraged the scholars to maintain their cohort connections by participating in workshops, social events, and community service with their community and campus cohorts.

Sense of Belonging

One particular challenge for first-generation college students is the sense of difference and exclusion in the unfamiliar environment of college, which is exacerbated for minority students from currently or historically marginalized groups (Strayhorn, 2019). This tends to result in worse academic outcomes for such students than their white or multi-generational peers (Hausmann et al., 2009). This is directly tied to a sense of belonging, “an individual's sense of belonging to a particular group and his or her feelings of morale associated with membership in the group” (Bollen & Hoyle, 1990, p. 482).

Additionally, college years are an important period of identity formation, and students from nondominant social groups often experience a sense of otherness that leads them to feel they do not belong in college at all. For example, studies have found that many female students experience imposter syndrome, a phenomenon in which they do not believe they are bright or worthy of attending outstanding institutions of higher education, despite their excellent academic accomplishments (Edwards, 2019). Students who are typically underserved in higher education struggle with finding their place in privileged academic environments. Jury et al. (2017) explored the experiences of students from low-income backgrounds who were in university contexts and found that these students face considerable psychological barriers in comparison with their more affluent peers, including negative self-perception, emotional distress, and identity management issues. Parkman (2016), in a review of imposter syndrome in higher education, discovered that imposter syndrome scores are higher for minority student populations than majority student populations. Several studies also reveal that first-generation

students experience imposter phenomenon more often and at higher levels than their non-first-generation peers (Martinez et al., 2009; Peteet et al., 2015; and Terenzini et al., 1996).

Institutional support structures such as formal identity-specific programs or spaces, and related personnel roles designed to support inclusion and identification with college, can help to mitigate this disadvantage by helping foster a sense of belonging. As students “feel cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or others on campus (e.g., faculty, peers),” they are more likely to develop necessary supportive relationships (Strayhorn, 2019, p. 3).

Supportive Relationships

The Ready to Rise program trained a set of continuing students to serve as near-peer mentors, tasked with providing coaching to incoming RTR scholar cohorts. The near-peer mentor design was intended to play an important role in the RTR program. These mentors were more advanced scholars in the RTR program, serving as near-peer “coaches” to help incoming scholars overcome obstacles in adapting to college and campus life and build networks of social support on campus and in the community. The coaches were trained to provide ongoing academic and personal support by sharing about resources on and off campus and formally and informally communicating with the students. By forming a trusting personal relationship, coaches could offer students ongoing social and practical support. Ideally, as incoming scholars developed knowledge and skills and advanced in the program, they too would go on to become coaches for future cohorts.

These near-peer relationships were complemented by a layer of additional support from site-level program staff. These professionals’ backgrounds mirrored the scholars’ backgrounds, with all being people of color who were first-generation graduates in their families from institutions that were among RTR’s partner colleges. This was intended to make them role models, to whom the scholars could feel safe reaching out for support.

Ready to Rise Program Evaluation Findings

It is important to note several key findings from the mixed-methods program evaluation that provide the basis for further research and findings set forth in this paper. The five-year evaluation addressed six key evaluation questions, two of which provide the foundation for the current study. All six questions are listed below, with the two relevant questions for this study highlighted:

1. To what extent is the RTR program implemented with fidelity across program sites?
2. How satisfied are RTR scholars with the program, and why?
3. How satisfied are RTR staff with the program, and why?
- 4. What are the personal, social, and academic outcomes of RTR scholars? How do these outcomes compare from baseline to end-of-year? How do they compare to demographically similar, non-participating students?**
- 5. To what extent can scholar outcomes be attributed to participation in RTR?**
6. Which RTR program strategies are most impactful for scholars?

A mixed methods design was utilized to investigate the above questions, including program document review, retrospective post survey, interviews and focus groups with scholars and staff, and analyses of academic data for RTR scholars and matched comparison group students. Scholars and comparison group students were matched on key demographic variables and attended the same college. Rigorous quantitative and qualitative data analyses were conducted to develop findings that were presented in a clear, actionable evaluation report (Zargarpour et al., 2021).

The following three sections set forth three key evaluation findings that emerged from the questions and which inform the current study.

Finding 1. Association between Ready to Rise program participation and increased self-efficacy in psychosocial competencies

Psychosocial competencies (PSC) encompass an array of metacognitive skills and mindsets that enable students to capitalize on their cognitive capabilities to succeed academically and personally. Also referred to as noncognitive factors, PSCs include:

1. Academic mindsets (e.g., sense of belonging, academic self-efficacy, or future self-expectations), which support academic motivation;
2. Learning strategies (e.g., study skills and goal-setting), which enable effective cognitive learning; and
3. Social skills (e.g., responsibility, empathy, assertion, compassion), which help build supportive relationships with peers, faculty, and other adults.

These factors have been demonstrated to contribute to academic and career success for all students, and underrepresented students in particular (Farrington et al., 2012). In the past, these relationships have been found to be mediated primarily through academic behaviors (e.g., attending class, doing homework, participating, studying) which contribute to students' ability to progress and complete school or college (Farrington et al., 2012). The Ready to Rise evaluation also supported this finding, particularly with respect to academic self-efficacy (Zargarpour et al., 2021).

Academic self-efficacy may be defined as students' perceived capability to produce designated levels of performance with regards to academic achievement. This study addresses one PSC, namely, academic self-efficacy with respect to future college and career attainment (Future Self-Expectation).

Finding 2. High correlation between sense of belonging to Ready to Rise program and relationships with college faculty and staff

As noted above, a key element of the RTR program was its conscious and consistent cultivation of developmental relationships between RTR scholars and their peers, their near-peer mentors, and program staff. This occurred at the level of both community cohorts in their home regions as well as campus cohorts, both of which provided RTR scholars a sense of belonging and helped them develop personal networks and friendships. This was accomplished through the combination of summer retreats, workshops, in-college support, and cohort-based activities such as community service projects over breaks between academic terms.

Crucially, scholars reported feeling a sense of belonging with their RTR cohorts in part because most RTR staff were themselves first-generation students from ethnic and academic backgrounds similar to those of the scholars. By expressing caring and sharing their own life story, these staff members served as role models and caring adults that scholars could identify with personally and feel comfortable approaching for support and guidance.

In turn, workshops exposing scholars to on-campus support services helped not only to raise scholars' awareness of these resources, but also to familiarize them with the individual adults working in those support centers. These connections were complemented by early-warning monitoring which helped to identify scholars at risk of academic distress and to refer them to campus services.

We hypothesize that these relationships with RTR staff helped scholars build the self-confidence and skills to approach faculty or staff on their own and access supportive services independently of the program.

In our evaluation of the Ready to Rise program, scholars reported feeling a sense of belonging to their program and college (Zargarpour et al., 2021). Fully 93% of the scholars after the 2018 summer retreat and 100% after the 2019 summer retreat agreed that the program

strengthened their sense of belonging in their campus cohort. Many of these scholars (69%) also reported a sense of belonging to their college as a result of the program. More than half (57%) of RTR scholars reported that they developed positive adult relationships with their RTR Coach through the program. Importantly, the development of positive adult relationships was highly correlated with scholars' sense of belonging to the program and to their college ($r = .56$).

As previously noted, a review of existing research shows that developmental adult relationships have been found to support self-efficacy (Farrington, 2012). This is particularly true when the adults communicate a strengths-based focus, emotional safety, space for exploration and self-definition, and support to take risks. In addition, adults' high expectations for scholars to set meaningful challenges, along with adults' individualized caring support, and provision of enabling resources support scholars' sense of their own capacity to set meaningful goals, persist, and achieve positive outcomes for themselves. Ready to Rise itself provided these forms of support through a combination of support from peer cohorts, near-peer mentors, and adult program staff.

One of the important findings from the program evaluation was that these program supports not only provided direct developmental benefits to RTR scholars, but also helped to impart skills and mindsets that supported these scholars in developing relationships with adults outside the program. By having a supportive, low-risk environment to practice setting and achieving goals, RTR scholars may have been able to apply what they learned when forming relationships with adults from whom they may have initially felt more psychological distance (Trope & Liberman, 2010).

Finding 3. Association between Ready to Rise program participation and greater persistence in first two years of college

Evaluations of the Ready to Rise program found that scholars engaged in the program were more likely than a demographically matched comparison group to complete a second year of college education.¹

RTR scholars demonstrated significantly more promising college persistence rates through the second year compared to the matched comparison groups. Of those who enrolled in Fall 2017 at 2-year colleges and 4-year universities, 85% of RTR scholars subsequently enrolled in Fall 2018 and 69% in Spring 2019, while only 64% of comparison group participants enrolled in Fall 2018 and 44% in Spring 2019. Of those who started in Fall 2018 at 2-year colleges and 4-year universities, 85% of the scholars were still enrolled in Spring 2019 while only 77% of comparison group students stayed enrolled. The differences in persistence rates between RTR scholars and the comparison group participants were statistically significant ($p = .008$).

¹ Data concerning persistence has been collected up to 2021, however, due to low retention during the third year of the RTR program at many colleges, it is difficult to determine whether persistence would have remained strong during the third year of programming for RTR scholars. See the Discussion section of this report for details

Current Study Design and Methods

Taken together, the above findings seemed to indicate that scholars' sense of belonging to the RTR program (Sense of Belonging to Program) may be pivotal in helping them to gain the skills and competencies needed to develop supportive adult relationships in college (College Adult Relationships) which, in turn, are associated with greater persistence at least two years into college (College Persistence). The current study was undertaken to explore these associations.

Due to limitations with data collection and matching, these associations could not be examined directly with College Persistence. Previous findings from the RTR annual program evaluation, however, established that scholars' Sense of Belonging and College Adult Relationships were both strongly, positively associated with scholars' College Persistence (Zargarpour et al., 2018). scholars' Sense of Future Self-Expectation, with respect to college completion and career attainment, which was shown to be strongly correlated with College Persistence, was used as a proxy for College Persistence in this study.

Thus, this study examined the strength and importance of scholars' Sense of Belonging to the RTR Program, the value of scholars' College Adults Relationships on their college campuses, and the impacts these had on scholars' sense of self-efficacy for college and career success (Future Self-Expectation).

Hypotheses

Building on the three key findings set forth above from the original evaluation study, and accepting the limitations in data collection described above, three key interrelated hypotheses were generated to be tested in the current study:

- 1) **Scholars' Sense of Belonging to the Program is related to their formation of supportive College Adult Relationships with faculty or staff.**

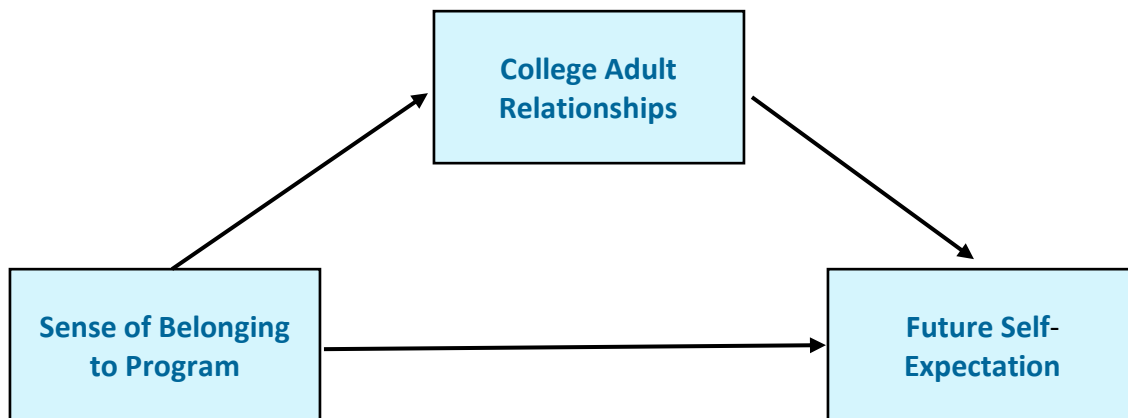
- 2) **Scholars' College Adult Relationships with faculty or staff are related to their Future Self-Expectation with regards to degree completion and career attainment.**
- 3) **The effect of scholars' Sense of Belonging to the Program on their levels of Future Self-Expectation is mediated by their level of supportive College Adult Relationships with faculty and staff.**

These hypotheses were combined into a conceptual model to guide the study and analyses.

Model

The three hypotheses in the previous section were combined into the conceptual model shown in Figure 3.

Figure 3. Conceptual Model of the Relationship of Program Belonging, Adult Relationships, and Future Self-Expectation



Methods

The relationships hypothesized in the model were assessed first via simple correlation analyses to define the variables of interest (See table 1). Following correlation analyses, a mediation analysis assessed the mediating effect of supportive College Adult Relationships on the relationship between scholars' Sense of Belonging and their Future Self-Expectation, as a proxy for persistence in college, a college success outcome.

Variables

In 2021, 82 RTR scholars from three cohorts across six colleges responded to a retrospective survey. This survey assessed scholars' Sense of Belonging to the RTR Program and their college, scholars' College Adult Relationships with college faculty and staff, and scholars' Future Self-Expectation with regards to degree completion and career attainment. (See Table 1 below for construct definitions and survey items.)

Table 1. Relevant Concepts and Related Survey Items

Definition	Survey Questions
<p>Sense of Belonging</p> <p>Students can be considered to have a sense of belonging to a group (such as a campus or program) when they feel cared about, accepted, respected, valued by, and important to the group.</p>	<p>To assess sense of belonging, scholars were asked to rate their agreement with the following statements:</p> <ul style="list-style-type: none"> • I feel a deep sense of belonging in the RTR program. • I feel a deep sense of belonging in my RTR home community cohort. • I feel a deep sense of belonging in my RTR campus cohort. • The RTR program feels like family to me. • I feel that I belong at my college or university. • I can really be myself at my college.
<p>College Adult Relationships</p> <p>Supportive relationships are relationships of a developmental nature which serve the following functions:</p> <ul style="list-style-type: none"> • express care • challenge growth • provide support • share power • and expand possibilities 	<p>To assess developmental relationships, scholars were asked to rate their agreement with the following statements:</p> <ul style="list-style-type: none"> • I have a good relationship with my professors/instructors. • I am confident that I know at least one faculty or staff person at my college I can talk to if I have a problem.
<p>Future Self-Expectation</p> <p>A student's belief in their own ability to persist in college to graduate and achieve personal and career success.</p>	<p>To assess future self-expectation, scholars were asked to rate their agreement with the following statements:</p> <ul style="list-style-type: none"> • I am certain I will be able to finish my college program. • I am certain I will transfer to a four-year university • I am certain I will have a job that will support my personal financial needs. • I am certain I will get a job in my field of study.

Findings

The evaluation found that a Sense of Belonging in the program was strongly correlated with scholars' sense of self-efficacy and expectations in relation to eventual college completion and attainment of a meaningful career (Future Self-Expectation). In the current study, we hypothesized that this effect may be mediated by students' relationships with adult faculty or staff at their colleges (College Adult Relationships). The analyses below explore the hypotheses.

Correlation Study: Testing Hypotheses 1 and 2

To study the mediating relationships hypothesized, this study commenced with a correlation analysis using the retrospective survey data. The correlation analysis was conducted to test the first two hypotheses:

1) The association between Scholars' Sense of Belonging to the Program and College Adult Relationships



2) The association between Scholars' College Adult Relationships and Future Self-Expectations



The findings from the correlation study are displayed below in Table 2.

Table 2. Pearson's Correlations Between Sense of Belonging to Program, College Adult Relationships, and Future Self-Expectations

	Sense of Belonging to Program	College Adult Relationships	Future Self-Expectations
Sense of Belonging to Program	1	.475**	.506**
Adult Relationships	.475**	1	.600**
Future Self-Expectations	.506**	.600**	1

Note: N = 82.

** = Correlation is significant at the 0.01 level (2-tailed).

A positive correlation between Sense of Belonging to Program and College Adult Relationships ($r = .48$) indicated that the more scholars reported feeling a strong Sense of Belonging to the Program, the higher was their tendency to form supportive College Adult Relationships with faculty or staff. This finding supported the first hypothesis. Further, a strong positive correlation between College Adult Relationships and Future Self-Expectations ($r = .60$) indicated that the more scholars formed strong and supportive College Adult Relationships with faculty or staff, the greater was their confidence in their ability (or self-efficacy) to complete college degrees and attain a fulfilling career of their choice (Future Self-Expectation). This finding supported the second hypothesis.

In light of these two findings, a positive correlation between Sense of Belonging to the Program and Future Self-Expectations ($r = .51$) strengthened key assumptions undergirding the third hypothesis – the possibility that the effect of scholars' Sense of Belonging to the Program on their levels of Future Self-Expectation may, indeed, be mediated by their level of supportive College Adult Relationships with faculty and staff. Mediation analyses testing the third hypothesis are detailed in the section below.

Mediation Study: Testing Hypothesis 3

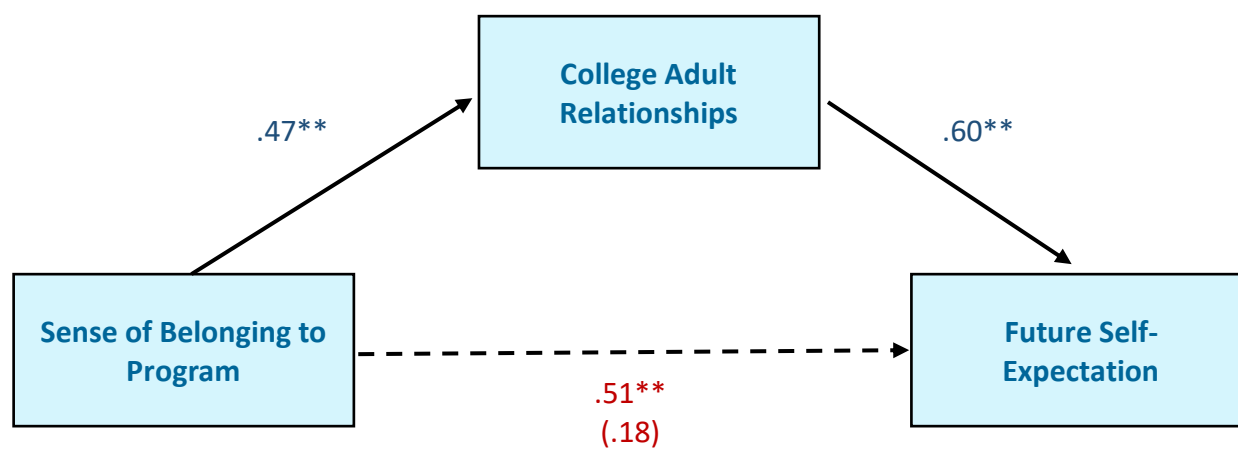
To investigate the mediating effect of supportive relationships with college adults (College Adult Relationships) on the association between scholars' Sense of Belonging and their Future Self-Expectation, a simple mediation analysis was performed (see Figure 4). This model tested the third hypothesis of this study.

3) The association between Scholars' Sense of Belonging to the Program and their Future Self-Expectations depends on their level of supportive College Adult Relationships



Scholars' Sense of Belonging to Program was found to be significantly associated with Future Self-Expectation ($\beta = .51, p < .01$). Scholars' College Adult Relationships (with faculty and staff) were also found to be significantly associated with Future Self-Expectation ($\beta = .60, p < .01$). In a model where Future Self-Expectation was predicted by both Sense of Belonging to Program and College Adult Relationships, however, the direct relationship between Sense of Belonging to Program and Future Self-Expectation disappeared ($\beta = .18, p = .06$). This indicates that without the effect of College Adult Relationships, Sense of Belonging to the Program, alone, does not have a direct predictive effect on Future Self-Expectations. Further, the indirect relationship was found to be significant (Effect = .46, $p < .01$).

Figure 4. Relationships with College Adults Mediates the Effect of Sense of Belonging on Future Self-Expectation for College and Career Attainment



Note: N = 82.

** = Correlation is significant at the 0.01 level (2-tailed).

Thus, based on the findings of this study, we can conclude that scholars' College Adult Relationships with faculty and staff fully mediates the relationship between student Sense of Belonging to Program and Future Self-Expectation. As students develop a sense of belonging with the program, they are able to build supportive relationships with college faculty and staff. It is these relationships which aid students in developing self-efficacy for college completion and career attainment.

Discussion: Importance of the Cohort Model

Educational researchers have shown that even small social-psychological interventions in students' thought patterns and beliefs can result in increased self-confidence and self-efficacy, and positively impact academic attainment (Cohen & Garcia, 2014; Yeager & Walton, 2011). The findings of this study validate the effectiveness of a cohort-based intervention on scholars' sense of self-efficacy for college and career attainment and, importantly, identify a potential causal pathway in this developmental model by highlighting relationship-building as a mediating factor.

The Ready to Rise program's cohort model is deliberate and systematic in its focus on developing a sense of belonging by means of fostering relationships and teaching relationship-building skills. In focus groups conducted over the course of the RTR program evaluation, Scholars consistently reported that their sense of belonging to their community and campus cohorts was a critical support to them in helping them form relationships. The combination of workshops and immersive retreats in the summer of their transition from high school to college helped scholars bond with their cohorts, with many describing their cohort groups as their "RTR family." Conversely, scholars who were unable to attend these workshops and retreats reported not feeling as much sense of belonging to the program. The cohorts provided a safe, supportive environment in which RTR scholars could form relationships with adults, particularly site directors and other program staff. These relationships were nurtured by the program, through regular contact, training workshops, immersive retreats, and ongoing coaching.

Scholars emphasized the exposure they gained to expanded developmental experiences and relationships through immersive cohort-based experiences and near-peer coaching, noting, *"What's cool about RTR is that at the start you're around people who look different and have different experiences. At the end of the day, after sharing stories at the retreat, you build trust with them and recognize commonalities."* This identification with near-peers also supported scholars in projecting themselves into their future selves by identifying with older scholars who had come from similar backgrounds and weathered the same challenges in their first year of

college. As one older near-peer participant commented, *“I can relate and coach them. I can share with them my stories. It's like I'm with like-minded people, even if we are one year apart”* (Zargarpour et. al., 2021, p. 14).

The mediation model in this study validates the power of belonging to the cohort-based program in helping scholars to develop strong and supportive relationships with adult faculty and staff on their college campuses, which, in turn, were associated with greater college persistence among scholars. This model is further reinforced by the evaluation finding that when the strength of the cohort model waned college persistence also began to decline. The success of the RTR program with respect to its high rates of scholar persistence in college began to wane in the third year of the program. Neither Cohort 1 nor Cohort 2 maintained significantly better rates of persistence in year three than their respective matched comparison groups. In fact, Cohort 1 had a 46% persistence rate into the third year of college compared to the comparison group's 51%.

We understand the decline in college persistence to be related to the fact that participation in the program dropped dramatically in the third year of college for each cohort. Of the 12 campus cohorts, 8 had fewer than 10 scholars in their third year. Of these 8 cohorts, 7 had persistence rates that were lower than their respective matched comparison groups within their college. Conversely, all of the cohorts with over 10 scholars retained persistence rates greater than their respective matched comparison groups within the same colleges. Therefore, a robust cohort size of 10 or more scholars seems to be needed for the program to develop a sense of belonging to the program and meaningful relationships that affect college outcomes.

Though unexplored in the RTR program, evidence from other cohort-based programs indicate that there may be diminishing returns if a cohort exceeds a certain size (Kember, Lee & Li, 2001). While this study suggests an important tipping point for cohort effectiveness, it does not address the maximum effective cohort size. Further study is needed to determine when a cohort becomes too large to be effective.

As has been noted previously, the use of a robust cohort system is a core component of the Ready to Rise program. These findings suggest that there is a tipping point with regards to cohort size and effectiveness in achieving the relational skills that, in turn, affect positive college outcomes.

Conclusions

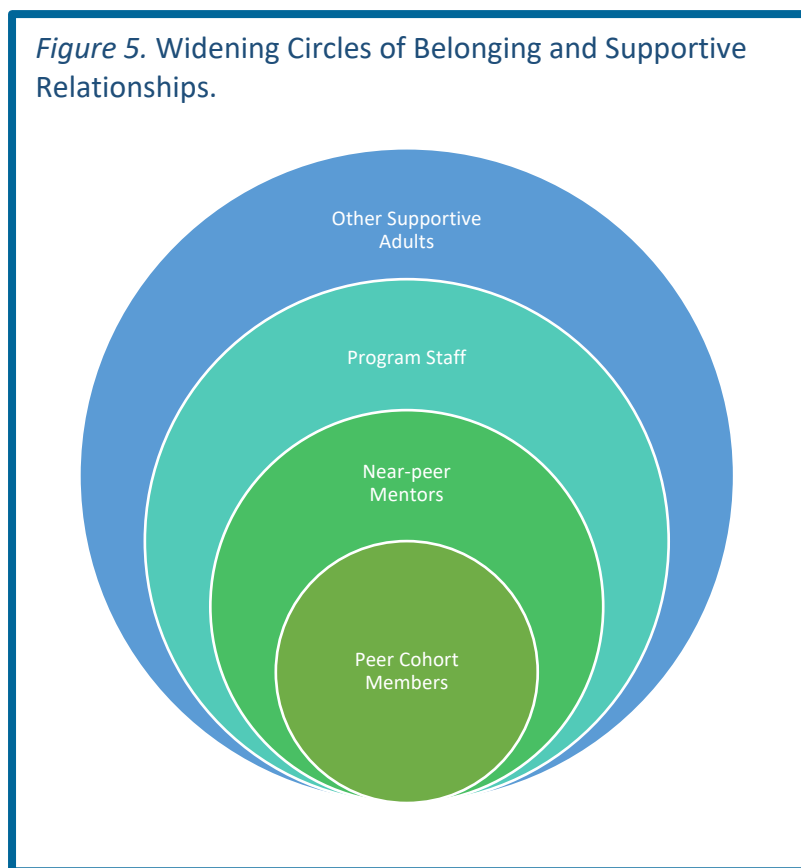
Bridging from peers to supportive adults for better academic outcomes

The finding that College Adult Relationships mediate the association between Sense of Belonging and Future Self-Expectation leads us to propose that there may be a progressive flow of developmental relationships that are supported by a strong cohort-based program. This understanding of a progression in developmental relationships may be intentionally integrated into program design to strengthen belonging to programs and thereby help young people gain the skills and competencies to develop relationships with adults in college, relationships that are critical for their college persistence.

We propose that by starting with peer cohorts, as the individuals who most closely represent their past and immediate experience, scholars build a sense of belonging and social support. In turn, near-peer mentors, as older and more experienced college students, represent figures somewhat more advanced in the path that the scholars aspire to pursue. Through coaching relationships with these mentors, scholars are able to project their image of themselves into the future and develop a sense that they can be safe with and accepted by people who are more advanced in their desired academic and social pathways and can, therefore, also achieve this outcome. Likewise, in building relationships with program staff, scholars are able to relate to even more advanced adults who have completed college and entered the workforce. As they are accepted, respected, and supported by program staff they develop a sense of safety and belonging with a future version of themselves as college graduates and career professionals.

This sense of belonging to the program and the relational skills and developmental identifications it engenders are then more readily transferred to college faculty and staff. Beyond more proximate peer and near-peer relationships, the RTR program has shown that it is able to assist scholars in building relationships with other adults on campus by intentionally introducing scholars to campus faculty and staff who can be academic or personal support resources. These introductions are often conducted through informational or skill-based

workshops and trainings with a variety of guest presenters from different campus services. The gradual expansion of supportive developmental relationships is shown in Figure 5.



This progressive widening of circles of belonging, identification, and relationships holds promise for the development of future programs that intentionally build progressively wider circles of relational capital. Similar to the Ready to Rise program, these programs may start by helping students build relationships with peer cohorts and near-peer mentors, then build supportive relationships with adults serving as program staff. In implementing this design, it is important to note that there may be a tipping point with regard to cohort size. Cohorts of greater than 10 scholars were able to retain effectiveness.

The programs could then intentionally facilitate relationship-building and identification with supportive adults outside the program, on college campuses and in the community, such as college support center staff, college faculty, career internship supervisors, and others. Thus, programs can help young people learn to build the confidence and skills needed to approach and develop relationships with college faculty and staff and career role models – adults who hold the knowledge and positional power to facilitate their college and life outcomes – and to see themselves in similar positions in the future.

In addition to implementation of the widening circles process, these programs have room to expand beyond the one-to-many knowledge transmission model that occurs when informational or skill-based workshops and trainings are offered by a variety of guest presenters. Programs should consider how they can create opportunities for students to have more personal connections with adults through small-group or individual interactions. The benefits of these relationships for developing psychosocial competencies could be further amplified by providing the adults with evidence-based tools and techniques for building students' self-confidence, future self-expectations, resilience, and self-regulation.

We recommend that as these programs are implemented, they be accompanied by empirical testing to confirm the widening circles of belonging and supportive relationships, and to measure the associated increases in academic outcomes that are anticipated to occur, particularly for low-income and first-generation students, in the transition to, persistence in, and completion of college.

Limitations

The purpose of this paper was exploratory, and the findings presented here should be taken as promising and suggestive, while still preliminary. The original evaluation tools were developed and optimized to address a different set of questions specific to the broader program evaluation and were not intended to be used for theory-building research. As a result, the findings presented here represent post-hoc inquiry into observed outcomes, and several specific considerations are important to take into account when interpreting the findings and their implications.

Conceptually, it is important to note that this paper focuses on specific psycho-social competencies and excludes other competencies and mindsets that may be relevant to academic, personal, and career outcomes for disadvantaged students. These include resilience, growth mindset, self-regulation and many others. The analyses here did not seek to link these psychosocial competencies to college outcomes, although extensive other research has shown the contribution of noncognitive factors to student outcomes (Farrington, et al., 2012).

Methodologically, because the survey data utilized for this study are from a single point in time (April-May 2021) and from a single program, definitive causal relationships cannot be determined. As the survey data represent a single method and are from a self-reported source (scholars' self-reporting), they may be subject to common-methods bias and social desirability or other types of response bias. Additionally, measurement of college persistence was limited by decreasing sample sizes as cohorts progressed through college.

Notwithstanding these limitations and potential biases, the triangulation of survey results with qualitative data from focus groups and interviews lends additional validity and explanatory power to the findings. These results merit further confirmation through additional research, programmatic interventions, and subsequent evaluation of those programs.

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Word Cloud of Students' Descriptions of RTR from 2019 Focus Group