



June 2021

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Recommended Citation

Collom, G. D. (2021). A Quasi-Experimental Investigation of Adult Student Enrollment Responses to the Tennessee Reconnect Grant. Postsecondary Education Research Center (PERC).

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A Quasi-Experimental Investigation of Adult Student Enrollment Responses to the Tennessee
Reconnect Grant

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Abstract

In this study I deployed quasi-experimental methods to explore enrollment responses to a unique statewide college promise program for adult students attending college within the two-year public postsecondary education sector in Tennessee. State policymakers implemented Tennessee Reconnect in 2018 to encourage adult students without a college degree to enroll in college and pursue a postsecondary credential or degree. There is little research quantitatively exploring how promise programs affect adult student enrollment in contrast with nationwide trends. For this study, I employ differences-in-differences to determine the effect of Tennessee Reconnect on total, part-time, full-time, male, and female adult student enrollment at public two-year postsecondary institutions in the first two years of the program. Findings revealed a significant increase in enrollment in response to the policy across all adult student categories in the first year. While overall adult student enrollment increased in the second year of the program, only part-time students and male students saw significant increases compared to the nationwide sample. Findings are encouraging regarding adult student responses to a free college program and how states can leverage policy to increase enrollment among individuals who may not have otherwise pursued postsecondary education, such as adult students.

Keywords: free college; promise program; Tennessee Reconnect; financial aid

A Quasi-Experimental Investigation of Adult Student Enrollment Responses Following the Implementation of Tennessee Reconnect Grant

Statewide promise programs, or free college programs, are increasing in popularity in the United States. The growing student debt crisis paired with increasing tuition and fees at public institutions is driving the student financing reform conversation. The cost to attend college, specifically tuition expenses, increased at a historic pace during the last 30 years (Perna et al., 2017). The burgeoning costs of college paired with a widening economic gap between the upper- and lower-income brackets in the United States created a system where low- and middle-income students were forced to borrow thousands of dollars to obtain a college education (Perna et al., 2017). Promise programs, although often varied in their design, are gaining popularity in part because of their simple and marketable message of free college for all (Bell, 2020). Policymakers and advocates for promise programs also point to the potential to increase enrollment and attainment among groups who would not have otherwise pursued postsecondary education (Bell, 2020). While the individual cost saving utility of last dollar promise scholarships is uncertain, especially among low-income or minoritized students (Collom et al., forthcoming; Davidson et al., 2020), research on existing statewide promise programs shows causal increases in college enrollment among all student groups (Nguyen, 2019; Nguyen, 2020).

The Tennessee Reconnect grant was implemented in 2018 specifically to increase postsecondary credential and degree attainment among adult students and individuals with some-college-no-degree (SCND) in the state. Currently, it is not known whether enrollment responses to the Tennessee Reconnect reflected those observed in other statewide promise programs. As more states consider the structure of their own promise programs, it is essential to explore how policy structures affect student outcomes in currently existing statewide programs. Further, if TN

Reconnect is effective for encouraging SCND students and other non-traditional adult students to enroll in college, other policymakers considering potential statewide or federal legislation must consider whether their own promise program should include age restrictions. Thus, the purpose of this study was to explore adult student enrollment responses to the implementation of the Tennessee Reconnect in 2018.

Data for this study include total, part-time, full-time, male, and female adult student enrollment at public two-year technical and associate degree grant institutions between 2011 and 2019. Further, I controlled for state economic conditions by including data from the 2011 to 2019 nationwide censuses. Data were gathered from the Integrated Postsecondary Education Data Systems (IPEDS) and from the U.S. Census Bureau. A differences-in-differences estimation was used to observe the enrollment responses among adult students following the implementation of the Tennessee Reconnect. The guiding research questions for this study were:

1. What were the adult student enrollment responses to the implementation of the Tennessee Reconnect grant policy?
2. To what extent do enrollment responses vary according to gender and part/full-time enrollment status?

Research on Statewide Promise Programs

There is a large body of research regarding institutional and local promise programs (see Perna & Leigh, 2018; Swanson et al., 2017). While institutional and local promise programs were popularized with the 2005 Kalamazoo Promise, statewide promise programs are a more recent development (Davidson et al., 2020). Thus, there is limited body of research exploring statewide college promise programs (Perna & Smith, 2020). In the following section, I provided

a brief review of current research exploring statewide promise programs and identified the need for this study.

Several scholars have attempted to classify statewide programs systematically (Davidson et al., 2020; Perna & Leigh, 2018). In their recent systematic review of statewide promise programs, Davidson et al. (2020) limited their sample to programs available throughout the entire state and programs which do not have high merit-based requirements. In their analysis, the authors identified 13 statewide programs which shared five common traits, including: (a) the program required a high school diploma or GED, (b) the program required a FAFSA application, (c) the program was a last-dollar program, (d) the program used state appropriations and funds, and (e) the program required satisfactory academic progress (Davidson et al., 2020). The authors concluded that statewide promise programs may increase postsecondary access and participation, although the last-dollar structure limited the financial benefit to low-income students (Davidson et al., 2020). Further, the authors called for research on individual statewide programs to determine how variability in program traits impacts student outcomes (Davidson et al., 2020).

While still limited, the research exploring individual statewide programs reveals mixed results regarding student outcomes. In his 2019 analysis of the New York Excelsior program, Nguyen found that the positive effects of the promise program may be mitigated by its strict requirements. The author stated that:

While Excelsior provides New Yorkers with a highly cost-effective option for pursuing postsecondary education, the program involves an intricate set of binding academic and institutional requirements, the existence of which is likely to deter at least a portion of students who could have enjoyed the benefits of such a large-scale tuition reduction program. (Nguyen, 2019, p. 584)

The Excelsior program began in 2017 and provides a last-dollar scholarship to all public State University of New York and City University of New York institutions for students who have a household income under \$125,000 and are residents of the state. However, the program requires that students finish their education (associate or bachelor's degrees) in two to four years, and that students stay in New York to work for the same number of years they used the scholarship. If they fail to meet this requirement, their scholarships are converted to loans (Quinlan, 2017). The program has been criticized for limiting career prospects of students in the military, students pursuing graduate or professional school, and those with better career prospects outside of the state (Billings, 2018).

Washington State's College Bound Scholarship program places less strict stipulations on its promise program for low-income students and only required that participants not be convicted of a felony in high school (Goldhaber et al., 2019). Yet, in their 2019 study, Goldhaber et al. found insignificant evidence that the scholarship program had a positive effect on low-income student enrollment and persistence. The authors observed that students were often confused about eligibility requirements of the program, if the program covered costs beyond the Pell Grant, and the sustainability of the program (Goldhaber et al., 2019).

A promise program which has yielded encouraging results is the Tennessee Promise. In their analysis of Knox Achieves, the precursor program to the Tennessee Promise, Carruthers and Fox (2016) found that participating in the program was strongly associated with increased high school graduation rates and college enrollment. The success of the Knox Achieves promise program resulted in a statewide expansion of the Tennessee Promise in 2015. Nguyen (2020) deployed a differences-in-differences estimation to analyze the Tennessee Promise and its impact on enrollment in the state. The study found that while implementation of the Tennessee Promise

was associated with a 2% enrollment decrease in the state's public four-year institutions, there was a corresponding enrollment increase of 40% of full-time first-time undergraduates at the state's community colleges and a positive enrollment response among both Black and Hispanic students (Nguyen, 2020).

Tennessee Reconnect

In 2018, free college funding in Tennessee was made available to adult students through Tennessee Reconnect. Tennessee Reconnect is one of the two active statewide promise program available to adult students in the United States¹ (Davidson et al., 2020). Tennessee Reconnect is a last-dollar grant that pays the remaining balance of tuition and mandatory fees after other state and federal financial aid have been applied. Tennessee Reconnect is an extension of Tennessee Promise and the Drive to 55 Initiative, which challenged the state to get 55% of Tennesseans to earn an associate degree or technical certificate by 2025. The grant may be applied toward the pursuit of an associate degree, technical degree, or technical diploma at a Tennessee community college or technical college.

There is minimal research on adult student promise programs or specifically studying Tennessee Reconnect. Collom et al. (forthcoming) conducted longitudinal interviews with 23 students who received Tennessee Reconnect funding. The authors of this study found that participants were incentivized to return to college because of a change of context, specifically because of the decreased financial burden presented through the grant (Collom et al., forthcoming). Yet, it was unclear whether there were adequate supports or services provided through Tennessee Reconnect for adult students who returned to college after prolonged time

¹ Michigan Reconnect was signed into law on April 2, 2020.

away from formal education. Several students in the study lost their initial drive and motivation prior to completing their degree. Participants in the study often indicated they did not have the family, communal, or institutional support they felt they needed to succeed in college a non-traditional age adult student (Collom et al., forthcoming). The authors of this study called for further research investigating outcomes of the program, including the initial statewide enrollment responses among adult students and whether enthusiasm for the program persisted following its first year. This quantitative study answers their call and expands on their qualitative work.

Theoretical Framework

Perna's (2006) conceptual model for college choice is the theoretical framework for this study. Her model proposed that college choices are shaped by four layers. Layer one represents habitus, or the belief in what one can achieve based on their socioeconomic and demographic characteristics, and other factors such as institutionalized racism and oppression (Bourdieu, 1984; Luedke et al., 2019). Layer two is the school and community context. This layer reflects "the ways in which social structures and resources facilitate or impede college choice" (Perna, 2006, p.177). Layer three is the higher education context and reflects the role postsecondary education institutions have in college choice through marketing and admission practices. Lastly, layer four reflects the macro-level effects on college choice due to social forces, economic conditions, and public policies. This study specifically explores how Tennessee Reconnect interacted with macro-level effects to affect enrollment responses of adult students.

The precursor to Tennessee Reconnect, Tennessee Promise, included unique components such as mandatory mentoring (10-15 hours/academic year) and community service (Carruthers & Fox, 2016). While previous research points to the positive effects of mentoring on habitus (layer one; Luedke, et al., 2019) and of community service on schools and communities (layer two;

Chesbrough, 2011), it is unclear what effect, if any, they had on enrollment and persistence among Tennessee Promise students (Nguyen, 2020). Tennessee Reconnect did not have the components which made Tennessee Promise unique, such as mandatory mentoring and community service requirements. While external advising for Tennessee Reconnect was offered through the Reconnect Navigator² program, this program was not mandatory nor widely marketed to adult students (Collom et al., forthcoming). Further, Tennessee Reconnect may have benefitted from the nationwide enthusiasm regarding Tennessee Promise and its strong statewide marketing. However, evaluating the impact of marketing and statewide enthusiasm for Tennessee's promise programs was beyond the scope of this study.

Thus, the primary macro-level forces defined by Perna (2006) which may affect adult student enrollment in Tennessee that were explored in this analysis are:

1. **Economic conditions:** the increase in jobs which require a postsecondary credential or degree (Lumina, 2018).
2. **Public policy:** the implementation of Tennessee Reconnect and the statewide availability of free college to adult residents.

Methods

Sample

For this analysis institutional level annual panel data (cross sectional and time series) were collected from the Integrated Postsecondary Education Data System (IPEDS) and from the United States Census Bureau. Adult student enrollment data from 2011 to 2019 were used. Cases with any missing data were deleted (i.e. listwise deletion). The final analytic sample included

² Reconnect Navigators “provide free, institution-neutral college navigation services, career exploration tools, and assistance with understanding financial aid & college costs” (Tennessee Reconnect, n.d.).

494 institutions over a nine-year period, for a total of 4,446 cases (institution-year). This analysis measured the causal effects of Tennessee Reconnect on total, part-time, full-time, male, and female adult student enrollment at public two-year postsecondary institutions in 2018 and 2019, the first and second year of the program (see Tables A4 and A5 for summary statistics). Lastly, United States Census Bureau data from 2011 to 2019 on state median income were included as a control.

Analytic Design

I analyzed the effect of Tennessee Reconnect by deploying a standard fixed-effects differences-in-differences (DiD) design (Nguyen, 2020). DiD is a widely used method in social science research to measure the causal effect of a policy or other treatment in non-experimental settings (Cunningham, 2021). The method is often used in policy analyses such as this study which rely on panel data (Donald & Lang, 2007). Recently, the method is often used to explore higher education policies such as performance-based funding (Hillman et al., 2015) and promise programs (Nguyen, 2019; Nguyen, 2020).

While establishing the causal effect of a policy or practice is preferably researched through experimental methods, quasi-experimental methods such as DiD have been shown to effectively establish causation when the data and sample size are appropriate (Kim & Steiner, 2016). For this study, the effect was measured at both the institutional (15 treatment and 479 non-treatment) and state (one treatment and 49 non-treatment) levels.

In this study I sought to measure the effect (δ) of Tennessee Reconnect (TNR) on adult student enrollment (AE).

$$E[\delta] = E [AE^1 - AE^0]$$

However, causal effect could not be determined by means testing because AE^1 (enrollment when TNR exists) and AE^0 (enrollment when TNR does not exist) do not exist at the same time and are therefore counterfactuals (Cunningham, 2021). Thus, DiD provided a more accurate estimate of the effect by comparing the differences in the treated group (Tennessee) with differences in the non-treated group (non-Tennessee; see Figure 1 & 2).

The representative regression equation for this study is:

$$Y_{ist} = \pi_i + Year_t + \gamma TN_{is} + \lambda TREAT_t + \delta (TN_{is} * TREAT_t) + \mathbf{x}'_{ist} \boldsymbol{\beta} + \epsilon_{ist}$$

Where Y_{ist} is enrollment for college (i) in state (s) in year (t). TN is the variable dummy coded to 1=TN and non-TN=0. $TREAT_t$ is the dummy variable which marks the start of Tennessee Reconnect in 2018 and continued availability in 2019. π_i equals the college fixed effects and $Year_t$ is the year fixed effects. \mathbf{x}'_{ist} equals the vector of observed time-varying covariates. Lastly, δ is the average enrollment effect of the Tennessee Reconnect on public two-year postsecondary institutions in the state. Following Nguyen's (2020) analytic method, I also conducted the analysis with the natural logarithm of the dependent variable enrollment (Y_{ist}); the estimated treatment effect was then calculated as $100 \times (e^{\delta} - 1)$ or $\delta \times 100$ percent.

Limitations

It is ideal to include at least three years of pre-treatment data and three years of post-treatment data to establish a causal relationship in studies using DiD (Hu & Hoover, 2018). However, this analysis was limited by the publicly available data in IPEDS, and therefore I was only able to observe the effects of Tennessee Reconnect in its first two years (2018 and 2019). Further analysis should be completed upon the release of annual IPEDS adult student enrollment

data, primarily considering the potential negative effects on adult enrollment following the COVID-19 pandemic and its economic fallout.

Furthermore, IPEDS did not include variables measuring the ethnicity of adult students in the 2011 to 2019 data. Therefore, this analysis is unable to address how Tennessee Reconnect affected adult student enrollment among students from marginalized backgrounds and was unable to address whether Tennessee Reconnect had the same positive effects among varying racial categories previously observed in Tennessee Promise (Nguyen, 2020). Lastly, this analysis was limited by the institutional level panel data available in IPEDS and the United States Census Bureau data, and therefore could not account for individual level factors (e.g. socioeconomic background, location, high school factors, GPA) which may have affected adult student enrollment decisions.

Common Trends

The most important and often violated assumption of DiD is the common trends assumption (Cunningham, 2021). The common trends assumption requires that the treated group and non-treated group follow similar trends prior to the treatment (Angrist & Pischke, 2009; Cunningham, 2021). Prior to running the DiD analysis, I visually compared trends in total, part-time, full-time, male, and female adult student enrollment at public two-year postsecondary institutions between 2011 and 2019 for both Tennessee and non-Tennessee institutions to ensure this assumption was met (Angrist & Pischke, 2009; Cunningham, 2021; see Figures 1 to 5).

Tennessee and the national sample followed similar downward trends in two-year public college enrollment between 2011 and 2017 in all categories. However, Tennessee did experience an unexpected increase in female adult students and part-time adult students in 2017. This unexpected increase may be due to several institutions providing a *soft-opening* of the Tennessee

Reconnect prior to the statewide launch in response to statewide enthusiasm for the program that preceded the official start of the program; however, there is no documentation of which institutions widely promoted early adoption (Siner, 2017). Tennessee experienced a sharp increase in all adult student enrollment categories in 2018, the first year of Tennessee Reconnect, while the nationwide sample continued the downward trend in enrollment for all categories. As observed in previous studies on promise programs (Nguyen, 2020), adult student enrollment appeared to taper off in all categories after the initial enrollment surge following the first year of the policy.

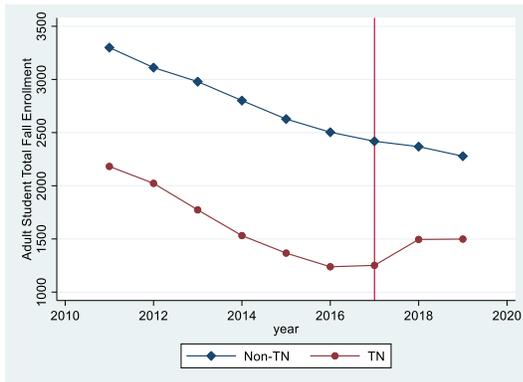


Figure 1: Common Trends Adult Student Enrollment

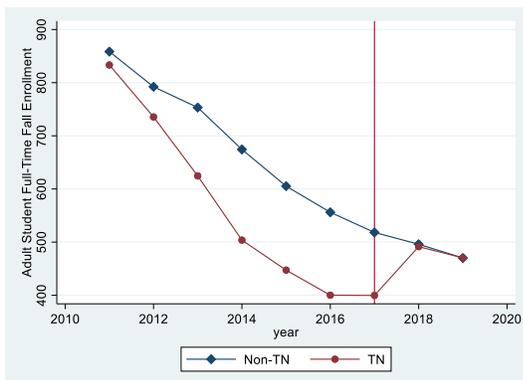


Figure 2: Common Trends Full-Time Adult Student Enrollment

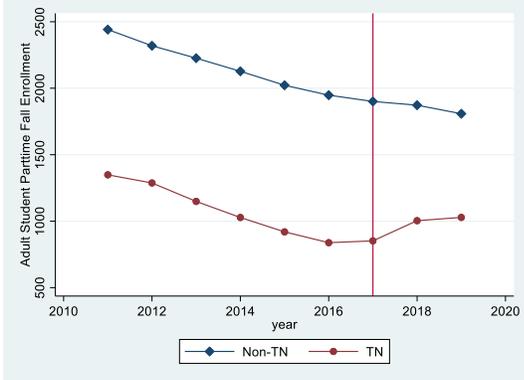


Figure 3: Common Trends Part-Time Adult Student Enrollment

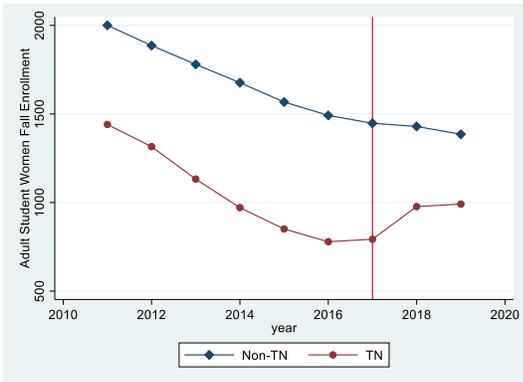


Figure 4: Common Trends Female Adult Student Enrollment

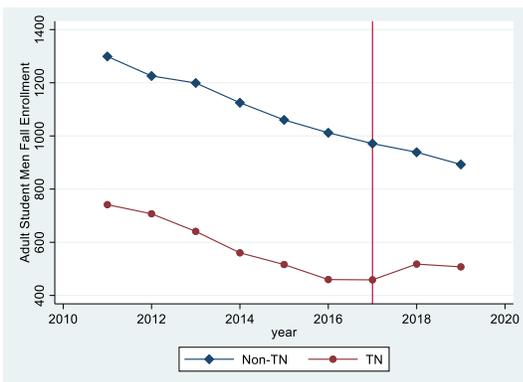


Figure 5: Common Trends Male Adult Student Enrollment

Differences-in-Differences Results

Summary results from the DiD analyses are presented in tables 1 and 2. Results are displayed for analysis when clustered by state and college. The interaction effects (TN*TREAT) in table 1 show a consistent significant positive effect when clustered by both state and college for total, full-time, part-time, male, and female adult student enrollment. Table 2 displays the results after a log transformation of the dependent variable, both when standard errors were clustered by state and by college. The estimated effect on enrollment due to TN Reconnect was calculated as $100 \times (e^{\delta} - 1)$ or $\delta \times 100$ percent on both the lower and upper 95% confidence interval coefficient.

After log transformation, DiD results indicate that from 2018 to 2019 the Tennessee Reconnect increased adult student enrollment by an estimated 19% to 28% in Tennessee when compared to others states, and an estimated 15% to 32% in Tennessee institutions when compared to the national sample of colleges. Full-time adult student enrollment increased by an estimated 26% to 36% by state, and by an estimated 20% to 42% by college. Part-time adult student enrollment increased by an estimated 24% to 34% by state, and by an estimated 13% to 45% by college. Male adult student enrollment increased by an estimated 20% to 30% by state, and by an estimated 16% to 31% by college. Lastly, female student enrollment increased by an estimated 19% to 29% by state, and by an estimated 15% to 33% by college.

Table 1: Main DiD Estimation Results

VARIABLE	(1) Total	(2) Total	(3) Full-Time	(4) Full-Time	(5) Part-Time	(6) Part-Time	(7) Male	(8) Male	(9) Female	(10) Female
TN*TREAT	422.027*** (58.765)	422.027*** (94.170)	135.010*** (17.492)	135.010*** (39.165)	287.017*** (46.046)	287.017*** (61.586)	161.819*** (25.693)	161.819*** (38.634)	260.208*** (34.659)	260.208*** (57.613)
Constant	2,673.364*** (308.254)	2,673.364*** (161.711)	618.566*** (93.468)	618.566*** (49.674)	2,054.798*** (218.708)	2,054.798*** (130.110)	1,043.422*** (117.255)	1,043.422*** (89.220)	1,629.941*** (194.812)	1,629.941*** (89.990)
Observations	4,446	4,446	4,446	4,446	4,446	4,446	4,446	4,446	4,446	4,446
Institutions	494	494	494	494	494	494	494	494	494	494
R-Squared	0.310	0.310	0.350	0.350	0.234	0.234	0.232	0.232	0.325	0.325
Clustered	State	College	State	College	State	College	State	College	State	College

Clustered standard errors in parentheses (***) $p < 0.01$, ** $p < 0.05$, * $p < 0.1$)

Table 2: Main DiD Estimation Results with Log Transformation of Dependent Variable

VARIABLE	(1) Total	(2) Total	(3) Full-Time	(4) Full-Time	(5) Part-Time	(6) Part-Time	(7) Male	(8) Male	(9) Female	(10) Female
TN*TREAT	0.238*** (0.022)	0.238*** (0.043)	0.311*** (0.027)	0.311*** (0.057)	0.289*** (0.024)	0.289*** (0.079)	0.253*** (0.024)	0.253*** (0.046)	0.240*** (0.023)	0.240*** (0.044)
Constant	7.137*** (0.151)	7.137*** (0.052)	5.816*** (0.198)	5.816*** (0.062)	6.827*** (0.138)	6.827*** (0.055)	5.999*** (0.159)	5.999*** (0.064)	6.746*** (0.152)	6.746*** (0.049)
Observations	4,446	4,446	4,443	4,443	4,414	4,414	4,436	4,436	4,443	4,443
Institutions	494	494	494	494	492	492	494	494	494	494
R-Squared	0.542	0.542	0.603	0.603	0.362	0.362	0.483	0.483	0.525	0.525
Clustered	State	College								

Clustered standard errors in parentheses (***) $p < 0.01$, ** $p < 0.05$, * $p < 0.1$)

Discussion

Many states adopted grant aid policies, such as statewide promise programs or merit-based aid, to address the growing need for a college-educated workforce in the United States (Lumina, 2018; Perna & Miller-Adams, 2017). Yet, current projections show a continued decrease in postsecondary enrollment among traditional-age students due to a multitude of factors, such as decreasing population (Hussar & Bailey, 2019), and the rising cost of postsecondary education and pending student loan debt crisis in the United States (Perna et al., 2017). Initial projections in Tennessee, for example, indicate the state will fall well short of its stated goal of 55% of its population holding a postsecondary degree or credential by 2025 (THEC & TSAC, 2021).

Tennessee Reconnect was created to counter the shortfalls of the age restrictions included in Tennessee Promise and other state grant aid programs; it was also created to incentivize students who are traditionally left out of postsecondary education to either return to college or enroll for the first time (Collom et al., forthcoming). The results from this study highlight the initial increases in adult student enrollment across all categories in Tennessee in the first two years Tennessee Reconnect funding was available statewide, despite the continued downward trend in enrollment observed nationwide. While follow up research is warranted to determine if increases in enrollment are sustained, this study establishes a significant causal relationship between the policy and initial enrollment responses among adult students in Tennessee's public two-year institutions. Results from this study are encouraging for statewide promise programs moving forward, primarily promise programs which are made available to non-traditional adult students such as the recently announced Michigan Reconnect. Further, if tuition-free community college is adopted at the federal level - an explicit goal of the 2021-2024 presidential

administration - the results from this study highlight the potential benefits of avoiding any policy eligibility restrictions based on age or time passed after receiving a high school diploma or GED.

Future Research

While there is a growing body of research regarding statewide promise programs, substantial future investigations must be conducted. Researchers must determine how variations in statewide policies impact student outcomes. For example, a longitudinal qualitative investigation replicating Collom et al.'s (forthcoming) work on Tennessee Reconnect should be conducted to explore the recently implemented Michigan Reconnect. Such analysis may investigate whether there are state or regional differences in the experiences of adult students in similarly structured statewide policies. Further, longitudinal analyses of enrollment responses, such as the DiD analyses conducted in this study, are needed to determine whether Michigan Reconnect will see similar increases in adult student enrollment. Researchers must also explore whether initial enrollment responses to the Tennessee Reconnect were affected by factors unaccounted for in this analysis, such as the established marketing and nationwide acclaim of Tennessee Promise or the individual marketing and admission practices within colleges.

The downward trend in postsecondary education enrollment in the United States may be exacerbated due to the COVID-19 pandemic and the potential long-term economic and social consequences of the crisis. While four-year enrollment in the United States were initially relatively unaffected by the pandemic, reports of fall 2020 enrollment in community and technical colleges indicated a sharp decrease nationwide, primarily among adult students (National Student Clearinghouse, 2020). Continued investigation of enrollment responses and in Tennessee is warranted to observe whether the availability of Tennessee Reconnect funding

decreased the negative effect of the COVID-19 pandemic on adult student enrollment in the state.

Further, qualitative and/or mixed-methods investigations are needed to determine how the broader economic and social conditions described by Perna (2006), such as the nationwide economic (i.e. increased unemployment) and social (i.e. at-home virtual K-12 education) consequences of COVID-19, impact the efficacy of promise programs such as Tennessee Promise and Tennessee Reconnect. Future studies on statewide adult promise programs must investigate whether practices included in other statewide promise programs - such as academic coaching, mentoring, and learning communities - are potentially effective practices to increase enrollment, retention, and persistence of adult students participating in a promise program (Collom et al., forthcoming).

Lastly, there is a dearth of rigorous analyses regarding promise programs critically addressing whether the policies are structured effectively and equitably. Substantial analyses are warranted to determine if current promise program policy mechanisms (e.g. last-dollar vs. first-dollar) benefit students who have the most need, or if the majority of state funds provide tuition-free college to students from middle- and upper-class families (Jones & Berger, 2018). Further, future research must address whether institutions and their academic support staff are effectively funded and prepared to support substantial enrollment increases of students from minoritized or other underrepresented groups (Collom et al., forthcoming; Perna et al., 2020).

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Appendix

Table A 1: Tennessee Public 2-Year Institution Adult Student Enrollment

Year	Mean	SD	Min	Max
2011				
Total	2182.067	1541.659	180	5508
Full-Time	833.267	528.815	138	1890
Part-Time	1348.8	1027.668	0	3618
Female	1440.6	1031.866	87	3919
Male	741.467	550.161	51	1696
2012				
Total	2022.933	1456.087	152	5150
Full-Time	735.467	485.518	136	1662
Part-Time	1287.467	989.893	0	3504
Female	1315.733	959.619	81	3631
Male	707.2	533.745	59	1647
2013				
Total	1773.333	1291.554	148	4361
Full-Time	624.533	421.696	130	1443
Part-Time	1148.8	883.069	0	2989
Female	1132.4	825.45	79	2972
Male	640.933	497.217	52	1512
2014				
Total	1531.6	1115.716	173	3750
Full-Time	503.733	296.741	145	1009
Part-Time	1027.867	831.127	3	2741
Female	971.267	714.03	84	2587
Male	560.333	433.02	70	1313
2015				
Total	1367	972.88	135	3094
Full-Time	447.333	262.447	125	952
Part-Time	919.667	719.86	7	2252
Female	850.733	602.484	66	2068
Male	516.267	406.522	51	1254
2016				
Total	1238.533	849.722	125	2806
Full-Time	400.133	217.75	96	754
Part-Time	838.4	642.102	2	2052
Female	778.733	537.335	65	1900
Male	459.8	343.103	49	1054
2017				
Total	1251.6	938.129	112	3013
Full-Time	399.667	243.069	84	888
Part-Time	851.933	711.804	1	2340
Female	792.933	593.618	69	2030
Male	458.667	368.93	43	1294
2018				
Total	1495.333	1014.303	131	3491
Full-Time	491.467	268.054	105	1001
Part-Time	1003.867	764.269	8	2490
Female	977.333	671.644	81	2475
Male	518	373.123	50	1285
2019				
Total	1498.8	960.547	99	3068
Full-Time	470.333	253.844	70	954
Part-Time	1028.467	725.862	9	2243
Female	991.267	643.428	71	2212
Male	507.533	350.472	28	1256

Table A 2: Non-Tennessee Public 2-Year Institution Adult Student Enrollment

Year	Mean	SD	Min	Max
2011				
Total	3299.766	3453.824	5	29181
Full-Time	858.474	869.834	5	8223
Part-Time	2441.292	2716.076	0	20958
Female	2000.664	2039.192	0	18222
Male	1299.102	1477.123	0	10959
2012				
Total	3111.626	3284.565	2	27294
Full-Time	792.24	806.237	1	7641
Part-Time	2319.386	2599.403	0	19653
Female	1886.054	1927.549	1	16967
Male	1225.572	1412.345	1	11045
2013				
Total	2979.418	3170.978	2	27543
Full-Time	753.273	773.557	2	7458
Part-Time	2226.144	2512.442	0	20085
Female	1780.188	1830.684	0	16824
Male	1199.23	1394.86	2	11125
2014				
Total	2801.612	3048.1	5	28656
Full-Time	674.355	697.399	3	7382
Part-Time	2127.257	2445.292	0	21274
Female	1676.67	1771.704	1	17729
Male	1124.942	1327.622	0	10927
2015				
Total	2627.647	2924.681	6	27069
Full-Time	605.324	629.242	3	6754
Part-Time	2022.324	2382.321	0	20315
Female	1567.384	1686.737	3	16666
Male	1060.263	1289.233	0	10403
2016				
Total	2503.981	2789.325	2	25727
Full-Time	556.159	572.92	0	6425
Part-Time	1947.823	2296.354	0	19302
Female	1491.902	1598.963	1	15765
Male	1012.079	1246.226	1	9962
2017				
Total	2418.641	2762.32	2	24955
Full-Time	518.173	548.783	0	6160
Part-Time	1900.468	2291.866	0	18795
Female	1447.409	1590.71	2	15564
Male	971.232	1229.683	0	9640
2018				
Total	2341.889	2735.224	2	25219
Full-Time	495.879	530.636	0	6288
Part-Time	1846.01	2285.714	0	18931
Female	1415.846	1572.254	2	16018
Male	926.043	1227.722	0	10647
2019				
Total	2254.674	2595.091	1	23246
Full-Time	470.132	495.41	1	5730
Part-Time	1784.543	2179.374	0	17516
Female	1373.607	1497.705	0	14962
Male	881.067	1162.396	0	9796