

## Research Article

# Is the GI Bill Enough? An Exploratory Analysis of Student Veteran Borrowing in College

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**Abstract:** In the United States, many student veterans use their GI Bill benefits to help fund their postsecondary education; however, when the GI Bill is not enough, student veterans may turn to grants and loans to subsidize their financial needs. This study examines the degree and extent to which Pell Grants and student loans are being used by student veterans using data pulled from the National Center for Education Statistics' Baccalaureate and Beyond dataset. We found that Pell Grant awards were higher for student veterans with disabilities as well as Blacks and that a student's age contributed to the overall amount of federal student loans borrowed. Implications, future directions, and a discussion of the results are provided.

**Keywords:** student veterans; Pell Grants; federal financial aid; at-risk students; GI Bill; U.S. postsecondary education

## 1. Is the GI Bill Enough? An Exploratory Analysis of United States Student Veteran Borrowing in College

The GI Bill was introduced in 1944 in an effort to stabilize the United States (U.S.) job market in the wake of WWII – in essence, President Franklin Roosevelt was concerned about the influx of soldiers returning from the front needing work and flooding the civilian job market. He wanted to prevent the resulting economic instability while increasing educational opportunities for those who had served [1,2]. The original intent of the GI Bill was to provide education benefits and home loan guarantees for veterans in order to underwrite their reintegration into civilian society (US Department of Veteran Affairs (USDVA) [3] and in the ensuing years, many have taken advantage of both. To date, almost 20 million veterans have used GI Bill benefits to help fund their education [4]. The GI Bill, in its various iterations, has been generous and has been updated in an attempt to keep pace with ever rising attendance costs as well increased cost of living.

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The Post 9/11 Veterans Educational Assistance Act (2008), colloquially known as the Post-9/11 GI Bill, the 21st Century GI Bill of Rights, the Webb GI Bill, or simply the New GI Bill was signed into law in 2008 and took effect in 2009 with the intent of expanding educational benefits for servicemembers. This new iteration of the GI Bill, along with the improvements provided in the Harry W. Colmery Veterans Educational Assistance Act [4], also known as the Forever GI Bill, has helped more than 800,000 veterans attain higher education at a value of more than \$12 billion [5]. The GI Bill in its current form recognizes that veterans and servicemembers are also eligible to use financial aid benefits available to non-veteran students, to include Pell Grants as well as subsidized and unsubsidized federal student loans because the GI Bill is not considered federal student aid [6,7]. This presents a direct concern by acknowledging that a veteran's GI Bill benefits are known to be insufficient to cover the costs of a college education. While the education benefit under the new G.I. Bill is admittedly generous and represents an expansion of previous benefits, it still only covers a maximum of 36 months of education, and student veterans continue to need ever greater amounts of money to pay for college. These additional funding streams take a variety of forms: full- or part-time employment, credit cards, scholarships and grants, or other forms of financial aid, or student veterans are ultimately forced to leave school prematurely no longer being able to afford the costs of attendance or by having to navigate unfriendly financial aid policies [8–11]. Despite the support provided through the GI Bill, student veterans do not wind up falling far behind their non-veteran peers in terms of graduating with an educational debt burden [12].

In the period since the end of the great expansion of higher education, since the 1970s-80s, student loans have shifted from being grant-based to loan-based, which poses special concerns regarding access and equity for minority and otherwise marginalized students [13–16]. The military and its veterans, due to its very nature, represents a significantly more diverse cross-section of the population [17]. In the wake of the 2020 COVID-19 pandemic, EAB released a report detailing concerns related to access and equity highlighting a special concern for 'low-income students and students of color' [18]. While these disparities may be attributed to the pandemic, it shows that during crises, perhaps unsurprisingly, disadvantaged students tend to be among the most adversely and disproportionately impacted. This also affirms the existing literature, which shows that even a minor financial disruption can create additional barriers to access for students, compounding pre-existing equity and access issues [15,16]. With a long overdue revision of the Higher Education Act currently working its way through Congress, policymakers should be aware of how fragile this community can be when trying to navigate procedural as well as physical barriers. That being said, this community has shown unparalleled resilience when provided with access to proper tools and programs appropriately tailored for their success [19,20].

## 2. Purpose Statement

This study seeks to examine the extent of the financial awards to student veterans using GI Bill benefits and the extent to which they are using them in combination with the Pell Grant using age, gender, race, and disability as a basis for inquiry. It is important to understand the impact of the financial needs of student veterans on a variety of levels including research, policy, and the direct service provider/practitioner levels to better help those with military experience successfully transition to student veterans and provide them with the tools to persist through graduation.

## 3. Research Questions

The following research questions guided this study:

1. To what extent do student veterans complete college with Pell Grant assistance?
2. To what extent do student veterans complete college with student loan debt?

We hypothesized that student veterans, despite the assistance of the GI Bill and the Pell Grant program, leave college with some degree of student loan debt and that at-risk student veterans will leave with even more student loan debt than their veteran not-at-risk peers. Following [21]'s model, for our purposes, at-risk will be defined as students who possess one or more of the following characteristics: first generation status, racial or ethnic minority status, low GPA, and/or low-income. As student veterans are older, typically male, and can have a disability, this may also add to the at-risk factors encountered, which may lead to longer time-to-degree and added costs to the students.

## 4. Literature Review

Student veterans are, by definition, non-traditional students. They tend to be older than the traditional-aged college student; they are more ethnically and racially diverse; and they come to higher education institutions (HEIs) with more diverse and markedly different needs than their non-veteran non-traditional student peers. A veteran, under statutory code, and for our purposes, is defined as a ‘person who served in the active military, naval or air service, and who was discharged or released therefrom under conditions other than dishonorable’ [22] and ‘as active duty for a purpose other than training’ [23].

Veterans have been receiving benefits since the American Revolution, but it was not until the introduction of the Servicemen’s Readjustment Act [24], also known as the GI Bill, that student veterans became a distinct recognized subpopulation of students supported by the federal government. The GI Bill not only provided tuition money, it provided money for books and a monthly living stipend to provide a stable basis of support for a student veteran through their higher education [25].

The U.S. National Center for Veterans Analysis and Statistics (NCVAS) [26] prepared a profile of Post-9/11 veterans for the 2016 cohort. Post-9/11 veterans, those serving on active duty in the Armed Forces on or after September 11, 2001, were the most prevalent on college campuses and were predominantly “white non-Hispanic, likely to be divorced, more likely to be insured, less likely to live in poverty, and had higher personal incomes than non-veterans” (p. 31). The median age for males was 35 compared to non-veteran males at 41, and the median age for females was 34 compared to non-veteran females at 46. Post-9/11 female veterans had higher educational attainment (17.3%) than their male counterparts (13.0%), and 56% used at least one other VA benefit. Post-9/11 veterans also had more service-connected disabilities (35.9%) than their pre-9/11 veteran counterparts (18.6%) regardless of race/ethnicity [26].

Student veterans come to campus with myriad and differing needs, so it is important to understand the lived experience they bring with them to provide them with the best educational opportunities [27], profiled the contemporary student veteran on two levels: academic performance and demographic characteristics. They found that student veterans are more likely to graduate, especially among their non-traditional peer group and have a 28% attrition rate [27], which is lower than the average dropout rate of 40% for undergraduate students [28]. Student veterans also have higher GPAs on average, 3.35 as compared to 2.94 overall, and many major in academically rigorous degree programs (e.g., STEM degrees) [27]. Demographically, they are older, may have a disability, service-connected or otherwise, have families and jobs, and take on educational loans [27]. Also, because student veterans are older and have had job experience either in the military or in civilian life or possibly both, they also come to college with more developed executive functioning and social skills such as time management and experience working in teams [29].

The GI Bill provides the ‘full cost of public, in-state tuition and fees’ at a public university and up to \$24,467.79 at a private institution [23], up to \$1,000 per year for books and supplies, and if a student veteran (or dependent) is enrolled more than half-time, a monthly housing allowance based on the cost of living of the area of the HEI’s physical location. The overall amount each veteran (or dependent) receives varies depending on length of service [23], and while this benefit helps to offset tuition and living costs, student veterans often still have to rely on grants and loans to subsidize any shortcomings [7,27]. Some student veterans have also indicated that the paperwork for G.I. Bill benefits is cumbersome and difficult to navigate, posing additional barriers [30,31].

### 4.1 Federal Loans

When a country moves from an elite higher education system (15% enrolled) to a mass higher education (15-50% enrolled), higher education must respond [32,33]. Today, the American higher education system is at a universal access level, meaning over 50% of the population have access to higher education [34]. During the mass higher education era, buildings need to be erected, programs need to be created, faculty and staff need to be hired, among other things -- and these cannot be at elite levels. HEIs had to be created to serve the masses. This is not to say that the institutions provided subpar learning opportunities, but that every HEI could not be a new Harvard or Yale. The GI Bill was among the first federal student aid programs to be introduced, and it certainly was the most popular at the time. However, by the 1950s, student loans had created a stranglehold that still exists today on those who need assistance with the costs of a postsecondary education [35].

The GI Bill certainly had a hand in moving the United States toward massification of higher education. In the early 1950s, the number of veterans using GI Bill benefits was declining, and HEIs had to find ways to continue subsisting without the revenue they had enjoyed from GI Bill recipients, and one of those ways was to increase tuition [36]. The federal government also responded by crafting civil rights legislation barring

discrimination, notably for racial minorities and people with disabilities, increased access for women, and the creation of scholarships, grants, and loans to make postsecondary education more affordable.

In 1958, the U.S. National Defense Education Agency created the first federal student loan program. It is still in existence today and is currently known as the Federal Perkins Loan Program. However, it was not until the Higher Education Act (1965) that guaranteed student loans became available through public-private partnerships of banks and the federal government [37]. In the early 1970s, students did not need to borrow much money in order to afford a college education [38]; however, by the late 1970s and continuing through the 1980s, the student debt burden was steadily moved away from taxpayers and on to individual students [35]. State levels of support for higher education also began their long decline during this time and have been increasing tuition to make up for the losses ever since [39]. In 2016, 47% of first-time, full-time undergraduate students used federal student loans [40]. By 2021, it is forecasted that the total student loan debt load will be around \$2 trillion [41].

## 4.2 The Pell Grant

The Federal Pell Grant program was authorized by Title IV of the Higher Education Act of 1965 to increase access to students of color [42]. Pell Grants are based on financial need for low-income undergraduate students. In 2018-19, Pell Grant expenditures were at \$6.8 million, and the average grant was \$4,160 [43] and ranged anywhere from \$650 to \$6,095 [44]. Family income levels for 89.5% of Pell recipients fell at or below \$50,000 annually [44].

## 5. Methods

The Baccalaureate and Beyond Longitudinal Study (B&B) public dataset forms the basis of this inquiry. The particular dataset used was for the Class of 2016 who were surveyed one year after graduation in 2017 [26]. The data were used to explore the role Pell Grants and federal student loans play in the overall financing of student veterans' higher education and the degree to which these grants and loans are received and taken out by student veterans. This dataset is a nationally representative study conducted by the National Center for Education Statistics (NCES) housed in the United States Department of Education. These data are collected and presented according to guidance for human subjects protections as outlined by current Office of Human Rights Protection guidelines and has received approval from the Fayetteville State University Institutional Review Board for exempt research (approval #18-04527).

### 5.1 Sample

The sample for this study was 1,005 ( $N = 1,005$ ) undergraduate student veterans. Participants were interviewed after graduating from college in 2017. The average age of the veterans in the sample was 33.12 years old. In the B&B dataset, 42.6% identified as male, and 57.5% identified as female. When examining disability status, approximately 8.1% reported having a documented disability, and 91.9% did not. The racial demographics were 73% White, 8.6% Black or African American, 9.2% Asian, 0.4%, and 3.1% other.

### 5.2 Analysis and Measures

Two separate linear regressions were conducted in NCES PowerStats, the online interface for NCES data analyses. Since this was an exploratory study, the overall model fit and each of the significance tests for both regressions were measured using a 0.05 significance level.

For the first regression, the dependent variable was measured by the total dollar amount of the Pell Grants received by student veterans during their undergraduate studies. For the second regression, the dependent variable measured the total dollar amount of federal student loans student veterans accumulated over the duration of their undergraduate studies. Independent covariates in both regression models included gender, race, institution type (public or private; non-profit or for-profit), and veteran status.

## 6. Results

The statistical analysis revealed areas of significance regarding both Pell Grant use and student loan borrowing for student veterans. These results are discussed presently in detail.

Descriptive statistics reveal that the average total amount received among student veterans under the Pell Grant program was approximately \$19,554 ( $M = 19554.15$ ). The overall linear regression model examining Pell Grant amounts was statistically significant ( $R^2 = 0.12$ ,  $F [7,190] = 23.93$ ,  $p = 0.044$ ). When observing the  $R^2$ , the regression model explained 12% of variance related to the amount of Pell Grants student veterans received during the duration of their undergraduate studies. Significantly associated variables included: age ( $B = -168.94$ ,  $p < 0.001$ ), identifying as having a disability ( $B = 3701.21$ ,  $p < 0.001$ ), and being African American/Black ( $B = 3687.50$ ,  $p < 0.001$ ). Meaning, for every year older the student veteran was, they received \$168.94 less in Pell Grants. Veterans with disabilities received \$3,701.21 more on average in Pell Grants than student veterans without disabilities. Lastly, African American/Black student veterans received \$3,687.50 more on average than White student veterans (see Table 1).

**Table 1.** Linear Regression Model: Pell Grants Received by Veterans.

Variable	B	95% CI	t	p
Intercept	19,554.15	15859.34, 22232.95	11.79	
Gender (ref = male)				
Female	698.32	-1028.57, 2425.21	0.80	0.426
Age	-168.94	-275.99, -61.882	0.29	*0.001
Disability Status (ref = no)				
Disability	3701.21	1498.44, 5993.98	3.42	*0.001
Race (ref = white)				
African American or Black	3687.50	1479.73, 5894.96	3.29	* 0.001
Hispanic or Latino(a)	1349.62	-872.63, 3571.96	2.00	0.232
Asian	1595.90	-2049.10, 5240.90	0.86	0.400
Other	-1440.92	-1999.58, 4903.61	0.84	0.420
Institution Type (ref = public)				
Private	-925.50	-2627.71, 776.72	-1.072	0.285
<i>R</i> <sup>2</sup>		0.12, df [7, 190]		
<i>F</i>		3.08 ( <i>p</i> < 0.044)		

### 6.1 Student Loans

Descriptive statistics reveal that the average total amount of federal loans that student veterans take out is approximately \$17,478. ( $M = 17478.51$ ). The overall linear regression model examining student loan amounts was not statistically significant ( $R^2 = 0.051$ ,  $F [7, 190] = 2.34$ ,  $p = 0.52$ ). Significant variables when observing student loan amounts taken out among veterans included age ( $B = 317.80$ ,  $p = 0.014$ ) and attending a private university ( $B = 4661.89$ ,  $p = 0.049$ ). Meaning, for every year older a veteran student was, they took out approximately \$317.80 more in federal student loans. Veterans who attended a private university took out approximately \$4,661 more than veterans who attended a public university (see Table 2).

**Table 2.** Linear Regression Model: Total Amount of Federal Student Loans Taken Out by.

Variable	B	95% CI	t	p
Intercept	17478.51	9169.34, 25787.69	4.15	0.000
Gender (ref = male)				
Female	3635.60	-1576.35, 8847.55	1.38	0.170
Age	317.80	65.33, 570.27	2.48	*0.014
Disability Status (ref = no)				
Disability	428.25	-4536.76, 5393.27	0.17	0.865
Race (ref = white)				
African American or Black	-195.38	-6758.51, 6367.75	-0.06	0.953
Hispanic or Latino(a)	-2054.97	-7684.02, 3574.09	-0.72	0.472
Asian	-1902.60	-13106.58, 9301.49	-0.36	0.738
Other	-1940.92	-13200.56, 9400.61	-0.39	0.740
Institution Type (ref = public)				
Private	4661.89	18.633, 9305.15	1.98	*0.049
<i>R</i> <sup>2</sup>		0.052, df [7, 190]		
F		2.335 ( <i>p</i> = 0.52)		

## 7. Conclusion

Although student veterans come to HEIs with some financial assistance in the form of GI Bill benefits, they still often find themselves having to work either full- or part-time and/or relying on grants and loans to afford college and living expenses. It is imperative that those higher education professionals working directly with the student veteran population understand who they are, what their needs are, and how to best support them.

### 7.1 Implications

The findings of this preliminary study have implications in the areas of developing further research, informing best practices, and shaping future policy around student veterans. We examine these areas in terms of their implications for research, practice, and policy. These areas have been explored in terms of their impact on those who work with student veterans, particularly those groups for which an impact was found to have statistical significance, namely student veterans with disabilities and Black student veterans.

### 7.2 Research

Researchers need to continue to develop the body of literature around the needs and experiences of student veterans, especially in the light of at-risk student veterans. As an otherwise highly demographically diverse group, student veterans have different needs than their non-traditional student peers and understanding these can help better inform the literature. Special attention should be placed on researching the impacts of debt awareness, financial literacy, and programs that help at-risk student veteran populations, as well as non-traditional student peers, persist through graduation. An analysis comparing borrowing and grant assistance of student veterans and non-traditional student peers could bring further disconnects to light for both populations. For example, non-traditional student loan borrowers represent almost half of student loan defaulters [38] and further study is needed on why student veterans' loan debt burden does not lag far behind their non-veteran peers [12]. Qualitatively, more research is needed on the lived experiences of student veterans and the underlying factors which drive the need to incur student debt. Quantitatively, at-risk student veterans' experiences should be examined further at the intersection of disability type, institution choice, and by age group. Post-9/11 veterans

are the most prevalent group of student veterans on campus [26], however, examining student veterans on the basis of their time of service could also yield interesting information related to the specific needs and barriers for this group. Longitudinal studies examining student veteran borrowing and its long-term impacts are also needed.

### **7.3 Practice**

Practitioners need to know more about the diverse needs of student veterans, acknowledging that student veterans do not represent a monolithic group and that special attention needs to be paid to their varied subpopulations. It is not enough to group them with non-traditional peers because of the myriad differences they have beyond the most salient veteran status [8,17,27]. Programs should be created for students, faculty, and staff in order to raise awareness of the needs of student veterans as well as how best to support them [45]. In particular, a program targeted specifically to student veterans on financial literacy and budgeting could prove extremely helpful to student veterans [46]. However, many of these programs should be implemented before the student veteran sets foot on the college campus. Military transition programs, while well-meaning, may not be timed appropriately for the transitioning servicemember [47]. These programs should, frankly, be done when the veteran is in the proper mindset to weigh future options and not as a part of a larger comprehensive transition program.

### **7.4 Policy**

With the impending reauthorization of the Higher Education Act, policymakers should be acutely aware of the needs of student veterans. Crafting policies that will allow student veterans to be more socially, as well as academically, mobile is an absolute necessity [48]. Programs like the now discontinued Servicemembers Opportunity Colleges consortium that allowed servicemembers to take classes at various member colleges without loss of credit during transfer or changing home institution and were highly beneficial to student veterans and allowed for just such a high degree of mobility should be reinstated. While the GI Bill is fairly generous, 36 months does not a four-year degree make [49], especially in more technical fields that require more than the traditional 120 credit hours for a baccalaureate degree. Many do not take advantage of the tuition assistance (TA) made available while in service, many do not do so [50,51] in 2018, only 215,000 of the 1.3 million servicemembers used TA [52], or they do not have a clear academic path in mind by the time they separate from the military putting them at a disadvantage while they are searching for a field to enter. Those who enter with a field of study in mind may also change that field of study and may have to start over due to a change in degree requirements or a loss of credits resulting in a longer time-to-degree [12]. The current Science, Technology, Engineering, and Mathematics (STEM) extension, which offers an additional 12 months of GI Bill funding is helpful; however, the concept of what a STEM program is can be hard to capture in some programs (e.g., exercise science, cybersecurity), and it is usually up to the students to prove that the degree program they are enrolled in constitutes a program covered under the extension. Policymakers should strongly consider extending the 36-months of the GI Bill to 48 months as a baseline for all students, which is more in line with the requirements of a modern undergraduate degree.

### **7.5 Limitations**

As with any preliminary exploratory study, there are several limitations. Even though we are using data pulled from a nationally representative dataset, the actual sample size analyzed is relatively small. This study only examines those students who successfully completed an undergraduate degree, did not examine student veteran non-completers and only provides a snapshot of one year in time. These ex post facto data also do not allow for further analysis of participants' responses. The research questions are also not able to be manipulated to dig deeper into why student veterans chose to take on student loans or to go beyond providing a binary response to disability. The dataset also does not provide the amount of GI Bill dollars received for participants, only their status as recipients of GI Bill benefits and the amount of non-GI Bill loans and grants they took out.

### **7.6 Future Directions**

This study is exploratory. It provides a representative snapshot of student veterans who use GI Bill benefits, grants, and loans to finance their postsecondary education. Further studies should examine why there exists such an age disparity in terms of Pell Grant awards to student veterans as well as why Black student veterans present

with a greater need for additional grant funding. Being able to compare the amount of GI Bill benefits received along with grants, loans, and scholarships would also provide a better overall view of student veterans' financial needs, which would allow higher education professionals as well as policy makers to better tailor support to the actual needs of student veterans.

Further study should be conducted examining the relationship between age and the amount of loans accrued -- being older correlated with a higher level of borrowing -- as well as why student veterans pursued more expensive private higher education options. Providing financial literacy and college planning programming early and consistently during military service could help make students more aware of how to stretch their academic dollars. For example, since community college tuition is substantially lower than tuition at a four-year institution, community colleges are recognized as an affordable way to start a college career. Student veterans could possibly afford to pay for community college out of pocket and save their GI Bill benefits as well as waiting to take out student loans for completing their junior and senior years of college.

Overall, there is no question that the added funds through the GI Bill to attend college are beneficial, but many veterans are also choosing to exercise the option to transfer those benefits to their children, so examining why veterans are opting for this choice would make for an interesting study. If student veterans chose to educate themselves and get better jobs, they might be able to better afford college tuition for their children and spouses/partners; however, it also is understandable that with the rising costs of college, there would be a recognized advantage to saving that benefit for their dependents.

Despite the benefits available to them through the GI Bill, many student veterans still choose to incur student loan debt in order to help finance their education. What remains to be answered is why the GI Bill continues to be insufficient, even with the addition of Pell Grant funds. The federal government and the states should take a deep dive into the cost of college and the appropriations they are providing to shift the burden back on to the educational system and take the burden back from the students. HEIs should find cost-saving measures such as partnering with industry and business to create more avenues to education, such as apprenticeship programs, experiential learning, and stackable credentials to create faster and more efficient pathways to knowledge, certification, or even degrees.

Finally, the student loan burden on all students should be reexamined. A 2015 report by the Brookings Institution reported that the federal government would make a profit of \$135 billion over ten years minus administrative costs to run the student loan programs [52]. While in the grand scheme of things, this is not a lot of money for the US government, creating loan programs that work for student borrowers is important. For example, lowering repayment times or removing interest accumulation after five years could have a substantial impact on the country's economy. There are many calls from both sides of the aisle to forgive some or all student loans and these have even made their way into the current presidential debates. Some reports indicate that student loan debt has increased because borrowers are slow to pay back their debts [53], while others report that student loan delinquency remains high [54] and that close to 40% may default on their loans by 2023 [56].

Graduating more students is inarguably good for the United States and its economy. Unfortunately, since the costs of college attendance has increased so dramatically since the 1970s–1980s, many students have to rely on student loans to graduate. This has placed an undue burden on many students, including student veterans, even with the benefit of the GI Bill. This is compounded when students have disabilities that affect their access to learning or the educational environment or when they come from otherwise at-risk populations. It is time to reduce the debt burden on students who are pursuing social mobility and personal betterment through the study and acquisition of academic credentials. Other nations with education benefits for former military members can take note of how the U.S. is dealing with increasing student debt for student veterans.

## Conflict of interest

There is no conflict of interest for this study.

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