

Student Loan Debt and Financial Hardships in Health Care Utilization

Min Zhan and Kang Sun

This study examines the association between student loan debt and financial hardships in health care utilization among young adults, with a focus on differences by race. This study analyzes data from the 2018 National Financial Capability Study, a publicly available data set, and includes 4,535 young adults in the age groups of 24–35 years. The study results show that student loan debt was related to financial hardships in health care utilization, measured with unpaid medical bills and missed health care services because of costs, after controlling for a range of socioeconomic factors as well as measures of financial knowledge and behaviors. In addition, student loan debt had additional negative influence on missed health care services for minority young adults. Further analyses indicate that among young adults who had outstanding student loans, those with late loan payments were more likely to have unpaid medical bills and missed health care services, compared to those without late loan payments. These findings inform helpful policy and practice implications for improving financial status of young adults with student loans, especially those with late loan payment and minority young adults.

Keywords: *student loan debt, health care utilization, race, financial hardships, young adults*

Introduction

Racial inequality in utilization of health care services has persisted over decades (Carratala & Maxwell, 2020), and it has further exacerbated during the pandemic,

Min Zhan, PhD, is a Professor and Kang Sun is a PhD student at the School of Social Work, University of Illinois at Urbana-Champaign, 1010 West Nevada Street, Urbana, IL 61801. Professor Min Zhan can be contacted at mzhan@illinois.edu

as the current crisis disproportionately affected minority and low-income families (Sherman, 2020). While policies and programs have been developed to reduce this disparity, they are not always effective in targeting certain most vulnerable groups. One of these groups is minority young adults who are burdened with student loans. Research has documented the negative economic impact of student loans on borrowers, particularly among minority and low-income borrowers (Sullivan, Meschede, Shapiro, & Escobar, 2019; Zhan, Xiang, & Elliott, 2016). However, we know little about the impact of student loans on health care-seeking behaviors. Given the strong associations between socioeconomic resources of family and health care use, the rapidly growing student loans may become a salient factor that affects racial inequality in access to health care resources.

The rising student loan debt has raised serious concerns regarding its consequences on the financial well-being of loan holders, especially among minority borrowers, who tend to have heavier debt burden (Haughwout, Lee, Scally, & Van der Klaauw, 2019). Research has shown the negative impact of student loan debt on savings, wealth accumulation, homeownership as well as creation of other debts (Grinstein-Weiss, Perantie, Taylor, Guo, & Raghavan, 2016; Rohlfing, Navarro, Maniya, Hughes, & Rogalsky, 2014; Xu, Johnson, Bartholomae, O'Neill, & Gutter, 2015; Zhan et al., 2016). Several studies further documented how student loans had additional detrimental influence on wealth accumulation among black borrowers and had widened the racial wealth gap (Sullivan et al., 2019; Zhan et al., 2016).

Beyond economic outcomes, student loan debt may also have significant consequences on borrowers' physical as well as mental health (Qian & Fan, 2021; Richardson, Elliott, & Roberts, 2013; Turunen & Hiilamo, 2014; Walsemann, Gee, & Gentile, 2015). While this line of research is expanding, there are two key limitations. First, existing studies tend to focus on specific health outcomes (e.g., sleep duration, anxiety, etc.), but few have examined how student loan debt affects health care service utilization (Babula & Ersoy-Babula, 2021). This is an unfortunate omission because of the importance of health care use on health and mental health outcomes. Second, the potential racialized influences of student loans on health and health care use are poorly understood. Minority borrowers are likely to experience higher levels of hardships and stress, compared to their white counterparts because of multiple factors, including their lower economic status, lack of access to affordable credit and loan burden, more limited availability of parental economic support, and less promising job opportunities.

The present study aims to start filling these research gaps by exploring three major research questions. First, whether and how having outstanding student loans is associated with financial hardships in health care use among young adults. Second, whether and how having unmanageable loans (measured with late loan payment) is associated with financial hardships in health care use among young adults. Third, whether and how these associations differ between white and minority young adults. We focus on young adults because they are particularly burdened with student loan debt that poses a significant financial

strain on them (Cilluffo, 2019). In addition, they are less likely to use health care services, compared to other age groups (Lau, Adams, Boscardin, & Irwin, 2014). Therefore, it is important to examine the associations between these two factors among young adults, especially minority young adults.

Rationales

The present study builds on two major rationales: (1) Propositions on the impact of indebtedness on financial hardships, and (2) frameworks of racial inequalities. The assumption of indebtedness helps to explain why and how student loan debt influences borrowers' financial hardships, and the framework of racial inequalities helps explain why student loans may affect financial hardships differently for white and minority young adults.

The propositions of indebtedness claim that household debt, especially high levels of debt, causes severe financial hardships by imposing budget constraints among young adults (Sanchez & Zhu, 2015). Unpaid debt also limits borrowers' ability to obtain subsequent loans, which may further reduce their access to financial resources if such needs develop. In addition, unmanageable debt and associated debt collection actions result in high levels of stress among borrowers (Drentea, 2000). Stress, in turn, reduces the borrowers' capacity for making rational choices beneficial to their financial status. Therefore, while student loan debt may help young adults enroll in and graduate from college by bridging the gap between family economic resources and rising college costs, the resulting debt may compromise their post-college financial well-being.

The framework of racial inequalities helps explain why debt may have differential impact on financial stress and hardship across racial/ethnic groups. By recognizing that racial inequalities are deeply engrained into different systems of society (Bonilla-Silva, 2016; Crenshaw, 2011), it offers an analysis of how minority borrowers may experience disproportionate higher levels of loan burdens, compared to their white counterparts.

The first factor is the marked racial disparities in income and wealth (Addo, Houle, & Simon, 2016; Ingraham, 2019). As a result, minority students are less likely to receive financial support from their parents (Addo, 2018; Addo et al., 2016); therefore, they are more likely to rely on student loans to finance their higher education (Houle & Addo, 2018), and also encounter greater challenges in repaying the loans (Huelsman, 2019). In addition, owing to racially discriminatory lending practices (Charron-Chenier & Seamster, 2020; Seamster & Charron-Chenier, 2017), minority college students are more likely to take out private loans with high interest rates. Moreover, racial discrimination in labor market opportunities and economic returns from a college degree also play an important role (Borowczyk-Martins, Bradley, & Tarasonis, 2017; Lang & Lehmann, 2012) in additional difficulties that minority young adults may encounter in repaying their student loan debt.

Therefore, the authors hypothesize that having student loan debt, especially having unmanageable loan debt, will be linked to increased financial hardships in

use of health care among young adults. It is also hypothesized that student loan debt may pose greater risks for minority borrowers' health care use because of their already vulnerable socioeconomic status.

Empirical Evidence: Consequences of Student Loan Debt

Existing studies have examined how student loan debt is related to different indicators of post-college financial well-being. More specifically, studies have reported that having student loans compromises various indicators of wealth accumulation, including reduced net worth (Fry, Parker, & Rohal, 2014; Sullivan et al., 2019; Zhan et al., 2016), projected long-term loss of retirement savings (Hiltonsmith, 2013), and reduced ownership rates and delayed purchase of homes and vehicles (Brown & Caldwell, 2013; Houle & Berger, 2015; Mezza, Ringo, Sherlund, & Sommer, 2016).

The study conducted by Zhan et al. (2016) further indicated that student loans had additional negative impact on wealth of black young adults. Similarly, Sullivan et al. (2019) examined three national longitudinal data and demonstrated how student loans further widened racial wealth gap. Their analyses indicated that after 20 years of starting college, a median black loan borrower still owed 95% of their debt, compared to only 6% of a median white borrower.

In addition, studies show that student loans are linked to various measures of financial hardships (Bricker & Thompson, 2016; Despard et al., 2016; Gicheva & Thompson, 2015). These studies consistently reported that student loan debt was related to higher likelihood of late payment and other types of material hardships (e.g., cannot afford food purchases) as well as credit constrains/declines and higher payment-to-income ratio.

While research on mental health outcomes of student loan debt has emerged in recent years, there were fewer studies on impact of student loans on physical health. The review done by Richardson et al. (2013) indicated that unsecured debt, including student loans, were related to multiple measures of self-reported health status and unhealthy health behaviors (e.g., drug use, problem drinking, and tobacco smoking). Another review done by Turunen and Hiilamo (2014) similarly reported that indebtedness (i.e., unmanageable debt) was related to poor self-reported health and unhealthy weight-related behaviors as well as drug and tobacco use.

Some studies have further examined racial/ethnic differences in the impact of student loan debt on health outcomes. For example, the study conducted by Walsemann, Ailshire, and Gee (2016) found that amount of student loan was related to shorter sleep duration among black young adults but no association between student loan debt and sleep duration among other racial/ethnic groups. The study conducted by Tran, Mintert, Llamas, and Lam (2018) revealed that amount of student loan debt was significantly related to poorer general health of African-American, Hispanic, and white students, but not so of Asian American

students. Research done by Kim and Chatterjee (2019) demonstrated that debt of student loan was negatively related to self-reported health among Hispanic respondents only, after controlling for other types of debt.

Most relevant to the present study, the study conducted by Babula and Ersoy-Babula (2021) established that the borrowers falling behind on student loans were more likely to forgo health care, including mental health care and counseling, consulting a doctor or specialist, follow-up care, prescriptions, and dental care, compared to other loans borrowers. Research done by Kalousova and Burgard (2013), on the other hand, indicated that while medical debt and credit care debt contributed to forgone medical and dental care, debt of student loan was not. However, it should be pointed out that participants in the present study were only southeastern Michigan residents.

The Present Study

While existing research has examined the impact of student loans on health and mental health outcomes, we know little whether and how debt of student loan is related to utilization of health care. The potential racialized influences of student loans on use of health care are even more poorly understood. The present study starts to fill in these gaps by examining associations between having outstanding student loans, unmanageable loans in particular, with financial hardships in use of health care among young adults, and how these associations differ between white and minority young adults.

Methods

Data and sample

The data for the study is from 2018 National Financial Capability Study (NFCS), a triennial survey that started in 2009 and funded by Financial Investor Regulatory Authority (FINRA) Investor Education Foundation. The participants for 2018 NFCS survey were recruited online through the following three established panels in the United States: Survey Sampling International (SSI), EMI Online Research Solutions, and Research Now. The survey used non-probability quota sampling with 500 samples from every state (plus the District of Columbia) (FINRA Investor Education Foundation, 2018). In 2018, more than 27,000 adults completed the survey. Sample for the present study included 4,535 respondents in the age group of 24–35 years (young adults).

Variables and measures

Young adults' experience of financial hardships in utilization of health care was measured with two categories of indicators. The first category measured whether

or not a respondent had “any unpaid bills from a health care or medical service provider ... that are past due” (1 = Yes; 0 = No) at the time of interview. The second category measured missed health care services because of costs in the last 12 months. It included three specific questions that asked whether there was any time when a respondent did the following because of costs (1 = Yes; 0 = No):

1. Did not fill a prescription for medicine
2. Skipped a medical test or follow-up recommended by a doctor
3. Had a medical problem but did not go to a doctor or clinic

In regression analyses, if a respondent’s answer to any of the above-mentioned three questions was “yes,” then the missed health care services were coded as “1”; otherwise, it was coded as “0.”

The two primary variables of interest were whether or not a respondent had any outstanding student loans at the time of interview (yes or no), and a respondent’s race: “white” (white, non-Hispanic) versus “minority” (others). In the analysis that only included young adults who had outstanding student loans, whether or not a respondent had late student loan payment in the last 12 months was included, as an indicator that measured whether the respondent had unmanageable student loans.

Other independent variables included a young adult’s demographic and socioeconomic characteristics as well as a range of measures of his/her financial knowledge and behaviors. A young adult’s demographic characteristics included gender (male vs. female), marital status (married vs. not married), and whether having dependent children (yes or no). Their socioeconomic characteristics included their annual household income (<\$35,000, at least \$35,000 but <\$75,000, and ≥\$75,000 and above), educational status (some college education or less, Bachelor’s degree or above), employment status (employed vs. unemployed), and health insurance coverage (yes or no).

Several measures of a respondent’s financial behaviors are included as well. These variables included a bank account ownership (yes or no), home ownership (yes or no), and whether a respondent had set aside an emergency funds that would cover the expenses for 3 months in case of emergencies (yes or no). In addition, whether or not a respondent utilized any types of alternative financial services in the last 5 years was also included (i.e., auto title loan, payday loan, pawn shop, rent-to-own store, or getting an advance on tax refund) (yes or no).

A respondent’s level of financial knowledge was measured with an individual’s following self-reported financial knowledge:

- (1) I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses (with a scale of 1 for “strongly disagree” to 7 for “strongly agree”).
- (2) How would you assess your overall financial knowledge (on a scale from 1 for “very low” to 7 for “very high”).

A new measure of financial knowledge (with a range of 2–14) was developed by adding up the above-mentioned two variables with higher numbers indicating higher levels of financial knowledge.

Statistical analysis

Several analyses were conducted. First, descriptive analyses were conducted to present sample characteristics by a respondent's student loan status (*without outstanding loans; with outstanding loans; with outstanding loan, and late loan payment*). Second, Chi-square analyses were carried out to examine how each indicator of financial hardships in health care utilization varied by three student loan status of young adults. Third, two sets of regression analyses were conducted to examine how student loan debt and race were related to each of the two broad indicators that measured financial hardships in utilization of health care: unpaid medical bills and missed health care services. The first set of regressions was conducted for the full sample to examine the impact of *whether or not having student loans* on health care use; and the second set of regression was conducted among the subsample of young adults who had outstanding loans to examine the impact of *whether or not having late loan payment* on health care use. The aforementioned demographic and socioeconomic variables as well as measures of financial knowledge and behaviors were included in both sets of regression analyses.

Results

Descriptive Analyses: Sample Characteristics

Table 1 provides descriptive statistics for the study sample ($n = 4,535$) by student loan status: young adults without outstanding student loans, those with student loans, and those with late student loan payment. About 47% of the sample ($n = 2,142$) reported that they had outstanding student loan debt at the time of the interview, and among these loan borrowers, nearly 40% ($n = 789$) had late payment during last 12 months at the time of interview.

A few comparisons across the groups are worth mentioning. Not surprisingly, while 40% of young adults with outstanding loans were minority young adults, they made up a higher percentage of those with late loan payment (51%). Female young adults consisted of a larger proportion (58%) of young adults who had outstanding loans than males, but they accounted for less than half (46%) of those with late loan payment. On the contrary, a larger proportion of young adults with late loan payment (69%) had dependent children. As expected, a higher percentage of young adults with a Bachelor's degree had outstanding loans (47%), but that only accounted for 34% among those with late loan payment. Interestingly, young adults who utilized alternative financial services made up 46% of those who had student loans, but 72% of these had late loan payments.

Table 1 Sample characteristics by student loan status

Variables	Without student loans (n = 2,393)	With student loans (n = 2,142)	With late student loan payment (n = 789)
Race			
Minority	38%	40%	51%
Gender			
Females	58%	58%	46%
Marital status			
Married	47%	50%	50%
Having dependent children	54%	56%	69%
Education			
Bachelor's degree and above	33%	47%	34%
Employment Status			
Employed	68%	80%	83%
Income			
<\$35,000	38%	28%	28%
≥\$35,000 but <\$75,000	37%	37%	32%
≥\$75,000	25%	35%	40%
Having health insurance coverage	82%	88%	84%
Banking account ownership	91%	95%	93%
Having emergency fund	45%	45%	47%
Home ownership	46%	46%	51%
Using alternative financial services	40%	46%	72%
Financial knowledge			
Good at handling financial matters	72%	75%	74%
Self-report high financial knowledge	65%	68%	69%

Chi-Square Analyses: Health Care Use by Loan Status

Chi-square analyses were conducted to examine the associations between indicators of financial hardships in health care utilization by young adults and their loan status, without controlling for other covariates (Table 2). The results demonstrated that it was common that a young adult reported experiencing different types of hardships related to health care even without student loan debt (between 21% and 29%); and not surprisingly, young adults with outstanding loans, especially those with late payment, were more likely to have these financial challenges. For example, 43% of loan borrowers and 65% of those with late payment had unpaid medical bills at the time of interview, and between 30% and 40% of loan borrowers and around 50% of these with last loan payment reported missing some type of health care services because of cost.

Regression Analyses: Full Sample

Table 3 presents the results of logistic regressions of the full sample on the two indicators of the financial hardships in utilizing health care: *whether having any*

Table 2 Financial hardships in health care utilization by student loan status

Variables	Without loans	With loans	With late loan payment
Hardships in health care utilization			
Currently having unpaid medical bills	27%	43%	65%
In the last 12 months, there was time when ... because of the cost:			
did not fill a prescription	21%	30%	47%
skipped a medical test or follow-up recommended by a doctor	24%	36%	52%
had a medical problem but did not go to a doctor or clinic	29%	39%	54%

Table 3 Odds ratio (OR) and confidence interval (CI) from logistic regressions on financial hardships in health care utilization: Full sample

Variables	Having unpaid medical bill	Missed health care services
	OR/CI (95%)	
Gender		
(Male) Female	1.24* (1.04–1.46)	1.27** (1.08–1.47)
Race		
(White) Minority	1.22 (0.96–1.55)	1.28* (1.04–1.57)
Marital status		
(Not married) Married	1.002 (0.83–1.20)	1.03 (0.87–1.23)
Having dependent children	2.25*** (1.88–2.68)	1.58*** (1.34–1.86)
Education		
(Some college education) Bachelor's degree or above	0.39*** (0.32–0.46)	0.67*** (0.57–0.78)
Employment status		
(Unemployed) Employed	1.14 (0.94–1.38)	1.19 (0.98–1.43)
Income		
<\$35,000		
≥\$35,000 but <\$75,000	0.89 (0.73–1.08)	0.86(0.71–1.11)
≥\$75,000	0.86 (0.67–1.09)	0.78*(0.62–0.97)
Having health insurance	.97 (.77-1.21)	.59***(.48 -.74)
Having a Bank Account	0.82 (0.60–1.13)	1.08(0.77–1.53)
Having emergency fund	0.72*** (0.61–0.86)	0.65*** (0.55–0.76)
Being a home owner	1.06(0.88–1.26)	0.95 (0.80–1.11)
Using alternative financial services	4.03*** (3.43–4.73)	3.24*** (2.77–3.79)
Levels of financial knowledge	0.97 (0.94–1.01)	0.96** (0.93–0.98)
Having student loan debt	2.84*** (2.20–3.67)	2.14*** (1.69–2.72)
Race * student loan	0.83 (0.61–1.14)	0.85* (0.64–1.15)
Cox and Snell R ²	0.22	0.16

* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$.

unpaid medical bills, and *whether having any missed health care services because of costs*. Results indicated that, after controlling for all other factors in the model, young adults with student loan debt were nearly three times more likely to experience difficulty in paying medical bills and two times more likely to skip health care services because of costs. Minority young adults, after controlling for other variables in the model, were more likely to experience missed health care services because of costs, compared to their white counterparts. In addition, it appeared that student loan debt had additional negative impact on missed health care services among minority young adults (indicated by the significant interaction effects between student loan and race with missed health care services).

Among demographic and socioeconomic factors, female young adults and those with dependent children were more likely to experience both types of hardships. On the other hand, those who had a Bachelor's degree were less likely to experience both types of hardships in utilization of health care. As expected, young adults with higher income and those with health insurance were also less likely to miss health care services because of costs.

Two measures of financial behaviors of young adults were strongly related to both indicators of hardships in health care use. More specifically, having emergency savings helped reduce the likelihood of experiencing financial hardships in using health care among young adults. In contrast, using alternative financial services increased their health care-related hardships. In addition, young adults with higher levels of self-reported financial knowledge were less likely to skip health care services because of costs.

Regression Analyses: Subsample of Student Loan Borrowers

Table 4 presents the results from logistic regressions on the two indicators of financial hardships in utilization of health care among the subsample of young adults who had outstanding student loans. Results indicated that, after controlling for all other factors in the model, young adults who had late student loan payment were three times more likely to experience difficulties in paying medical bills and have missed health care services because of cost. Minority young adults were more likely to experience missed health care services because of costs, compared to their white counterparts after controlling for other variables in the model.

Among demographic and socioeconomic factors, young adults with dependent children were more likely to experience both types of financial hardships in health care. On the other hand, those who had a Bachelor's degree were less likely to experience financial hardships in utilization of health care than those without a Bachelor's degree. Similarly, young adults with income of more than \$75,000 were less likely to experience these two types of health care hardships, compared to those with income less than \$35,000. Young adults with health insurance were also less likely to skip health care services because of costs, as expected. In addition, using alternative financial services increased young adult borrowers' health care-related hardships. More specifically, those who used alternative

Table 4 Odds ratio (OR) and confidence interval (CI) from logistic regressions on financial hardships in health care utilization: subsample of student loan borrowers

Variables	Having unpaid medical bill	Missed health care services
OR/CI (95%)		
Gender (Male) Female	1.17 (0.90–1.50)	1.17 (0.92–1.48)
Race (White) Minority	1.22 (0.96–1.55)	1.33*(1.05–1.67)
Marital status (Not married) Married	1.02 (0.78–1.32)	1.05(0.81–1.35)
Having dependent children	2.02*** (1.56–2.61)	1.43** (1.12–1.84)
Education (Some college education) Bachelor's degree or above	0.41*** (0.32–0.51)	0.71** (0.56–0.89)
Employment status (Unemployed) Employed	1.27 (0.94–1.71)	1.21 (0.89–1.64)
Income (<\$35,000)		
≥\$35,000 but <\$75,000	0.88 (0.65–1.18)	0.85 (0.63–1.15)
≥\$75,000	0.62** (0.44–0.88)	0.69* (0.49–0.96)
Having health insurance	1.28 (0.90–1.83)	0.59** (0.40–0.86)
Having a bank account	1.64 (0.93–2.88)	1.39 (0.74–2.61)
Having emergency fund	0.94 (0.73–1.22)	0.83 (0.66–1.06)
Being a home owner	1.22 (0.94–1.59)	0.99 (0.78–1.28)
Using alternative financial service	3.43*** (2.69–4.37)	2.83*** (2.22–3.64)
Levels of financial knowledge	0.10 (0.95–1.05)	0.98 (0.93–1.03)
Having late loan payment	3.19*** (2.51–4.06)	3.19*** (2.45–4.15)
Cox and Snell R ²	0.26	0.18

p* < 0.05, *p* < 0.01; ****p* < 0.001.

financial services were nearly three times more likely to experience both types of health care hardships.

Discussion and Implications

Discussion

By analyzing a recent nationally representative data, the present study found that financial hardships in using health care were common among young adults with student loans—between 30% and 43% of young adults experienced different types of hardships. These hardships were more prominent among those having unmanageable loans (i.e., with late loan payments)—47%–65% of this group experienced some types of hardships. This was not surprising, given the consideration to financial challenges among those with heavy student loan debt

(Gicheva & Thompson, 2015; Sullivan et al., 2019). The study results for the two major hypotheses are discussed as follows.

Hypothesis #1: Having student loan debt, especially having unmanageable loan debt, is linked to increased financial hardships in health care use among young adults.

The study findings provided strong support for this hypothesis. After controlling for a range of socioeconomic characteristics, young adults with student loans were nearly three times more likely to have unpaid medical bills and more than two times more likely to skip health care services because of costs. These findings were consistent with previous research that indicated the positive associations between having student loans and other types of financial hardships (Bricker & Thompson, 2016; Despard et al., 2016; Gicheva & Thompson, 2015).

The present study further establishes that among young adults with outstanding student loans, those with late loan payment were three times more likely to experience both unpaid medical bills and having to skip health care services because of costs. This finding adds new evidence that heavier or unmanageable loans were related to increased health care-related hardships. It is consistent with previous research that indicated that unmanageable loans could cause higher levels of financial hardships among loan borrowers (Babula & Ersoy-Babula, 2021).

Hypothesis #2: Student loan debt poses greater risks for minority borrowers because of their already vulnerable socioeconomic status, compared to their white counterparts.

The study findings also provide evidence in support of this hypothesis. First, after controlling for other factors in the model, including student loan debt, minority young adults were more likely to miss health care services because of costs than their white counterparts. Similarly, among young adults with student loans, minority young adults were also more likely to skip health care services because of costs, after controlling for other factors, including having late payment. Second, a significant interaction between race and student loans in their influence on the possibility of missing health care services indicated that student loan debt had an additional negative impact on health care hardships of minority young adults. It provided additional empirical evidence that having education loans could further magnify the already widening financial status between white and minority young adults (e.g., Sullivan, et al., 2019; Zhan et al., 2016).

It is worth highlighting some of the results on the relationships between the covariates in the model and indicators of health care hardships. Similar to the findings from previous studies (American Association of University Women [AAUW], 2017; Karpman, Zuckerman, & Gonzalez, 2018), the present study reports that female young adults and those who had dependent children were more likely to experience financial hardships in health care. On the other hand,

having a Bachelor's degree, higher income, and health insurance helped buffer the hardships in young adults' health care utilization, which was consistent with the results from previous research (Elliott, Lewis, & Johnson, 2014; Grinstein-Weiss et al., 2016; Zhan & Sinha, 2019).

Another set of interesting findings is the influence of financial behaviors. In particular, having emergency savings helped reduce both indicators of financial hardships in using health care among the full sample after controlling student loans and other factors in the model. On the other hand, the present study found that using alternative financial services was strongly related to increased financial hardships in health care use. For example, among the full sample, those who used alternative financial services were four times more likely to have unpaid medical bills and nearly three times more likely to skip health care services because of costs. Similar findings were reported among the subsample having outstanding student loans. These results were consistent with those from previous research (Birkenmaier & Fu, 2016; Gjertson, 2014) and indicated the importance of access to mainstream financial products in enhancing financial well-being (Sherraden, 2013).

Limitations

A few limitations should be noted and point to useful directions for the future research. First, the study is not an experimental research or a longitudinal study. Although we used a well-regarded national data set and control for a number of important factors that could have influenced health care utilization, it was impossible to completely rule out alternative explanations for the findings. Second, the data were collected through self-administered questionnaires on a website; therefore, there are chances of selection bias in participants' responses to health care utilization and other questions. Third, the present study did not examine the possible mechanisms through which student loans influenced use of health care. The future studies addressing these limitations will help further develop knowledge base and theoretical frameworks in this and related research areas.

Implications

The study findings provided evidence that young adults with student loans, especially those with unmanageable student loan debt, experienced significant financial hardships in use of health care, including unpaid medical bills and missed health care services. While the current federal and state student loan relief programs (Calhoun & Harrington, 2020) have provided temporary help, many borrowers, minority and low-income borrowers in particular, still faced dire financial circumstances (Jabbari, Kondratjeva, Despard, & Grinstein-Weiss, 2020). Therefore, more targeted loan relief programs and long-term strategies to address student loan issues are required.

First, the present study indicated that certain groups of young adults were more likely to encounter financial hardships in health care. More specifically, minority young adults, and those with dependent children, with low incomes and without a Bachelor's degree, were particularly vulnerable. Given the severity of economic impact of the pandemic among these groups, student loan debt burden would further magnify economic inequalities, for example, among different racial/ethnic and income groups as demonstrated previously (Darity et al., 2018). Therefore, these families should be provided with larger amount of loan relief and/or cancellation, especially considering their economic hardship in the context of the pandemic. In addition, considering that many of these groups (minority borrowers, for example) are more likely to be the victims of financial frauds (Ramirez, Ohlhausen, & McSweeney, 2016), it is equally important to strengthen policies that would help loan holders prevent frauds and abuse of student loan services (Illinois Asset Building Group, 2017).

Second, while loan relief and cancellation programs provide temporary relief, alternative strategies to address the "root" issues of student loan debt are required. The cost burden of college tuition has shifted more toward students and their families in recent decades, versus assistance from the state or federal government. Therefore, it is critical to promote federal and state investments in affordable higher education, thus increasing access of students to need-based student aid and decreasing their reliance on student loans. For example, Pell Grants are perhaps the most effective investment by the federal government in helping college access and success of low- and moderate-income students. However, the purchasing power of Pell Grants has declined over time; therefore, improving Pell Grants can help reduce minority and low-income students' reliance on loans (Protosaltis & Parrott, 2017).

Findings of the present study further indicated that having emergency savings reduced financial hardships in health care utilization among young adults. This is not surprising because emergency savings can help provide financial cushion for families, especially during income disruptions and/or when unexpected expenses come up. However, studies indicated that young adults did not have emergency savings (Birkenmaier & Fu, 2016; FINRA Investor Education Foundation, 2013), and many finished their emergency savings during the current pandemic (Ortegren, 2020). Therefore, it is important to support young adults, especially those with student loans, to develop emergency funds to reduce their financial hardships.

On the contrary, utilization of alternative financial services increased financial hardships. However, research indicated that use of at least some types of alternative financial services is common among the majority of Americans, especially among minorities, young adults, and those with low-income and lower educational attainment (Birkenmaier & Fu, 2016). The use of alternative financial service increased further among low- and middle-income population since the pandemic (Merrefield, 2020). Therefore, supports are particularly required for these populations to help them save on a regular basis to avoid use of alternative financial services in case of emergencies.

Conclusion

The present study, by analyzing a 2018 national data set, determined that young adults with outstanding student loan debt were more likely to have unpaid medical bills and to skip health care services because of costs. These financial hardships were more among those with late loan payments. In addition, student loan debt had additional negative impact on minority young adults. The future research should investigate these relationships using the longitudinal data and examine possible mechanisms through which student loans affect utilization of health care.

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