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What's in a Debt Letter? A Content and Linguistic Analysis of Student Loan Debt Letters

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ABSTRACT

Since 2012, many Title IV institutions of higher education have sent their students debt letters to inform them of their outstanding loan amounts, estimated or real monthly payments, and other loan-related information. However, no extant research has analyzed whether these letters are written at an appropriate level for college students, nor has research articulated what complex jargon is used in these letters (e.g., *subsidized, consolidated*) and what content is contained in these letters (e.g., interest rates, loan types). Subsequently, this study analyzes a sample of 24 letters gathered from institutions of higher education across the country to fill these research gaps. Results suggest most debt letters are not comprehensible by the average first- or second-year college student, jargon differs between sectors (e.g., public, private), and debt letters share many common elements, such as aggregate loan totals and interest rates, but many do not include contact information or any multimedia, even though letters were written to be delivered digitally. Implications for research, practice, and financial aid communication are addressed.
Keywords: debt letters, financial aid, college students, debt

With growing public awareness of student loans and what some refer to as a "student debt crisis," (Quinton, 2016b, para. 1) legislators and college administrators alike have begun to show increasing interest in better managing students' debt burdens and informing students how to be well-informed borrowers. Currently, for the Federal Direct Loan program first-time student borrowers are required to sign a Master Promissory Note (MPN), as well as complete entrance counseling. The entrance counseling is meant to help the first-time borrower learn about the loan and its commitments (Klepfer, 2015). But even with these requirements, average student debt continues to climb, and students continue to report a lack of awareness of the debt they are taking on and the implications repayment has on their future income and budget (Burd et al., 2018; Johnson et al., 2018; Marx & Turner, 2020).

As the concern over student debt has grown, the U.S. Department of Education (ED) and other federal agencies have begun to release new documents and tools to supplement these requirements. In 2012, ED announced the Shopping Sheet, now called the College Financing Plan. Although schools are not required to provide this plan, it provides a standard template for financial aid offers and allows the student to better compare and consider different offers so they can make the most informed financial decisions (U.S. Department of Education, 2019). Then, in November 2019, ED notified institutions of their intent to change the MPN process to make it an annual process. Student and parent borrowers would need to acknowledge their current loan debt each new academic year before their school could make a new loan disbursement. Though available to students now, the ED delayed the required student completion of the new Annual Student Loan Acknowledgement until 2021 (Federal Student Aid, 2020). Most recently, the Consumer Financial Protection Bureau (CFPB) released *Your Financial Path to Graduation*, an online tool designed to assist students with understanding both the cost of college and how to budget for those costs while learning to make informed financial decisions around paying for college (Consumer Financial Protection Bureau, 2020).

However, state legislators from thirteen states to date have attempted to engage their institutions of higher education with their outstanding student loan borrowers through the sending of debt letters: a letter mailed from the student's last attended institution which informs the student (current or former) of how much student debt they owe and what kind (Darolia & Harper, 2018; Stoddard et al., 2017; Taylor & Holthaus, 2020). Institutions sending some of the first debt letters in the country, such as Indiana University and Montana State University, have explained that sending a student a debt letter is another way to inform students of their student loan borrowing, yet the research into the effect of these debt letters has been variable and only short-term (Darolia & Harper, 2018; Stoddard et al., 2017). However, no research has examined whether most college students can read and comprehend the contents of the debt letter or what content is presented in debt letters, even though prior research has suggested that many students and their families do not understand financial aid award letters (Burd et al., 2018) and do not understand how to complete the Free Application for Federal Student Aid (FAFSA), which is the official application for federal student aid in United States (Bettinger et al., 2012;

Dynarski & Clayton, 2006; Taylor, 2019a). Moreover, students often struggle to comprehend financial aid jargon, such as *FAFSA*, *tax return transcript*, and *verification*, terms that are important for students to understand to successfully apply for and receive federal student aid to attend a postsecondary institution in the United States (Taylor, 2019a, 2019b; Taylor & Bicak, 2019).

As a result, given that hundreds of institutions of higher education across thirteen states in the U.S. send debt letters to their current or former student loan borrowers, this study will fill considerable research and practice gaps by answering the following questions:

1) How readable are debt letters and does readability level vary by institutional sector or institution?
2) What are the most commonly used terms in debt letters (e.g., *subsidized, consolidated*)?
3) What content is included in debt letters (e.g., *aggregate loan totals*, *interest rates*, etc.)?

Answering these questions will inform both financial aid practitioners and researchers as to how debt letters can be simplified and more informative for student loan borrowers, helping these borrowers understand their loan debt and how to access resources to repay their loans.

LITERATURE REVIEW

Although the sending of debt letters is a recent phenomenon in higher education, several studies have addressed how institutions send debt letters and a few behavioral student outcomes as a result of receiving a debt letter. While these studies are limited in their generalizability when considered individually, these studies may provide a more complete understanding of debt letters and their associated outcomes when compared with the current study at hand.

Indiana University Debt Letters

As one of the first universities to initiate debt letters in 2012, Indiana University (IU) is often looked to as a success story associated with this initiative (Darolia, 2016). Within two years of instituting debt letters, IU students had reduced their borrowing by about $44 million, or 16% overall (IU Newsroom, 2015b). By 2018, federal and private loan borrowing at IU had decreased by 19%, or more than $126 million total (McRobbie, 2018). These results garnered a great deal of media attention at the time, with articles published in national news sources such as *The Wall Street Journal* (Korn, 2017), *CNN Money* (Quinton, 2016b), and *Yahoo Finance* (Woodruff, 2015), among others. Some of these articles asked if this simple solution solve the student loan crisis (Quinton, 2016b). While the debt letter solution may have seemed simple to outsiders, a much more complex financial literacy initiative was in place at IU.

During this timeframe, the university developed a “multi-faceted financial literacy program and started adopting policies to increase student financial assistance and promote on-time graduation” (IU Newsroom, 2016a, n.p.). In

addition to debt letters, IU also offered peer-to-peer financial counseling, a podcast on personal finance, a website with quizzes and loan calculators, a full-time enrollment campaign, and changed the financial aid loan acceptance process to make it easier to decline loans (Quinton, 2016a). Because the debt letters were part of larger efforts to reduce loan borrowing, it is difficult to determine the effects from the letter alone, as other initiatives were also implemented during this timeframe.

Administrative focus on financial education efforts was also exceptionally high at IU during this time. IU's president mentioned the university's work on financial literacy as a priority in every state of the union address from 2011 to 2018 (McRobbie, 2018). The president also chose to award the senior vice president and chief financial officer at IU, MaryFrances McCourt, with the President's Medal for Excellence for her work on student affordability and her oversight of the IU Office of Student Financial Literacy in 2016 (IU Newsroom, 2016b). In addition to a high level of institutional focus on financial education, the university also led a national initiative on financial literacy by co-founding the Higher Education Financial Wellness Association, formerly known as the National Summit on Collegiate Financial Wellness (IU Newsroom, 2015a).

Due to the comprehensive financial literacy efforts in place at IU, as well as the administration's extraordinary focus on the subject, the loan debt reduction experienced at IU may not be causally linked to student loan debt letter initiatives alone. To determine the effects of loan debt letters, it is beneficial to turn to other institutions that have implemented similar stand-alone initiatives for further examination.

Montana State University Debt Letters

Montana State University (MSU) implemented debt letters similar to Indiana University's in 2012, and Stoddard et al. reviewed the efficacy of these letters in 2017. MSU's letter differed from IU's in that it included debt thresholds at which point letters would be sent to some, but not all, students. The MSU students who received letters were first year students who had more than $6,250 in student loans, sophomores with more than $12,000, juniors with more than $18,750, and any student with more than $25,000 in debt received a letter. Students were provided with incentives to meet with financial planners and career coaches. MSU's debt letters also included strategies to reduce borrowing and work towards a timely graduation. In particular, federal Satisfactory Academic Progress (SAP) regulations were outlined, informing students of the need to pass 67% of courses each semester to continue to receive federal funding. Information was also shared on the university's tuition plateau program, in which students do not incur any additional tuition charges after enrolling in 12 credit hours a semester. By charging the same amount for 12 and 15 credit hours, for example, the university sought to increase credit hours completed, leading to higher on-time graduation rates.

Additionally, MSU outlined benefits to earning a college degree, including lower average unemployment rates and better long-term health outcomes. To study the outcomes of MSU's debt letter, Stoddard et al. (2017) used a difference-in-

differences approach, using the University of Montana as a comparison site, where no student debt letters were sent. In this study, the researchers did not find a significant reduction in the amount of student loans borrowed due to the debt letters, controlling for gender, race, major, age, and several other characteristics. However, the researchers did find positive academic effects associated with the debt letters.

Receiving a letter increased average grade point averages for the semester, as well as the number of credit hours completed. These effects continued into the following semester and year. Students receiving debt letters also experienced higher retention rates by semester and year compared to their peers who did not receive the letters at the University of Montana. The authors of the report argued that the academic successes students experienced may be attributable to the information provided about SAP. While student loan debt did not significantly decrease, there were other, unintended positive outcomes associated with the letters. MSU's outcomes suggest that outlining SAP and other benefits to completing coursework towards a timely graduation are important to include in student loan debt letters.

University of Missouri Debt Letters

Darolia and Harper (2018) studied debt letters sent by the University of Missouri (UM), and these debt letters sent by the university differed from other debt letters in that they only provided factual information about loan debt and estimated repayments pulled directly from the National Student Loan Data System (NSLDS). Unlike MSU and IU, other financial education resources were not promoted simultaneously, and students were not outwardly encouraged to reduce their borrowing. Debt letters at UM were not written with the intent to increase or decrease loan-borrowing behavior, but rather to provide factual information.

Darolia and Harper (2018) found in their 2017 review that sending a debt letter at the University of Missouri did not lead to a change in the amount students borrowed or the likelihood that they would borrow. Although UM's debt letter did not alter borrowing behavior, it did induce more information seeking among some students. The researchers found that students receiving debt letters were two percent more likely to seek a meeting with a financial aid officer. Interviews conducted by Darolia and Harper (2018) with debt letter recipients demonstrated that students did not find the letters particularly distinguishable from others sent by the financial aid office or other offices on campus. Out of 23 students interviewed, just nine remembered receiving the debt letter, and another four reported being unsure. Additionally, two out of four students in a control group stated that they had received the debt letter, when they in fact had not. Overall, the debt letters sent at UM did not appear to be particularly memorable for students.

One concern about sending debt letters is that they may potentially discourage students who need loans to complete their education from utilizing them (Quinton, 2016a). Research has demonstrated that students who are averse to borrowing, and that have unmet need of $2,000 or more during their first year of college, are less likely to complete their degree (The Institute for Higher Education Policy, 2008). The researchers at UM, therefore, looked for any negative completion outcomes associated with sending debt letters to students. They found no negative outcomes

associated with sending debt letters to students, however. Students receiving debt letters were no more likely to withdraw from courses, change their major, leave the university, or change the number of hours they worked in work-study positions (Darolia & Harper, 2018).

Although the researchers were unable to determine any harm that had been caused by the letters, they did find that they may not be the most effective approach to addressing student loan debt either. Half of students who received an emailed debt letter reported that they believed that it was the best approach, while the other half that were interviewed did not recommend debt letter emails, believing that students skimmed or overlooked them (Darolia & Harper, 2018). The researchers found that students who receive frequent communication about their finances may decrease their attention to any one message. Some students even reported purposefully avoiding paying attention to their student debt. In interviews, students suggested that other approaches such as tweets, texts, songs/videos, presentations/budgeting classes, letters sent to parents, or one-on-one financial or academic advising may be more beneficial. It is important to note that, overall, students who were interviewed about debt letters referred to their lack of understanding, not a lack of data as hindering their financial decision-making. This research echoes some of the findings of prior research focused on text messaging, finding that community college students may be more likely to refile their FAFSA and stay in school after receiving a text message reminder instead of another form of communication, such as a postcard or email (Castleman & Page, 2016).

Review of Debt Letter Findings To-Date

Together, the three studies at Indiana University, Montana State University, and the University of Missouri suggest that debt letters by themselves may not be effective in reducing student loan debt, but as part of larger financial education programs, they may be beneficial (Darolia & Harper, 2018; Stoddard et al., 2017). When students are provided information on additional resources, they are more likely to engage in help-seeking behavior (Darolia & Harper, 2018). Experimenting with other methods of communicating student debt information, such as through academic courses, presentations, social media, (Darolia & Harper, 2018), and text messages (Castleman & Page, 2016) is also recommended. Including information on Satisfactory Academic Progress and other incentives to graduate on-time are important in student debt letters as well (Stoddard et al., 2017).

Smaller studies, such as the one from Taylor et al. (2021), scanned six different debt letters—two of which were from IU Bloomington and Montana State University—to find that debt letters were often too difficult for most first-year college students to read and contained complex jargon that students may struggle to understand. Akin to the IU and MSU studies, McKinney's (2017) dissertation explored college student behaviors after receiving a debt letter and found that students were more likely to reduce their borrowing as a result of receiving the letter. However, McKinney (2017) did not control for demographic characteristics or other factors related to student borrowing, while the study was also situated at a single institution and gathered only one year of data.

While there are several important findings from the literature that have been published on student debt letters to-date, additional research is still needed to improve outcomes associated with these initiatives. Moreover, after an extensive literature search, the research team was unable to find related work in international settings, rendering research into how educational institutions communicate debt to students even more important.

METHOD

The following sections outline the methods employed by the researchers to identify the population and sample of study and how the researchers collected and analyzed data. All debt letters analyzed in this study can be made available in anonymized versions by request. Per agreements between the researchers and the institutions sending the debt letters, the researchers cannot publicly share original versions of all debt letters analyzed in this study.

Debt Letter Mandates and Identifying the Population

To date, politicians in thirteen states have mandated that Title IV (federal loan participating) institutions of higher education send their current and former students holding federal student loans a student loan debt letter. These states include California, Florida, Illinois, Indiana, Maryland, Nebraska, Oregon, Pennsylvania, Texas, Utah, Virginia, Washington, and Wisconsin (Attigo, 2020). According to the National Center for Education Statistics' (2020) Integrated Postsecondary Education Data System (IPEDS), there are 2,685 institutions of higher education in these 13 states that could be sending unique debt letters to their students. The research team is aware that organizations contract with state systems and multiple campuses to send debt letter templates to their students, meaning that not all debt letters may be different from campus to campus, especially if campuses are in the same state system like the University of California System (Attigo, 2020). As a result, it is unclear how many institutions are complying with their state mandates and sending student loan debt letters. Moreover, it is unclear whether state level departments of education, the ED, or the Office of Federal Student Aid (FSA) are regularly auditing these institutions to ensure that institutions are sending timely, accurate debt letters per state laws.

Data Collection

Since early debt letter mandates began in 2015 in Indiana and 2016 in Nebraska (Quinton, 2016), the research team began soliciting blinded debt letters (no personally identifiable information) at professional conferences and within extant personal and professional networks, including through state- and national-level organizations. However, the research team found that collecting debt letters—even anonymized or blinded ones—was exceedingly difficult for several reasons provided by financial aid professionals. These reasons included uncertainty surrounding changing state laws and debt letter requirements, competitive

advantages against other institutions, and an uneasiness of sharing a financial document meant for a specific student, even though we asked practitioners for anonymous or blinded copies of the debt letters. Additionally, the stress and uncertainty produced by the COVID-19 global pandemic rendered collecting debt letters even more cumbersome.

Given these hurdles the research team was only able to collect twenty-four unique debt letters over a two-year period, representing less than 1% of the overall population of institutions of higher education who have been mandated to send debt letters. However, the research team felt that analyzing twenty-four letters across multiple textual aspects—including both linguistic and qualitative analyses—would make a novel contribution to the literature, seeing as few studies have analyzed whether students are likely able to read debt letters (McKinney, 2017) and what types of information are included in debt letters (Taylor et al., 2021).

Data Analysis

To optimize the analysis of the debt letters across multiple textual aspects, the research team decided to employ both quantitative linguistic and qualitative methodology to build upon extant research and fill gaps in the literature.

Linguistic Analysis

First, this study sought to build upon extant research suggesting that financial aid-related communication could be very difficult for traditionally-aged college students to read. FAFSA instructions (Taylor, 2019b) and application fee waiver statements (Taylor, 2019a) are difficult to read and often written above the 16th grade English reading level, and financial aid award letters are often difficult to read and contain confusing jargon and vague definitions of critical terms (Burd et al., 2018). From here, this study employed Taylor's (2019a, 2019b) linguistic methodology to analyze the English readability level, debt letter length (by word count), token-type ratio, and word frequency of each letter to approximate each letter's difficulty and content. The instruments used have been validated by nearly sixty years of readability research related to how texts are written and can be simplified to increase the readability of text for a wide variety of audiences (DuBay, 2007). To perform the linguistic analysis of the debt letters, we used Readability Studio, a quantitative linguistics software program with the ability to analyze text and text files across many readability measures, including word count, token-type ratio, and word frequency (Oleander Software, 2020). In analyzing the text, we used Readability Studio to calculate the following measures, with results displayed in Table 1.

Table 1: Readability, Length, and Lexical Diversity of Debt Letters, by Institution Type (n = 24)

Institution type	ARI	FK	GFI	SMOG	AVG*	WC	TTR
Public 2-Year	15.2	14.8	13.1	15.8	14.7 (1.5)	447.5	0.50
Public 4-Year	15.1	14.9	12.1	15.7	13.9 (1.0)	572.9	0.52
Private 4-Year	15.3	15.9	12.0	15.8	14.7 (1.1)	572.6	0.52
All	15.2	15.1	12.1	15.8	14.1 (1.1)	542.0	0.51

Note: *Averages followed by standard deviations in parentheses.

- The Automated Readability Index (ARI). The ARI is a measure of readability difficulty that calculates the grade level of narrative text, examining the average word and sentence length of a given selection of text. The use of the ARI for this study's purpose is validated by its appropriateness for adult-level textual analysis, given the ARI's implementation by the Army National Guard and other branches of the United States Department of Defense. Moreover, the ARI has been found to be an accurate and valid measure of readability difficult across many settings (DuBay, 2007). ARI is measured by counting the number of words per sentence, number of keystrokes per sentence, and the overall number of words per sentence and then running a grade level calculation

$$G = (4.71 * (RP/W)) + (0.5 * (W/S)) - 21.43 \quad (1)$$

  where G = grade level, W = number of words, RP = number of strokes (characters and punctuation less sentence terminating punctuation, i.e., periods), and S = number of sentences (Kincaid & Delionbach, 1973).
- The Flesch-Kincaid grade level test (FKGLT). The Flesch-Kincaid grade level test calculates the grade level of technical documents and nonfiction based on sentence length and syllable count. The use of Flesch-Kincaid (FK) for this study's purpose is validated by its longitudinal use—over forty years—by the United States Navy in its evaluation of the reading levels of entry-level and experienced naval cadets. Moreover, the FK has been found to be an accurate and valid measure of readability difficult across many settings (DuBay, 2007). FK is measured by counting the number of words in the document, number of syllables in the document, and then dividing by the number of sentences. The calculation is

$$G = (11.8*(B/W)) + (.39*(W/S)) -15.59 \quad (2)$$

  where G = grade level, W = number of words, B = number of syllables, and S = number of sentences (Kincaid et al., 1975).
- The Gunning-Fog index (GFI). The GFI) calculates the grade level of a document based on numbers of sentences and complex words, defined as words that contain three or more syllables except for proper nouns, words

made three syllables by adding the inflections *-ed* and *-es*, and compound words composed of simpler words, i.e., *horsepower = horse + power*. The use of the GFI for this study's purpose is validated by its widespread use across a variety of disciplines for over forty years (Schlief & Wood; 1974; Wong, 1999). Moreover, the GFI has been found to be an accurate and valid measure of readability difficult across many settings (DuBay, 2007). GFI is measured by counting the overall number of words, overall number of complex words (words with three or more syllables) and then the overall number of sentences. The calculation is

$$G = .4*(W/S + ((C/W)*100)) \quad (3)$$

where G =grade level, W = number of words, C = number of complex words, and S = number of sentences (Gunning, 1952).

- The Simple Measure of Gobbledygook Readability Formula (SMOG). The SMOG is a measure of readability difficulty that calculates the grade level of any document at least 30 sentences in length based on the number of complex words and total sentences. A complex word is defined as one with three or more syllables, with complex sentences featuring a semicolon counted as two sentences. The use of the SMOG for this study's purpose is validated by its widespread use across a variety of disciplines for over forty years, especially the healthcare field where complex jargon (gobbledygook) is commonly used to describe medical conditions (DuBay, 2007). SMOG is measured by counting the number of complex words with three syllables or more per sentence and then the number of complex words in the overall document. The calculation is

$$G = C \text{ per } 30 \text{ sentence passage} \quad (4)$$

where G = grade level, and C = number of complex words (three syllables or more) using SMOG's proprietary conversion table (McLaughlin, 1969).
- Word count. Word count is the overall number of words in a text.
- Token-type ratio (TTR). TTR is the number of unique words divided by the overall word count of a text, calculated primarily as a proxy for lexical diversity. Texts with a higher TTR have a more differentiated lexicon than texts with lower TTRs. Additionally, TTRs are often expressed in decimals (0.54) or percentages (54%), but each expression holds the same meaning.

Table 2: Word Frequency Corpora Analysis of Debt Letters, by Institution Type (n = 24)

Institution Type			
Public 2-Year (n = 2)	Public 4-Year (n = 15)	Private 4-Year (n = 7)	All (n = 24)
your (27)	your (263)	your (101)	your (391)
you (22)	loans (185)	you (96)	you (300)
loan (14)	you (182)	loans (83)	loans (282)
student (14)	loan (163)	loan (60)	loan (237)
loans (14)	student (154)	federal (50)	student (204)
repayment (11)	information (85)	student (36)	federal (134)
amount (10)	federal (78)	repayment (33)	information (122)
information (7)	debt (68)	information (30)	repayment (109)
debt (7)	repayment (65)	direct (26)	debt (100)
financial (7)	financial (62)	debt (25)	interest (86)
borrowed (7)	interest (57)	interest (24)	financial (86)
education (6)	total (48)	year (22)	direct (73)
aid (6)	direct (45)	borrowing (22)	total (68)
federal (6)	estimated (38)	borrowed (21)	borrowed (61)
visit (6)	estimates (37)	total (18)	year (55)
please (5)	we (36)	academic (18)	estimated (54)
year (5)	borrowed (33)	financial (17)	estimates (53)
interest (5)	monthly (31)	estimated (15)	academic (50)
resources (4)	payment (30)	contact (14)	borrowing (49)
academic (4)	included (29)	estimates (13)	aid (44)
degree (4)	please (29)	private (13)	amount (44)
borrowing (4)	academic (28)	amount (13)	please (44)
future (4)	year (28)	limit (13)	monthly (43)
options (4)	aid (27)	included (12)	payment (40)
letter (3)	education (26)	payments (12)	education (39)
provided (3)	estimate (26)	grants (12)	estimate (37)
included (3)	resources (24)	aid (11)	private (37)
students (3)	private (24)	university (10)	resources, we (36)

Note: Frequency in parentheses; only content words reported (corpora cleaned of articles, prepositions, conjunctions).

Finally, the research team merged all debt letters (a corpus) and then merged debt letters separately by institution type (two-year public, four-year public, and four-year private) to understand the lexical diversity by specific terms used in debt letters. We used Readability Studio to analyze the word frequency of the corpus and the individual institutional corpora; results are displayed in Table 2 of this study.

Qualitative Analysis

To add an additional layer of meaning to the analysis of debt letters, we also employed qualitative measures to better understand what types of information has been included in debt letters. To build upon prior studies (Darolia, 2016; Darolia & Harper, 2018; McKinney, 2017; Stoddard et al., 2017; Taylor & Holthaus, 2020), we first generated a codebook (Miles et al., 2014) of debt letter content that we knew appeared in many debt letters that we have reviewed in our professional practice and that have appeared in peer-reviewed studies. These codes included aggregate debt totals, loan types, interest rates, cost estimates, estimated or real payment amounts, and contact information. We then employed a double-blind coding approach by each using the codebook to code all 24 debt letters and then came together collectively to discuss our codes, following best practices (Maxwell, 2013; Miles et al., 2014).

After learning our codes were identical during the first round of coding, the team re-coded each debt letter, searching for other information that may not have been captured by our initial codebook. Again, we performed another round of double-blind coding and compared results collectively, learning that we also needed to generate codes for the presence of multimedia within a debt letter (e.g., a table, picture, infographic, embedded video, etc.) and hyperlinks (e.g., the presence of a hyperlink, how many hyperlinks were embedded in each debt letter). Once these additional codes were generated, the research team performed one final, third round of coding to ensure accuracy, comparing results collectively and finding that all codes were uniform across all members of the research team. The results of this analysis are displayed in Table 3 of this study.

Table 3: Descriptive Analysis of Debt Letter Content, by Institution Type (n = 24)

Institution type	Aggregate Totals	Loan Types	Interest Rates	Cost Estimate	Payment Amounts	Contact Information	Multimedia	Hyperlinks
Public 2-Year (n = 2)	100%	0%	0%	0%	50.0%	100%	0%	100%
Public 4-Year (n = 15)	100%	46.7%	86.7%	20.0%	80.0%	66.7%	33.3%	100%
Private 4-Year (n = 7)	85.7%	71.4%	85.7%	28.6%	85.7%	71.4%	28.6%	85.7%
All	95.8%	50%	79.2%	20.8%	79.2%	70.8%	29.2%	95.8%

RESULTS

The results of this study are presented through each research question.

Research Question 1: How Readable Are Debt Letters?

Data in Table 1 suggest that many debt letters may not be readable for first- and second-year college students who read between the 12th-and 14th-grade English reading comprehension level. Across all sectors, the average debt letter was written at the 14.1 grade level, with public two-year and private four-year institutions composing debt letters at the 14.7 grade level. However, overall standard deviations in Table 1 indicate that debt letters within institution type may not vary by readability level, as the highest standard deviation was within public two-year institutions at 1.5 grade levels of reading comprehension. Yet, there was variance among different readability levels, as the ARI, FK, GFI, and SMOG all measure different syntactic (sentence structure) and semantic (word choice) elements of a sentence or paragraph.

Regarding semantics, the ARI, FK, and SMOG all heavily calculate lexical complexity as part of the readability formula. Overall ARI (15.2), FK (15.1), and SMOG (15.8) scores compared to the overall GFI score (12.1) likely indicate that lexical difficulty most influences the high readability of debt letters in this study, as measured by the ARI, FK, and SMOG. The GFI is measured by counting the number of complex sentences and words in a text, with complex words being defined as words with three syllables or more. However, the GFI more heavily calculates sentence complexity, putting less emphasis on lexical complexity and a text's syntactic structure. We elaborate on this finding in the Discussion section of this study.

In terms of word count (text length), public two-year institutions (n = 2) composed much shorter debt letters than four-year peers, as two-year institutions used 447 words on average to communicate debt to students, whereas four-year institutions used roughly 572 words to communicate the same. Although this study includes a weak sample of two-year institutional debt letters, the word count difference between institution types was a notable finding of this study. Akin to similar word counts within four-year institutional debt letters, data in this study also suggest that debt letters may share a uniform lexical complexity across the entire letter, evidenced by TTRs between 0.50 and 0.52 across all institutions. These similar TTRs likely indicate that the lexicon that institutions employ is similar, meaning that common words such as *loan*, *student*, and *repayment* appear in all debt letters, no matter the institution. In addition, TTRs of 0.50 indicate that 50% of the words used in debt letters are unique, meaning they are only used once in the letter. With this information, it is possible that students may only encounter key terms in a debt letter once, failing to provide the student with enough context in the letter and repetition of the word to reinforce its meaning and truly educate the student of the term. We also elaborate on this finding in the Discussion section of this study.

Research Question 2: What Words Are Used in Debt Letters?

Regarding the words used in debt letters across different institutional sectors, data in Table 2 suggest that debt letters tend to address students in the second person (*you*, *your*) while using much of the same lexicon (*loan*, *student*, *information*, *debt*, and *repayment*). However, there were subtle institutional differences, such as the frequency of the word *federal* across debt letters in public two-year and four-year debt letters. For instance, the word *federal* only appeared three times on average across two public two-year debt letters (1.5 times per letter), whereas the word *federal* appeared 78 times across 15 debt letters from public four-year institutions (5.2 times per letter) and 50 times across 7 debt letters from private four-year institutions (7.1 times per letter). Here, four-year institutions seemingly discuss the *federal* nature of student debt and the redirecting of students away from their institutions of higher education and toward repayment at the federal level.

Additionally, debt letters across all sectors seem to emphasize *repayment* and *borrowing/borrowed*, suggesting that one of the purposes of student loan debt letters is to inform students that they have borrowed money which must be repaid. As all debt letters uniformly emphasized concepts such as *loans*, *interest*, *financial*, and *debt*, debt letters in this study suggest that institutions mean to educate their student borrowers regarding their student loan debt, making a novel contribution to the literature. Prior studies have suggested that student loan debt letters may be used as a tool for students to alter their borrowing habits or change their academic pathways (Darolia, 2016; Darolia & Harper, 2018; McKinney, 2017; Quinton, 2016; Stoddard et al., 2017). However, the language used in the debt letters in this study suggests that perhaps the primary function of debt letters is to inform students of their loan debt and how to repay those loans. Yet, it is important to note that this information may indeed change a student's behavior, and without any form of quantitative analysis to explore student behavior *after* reading a debt letter, the body of research in this field remains incomplete. As a result, students receiving a debt letter may be changing their behavior, including changing their major, course load, institution, or enrollment status, leading to varied postsecondary outcomes as a consequence of the debt letter.

Table 2 also indicates that many public four-year debt letters provided estimates of student loan debt and not actual repayment amounts or monthly payments, evidenced by the frequency of *estimated* (38 occurrences), *estimates* (37), *estimate* (26) across fifteen letters (6.7 occurrences per letter). Private four-year debt letters were slightly less likely to mention the *estimated* nature of debt information than public four-year institutions, as *estimated* (15 occurrences) and *estimates* (13) appeared across seven private four-year debt letters (4 occurrences per letter). Inversely, public two-year debt letters did not mention any form of *estimate,* even though there were only two public two-year debt letters in this study. As a result, students receiving public four-year debt letters may either be more aware of the estimated nature of their student loan debt than students receiving debt letters from private four-year or public two-year institutions.

There were also several outliers in the data, as public two- and four-year institutions composed the only debt letters to use the word *please*, while public four-

year institutions were the only ones to use the second person pronoun *we* to refer back to the institution. Although it is unclear why several institutions chose to use these terms to inform their students about student loan debt, using the word *please* may be attributed to institutions encouraging their current or former students to *please visit* or *please contact* their financial aid office for more information. Moreover, using the word *please* may have been an attempt at encouraging or nudging the student to contact a resource if they required assistance, yet the same encouragement or nudging was not apparent in private four-year debt letters. Additionally, after reviewing the public four-year debt letters, all instances of *we* were used from the sender's perspective without including the student (ex: *We encourage*, *We know*, *We want you to*). This indicates that the usage of *we* could have been used to emphasize that the institution was sending the letter and thus, the letter could be seen as a trusted source of information. Also, the usage of *we* could have been a way to personify the institution, rendering the debt letter less formal and perhaps more relatable or friendly from a student's perspective. However, without student input and a longitudinal analysis of student behavior, this finding remains speculative.

Additionally, the word *grants* (12 occurrences) only appeared in private four-year debt letters, further suggesting that different types of institutions communicate student debt in different ways, even though the majority of students attending institutions of higher education access the same types of federal loans from the same system. The occurrence of *grants* in private four-year debt letters could suggest that private institutions remind students to seek outside, non-loan financial resources, such as grants, in lieu of taking out student loans within debt letters. Moreover, private four-year debt letters may make mention of *grants* more often than public debt letters, as private institutions may be better positioned to award institutional grants to their students to offset these students' cost of education and their need for student loans. This finding would also suggest that private four-year institutions may view debt letters as an educational tool to inform their students of alternative sources of funding that do not need to be repaid, in addition to informing students of their outstanding student loan balance, interest rates, and estimated monthly payments.

Finally, as all debt letters were sent by the institution to the student, the use of the word *we* by public four-year institutions may signal that public four-year institutions were more willing to refer to themselves, and thus their institutional services, as the collective pronoun *we* is inherently self-reflexive. This finding reveals that public four-year institutions were more likely to position themselves as a collective organization that a student can contact for more information, whereas other institutions may not have the capacity to respond to all student questions, rendering it difficult for the institution to refer back to itself (as *we*) for students to access for more information.

Research Question 3: What's in a Debt Letter?

Across twenty-four unique debt letters, data in Table 3 suggest that nearly all debt letters include loan aggregate totals (95.8% of all letters), interest rates

(79.2%), payment amounts (79.2%), and hyperlinks to additional information (95.8%). However, these percentages differ by institution type, as public two-year debt letters did not mention interest rates, while only 85.7% of private four-year debt letters included hyperlinks, while all public debt letters did so. Like the data in Table 2, the content presented in Table 3 suggests different institution types include different information within debt letters.

Also echoing earlier findings, few debt letters included cost estimates of attending an institution (20.8% of all debt letters), signaling that debt letters primarily serve the purpose of informing a student of their debt and little else: the cost of college is separate from the debt a student accrues. Additionally, only 50% of all debt letters (and no public two-year debt letters) included information about what types of loans a student holds. This finding also indicates that institutions believe it is more important to tell a student *how much debt they owe* and not *what kind of debt they owe*, failing to educate the student regarding the different types of student loans and their corresponding repayment obligations.

Data also suggest that many debt letters in this study were meant for one-way communication of student debt: from institution to student and not from student to institution. Exemplifying this communication style is the finding that only 66.7% of public four-year institutions included contact information on their debt letter, meaning that the institution wanted to *communicate with the student* but did not encourage *communication from the student.* However, a higher percentage of private four-year debt letters and all public two-year debt letters included contact information, suggesting that perhaps public four-year institutions prefer one-way communication with a student or simply do not have the resources to field questions from students, given the volume of debt letters that larger, public four-year institutions may send.

Finally, data in Table 3 suggest that debt letters in this study were meant to be sent electronically, evidenced by the high percentages of debt letters including hyperlinks (95.8%). However, it seems that many debt letters did not fully embrace the digital nature of the debt letter and the flexibility of modern technology, as very few debt letters included any form of multimedia, such as a video, picture, table, or other way to differentiate student loan debt information for a wide variety of learners. Here, it seems many debt letters were meant to be emailed or accessed from a student's institutional portal, yet these debt letters prioritized text and not other communication elements, potentially limiting how well students can comprehend the information in the debt letter.

DISCUSSION

The following section provides limitations as well as implications for research, practice, and policy.

Limitations

As with any study, there were several limitations of this work, some of which may be addressed by future research.

First, the research team was only able to gather 24 unique debt letters from 24 different institutions of higher education, whereas the most recent available data from Attigo (2020) suggests that over 2,000 institutions of higher education across thirteen states may be sending debt letters to their current and former students with outstanding student loan debt. As a result, this study's small sample does not represent the overall population of hypothetical debt letters. Moreover, this study only analyzed two student loan debt letters from public two-year institutions, so future research could focus much more on how two-year institutions communicate debt to their students. However, it is notable that many institutions did not feel comfortable sharing their debt letters publicly while also consenting to having their debt letter studied and reported on. From here, future studies could collect larger numbers of debt letters and perform similar analyses to inform the field.

Second, this study employed quantitative linguistic and qualitative measures to analyze the readability, simplicity, diction, and content of debt letters. Yet, the research team did not engage with college students—or any human audience—to explore whether these students or other audiences could read the debt letters, nor did we explore whether students or other audiences would change their behaviors as a result of reading the debt letter. From here, future research could explore whether relevant parties can read the debt letter, whether they would act upon the letter in any number of ways, and if the debt letter could include or exclude any information that would render the letter more readable or informative.

Third, the research team did not learn when debt letters were sent to students or how, as timing (time of year, time of day, day of week) and mode (email, text message, physical mail) may change how a student or audience may interact with and interpret the letter. Akin to prior studies related to the effect of debt letters (Darolia & Harper, 2018; McKinney, 2017; Stoddard et al., 2017; Taylor & Holthaus, 2020), there has not been a study which controls for specifically when a debt letter is delivered. Subsequently, it is difficult to assess whether students prefer to receive their letter over specific media or at specific times, rendering the letter more attractive to read. Moreover, institutions using different content management systems (CMSs) may have different capabilities regarding the NSLDS information exporting to letter format, possibly restricting what information can be included in debt letters and whether that information is up-to-date and accurate. Given these institutional uncertainties, it is difficult to assess the effectiveness of the debt letters in this study.

Implications

Results from this study hold much for future research, practice, and policy related to student financial aid and the communication of debt to student loan holders.

To begin, researchers should continue to investigate how student loan information is communicated to students. As previously detailed, the ED and FSA have made numerous attempts to simplify the financial aid application process and how students access their student loan information. However, research has continued to find that students and their support networks struggle to understand

many elements related to financial aid, including how to interpret their student loans and the best course of action to successfully repay them (Darolia & Harper, 2018; Marx & Turner, 2020; Taylor & Holthaus, 2020). Here, researchers could explore student preferences for student loan information communication and whether students prefer a debt letter over another form of communication, such as a phone call, text message, or other media (Castleman & Page, 2016).

This study found that many debt letters were likely incomprehensible by most college students of average English language reading ability, as the average debt letter in this study was written above the 14th grade reading level. This finding echoes prior work that found many debt letters were written at the 12th grade reading level or higher (Taylor et al., 2021). In a United States context, seniors in high school or secondary school may be expected to read and comprehend English at the 12th grade level, but data in this study suggests many first- and second-year college students (expected to read at the 13th or 14th grade level) would be unable to read their institution's debt letter. Additionally, many of the jargon terms in debt letters in this study may be difficult for readers to understand. From here, researchers could further investigate how institutions of higher education communicate debt to their students and whether this communication could be simplified and made to read at an appropriate level for college students and graduates.

Regarding practice, many debt letters in this study contained complex language and difficult sentences for the average college student to read and comprehend. Prior research articulated that financial aid-related information may be especially difficult for college students to read given the financial aid-related jargon in the communication, as well as the financial stress that a student may be under, contributing to lower reading comprehension abilities (Taylor, 2019a, 2019b). For example, consider this sentence excerpted from a debt letter in this study:

> Interest that accrues while you are enrolled, which must be paid first or capitalized (added to your debt), has not been projected here and therefore has not been included in these estimates.

This sentence is complex because it contains difficult jargon (*accrues* and *capitalized*) as well as a structure that produces a 15th-grade English reading comprehension level. This implies that practitioners could simplify the text and avoid jargon to render the information more intelligible. However, this sentence could be rewritten in simpler terms at a much lower reading level:

> These numbers are the best estimates available and many factors can impact your actual monthly repayment amount, including gained interest.

This rewrite is much easier for students to read and does not contain complex jargon that students may not understand. Additionally, this simplified sentence makes it clear that the student loan debt amount in the letter is an estimate and that the student should understand that other factors may impact the actual amount of debt they have and how to repay that debt. Although the term *interest* may still be considered jargon, it is a financial term that is likely difficult to replace with a synonym and is integrated into many other financial contexts (e.g., investing, credit, etc.). Here, this simplification demonstrates that simplified versions of financial aid information may not be ideal and are likely restrained by reliance on certain jargon

terms in broader financial contexts. Additionally, data in Tables 2 and 3 of this study make it clear that many debt letters estimate costs, do not often provide information about scholarships or other sources of funding, and some do not contain contact information for a student to get help understanding their debt letter. For these reasons, practitioners should write debt letters in simpler, shorter terms and always include contact information in the letter so a student can seek help if necessary.

Data from this study also make it clear that debt letters are written in a variety of ways and are in no way standardized from institution to institution. A student may receive a debt letter from their most recent institution, enroll elsewhere, and then receive a debt letter from a different institution containing drastically different information in a debt letter that could be written in a different way or delivered through different media (e.g., mail, email, text, etc.). Institutions should consider collaborating with the ED to compose a common debt letter—written in simple, short terms with actual payment amounts at the time of the letter's delivery—to ensure that students are receiving a clear, consistent message about their debt, no matter where they enroll and take on debt.

Finally, regarding policy, the ED should move beyond MPN additions and student loan acknowledgements to engage with NSLDS information and connect with students personally to deliver updated, accurate student loan debt amounts and payment options. ED has access to student contact information, including phone numbers, email addresses, and home addresses, and the ED should consider sending students accurate and timely notifications of their student loan debt, in addition to simplifying the NSLDS website for students and their support networks. Simply put, a student loan debt letter is a written document containing information that already exists in the NSLDS portal and to which every student with outstanding student loan debt has access. From here, policymakers ought to first simplify NSLDS to make it more accessible to students and their support networks, and then these policymakers should work with practitioners and the ED to simplify and standardize debt letters for all Title IV (federal student loan participating) institutions of higher education to use.

Yet, given the challenges that U.S. higher education—and global higher education—amid the COVID-19 pandemic, change may be hard to come by. As a result, perhaps now more than ever, institutions and ED must partner to simplify and standardize the student loan debt communication process. If these steps are not taken, students will likely continue to borrow money for college without understanding the short- and long-term impacts of their financial decisions and subsequent debt. This lack of understanding may further minoritize students, confusing the federal financial aid repayment process and restricting the postsecondary and post-postsecondary success of the future leaders of the United States.

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