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# Health Literacy and Self-Efficacy among University Students in the United States

**Lauren Beasley**
*Georgia State University, USA*
*E-mail: lbeasley10@gsu.edu*
*https://orcid.org/0000-0001-7707-2051*
*https://ror.org/03qt6ba18*

**Steven Hoffman**
*Brigham Young University, USA*
*E-mail: steven_hoffman@byu.edu*
*https://orcid.org/0000-0002-2764-4207*
*https://ror.org/047rhhm47*

**Emily McCracy**
*Tangible Therapy, USA*
*E-mail: emily.m.mccrary@gmail.com*

**Tucker Wallace**
*Cedar View Counseling, USA*
*E-mail: Cedarviewcounseling@gmail.com*

**Abstract.** *Research suggests that college can be a time of high stress, serious mental health challenges, and high-risk substance use habits. Self-efficacy (one's belief in their abilities) and health literacy (one's ability to read, understand, and apply health information) are two factors that promote wellbeing and positive health behaviors among college students, but little research has been conducted so far that looks at the relationship between these protective factors. Thus, this study examined the connection between self-efficacy and health literacy among American college students. Data were collected by using quota sampling from 410 undergraduate students. Health literacy was measured by using the All Aspects of Health Literacy Scale, whereas self-efficacy was measured by using the General Self-Efficacy Scale. Self-efficacy was positively predicted by functional ($b = 2.77$; $d = 0.26$; $p < 0.001$), communicative*

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*($b = 2.94$; $d = 0.27$; $p < 0.01$), and critical health literacy ($b = 1.51$; $d = 0.14$; $p < 0.05$). Our findings suggest a positive relationship between self-efficacy and health literacy in the college student population in the United States. Colleges and universities can work to provide accessible health literacy resources and education, as this type of health literacy education may also lead to higher self-efficacy and increased overall wellbeing.*

**Keywords:** *college students; mental health; university programming.*

## Health Literacy and Self-Efficacy among University Students in the United States

University students in the United States are at a unique and challenging time in their lives. Stressors such as exams, parental expectations, sleep difficulties, worries about the future, and feelings of loneliness all contribute to high stress levels among university students. According to the *American Council on Education* (ACE, 2024), in the 2022–2023 academic year, 78% of college students reported experiencing moderate to high levels of anxiety. The stress and pressure of the university experience, accompanied by the new-found freedom associated with emerging adulthood, often leads to risky behaviors. For example, college students who report higher levels of stress are more likely to engage in maladaptive drinking, which can result in adverse health outcomes (Courtney et al., 2023). The increased stress may also lead to diminished mental health, as ACE (2024) found that 41% of college students presented with depressive systems. Taken together, these challenges college students face have the potential to impact biopsychosocial outcomes. Therefore, exploring protective factors for college student well-being is an important task for research.

Despite the wealth of research on such protective factors, little has focused on the relationship between students' self-efficacy (one's belief in their abilities; Bandura, 1994), and their health literacy (one's ability to read, understand, and apply health information; Sykes et al., 2013), the two factors that can promote well-being and health behaviors among university students. Thus, the purpose of this study is to examine the relationship between self-efficacy and health literacy among a sample of students attending universities throughout the US.

### Literature review

#### *Self-efficacy*

Bandura (1994) was a pioneer in researching and understanding self-efficacy. He defined self-efficacy as an individual's belief in their own capacity and ability to reach certain levels of performance, and influence outcomes in their lives (Bandura, 1994). He went on to say that self-efficacy determines one's thoughts, feelings, and motivations when taking on difficult tasks (Bandura, 1994). Self-efficacy is developed as a person

experiences success in a particular field, because experiencing previous success builds confidence and encourages belief in oneself and one's ability (Papyrina et al., 2021). Individuals with high self-efficacy put forth greater effort during difficult tasks, recover quickly from failure, and view failure as themselves lacking effort or attainable knowledge (Bandura, 1994).

Among university students, self-efficacy is positively correlated with physical health and mental health (Han et al., 2022; Wang et al., 2022). In fact, some research suggests self-efficacy to be a stronger predictor of academic achievement among university students than achievement motivation and learning strategies (Yusuf, 2011). Among various samples of university – students, low levels of self-efficacy have been shown to be correlated with worse health outcomes, internet addiction, help-seeking behaviors, insufficient understanding of preventative care, and decreased academic performance (Barsell et al., 2018; Nutbeam and Lloyd, 2021; Sørensen et al., 2021). In short, research suggests that self-efficacy promotes health behaviors and discourages risk behaviors among university students.

### *Health literacy*

Health literacy is defined as one's ability to read, understand, and apply health information in a way that enhances health behaviors (Sykes et al., 2013). For the purposes of this study, we focused on three types of health literacy suggested by Nutbeam (2000): (a) functional health literacy, (b) communicative health literacy, and (c) critical health literacy. Functional health literacy is defined as a person's reading and writing skills that enable them to read and interpret health information, and a person's basic knowledge of health and health behaviors (Nutbeam, 2000). Communicative health literacy is a person's communication skills, which allow them to extract health information from various sources and apply that information to new situations (Nutbeam, 2000). Critical health literacy describes the advanced cognitive skills that a person uses to analyze and interpret health information, as well as a person's ability to use this information to improve their wellbeing (Nutbeam, 2000).

High health literacy in all three of the above categories is correlated with various positive health outcomes including higher awareness of one's health status and needs, improved levels of self-care, better mental health help seeking behaviors, and increased levels of regular exercise, (Alidosti et al., 2019; Astantekin et al., 2019; Barsell et al., 2018; Sørensen et al., 2021). Health literacy levels tend to increase with education levels and are highest among individuals with a university degree (Zareipour et al., 2020). Age also shares a relationship with health literacy. Individuals between ages 20–40 years have higher levels of health literacy than do older individuals. Some research suggests that this inverse correlation is a result of higher internet fluency among younger individuals, as health information is generally accessed online (Taba et al., 2022).

Health literacy levels among university students have been studied extensively in previous research. Although some studies suggest that there is room for improvement in health literacy levels of university students (e.g., Kühn et al., 2021; Mullan et al., 2017; Okuyan et al., 2019), other studies report that health literacy levels among university students are relatively high (i.e., Kaboudi et al., 2017; Elsborg et al., 2017). Interestingly, within the body of previous research, few studies have addressed the implications of high levels of health literacy on the university population. The ability to access and utilize health services and health information is especially critical among university students, as they exhibit higher than average levels of diminished mental health and poor substance use habits (e.g., Ayaz-Alkaya and Terzi, 2019; Nguyen et al., 2020) Additionally, university students are at a transitional time in their lives when the burden of navigating healthcare services is shifting to their own shoulders. University students are often leaving the care and supervision of their parental figures, while also transitioning from pediatric health care to adult health care services (Vamos et al., 2020).

Therefore, as health literacy has been found to reduce barriers related to health-related services among other populations (e.g., Palumbo, 2015; Thai and George, 2010) and serve as a bridge to numerous positive health outcomes (e.g., DeWalt and Hink, 2009), a more detailed understanding of health literacy and its correlates could provide insights into addressing the unique challenges of university students.

### *Self-efficacy and health literacy*

Previous studies among varying populations point to a strong correlation between self-efficacy and health literacy and suggest that both factors are strong predictors of positive health outcomes and practices (e.g., Berens et al., 2022; Alidosti et al., 2019; Astantekin et al., 2019; Zareipour et al., 2020). For example, a study of university students with chronic health conditions suggested that self-efficacy and health literacy were strong predictors of positive health behaviors and health maintenance (Barsell et al., 2018). Yet, in these studies, time ordering was often unclear. Some studies suggested that high levels of health literacy led to high levels of self-efficacy (Guntzviller et al., 2017; Masoompour et al., 2017; Park, 2024; Zareipour et al., 2020), with one study reasoning that health literacy empowered people to change their environments to meet their health goals, which, in turn, bolstered their self-efficacy (Zareipour et al., 2020). However, other studies suggested that higher self-efficacy leads to increased health literacy (Alidosti et al., 2019; Berens et al., 2022; Lee et al., 2016), with one study proposing that self-efficacy's connection to good research behaviors could be the driving force behind higher health literacy (Astantekin et al., 2019). Thus, among populations similar to that of the present study, while self-efficacy and health literacy are highly correlated, the exact nature of their relationship remains unclear.

However, if following Bandura's (1997) assumptions of self-efficacy, because health literacy heightens one's determination and chances of success through education, knowledge, and resources, it would lead to an increase in self-efficacy. In other words, when an individual's level of health literacy increases, one's level of self-efficacy follows (e.g., Dominick et al., 2013; Guntzviller et al., 2017; Park, 2024). For example, in a study considering cancer education, the researchers found that women's self-efficacy increased as their health knowledge increased (Tiraki and Yılmaz, 2018). Therefore, if we operate under the prevailing assumption that health literacy predicts self-efficacy among university students, it will be important to understand the factors that lead to increased health literacy among university students in the U.S.

## Present study

Although there is some research surrounding the relationship between health literacy and self-efficacy, many studies focus on populations in hospitals, outpatient clinics, and other areas of the healthcare system. With the stressors associated with attending university, including poor habits of substance use, poor health habits, and the challenge of learning to navigate a complex health care system on one's own, understanding the possible connection between health literacy and self-efficacy among university students is critical. Therefore, the purpose of this study is to examine the relationship between self-efficacy and health literacy among a sample of students attending universities throughout the U.S. Given the findings from previous studies suggesting that health literacy predicts self-efficacy among a variety of diverse populations (e.g., Bandura, 1997; Kühn et al., 2022; Nutbeam and Lloyd, 2021; Zareipour et al., 2020), we hypothesize that health literacy will likewise predict self-efficacy among university students

## Methods

Following the approval of the study from the lead researcher's Institutional Review Board, data were collected from July 2019 to August 2019 with the support of a *Qualtrics* data collection research support team. *Qualtrics* is a multidimensional research software and data collection company that often assists in distributing and analyzing survey research (Qualtrics, 2020). This study utilized purposive sampling in that the participants needed to be competing for their university in an NCAA-sanctioned sport at the undergraduate level or currently enrolled at a university as an undergraduate student. We recruited 205 SAs across Divisions I, II, and III, as well as 205 non-athlete university students. Although there are inherent limitations in a non-experimental design, non-experimental designs are important in exploratory and descriptive research as a means of gathering new information from a large sample of participants (Johnson and Christensen, 2017).

After the research team designed the survey and outlined the inclusion criteria, the *Qualtrics* data collection research support group sent out a link to undergraduate students attending four-year universities in the United States who had previously agreed to be on *Qualtrics* research panels and be invited to complete surveys. Potential participants were sent a survey link that they were able to complete on their hand-held device or computer. The first page was an informed consent, listing the purposes of the study and the potential risks and benefits. If the student consented to continue the study, they were directed to the next page to begin the survey. A total of 410 responses were collected, at which time their responses were transferred to the research team for analysis.

**Measures**

The primary independent variable for this study was health literacy. To measure this, the *All Aspects of Health Literacy Scale* (AAHLS) was used (Chinn and McCarthy, 2013). The AAHLS measures three levels of health literacy: Functional, Communicative, and Critical. Three items measure functional health literacy (e.g., "Do you need help to fill in official documents?), three items measure communicative health literacy (e.g., "When you talk to a doctor or nurse, do you ask the questions you need to ask?"), and four items measure critical health literacy (e.g., "Are you someone who likes to find out lots of different information about your health?"). Likert-scale response options are provided for each question, with higher scores indicating higher health literacy. The AAHLS has been used previously among college students (Barsell et al., 2018), and was found to have acceptable construct validity and measurement reliability among adults (Cronbach's Alpha = .74; Chinn and McCarthy, 2013).

To measure self-efficacy, our primary dependent variable, the brief *General Self-Efficacy Scale* (GSE-10) was used. This scale consists of ten Likert-style items (for example, "I can handle whatever comes my way"), with response options of 'not at all true', 'hardly true', 'moderately true', and 'exactly true'. Composite scores range from 10 to 40, with higher scores indicating higher levels of self-efficacy. The GSE-10 was originally shown to have acceptable criterion validity and measurement reliability (Cronbach's Alpha = .77; Lennings, 1994), and has been used in young adult populations and among university students throughout the world (see Jafar et al., 2016; Terry et al., 2020). Control variables in this study included age, gender, race, socioeconomic status, previous mental health diagnosis, and previous diagnosis of a chronic health condition. Age scores ranged from 18–24 and 25+. The gender was processed as dichotomous (0 = female, 1 = male). While various race/ethnic responses were available to respondents, the vast majority identified as White, and so the variable was collapsed into 0 = White and 1 = non-White. The socioeconomic status was measured by asking participants about their parents' yearly income, with response options ranging from 1 = $0 – $9,999, to 12 = $150,000+. Previous diagnosis of a

mental illness was measured by asking "Have you ever been diagnosed with a mental health illness"; (0 = no, 1 = yes). Previous diagnosis of a chronic health condition was measured by asking "Have you ever been diagnosed with a chronic health condition (e.g., asthmas, diabetes)"; (0 = no, 1 = yes).

### Data analysis

Data was analyzed by using *STATA-16*. First, univariate statistics for all variables were observed. Next, three linear regression models were used to determine if the three health literacy domains predicted self-efficacy while controlling for age, gender, race, parents' yearly income, previous mental health diagnosis, and previous diagnosis of a chronic health condition. P-values below 0.05 were considered statistically significant. Cohen's (1988) recommendations for interpreting effect sizes were used (i.e., d < 0.2 as weak; d = 0.2–0.8 as moderate; and d > 0.8 as strong).

### Results

Table 1 shows descriptive statistics for all study variables. The average age of the participants was ~20 years, 72% of our sample was female, and 63% of our respondents selected "White" as their race/ethnicity. Almost a quarter of the participants had previously been diagnosed with a chronic health condition, and 42% had previously been diagnosed with a mental health condition. On average, the participants' parents or guardians made between $50,000–$70,000 per year.

**Table 1.**

*Descriptive Statistics*

| | N | M(*SD*) | Range |
|---|---|---|---|
| Age | 410 | 20.46(*1.84*) | 18-25+ |
| Gender (0 = Female) | 408 | 0.28(*0.45*) | 0-1 |
| Race (0=White, 1=Non-White | 410 | 0.37(*0.48*) | 0-1 |
| Parent's Yearly Income | 410 | 6.62(*3.49*) | 1-12 |
| Functional Health Literacy | 374 | 2.36(*0.48*) | 1-3 |
| Communicative Health Literacy | 410 | 2.52(*0.47*) | 1-3 |
| Critical Health Literacy | 410 | 2.21(*0.48*) | 1-3 |
| Self-Efficacy | 410 | 29.49(*5.14*) | 14-40 |
| Ever Mental Diagnosis (0 = No) | 410 | 0.42(*0.49*) | 0-1 |
| Ever Chronic Health Condition (0=No) | 410 | 0.24(*0.43*) | 0-1 |

The results of the linear regressions are shown in Table 2.

**Table 2.**

*Least Squares Regression Predicting Self-Efficacy*

| | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Functional Health Literacy | 2.77*** | | |
| Communicative Health Literacy | | 2.94** | |
| Critical Health Literacy | | | 1.51* |
| Age | -0.01 | 0.24 | -0.12 |
| Race (0=White, 1=Non-White) | 0.29 | 0.01 | 0.43 |
| Parent's Yearly Income | 0.13 | -0.05 | 0.19* |
| Ever Mental Health Diagnosis (0=No) | -1.32** | -1.29** | -1.71** |
| Ever Chronic Health Condition (0=No) | -0.56 | -0.32 | -0.43 |
| *p<0.05; **p<0.01; ***p<0.001 | | | |

Functional, communicative, and critical health literacy were all positive predictors of self-efficacy ($p < 0.05$), with the functional and communicative health literacy relationships having moderate effect sizes ($d = 0.26$ and 0.27, respectively). Previous mental health diagnosis was a significant predictor in all three models, having a negative relationship with self-efficacy ($p < 0.05$), and parents' yearly income was statistically significant in the critical health literacy model ($p < 0.05$). Age, race, and ever having had a chronic health condition were not significant predictors in any of the models.

## Discussion

The various challenges that university students face, including high stress, poor habits of substance-use, and increased mental health challenges, point to a need to understand the relationship among protective factors. The purpose of this study was to explore the relationship between two protective factors: health literacy and self-efficacy. We hypothesized that health literacy would positively predict self-efficacy among university students. The findings of this study supported our hypothesis in that functional, communicative, and critical health literacy all had statistically significant positive relationships with self-efficacy. These findings support previous research gathered from samples with diverse ethnicities, education levels, socioeconomic statuses (SES), marital statuses, and ages (e.g., Alidosti et al., 2019; Barsell et al., 2018; Cha et al., 2014; Guntzviller et al., 2017; Lee et al., 2016; Osborn et al., 2010; Taba et al., 2022; Tiraki and Yilmaz, 2018; Zareipour et al., 2020). Among prior research, many reasons have been cited as possible explanations for the positive relationship between health literacy and self-efficacy. One researcher hypothesized that gaining greater health literacy teaches people how to find and apply information, which may lead to an increased ability to achieve health goals, promoting self-efficacy (Zareipour et al., 2020). Another possibility is that as a person develops health literacy, they engage in more positive mental health behaviors, which may alleviate the effects of diminished mental health. This may explain the positive link between health literacy and self-efficacy, as

diminished mental health shares a negative relationship with self-efficacy both in our study and in previous research (Al-Amer et al., 2016; Adam and Folds, 2014; Grøtan et al., 2019; Huang et al., 2023; Wagner et al., 2011). Another potential explanation is that self-efficacy is developed as one successfully accomplishes and perseveres through new and challenging goals or tasks (Bandura, 1994). As some university students are living away from their guardians and are taking care of themselves for the first time, self-efficacy may increase among those who successfully navigate the healthcare system and apply health information on their own.

This study also revealed various underlying variables that predict self-efficacy levels, including previous mental health diagnosis. Previous mental health diagnosis had a statistically significant negative relationship with self-efficacy in all three models. As 42% of our sample had a previous mental health diagnosis, this finding is daunting. Unfortunately, this finding is not uncommon among other studies, which have consistently found mental health diagnosis to have a negative relationship with self-efficacy (Al-Amer et al., 2016; Adam and Folds, 2014; Grøtan et al., 2019; Huang et al., 2023; Wagner et al., 2011). Two of the most common mental health diagnoses among university students are depression and anxiety (Asif et al., 2020). Both depression and anxiety can lead to a decrease in energy, self-esteem, and motivation, and an increase in fear about the future and awareness of one's shortcomings (American Psychiatric Association, 2013). These symptoms may discourage a person from attempting challenging tasks, and may lead to a negative self-perception, both of which are linked with lower levels of self-efficacy (Bandura, 1994).

Additionally, our findings suggest that previous diagnosis of a chronic health condition was not related to self-efficacy. It was assumed that, similar to mental health diagnosis, a chronic health condition would negatively impact self-efficacy, yet in our sample this was not the case. One reason for this finding could be that having a chronic health condition forced these individuals to have repetitive experiences with the health care system, read labels and take medications on a regular basis, and understand and follow through with health promoting activities, thus developing one's health literacy and, potentially, self-efficacy. Another possible explanation is that understanding more about one's illness promotes self-efficacy, and chronic illnesses give individuals considerable time to learn about their diagnosis (Bonsaksen et al., 2012; Farley, 2020). It is also possible that those with chronic health conditions who choose to attend university may already have high levels of self-efficacy to take that leap, leading to a skewed sample of university-aged individuals with chronic health conditions (Heijmans et al., 2015).

The negative stigma associated with mental health may also contribute to this finding. Research suggests that there is a greater stigma associated with mental health when compared to physical health (Corrigan, 2000). This may be a result of chronic health conditions being perceived as outside of a person's control, whereas mental health is often perceived as within a person's control. The greater is the perceived control over a

disorder, the greater is the stigma associated with that disorder (Corrigan, 2000). The stigma surrounding mental health tends to be higher in developed countries, as adults in developed countries are more likely to suffer from embarrassment and discrimination due to their mental health concerns than adults in developing countries (Alonso et al., 2008; Antunes et al., 2022). Participants in our study with a mental health diagnosis may be internalizing this negative mental health stigma, which may in turn lead to lower self-esteem and self-efficacy. Participants with a history of a chronic health condition do not likely face these same negative stigmas and may therefore have higher levels of self-efficacy.

Our findings also suggest that self-efficacy is linked with the parent and guardian income. The parent and guardian income had a statistically significant positive relationship with self-efficacy, but in only one of the three health literacy models (critical health literacy). Critical health literacy describes advanced cognitive skills that a person uses to analyze health information, as well as a person's ability to use that information to improve their wellbeing (Nutbeam, 2000). It is possible that the correlation between income and self-efficacy was the most significant in this sub-group of health literacy because parental or guardian income often predicts children's education levels (Jensen, 2012). Critical health literacy is a more advanced skill (Nutbeam, 2000), and those with higher education levels may have higher levels of critical health literacy. Additionally, children who grow up in high SES households may grow up with more access to healthcare and health information because they are more likely to have consistent access to health insurance. Having stable health insurance may increase their likelihood of having access to regular preventative healthcare and education. This finding supports previous research that parent income is a predictor of both self-efficacy and health literacy, because high SES parents promote a more health-positive environment (Fretian et al., 2020).

### *Limitations*

Several limitations to this study are important to note. First, this was a secondary data analysis of a cross-sectional survey, which means that time ordering is not clear. As with many previous studies on this topic, it is impossible to know if health literacy led to self-efficacy, or whether an increased self-efficacy led to higher levels of health literacy. Second, despite the data coming from students at universities throughout the U.S., non-random sampling measures were used to collect the data, which means these results cannot be generalized beyond those in our sample. Third, the participants were predominantly white, underrepresenting other ethnicities. Finally, this was a secondary analysis, whereas the original data was collected in 2019. As major cultural shifts have happened since 2019 that impacted the well-being of college students (e.g., the COVID-19 pandemic; Alemany-Arrebola et al., 2020), the study's results do not capture such shifts.

### *Implications*

Despite the limitations stated above, the results of this study have important practical implications for university students and their parents and guardians, university administrators, and policy makers. Health literacy is affected by personal factors, lived experiences, organizational practices, and national policies; therefore, interventions could be considered at each of these levels. First, parent health literacy has been shown to be a strong predictor of adolescent health literacy (Sanders et al., 2009). Parents usually act as the link between children and the available healthcare resources and systems (DeWalt and Hink, 2009; Lee et al., 2020). It stands to reason that if the parents' health literacy levels increased, the adolescent health literacy levels would follow, thus helping first-year students be more prepared to navigate the healthcare system on their own when starting at university (Chisolm et al., 2015; Sanders et al., 2009). Therefore, parent education, community resources for parents, and healthcare policies that encourage adult health education could all have a positive long-term effect on the health literacy levels of university students.

Interventions in the educational sector, including improved health curriculum in primary and secondary schools, should also be considered when looking to improve the health literacy levels of university students. Research shows that K-12 school health education has a significant impact on university and career outcomes among young adults (Videto and Dake, 2019). This claim is reinforced by the findings of previous research which show that adolescents rely on the school system to obtain much of their health information (Brown et al., 2007). In fact, the *Center for Disease Control* (CDC, 2021) states that increasing health literacy should be one of the aims of school's health education programs. The CDC recommends implementing community-specific health education from kindergarten through 12$^{th}$ grade and involving parents in the health education that takes place at school (CDC, 2021). Despite the recommended health education in schools across the United States, a 2021 world report published by the CDC (2021) shows that health literacy levels across the adolescent population are still relatively low. This points to a need to improve school health education in order to increase the health literacy levels of children prior to their entering university.

Another point of potential intervention is the transition from pediatric care to adult care. Findings from previous research indicate that this transition is difficult for many young adults who find themselves unprepared to take on the responsibility of navigating the healthcare system on their own (Kirk, 2008; Van Staa et al., 2011). Practices that ease this transition for young adults may support university students in interpreting and understanding healthcare services on their own, which may improve health literacy levels as well as self-efficacy levels. Both the school system and parents can play a role in easing this transition. School health education that focuses on understanding and utilizing adult health care services may be beneficial. Additionally, university students may benefit from a gradual transition, in which their parents and guardians slowly

relinquish control of health decisions and responsibility as their children grow closer to the university age.

This information should be noted by university administrators, as interventions that increase health literacy may have a significant impact on the self-efficacy and success of university students. University administrators and policy makers should take a proactive approach to improve the health literacy of current university students. Universities should consider the accessibility of their healthcare services, including student health centers and student health plans. The university administrators in charge of designing these resources should ensure that they are easy to understand and well-advertised. It would also be wise to provide support to university students who are accessing these resources for the first time. Potential sources of support that universities may implement include peer mentors who walk incoming freshmen through the initial healthcare paperwork, easy-to-use websites with online chat options, healthcare question-and-answer sessions during freshman orientations, and the required introductory health courses for university freshmen. Regardless of the level at which interventions are implemented, it is clear that change is necessary. Low health literacy levels are a threat to the self-efficacy, and therefore the overall well-being of young adults.

## Conclusion

As non-random sampling measures were used in our study, future research should focus on the relationship of health literacy and self-efficacy among a more diverse sample of university students. If these results are replicated among other university student populations, it may be important for universities to consider programs that promote health literacy, which may also increase self-efficacy among their students. Additionally, future research should investigate the effectiveness of interventions that promote health literacy among the adolescent and young adult populations, including the effectiveness of K-12 health curriculums and university student health centers/health plans. The potential positive effects of a health-literate university population are overwhelming. A young adult's experience at university can profoundly impact not only their educational outcomes, but future outcomes involving their career, health, and overall wellbeing.

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