



# Elucidating College Students' Stressors: Photovoice as a Pedagogical Tool and Qualitative Methodology

DeAnne Priddis  and Heather L. Hundley

**Keywords:** photovoice, college students, stressors, time management, mental health

**Abstract:** Traditional research examining student stress relies on surveys using pre-determined categories. This study diverts from that approach by adopting a Conflict in Communication class assignment over seven classes ( $N = 115$ ) using photovoice to determine if results fluctuate by using a different methodology. Additionally, we sought to understand if the sources of stress vary by gender and semester. The data revealed seven categories as the main stressors of student conflict: (1) time management, (2) mental health, (3) finding oneself, (4) future uncertainty, (5) other, (6) financial, and (7) past mistakes. Regardless of participants' sex/gender or semester in which the data were collected, time management and mental health remained constant. Furthermore, finding oneself and future uncertainty were stressors identified more often in the fall rather than the spring semester. These results varied from traditional survey research.

## NOTE

While we acknowledge there is a difference between sex and gender, they are convoluted in U.S. culture. Generally speaking, children are deeply socialized to conform to a gender that is associated with their biological sex. The anonymous files disallowed us to identify specific participant demographics. Therefore, we provided the overall course demographics. To maintain authenticity, agency, and voice, all participants' titles and captions remain as the students submitted them; therefore, grammar and spelling errors may be present.

DeAnne Priddis, Middle Tennessee State University, Murfreesboro, TN

Heather L. Hundley, University of Nebraska, Omaha, NE

CONTACT: [DeAnne.Priddis@mtsu.edu](mailto:DeAnne.Priddis@mtsu.edu)

## Introduction

Lasarus and Folkman (1984) state that stress is inevitable, however the reaction one has to stress is unique. Stress can occur from fear of failure or outside stimuli. Böke et al. (2019) confirm that when outside stimuli outweigh one's perceived ability to cope, the individual will experience stress. As a unique population, college students experience a significant amount of stress from both fear of failure and outside stimuli and are identified as a vulnerable group (Acharya et al., 2018; Bulo & Sanchez, 2014; CCMH, 2020; Deatherage et al., 2014; Nisa & Nizami, 2014). While they transition into young adulthood, many move away from what is known and comfortable (parents, siblings, friends, hometown) to unknown circumstances (college, professors, roommates). Unlike high school, the stakes are higher in college as they gain more financial independence and personal freedoms. Parents and teachers are less likely to check up on them or remind them to meet deadlines and complete their homework. They often secure employment, loans, and scholarships to pay for their education. Thus, students must learn to manage their resources, including their time and money, which may compete with the individual's responsibilities and social life, creating conflict and stress.

Although stress levels are high for students in early college careers with unknown circumstances, Böke et al. (2019) determined stress levels are higher in the latter part of the college career. Students in later college years are faced with new stressors such as finding an internship or starting their professional career that may stress coping mechanisms. The students are required to maintain coping with the academic and social stressors, while adding on new stressors.

Many college and university campuses have counseling centers to aid students with varying traditional college stressors and conflict. Novotney (2014) identified that the number of students attending a counseling center for mental health concerns increased annually which coincided with the severity of the cases. For example, the Center for Collegiate Mental Health (CCMH) 2020 report notes that counseling centers increased utilization by students 30%–40% between Fall 2009 and Spring 2015, while college enrollment only increased 5%. The Association for University and College Counseling Center Directors' (AUCCCD) 2019 annual survey of 562 counseling center directors evaluated the unique number of students served by a campus counseling center for all universities and colleges (excluding community colleges). The survey reveals the mean number 1,083.8 services provided including triage/screening, crisis, group psychiatric help, and individual therapy (LeViness et al., 2019).

While we cannot identify whether students experience more stress now compared to students in the past, we do know that it is a more explicit topic of concern. In bringing it to the forefront, universities have improved by acknowledging student stress and other mental health issues, addressing the topic in faculty training and student orientation, and providing more resources such as campus counseling centers. Currently, it is evident that college students do indeed experience conflict and stress which negatively impacts their mental health. Fortunately, more students today are seeking campus services to help navigate their situations.

Research reveals that sources of college students' stressors include loneliness, concern about financial and health-related issues, missing loved ones, academic pressure, and managing interpersonal conflict (Acharya et al., 2018; Bulo & Sanchez, 2014; Deatherage et al., 2014). While student participants completed surveys for researchers to determine their stressors, the AUCCCD surveyed counseling center directors to understand reasons students sought treatment. The AUCCCD survey from July 1, 2018, to June 30, 2019, reports the most frequent reason for students seeking services were ranked in order of concern

---

as suffering from anxiety, depression, stress, family issues, specific relationship problems, academic performance difficulties, sleep disturbances, social isolation/loneliness, trauma, adjusting to the new environment, suicidal thoughts, and lastly eating/body image concerns (LeViness et al., 2019).

Nisa and Nizami (2014) categorized these sources of stress into four dimensions: interpersonal stress, intrapersonal stress, environmental stress, and academic stress. They identified interpersonal stress as involving relationships, intrapersonal stress pertaining to self, and environmental stress in college life relating to technology issues, noise, living environment, access to faculty, and access to transportation. The fourth dimension, academic stress, Nisa and Nizami explain is unique to students because it occurs when a student transitions to college, switches colleges or semesters, or adjusts to the workload for individual or group work. Past survey research reports that college students predominantly suffer from interpersonal stress followed by intrapersonal, academic, and environmental stress.

### **Providing Voice to Students**

As evident in the literature, college students' stressors are typically determined by surveying students (Acharya et al., 2018; Bulo & Sanchez, 2014; Deatherage et al., 2014) or counseling center directors (LeViness et al., 2019), whereas photovoice involves the participants and uses their photography as data. Photography offers participants the opportunity and freedom to "document the realities of their circumstances" (PhotoVoice, n.d., para. 7) while communicating their own story to the audience (PhotoVoice, n.d.). Photovoice is a participatory action research (PAR) approach that offers participants the opportunity to reflect and share one's life experience and perceptions with the researchers as co-researchers (Nelson, 2019; Wang, 1999; Young, 2017). Drawn from Giroux's (2011) critical pedagogy, Freire's (2005) empowerment education, hooks's (1994) feminist theory, and documentary photography (Ewald, 1985; Hubbard, 1994), photovoice is a well-established classroom tool and popular methodology among social science researchers.

Categorized as arts-based research, photovoice participants can "create images and words to express their realities and feelings" (Latz, 2017, p. 32). The image-text combination creates the ability for participants to communicate their message more vividly on their own terms. The researcher's role is then considered as "making space for a voice rather than give one" (Latz, 2017, p. 43). Each participant is provided an opportunity to tell their story through pictures. Furthermore, photovoice methodology can raise questions and initiate conversations to create stronger meanings than traditional research methods (Latz, 2017).

Initially used in health activism and promotion (Castleden et al., 2008; Downey et al., 2009; Palibroda et al., 2009; Wang, 1999; Wang, 2006; Wang & Burris, 1997), it has been employed in examining domestic violence and homelessness, and for indigenous studies (see Allen, 2012), stigma of mental health (Wada et al., 2019), disability studies (Povee et al., 2014), assisted living (Lewison, 2015), and public health, international development, parenting, and refugees (Sutton-Brown, 2014). Despite its implementation in education (Schiller & Einarsdottir, 2009), it has not been as prevalent in higher education (Metcalf, 2015; Wass et al., 2020).

Yet, more recently Hunter et al. (2020) used photovoice to understand students' perceptions of a summer college preparation program. Anderson et al. (2019) and Wass et al. (2020) employed photovoice to determine how Maori and Pacific students in New Zealand described "good teaching" and "effective

---

learning," respectively. Latz and colleagues (2016) implemented photovoice to identify graduate students and community college student success. More closely related to our research, Tsang and Lian's (2020) use of photovoice examined undergraduates' academic stress in Hong Kong. Although their focus was primarily on the role of academic stress created by examination demands, school administration, and parents, the intent of the study was to reduce the pressure caused by heavy loads and exams.

Similarly, our study examines academic stress that students experience in higher education. Rather than pre-determining categories as reasons for student stress, as evident in survey research, we allowed the categories to emerge from student participants to understand if the results are the same, regardless of methodology. Additionally, we collected data over several years allowing us to determine if sources of college student stress vary by sex/gender or between fall and spring semesters.

Despite their goals or applications, scholars claim photovoice is participatory, empowering, and inclusive. Participants are encouraged to share their story or experience collectively vis-à-vis photographs, captions, and brief descriptions (Nelson, 2019). Thus, for this study, the first author assigned college students to identify their stressors visually and verbally with the intended audience of professors and administrators. The audience is important to identify as they may craft their message differently if directed toward friends, parents, or employers. As such, to understand perceptions of stressors germane to college students, we asked the following research question:

**RQ1:** What do college students communicate as their biggest stressor to professors and administrators?

Sex/gender may play a role in college stressors since people are socialized differently. Thus, gender expectations and stereotypes may affect the types of stress students experience. Böke et al. (2019) state that females perceive having higher levels of stress than males, and females are more apt to react emotionally to the stress (i.e., coping response) based on perception of the stress and their socialization. Acharya et al. (2018) found female students reported higher levels of stress in social activities, change in eating habits, being placed in unfamiliar situations, and change in living environments as compared to male students. Additionally, research identifies women as more likely than men to seek and receive information on mental and emotional health concerns (Gibbons et al., 2019).

Acharya et al. (2018) determined that male students had higher levels of stress than females in interpersonal and academic levels. Research also indicates that men are more likely to use drugs and alcohol to help cope with stress (Böke et al., 2019). In addition, men are less aware of resources available on campus to help them cope with stressors (Gibbons et al., 2019), such as the campus counseling center. Based on this information we asked:

**RQ2:** Does the perceived stressor differ between varied sexed/gendered<sup>1</sup> college students?

Stressors may also change for individuals based on the time of the year. For example, fall semester students may be experiencing stress related to transitioning to (or back to) college and a new environment, or adjusting to the new independence of living away from family (Hurst et al., 2013). On the other hand, spring semester students may encounter stressors related to changes in employment, graduation, or

---

1. While we acknowledge there is a difference between sex and gender, they are convoluted in U.S. culture. Generally speaking, children are deeply socialized to conform to a gender that is associated with their biological sex.

returning to family (Bulo & Sanchez, 2014). Overall, the types of stress encountered by college students may differ depending on the semester, therefore we asked:

**RQ3:** Does the perceived stressor differ in the fall and spring semesters?

Students experience stressors such as academic stressors, interpersonal stressors, and environmental stressors that have impacted their physical and psychological health (Lasarus & Folkman, 1984; Yang et al., 2021). Furthermore, psychological health can impact the mental health and well-being of emerging adults (Charles et al., 2021).

## Photovoice as a Qualitative Method

To address these questions, we extended the pedagogical tool of photovoice to its methodological application. Wass et al. (2020) posit that qualitative higher education researchers predominantly use interviews and focus groups as methods. However, the visual component in photovoice adds to the quality and depth of data. "Visual metaphors can generate different ideas from those derived from verbal or written interviews" (Wass et al., 2020, p. 844). Latz et al. (2016) concur that photovoice is a powerful research approach. Likewise, O'Mally and Munsell (2020) agree that photovoice, as a method, helps researchers gain a better understanding of the lived experiences from people. Based on this, our study provides the combined voice for participants asking them to submit an original photograph or image, caption, and a brief narrative to articulate their biggest stressor they experience as college students with faculty and university leadership as the intended audience.

## Data Collection and Participants

While explaining the assignment, the instructor provided some general examples of visual metaphors and suggested they use a digital camera or smartphone to obtain an original image that represents their perception of their biggest student conflict (see Figure 1 on the following page for assignment prompt). One student drew a picture rather than supplying a photo, which was acceptable since an image was provided and the assignment criteria were met. Coinciding with Hocker and Wilmot's (2014) *Interpersonal Conflict* textbook (see Chapter 2) used in this class, the assignment was due at the end of the first week and students delivered a brief presentation the second week of class to explain how their perceived stressor or conflict is communicated by the visual metaphor in an upper division Conflict in Communication class.

Originally, the assignment was scheduled to occur the first week of the semester and then repeated during the 10th week to determine if differences existed in level of disclosure and type of stressor throughout the academic semester. The project was initially employed Fall 2017. During the assignment debriefing early in the semester, students revealed that they lacked an understanding of what others were experiencing. This acknowledgment led students to immediately identify with others, share stories and strategies to resolve or alleviate the stressors, and display empathy toward each other. Ultimately the assignment during week 10 was removed because the anticipated level of disclosure or type of stressor variation was minute; therefore, the latter assignment was repetitive and unnecessary. Keeping the assignment in week one was fruitful in terms of building trust, rapport, and support among students. Further, upperclassmates reflected upon past experiences and did not rely on the stressor as an excuse to not come to class, meet their deadlines, or get their work completed. This was an unintended but welcomed consequence.

---

**FIGURE 1****Assignment Handout****COMM3650****Writing 1: Photovoice**

**Purpose:** To use photovoice as a tool to present metaphors of conflict.

**Instructions:** Because the student role provides several challenges, this project allows you to share your biggest conflict as a student with faculty and university leadership.

**The Photo:** Your photo will represent a metaphor of your biggest area of conflict encountered as a college student. Be creative! Don't just show a picture of a book. This picture should be a metaphor or unique item representing your conflict. This picture should be your original photo that you take with a digital camera or smartphone. If your photo includes any people in it, they must be unrecognizable.

**Caption:** Create a small caption to go with your original photo. This caption should be a sentence fragment of less than eight words, as in a textbook, to explain how the picture relates to your conflict.

**Write-up:** Explain your biggest conflict as a student. Tell the story of why this picture was selected and explain the picture. Tie the two together and include how it represents your biggest conflict as a college student.

**Informed Consent:** Please include at the end of your write-up if your informed consent was given. This can simply be done by stating "yes, I give my informed consent to use my work for the project" or "no, I do not give my informed consent to use my work for this project." This is part of a larger photovoice project that will be used for presentation and/or publication purposes.

This assignment is due at the end of Week 1. Your photo and caption will be presented with a brief presentation to the class during class Week 2. Please note that all four items (picture, caption, write-up, and consent) should be submitted in one Word document.

Writing 1 = 30 points

After obtaining IRB university approval (protocol number 18-1017), participation was acquired through an upper-level undergraduate course assignment. Students were asked to give written consent permitting researchers to use their assignment as data. The collection of data occurred from Fall 2017 through Fall 2020, for a total of 7 semesters, 8 class sections, and 174 total students listed on the rosters.<sup>2</sup> The largest student major was communication ( $n = 101$ , 58.1%). Other majors spanned across the university, with the second highest representation from journalism. Combined, the classes included 26 sophomores (14.9%), 71 juniors (40.8%), 76 seniors (43.7%), and 1 other.

Of the 174 total students, 115 (67.2%) participated in the study, 70 identified as female (60.9%) and 45 identified as male (39.1%). Most of the participants were enrolled in the Fall semester ( $n = 74$ , 64.4%) and 41 were in the Spring (35.7%). Students who did not provide written consent or did not submit an original image were excluded from the study. Further reasons for nonparticipation include the student failing to submit the assignment or joining the class after the assignment was due. Approximately two

2. The anonymous files disallowed us to identify specific participant demographics. Therefore, we provided the overall course demographics.

students' work per class were excluded in the final data for this research regardless of the rationale. Students' grades were not penalized if they chose not to sign the consent form. They were penalized for other reasons pertaining to the assignment criteria and grading rubric.

A spreadsheet located on a Google Drive included participant pseudonyms, semester, and year of participants' submissions. To protect student identity and maintain anonymity, students who identified themselves to the class as male students were assigned the name of John 1, 2, 3 and so forth; female self-identified students were assigned as Jane 1, 2, 3, and so forth. Students did not identify as non-binary or transgendered. Distinguishing student sex/gender was necessary to address RQ2. The semester and year were identified to address RQ3.

## Coding

After reviewing the submissions and hearing the presentations, the first author (also the course instructor) identified seven emergent themes from the data, along with "other" for a total of eight total themes. The two authors independently coded 12 projects (10%) and found differences among three of them. They discussed the differences, clarified the themes, and achieved consensus. The codebook was modified to seven themes by merging mental health and loneliness as one theme when the coders found difficulty differentiating them. The remaining projects were divided between the two authors who coded them independently. Some projects referenced more than one theme. For example, John 37 discussed his struggles with time management, mental health, and finding oneself. Therefore, to select the most dominant theme, the coders discussed each project that referenced multiple themes and jointly decided which to code as the most dominant.

## Results

This study was designed to serve several purposes. As college professors concerned with students' well-being, we sought to identify their perceived stressors to determine if they varied among sex/gender or by time of year. We were curious how students would visually depict their perceived stressors metaphorically. Additionally, we sought to understand if photovoice reveals different results compared to the traditionally employed survey method. We conclude by critically questioning whether photovoice—as a pedagogical tool and qualitative method—is truly empowering for participants.

## Types of Stressors

Research question 1 posed the question, "What are the biggest areas of conflict (i.e., stressors) encountered by college students?" The findings reveal that college students' main sources of conflict are time management ( $n = 49$ ), mental health ( $n = 23$ ), finding self ( $n = 15$ ), future uncertainty ( $n = 14$ ), other ( $n = 7$ ), financial ( $n = 5$ ), and past mistakes ( $n = 2$ ). See Table 1 on the following page for a summary of theme frequencies and percentages.

**Time management.** Time management was the most prevalent category (42.6%). The theme included students juggling work, school, and social life. Several students disclosed they worked full-time and were also full-time students. Although there were several degrees of work-school balance discussed, there were also struggles with social life, organizations, and studies. A student used the visual metaphor of a pot of boiling water for his struggle with time management. His photograph is of a pot on a stovetop

---

**TABLE 1**  
**Student Stressors**

Category	All		Females Only		Males Only		Spring Semester		Fall Semester	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Time Management	49	42.6%	30	42.9%	19	42.2%	20	48.8%	29	39.2%
Mental Health	23	20.0%	16	22.9%	7	15.6%	7	17.1%	16	21.6%
Finding Self	15	13.0%	11	15.7%	4	8.9%	3	7.3%	12	16.2%
Future Uncertainty	14	12.2%	7	10.0%	7	15.6%	3	7.3%	11	14.9%
Other	7	6.1%	3	4.3%	4	8.9%	3	7.3%	4	5.4%
Financial	5	4.3%	2	2.9%	3	6.7%	3	7.3%	2	2.7%
Past Mistakes	2	1.7%	1	1.4%	1	2.2%	2	4.9%	0	0.0%
Total	115	100.0%	70	61.0%	45	39.0%	41	35.7%	74	64.4%

with a slotted spatula being held by someone's hand to show the depth of the water and the bubbles from the boiling water in the pan. His narrative explained<sup>3</sup>:

In college, semesters always seem to start off like a breeze. The days go by nice and slowly. In my head I believe can stay at a nice even pace and keep up. Instead I always feel like I must go faster and harder every new week. Assignments get harder and harder. Studying is a must as every exam and assignment covers more and more material. Time is now flying by at a million miles per hour. This constant buildup of assignments and studying is like water boiling over the sides of a pot. If you don't "stir the pot", do your work, it will overflow, just like keeping up with everything college entails. (John 18)

Just like a pot of water on the stove may boil over if left unattended, he identified the growing challenge keeping up with an increasingly difficult pace as a student. Attending to his schoolwork can lead to less time for other things such as work and social time.

Similarly, another student expressed how she overcame the difficulty of managing her schoolwork. She shared a picture of a large window with sheer curtains covering blinds behind them. The neighboring house is visible through the blinds, with the caption "Far Far and Away" she wrote,

My biggest conflict as a student is having so much work to do and having to stay at home to do it. I get distracted easily, so being in my room I have other distractions such as my tv, music, video games, and etc. I am the type of student who gets things done early, and likes to organize the way I do things. With this virtual learning, it is hard for me to keep up with everything. I am taking a lot of political science classes which requires a lot of reading and weekly papers. To juggle with those classes and others will be difficult.

I took the picture of my window and blinds because it shows my life right now. I am taking some difficult courses this semester so it contains a lot of work. This requires me to be at home

3. To maintain authenticity, agency, and voice, all participants' titles and captions remain as the students submitted them; therefore, grammar and spelling errors may be present.



a lot of the time. The window shows how I can easily open up the blinds and see the sun, see people, which is a little bit of fresh air, but I cannot actually go out there. Although, I hope this is temporary, it is what I have to do as a student to succeed. (Jane 15)

She expressed her determination to manage her time wisely by disclosing techniques employed such as self-discipline and essentially self-confinement to get her work done. She recognized the need to stay focused and prioritize schoolwork above distractions for the rest of the semester. Though the benefits may seem “far far and away” or she may have felt “far far and away” from what she would prefer doing, the results were just out the window or the distractions are within sight.

**Mental health.** The second most common category was mental health (20%). The students disclosed that they were experiencing loneliness by missing friends, family, and pets. The students also shared their feelings of anxiety, stress, depression, fear, burnout, emotions, mourning, and being overwhelmed.

Participants recognized the negative effects being a student had on their mental health. One student attempted to overcome feeling overwhelmed by using the visual metaphor of the cockpit of an airplane (see Figure 2). In the photo, the upholstery on the pilot's and co-pilot's seats were torn and tattered, showing wear. The interior, including the floor, appears dingy and dirty. Numerous knobs, switches, and

**FIGURE 2**

**Being Overwhelmed With Options but Focusing on the Bigger Picture**



dials on the dashboard and above the seats are evident, leading one to easily surmise how overwhelming the responsibility of flying may be. There are myriad choices and decisions required for operation and control. Just above the center of the frame, four windowpanes reveal a tree line and gray skies indicating options for what is ahead, though neither are particularly optimistic. This student used the caption “Being overwhelmed with options but focusing on the bigger picture” and this description:

My biggest conflict as a college student is simply how overwhelming everything can seem. Many small tasks (due dates, projects, papers, presentations, etc.) can add up into one massive stress-inducing problem. I often have to force myself to not focus on all of the small details but rather the bigger picture as a whole. As with the picture above, there are so many small buttons and options and while they do have a major impact on things, I must remind myself that sometimes I just need to look through the window in order to understand where I need to go. (Jane 46)

Another student continuously cited the mantra “Stay Positive” attempting to overcome the impact that being a full-time student had on her mental health (see Figure 3). The picture features a gray and brown dull-colored wall with a concrete floor. It may be an abandoned space or underpass. In contrast, someone

**FIGURE 3**  
**Stay Positive**



spray painted the wall with “GOOD” (in pink), “Vibes” (in yellow with purple outlines), “Only” (in yellow). The words were stacked vertically, and a pink flower and blue stem were on the right side. The word “GOOD” had a line of black spray paint across it. She explained:

The photo I chose represents how I have a hard time staying positive. The stress of college and always being tired can affect how you perceive things. As an ORCO [Organizational Communication] major you're always having to communicate with others and seem like a happy person even if you are not. These interactions with others can sometimes get annoying or overwhelming. Sometimes you have to get up in front of a class and give a presentation whether you feel like it or not, but you have to pretend to be happy. In this major, there is a lot of group work which can be great unless you get stuck in a group that is not willing to participate. Last semester, I ended up being the only person doing work in two of my classes near the end of the semester. This put a lot of stress on me and I was in a bad mood a lot of the time. This semester, I already have a group that I can tell is going to be hard to work with because they want to wait until the last minute to do things. I have to try my best to be patient with them as well as be encouraging because if I was rude it would not make them want to get their work done any faster. This semester I am taking 18 hours so I know that there are going to be points where I feel overwhelmed, but if I stay positive it will be a better experience for not only me, but the people around me.

This year I am trying to get rid of the negative factors in my life in order to make me feel happier. I am trying to surround myself with positive people and get rid of the negativity in my life. Staying positive is easier said than done, but I believe it is necessary. I also believe that happier people live a better life and that is something that I would like to be a part of. (Jane 45)

Although both Jane 45's and Jane 46's narratives and photographs told their unique stories, their submissions were coded in the mental health theme. Both students were finding ways to work through their mental health concerns by consciously focusing on the things that make them happy, attempting to avoid situations and people that caused them stress.

**Finding self.** The third category of stress concerned the students' interest in finding self (13%). Many participants worried if they were on the right track, if they were doing enough, or doing the right thing. Self-doubt can cause stress for the students. Jane 52 submitted a photograph of the end of a Fender Telecaster acoustic guitar with the headstock and focused on the strings and tuning pegs. The guitar's neck is not visible, but instead the photograph is altered with purple dots in the darkness. She included the caption “How one with passion sees their craft” to help describe her greatest conflict at the time of the assignment.

My biggest conflict as a student has been finding myself. Finding who I want to be, who I want to surround myself with, and how I want to spend my future. I think underneath this all lies a desire to find my passion—something that drives me more than anything. For some people, this is music. For me, I had hopes that someday it could be photography. This photo features me doing something I love, and capturing an image of what the person I loved is passionate about: music. I have a desire to learn more on the camera, and have an underdeveloped passion for it as well. So, to me, this photo says passion. His passion in music, and my passion behind the shutter. Passion has been a struggle of mine, and I hope to discover what makes me tick before my time as a student has ended. (Jane 52)

She appeared to have doubts if her passion for photography will be enough to make her great in this profession. Another student shared his desire to find himself with a photograph of a clear plastic 16-ounce cup half-full of water. Behind the cup is a stack of school-related items including a red three-ring binder and a paperback textbook on top of it. The caption for this photograph was "Where am I?"

My biggest conflict as a student is determining where I am. Of course I know where I am in terms of my location, but where am I when it comes to my education. Am I on track to graduate? Do I have enough credits? Will these classes benefit my career? Although I try my best to stay on top of all of my work, I still often question myself and ask am I doing enough or do I need to more. I chose this picture because I feel like it's perfect for my thoughts towards where I am. The cup symbolizes what I mean when ask the question, "Where am I?" One can't determine if the cup is half-empty or if it is half-full. One can't determine if someone hasn't finished drinking it or if they haven't finished pouring the water. This picture represents my biggest conflict as college student perfectly because one can't determine where am I stand with my life by simply looking at me. It would take one to see my entire process to know where I am truly located. (John 04)

He seemed to be searching for a roadmap to help him navigate his progress toward graduation, and perhaps the impact that others have on his progress by controlling the level of water in the cup.

**Future Uncertainty.** The fourth category was future uncertainty (12.2%). The participants worried if they would find an internship or a job after graduation. The photograph one female student submitted was a treetop, at the bottom of the picture darkness was surrounding it. Further up the picture were storm clouds that dominate the photograph's right side. The clouds were gray and suggest impending rain. However, on the left side of the photograph the disappearing sun was hiding behind the clouds. She captioned the photograph "The Unknown."

One of my biggest conflicts I face as a student is fearing the unknown. Now, what I mean by this is not knowing exactly how my future is going to play out, or what challenges I am going to face going forward. I find myself thinking about what I am going to do with my life a lot, especially now that I am a junior. The thought of failure really scares me. I took a picture of the sky at night because just like our futures can be unclear and not certain, the clouds can sometimes fog the view of the sky and make everything not as clear. Along with that, there is so much out in the world that we do not know of. So much of the world is still unknown to us. I think many young adults my age face this conflict without even realizing it. (Jane 73)

The dark night and cloudy sky featured in the image metaphorically depicted her fear of the future as it is unknown. She also noted the level of uncertainty for many young adults; thus, she was not alone, suggesting she found this notion comforting.

Also concerned with future uncertainty but more optimistically, another student wrote the caption "A Flower Waiting to Bloom" with the visual metaphor of a flower in the rain representing the uncertainty of his education compared to what he will do after graduation. The photograph he took inside features a window framing a flowering bush. The window is slightly foggy, and raindrops are on the glass. The green bush has long, leafy branches and a few large pink flowers, somewhat like hydrangeas. The flower in the center of the photograph appears to be weighed down by the rain. He connects this image with his stress as a student:

My biggest conflict as a student is feeling as if all the work that I'm doing is weighing me down and all for nothing. Sometimes the courses and assignments feel like they are not doing anything to further my development. I feel like the work isn't doing anything for me but I know in the end when I finish my degree it'll all be worth it. The work that I feel like is dragging me down is actually molding me to be successful in my career field.

The flower is being pushed down by water when it rains. The rain comes down hard and fast and sometimes knocks the petals off of the flower making it look fragile and weak. In reality the rain in the moment makes the flower look less desirable but the rain is necessary for the flower to bloom similar to me being a college student. The things that may feel like they're hurting me or useless at the time are often just necessary in my journey of success. (John 19)

The flower metaphor allowed the student to express the toll that going to school may have on him at this moment. He recognized the importance of his education for building resiliency and strength.

**Other.** The fifth most common category (6%) was other. This category included a wide variety of stressors including the desire to travel, home responsibilities, inability to have desired time for fitness, lack of transportation and parking, and challenging relationships with professors. These participants appeared to be more focused on an immediate stressor compared to the other participants. While these stressors varied, they often dealt with sacrificing something to fulfill the student role. For example, a participant photographed a silhouette of a man looking toward the sky with a red backpack on his back in the bottom third of the photograph. The background features the top of a tree line, but the sky makes up most of the image. The student captioned it "Beyond His Backpack" and stated,

I chose the picture because it expresses my love for travel and adventure. I'm wearing the backpack because it's what's holding me back. I want to travel while I'm young but it's impossible without the proper knowledge and funding. Though the backpack aids me in obtain what I need, it keeps me still. Patience is a struggle. (John 16)

While this student yearned to be elsewhere, another student desired that all people remain present throughout the learning experience. She created the caption "Lack of Passion" to accompany her photograph picturing a computer monitor with a document on the screen. The heading on the paper said "Nothing" with three arrowed bullet points following. The first lines stated, "Blah Blah Blah" and the two remaining lines stated, "Blah Blah." She expressed that she had already completed the reading for the week, and that she relied on her professors to also contribute to the learning experience.

As a student at MTSU who has had several kinds of professors, I can comfortably say that a professor without passion promotes students without passion. If they haven't got the passion, they are less likely to be engaging. A lot of people I know would go to classes a lot more often if they had professors that had passion about the subject they were teaching. An issue that I have faced with dispassionate professors is that I personally love to learn, but a bad professors makes even me dread going to class. Students are less likely to get a good grade in the class, and that in turn reflects poorly on the professor too.

Since the first assignment, I understand that conflict is between two parties that perceive something to be scarce or unattainable. So, in this instance, the student is frustrated with

---

school because it prevents them from learning things that they care about or something that they can personally use in the “real world.” The professor could see updating their knowledge on the topic as unnecessary or too time consuming. They could see it as the students just being lazy when in actuality, but must compromise to benefit all stakeholders. (Jane 65)

The student was expressing her impression of past educational experiences as she was attempting to connect her learning to current and future goals.

**Financial Concerns.** The sixth category involved financial concerns (4.3%). The participants stated that conflict is caused by working for financial reasons, paying bills, and overall money is an area of conflict for them. For example, Jane 78 shared a picture of a nylon wallet with a driver's license, library card, fast-food restaurant card, and loyalty card for Sephora. The wallet had several empty card slots, and was absent money or credit cards. The caption was void, but the summary stated, “The life of a college student can be hard. The biggest problem I've noticed is that many people are not financially stable as they would like to be. Money is the root of a lot of issues for college students” (Jane 78). This participant made a blanket statement expressing that it is not uncommon for students to have financial concerns. Another participant conveyed more details on expenses and income while attending school with her photograph of a laptop, highlighters, a mason jar of markers, and a stack of three textbooks, a journal, and spiral notebook with a bag of coffee beans and a coffee mug on top of the stack. The photograph included the caption, “Vital school supplies for the average successful student.”

My largest area of conflict with college involves the fees above the tuition price. The price of textbooks, school supplies and miscellaneous fees cause me distress. We as college students pay a hefty sum of money for tuition. I am fully aware that some people are lucky enough to have wealthy parents, scholarships or plenty of financial aid to cover the fees of being a successful student. But I, like many other financially burdened students, am not that lucky. There are over \$2000 worth of school supplies in this photo alone. Considering money is an extremely scarce resource for me, it is difficult to shell out approximately \$800 dollars a semester solely for textbooks. Add to this the gas money for the forty-five minute daily commute to get to campus, the costs add up. I have to get a lot of babysitting jobs to stay in school. (Jane 88)

**Past Mistakes.** The seventh and final category focused on past mistakes (1.7%). The participants in this theme disclosed their regret at starting at a different school, initially selecting the wrong major, or other choices they made. One student metaphorically articulated this with a photograph of a wire garbage can containing several books and tools including large shears and a wood handled long bristled brush. The trash can on the carpeted floor is placed in front of white louvered closet doors. The caption is “Waste of Time,” and he related it to his stress as follows:

My picture features a metal waste basket that holds some of my Interior Design components. Before I discovered my love for communication I spent two years in the major Interior Design. Those two years were very difficult, because I did not fully understand everything in the major and completely a waste of my time. The professors were not very helpful. One even told me I should consider changing my major, which I thought was very offensive at the time. I was so devastated that I tried even harder to commit to Interior Design and understand the major. It was pointless, because my grades were not reflecting what I wanted them to be. Instead of A's and B's, I was making C's and B's on majority of the assignments. This picture represents a big

conflict I had in my life which was being lost. I spend so much time in a major I hated that I was not sure what I would want to do if I changed it. Shortly after I left Interior Design, I held meetings with the career center to help me determine my new major. I am happy to experience every part of that journey, because if it had not been for my failure in interior design I would not have discovered my success and enjoyment in the Organizational Communications major. (John 27)

Although he found a major that he truly enjoyed, he regretted the two years that he spent in a major that was not as fulfilling. Clearly, his stress was derived from a past decision that hindered his progress toward graduation.

### **Stressor Differences Between Varied Sexed/Gendered Students**

Research question 2 asked if the stressors differed between sexed/gendered students. As noted, the participants consisted of 70 self-identified females (61%) and 45 self-identified males (39%). Female college students reported the following stressors: time management (42.9%), mental health (22.9%), finding self (15.7%), future uncertainty (10%), other (4.3%), financial (2.9%), and past mistakes (1.4%). Whereas the male college students reported their stressors slightly differently as time management (42.2%), future uncertainty and mental health (15.6% each), other and finding self (8.9%), financial (6.7%), and past mistakes (2.2%). Both groups rated time management as their biggest perceived conflict, followed by mental health. Females more frequently cited finding self than future uncertainty, whereas males noted future uncertainty more often than finding self. Both groups identified other, financial, and past mistakes as their least perceived stressor as college students. See Table 1 for theme frequencies by sex/gender.

While a direct connection between our findings and the literature is unclear, female participants' stress about finding self aligns with Acharya et al.'s (2018) claim that this population reports higher levels of stress when it comes to their social activities. That is, identity (finding self) is determined socially; thus, to figure out who you are, you must engage in social activities to compare yourself with others and understand their perception of who you are and who you are not (Derrida, 1982). Furthermore, the finding that male students are less likely to seek help for mental health (Gibbons et al., 2019) is alarming given that is the second largest stressor for this demographic in our study.

### **Conflict Between Time of Year**

Research question 3 queried whether students' perceived stressors varied between Spring and Fall semesters. As identified earlier, the study took place over seven semesters; 41 students (35.7%) were enrolled in the Spring semesters and 74 students (64.3%) were enrolled in the Fall semesters. The frequency of stress categories for the Spring semester students were time management (48.8%), mental health (17.1%), financial, future uncertainty, finding self, and other all ranked the same (7.3%), and past mistakes (4.9%). The Fall semester students reported more variation with time management (39.2%), mental health (21.6%), finding self (16.2%), future uncertainty (14.9%), other (5.4%), financial (2.7%), and past mistakes (0%). The students were more concerned about finding self and future uncertainty in the Fall semesters than in the Spring semesters. See Table 1 for theme frequencies by semester. Literature fails to seek whether student stress varies between semesters, though we do know that stress levels are higher among students completing their college education (Böke et al., 2019).

---

## Discussion

This research utilized photovoice as a pedagogical tool and qualitative methodology to identify college students' stressors and determine if these stressors varied by sex/gender and semester. This enables us to compare results from traditional survey research to this approach and question the claim that photovoice is empowering for participants. Although faculty and administrators may assume students' sources of stress, this study engages in participatory action by empowering students to define and describe their stress through visual metaphors and verbal explanations. In doing so, student stressors are discovered, and other, traditionally stereotyped stressors are questioned.

The literature reveals several stressors experienced by students by employing surveys including loneliness, concern about financial and health-related issues, missing loved ones, academic pressure, and managing interpersonal conflict (Acharya et al., 2018; Bulo & Sanchez, 2014; Deatherage et al., 2014). Our study founded on photovoice confirms previous research identifying student stress is partially derived by financial issues and academic pressure. Based on Nisa and Nizami's (2014) categories, surveys report that students primarily experience interpersonal stress the most followed by intrapersonal, academic, and environmental stress. Our results reveal that students primarily experience academic stress followed by intrapersonal stress as a close second regardless of their sex/gender or semester. Specifically, we identified time management and mental health as the two highest perceived stressors for college students.

Time management, as the most common stressor reported by participants, supports Musabiq and Karimah's (2020) research and the theme they labeled as "lack of resources." The second most frequent category of stress students experience pertains to mental health. As noted in the introduction, students' mental health issues are a growing concern for college and university campuses. Although many colleges have a counseling center, they are often understaffed and experience high turnover. The turnover rate for centers in 2019 was 43.5% compared to 36.5% in 2018 (LeViness et al., 2019). As a result, students requiring services have increased on average by 12.2% from 2018 to 2019, causing an average wait time of 6.1 business days for their first appointment, and 8.7 business days for their first appointment after a triage appointment (LeViness et al., 2019). Counseling centers are developing more collaborations such as the AUCCCD and other collaborative organizations to help tailor effective programs reaching students (CCMH, 2020; Gibbons et al., 2019; LeViness et al., 2019).

It is important to note that several themes are intertwined because the cause of one can affect another. For example, students struggle with work-life balance, time management, and procrastination. There are several students who work to pay bills which can be associated as financial stress but may also be identified as time management stress. Furthermore, interpersonal relationships and academic responsibilities can also create time management stress. Nevertheless, photovoice allows participants to define the sources of their stress rather than imposing them a priori.

As an in-class activity, one benefit to this exercise is the expression of empathy toward each other. Students disclosed their surprise that time management and financial stress exists among traditional and nontraditional college students. For example, an Army veteran student with a family expressed that he was not aware so many students had full-time jobs while attending school. This exercise revealed commonalities and led to a discussion of students' new understanding of what each person experiences.

---



This empathy can also benefit professors and administrators to understand that students have other concerns outside of the classroom that may be a higher priority on any given day. Personally, this exercise has changed our class attendance policy. The first author changed her attendance policy from accepting only absences due to illness to allowing students two absences each semester without explanation or penalty. She discovered that students may be experiencing reasons for missing class outside of illness, such as childcare needs or financial issues forcing them to work during class. Furthermore, counseling centers can use this exercise as a strategy to determine the types of students' needs for services on campus. These needs may vary based on the campus demographics (e.g., commuters, nontraditional students, socioeconomic implications, first-generation).

Due to the conflation of stressors college students experience, we are challenged to prioritize one methodology over another. Instead, we caution faculty, administrators, and researchers to make stereotyped assumptions about students' source of stress. For example, we are familiar with the cliché of the "poor college student" eating ramen noodles and struggling to make ends meet. Working students have become more of the norm since reduced state support shifts the cost of tuition on to students. Interestingly financial stress was less often identified by participants in our study, but time management was the highest source of stress. This suggests that many students have jobs meeting financial demands, but this exacerbates their ability to balance school, work, family, and other demands on their time.

While financial stress extends beyond college life, so does mental illness. College counseling centers are focusing on increasing mental health awareness and treatment. For example, the 2020 Center for Collegiate Mental Health annual report states that during the 2019–2020 academic year approximately 60% of students who visited over 600 university and college counseling centers had prior mental health treatments. This number was under 48% in the 2012–2013 academic year (CCMH, 2020). The prior mental health treatments also have an impact on the growing number of student campus visits to the counseling centers. Counseling center directors report on average having 12.2% more clients served in 2019 than in 2018 (LeViness et al., 2019). Although our research has ranked mental health second highest, time management is much higher. Counseling centers can also offer more programs to help students with time management of classes, work, friends and family, and other responsibilities.

Finally, we find that photovoice is a useful and engaging pedagogical tool as well as an appropriate methodology in which to acquire data. Yet, we are cautious of scholars' empowering and liberatory claims. As scholars, we embrace the ability to seek answers using an alternative approach. This allows us to support or question past research. We also welcome the opportunity for participants to have a voice and articulate their primary source of conflict as a college student. By doing so, they are empowered to express themselves and they are generating data for analysis.

Conversely, student participants were not active in all stages of this research. They were not included to create themes, nor were they given the opportunity to assess our results. As such, students are not complicit and for this reason the exercise is not liberatory (see Higgins, 2016). In some sense, they were disempowered by assigning them this work and confining their expression to an original visual metaphor. As Wass et al. (2020) demonstrate, some ideas are challenging to express visually. For this assignment, students must possess some visual literacy and it may be challenging for some students to creatively express themselves through visual metaphor. As a result, the photovoice assignment is "emotionally laden" (Wass et al., 2020, p. 837).

---

## Limitations

As with any research, this study is not exempt of limitations. To begin, participants were students in a 3000-level communication class. Hence, the students who were asked to identify their primary stressor visually and verbally were primarily juniors and seniors. We acknowledge student stressors may be different for freshmen and a larger representation of sophomores compared to junior- or senior-level students. Our older and more experienced participants may be more adjusted to coping mechanisms for the stressors compared to newer students. Yet, as stated in the introduction, Böke et al. (2019) argue that student stress levels are higher later in a student's college career.

Another limitation is that the students were asked to identify their dominant stressor in their photovoice project. Then each assignment was coded as one dominant theme. Many students experience more than one type of stressor (Musabiq & Karimah, 2020) which was exhibited in some of the photovoice assignments where coders had to determine which seemed to be the most dominant. Thus, multiple, secondary, and minor themes were not calculated, and the cause/effect of the themes were not speculated.

Coding was completed after the seven semesters from Fall 2017 to Fall 2020. Each student assignment was saved as an anonymous file shortly after the semester. The file name was saved as the students' self-identified sex/gender and the semester and year in which the class was held. No other demographic information was requested nor shared by each student. Thus, the demographic information provided earlier in this manuscript was derived from class rosters, not by the actual participants. While this does not affect our data and results, it does suggest that future research may seek more nuanced information about particular types of students (e.g., age, major, minor, classification level, etc.).

Nonetheless, we find the 115 photovoice assignments, over eight sections and seven semesters provided robust data for analysis. Given the fact that students maintained the freedom to express their primary stress with a visual metaphor and accompanying caption and narrative empowered them, as opposed to presenting pre-determined options for them to rank or check off inherent in survey research. This offers valuable insight. The themes were not selected from past research, as the themes were not consistent throughout literature.

## Future Research

While we caution not to overemphasize the power of photovoice, we encourage other faculty and researchers to continue exploring its pedagogical and methodological utility. Although the intent of the project was to identify college students' stressors, compare results with traditional survey research, and consider scholars' claims about photovoice, this project suggests the necessity of future research.

Specifically, as a participatory action research approach (Nelson, 2019; Wang, 1999; Young, 2017), photovoice provides a strong foundation to begin conversations and share commonalities within the classroom. This may be empowering to students to learn empathy that will help build connections and start conversations with other students who experience or have conquered similar stressors. For those who experience different stressors, they can learn about their classmates' resilience and ability to overcome tremendous obstacles, which is both reaffirming and empowering. Hunter et al. (2020) adopted photovoice in a gallery-walk assignment and concluded the experience helped students feel heard and better understood by other students. Thus, future research can include the presentation portion of this assignment to capture whether students felt better connected, understood, and supported by their peers.

---

## References

- Acharya, L., Jin, L., & Collins, W. (2018). College life is stressful today—Emerging stressors and depressive symptoms in college students. *Journal of American College Health*, 66(7), 655–664. <https://doi.org/10.1080/07448481.2018.1451869>
- Allen, Q. (2012). Photographs and stories: Ethics, benefits and dilemmas of using participant photography with Black middle-class male youth. *Qualitative Research*, 12(4), 443–458. <https://doi.org/10.1177/1468794111433088>
- Anderson, V., Rabello, R., Wass, R., Golding, C., Rangi, A., Eteuati, E., Bristowe, Z., & Waller, A. (2019). Good teaching as care in higher education. *Higher Education*, 79, 1–19.
- Böke, B. N., Mills, D. J., Mettler, J., & Heath, N. L. (2019). Stress and coping patterns of university students. *Journal of College Student Development*, 60(1), 85–103. <https://doi.org/10.1353/csd.2019.0005>
- Bulo, J. G., & Sanchez, M. G. (2014). Sources of stress among college students. *CVCITC Research Journal*, 1, 16–25.
- Castleden, H., Garvin, T., & First Nation, H. (2008). Modifying photovoice for community-based participatory indigenous research. *Social Science & Medicine*, 66(6), 1393–1405. <https://doi.org/10.1016/j.socscimed.2007.11.030>
- Center for Collegiate Mental Health (CCMH). (2020). *2020 annual report*. <https://ccmh.psu.edu/assets/docs/2020%20CCMH%20Annual%20Report.pdf>
- Charles, N. E., Strong, S. J., Burns, L. C., Bullerjahn, M. R., & Serafine, K. M. (2021, February). Increased mood disorder symptoms, perceived stress, and alcohol use among college students during the COVID-19 pandemic. *Psychiatry Research*, 296(113706), 1–11. <https://doi.org/10.1016/j.psychres.2021.113706>
- Deatherage, S., Servaty-Seib, H. L., & Aksoz, I. (2014). Stress, coping, and internet use of college students. *Journal of American College Health*, 62, 40–46. <https://doi.org/10.1080/07448481.2013.843536>
- Derrida, J. (1982). *Margins of philosophy* (A. Bass, Trans.). University of Chicago Press.
- Downey, L. H., Ireson, C. L., & Scutchfield, F. D. (2009). The use of photovoice as a method of facilitating deliberation. *Health Promotion Practice*, 10(3), 419–427. <https://doi.org/10.1177/1524839907301408>
- Ewald, W. (1985). *Portraits and dreams: Photographs and stories by children of the Appalachians*. Writers and Readers Publishing.
- Freire, P. (2005). *Pedagogy of the oppressed*. Continuum.
- Gibbons, S., Trette-McLean, T., Crandall, A. A., Bingham, J. L., Garn, C. L., & Cox, J. C. (2019). Undergraduate students survey their peers on mental health: Perspectives and strategies for improving college counseling center outreach. *Journal of American College Health*, 67(6), 580–591. <https://doi.org/10.1080/07448481.2018.1499652>
- Giroux, H. A. (2011). *On critical pedagogy*. Continuum.
- Higgins, M. (2016). Placing photovoice under erasure: A critical and complicit engagement with what it theoretically is (not). *International Journal of Qualitative Studies in Education*, 29(5), 670–685. <https://doi.org/10.1080/09518398.2016.1145276>
- Hocker, J. L., & Wilmot, W. W. (2014). *Interpersonal conflict*. McGraw Hill.
- hooks, bell. (1994). *Teaching to transgress: Education as a practice of freedom*. Routledge.
- Hubbard, J. (1994). *Shooting back from the reservation: A photographic view of life by Native American youth*. The New Press.
- Hunter, O., Leeburg, E., & Harnar, M. (2020). Using photovoice as an evaluation method. *Journal of MultiDisciplinary Evaluation*, 16(34), 14–20. [https://journals.sfu.ca/jmde/index.php/jmde\\_1/article/view/603](https://journals.sfu.ca/jmde/index.php/jmde_1/article/view/603)

- Hurst, C. S., Baranik, L. E., & Daniel, F. (2013). College student stressors: A review of the qualitative research. *Stress & Health, 29*(4), 275–285. <https://doi.org/10.1002/smi.2465>
- Lasarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing.
- Latz, A. O. (2017). *Photovoice research in education and beyond: A practical guide from theory to exhibition*. Routledge.
- Latz, A. O., Phelps-Ward, R., Royer, D., & Peters, T. (2016). Photovoice as methodology, pedagogy, and partnership-building tool: A graduate and community college student collaboration. *Journal of Public Scholarship in Higher Education, 6*, 124–142. <https://files.eric.ed.gov/fulltext/EJ1123809.pdf>
- LeViness, P., Gorman, K., Braun, L., Koenig, L., & Bershad, C. (2019). The Association for University and College Counseling Center Directors (AUCCCD) annual survey: 2019. <https://www.aucccd.org/assets/documents/Survey/2019%20AUCCCD%20Survey-2020-05-31-PUBLIC.pdf>
- Lewison, T. (2015). Co-constructing home with photovoice: Older residents of an assisted living facility build a photonarrative. *Qualitative Social Work, 14*(5), 702–720. <https://files.eric.ed.gov/fulltext/EJ1250278.pdf>
- Metcalfe, A. (2015). Visual methods in higher education. In F. Stage & K. Manning (Eds.), *Research in the college context: Approaches and methods* (pp. 111–127). Routledge.
- Musabiq, S. A., & Karimah, I. (2020). Description of stress and its impact on college students. *College Student Journal, 54*(2). [https://link.gale.com/apps/doc/A634682859/AONE?u=tel\\_middleten&sid=bookmark-AONE&xid=cc33109a](https://link.gale.com/apps/doc/A634682859/AONE?u=tel_middleten&sid=bookmark-AONE&xid=cc33109a)
- Nelson, L. R. (2019). Eliciting a thousand words: A case for photo-elicitation in interpersonal communication research. *Qualitative Research Reports in Communication, 20*(1), 50–57. <https://doi.org/10.1080/17459435.2019.1615979>
- Nisa, M., & Nizami, N. (2014). Developing and validation of student's sources of stress scale. *Indian Journal of Health & Wellbeing, 5*(9), 1036–1039.
- Novotney, A. (2014, September). Students under pressure: College and university counseling centers are examining how best to serve and the growing number of students seeking their services. *American Psychological Association, 45*(8), 36. <https://www.apa.org/monitor/2014/09/cover-pressure>
- O'Mally, L. J., & Munsell, S. E. (2020). PhotoVoice: An innovative qualitative method in research and classroom teaching. *Educational Research: Theory and Practice, 31*(1), 26–32. <https://files.eric.ed.gov/fulltext/EJ1250278.pdf>
- Palibroda, B., Krieg, B., Murdock, L., & Havelock, J. (2009). *A practical guide to photovoice: Sharing pictures, telling stories and changing communities*. [http://www.pwhce.ca/photovoice/pdf/Photovoice\\_Manual.pdf](http://www.pwhce.ca/photovoice/pdf/Photovoice_Manual.pdf)
- PhotoVoice. (n.d.). About photovoice: Why photography? Retrieved November 12, 2022, from <https://photovoice.org/about-us/>
- Povee, K., Bishop, B. J., & Roberts, L. D. (2014). The use of photovoice with people with intellectual disabilities: Reflections, challenges, and opportunities. *Disability and Society, 29*(6), 893–907. <https://doi.org/10.1080/09687599.2013.874331>
- Schiller, W., & Einarsdottir, J. (2009). Special issue: Listening to young children's voices in research—Changing perspectives/changing relationships. *Early Child Development and Care, 179*(2), 125–130. <https://doi.org/10.1080/030044.30802666932>
- Sutton-Brown, C. A. (2014). Photovoice: A methodological guide. *Photography and Culture, 7*(2), 169–185. <https://doi.org/10.2752/175145214X13999922103165>
- Tsang, K. K., & Lian, Y. (2020). Understanding the reasons for academic stress in Hong Kong via photovoice: Implications for education policies and changes. *Asia Pacific Journal of Education, 41*(2), 356–367. <https://doi.org/10.1080/02188791.2020.1772719>

- Wada, M., Suto, M. J., Lee, M., Sanders, D., Sun, C., Le, T. N., Goldman-Hasbun, J., & Chauhan, S. (2019). University students' perspectives on mental illness stigma. *Mental Health & Prevention, 14*, 1–8. <https://doi.org/10.1016/j.mph.2019.200159>
- Wang, C. (1999). Photovoice: A participatory action research strategy applied to women's health. *Journal of Women's Health, 8*(2), 185–192. <https://doi.org/10.1089/jwh.1999.8.185>
- Wang, C. (2006). Youth participation in photovoice as a strategy for community change. *Journal of Community Practice, 14*(1–2), 147–161. [https://doi.org/10.1300/J125v14n01\\_09](https://doi.org/10.1300/J125v14n01_09)
- Wang, C., & Burris, M. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior, 24*(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- Wass, R., Anderson, A., Rabello, R., Golding, C., Rangi, A., & Eteuati, E. (2020). Photovoice as a research method for higher education research. *Higher Education Research & Development, 39*(4), 834–850. <https://doi.org/10.1080/07294360.2019.1692791>
- Yang, C., Chen, A., & Chen, Y. (2021). College students' stress and health in the COVID-19 pandemic: The role of academic workload, separation from school, and fears of contagion. *PLoS ONE, 16*(2), 1–16. <https://doi.org/10.1371/journal.pone.0246676>
- Young, B. L. (2017). Photovoice participatory action research for the communication classroom. *Communication Teacher, 31*, 226–230. <https://doi.org/10.1080/17404622.2017.1358381>
-