

A Systematic Review Examining Multi-Level Policy and Practice Recommendations, and Calls for Research, on Food Insecurity at American Community Colleges

Community College Review
1–29

© The Author(s) 2024

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/00915521241241265

journals.sagepub.com/home/crw

Charity-Ann J. D’Andrea-Baker¹ 
and Brian Kapinos¹

Abstract

Purpose: The purpose of this systematic literature review is to examine policy and practice recommendations, along with calls for future research, aimed at addressing food insecurity for community colleges across the U.S. **Argument/Proposed Model:** This article will provide a detailed methodology for the systematic literature review, as well as the findings gathered from a range of peer-reviewed articles on this topic. The authors analyzed six significant themes that surfaced from the current literature related to policy and practice at the federal, state, local, and institutional levels. **Conclusions/Contributions:** Six chief themes are discussed in-depth, including but not limited to: important tools and approaches for marketing and communications, data-driven decision-making, and the augmentation of food support with other public benefits and institutional resources. These thematic findings address the issue of food insecurity on community college campuses, and also offer a range of techniques and areas for consideration. This systematic literature review offers a compilation of policy and practice recommendations steeped in actionable strategies for researchers, policymakers, campus leaders, and practitioners alike. The strategies can be implemented and/or tailored to meet the needs and nuances of any community college population.

¹University of Hartford, CT, USA

Corresponding Author:

Charity-Ann J. D’Andrea-Baker, University of Hartford, 200 Bloomfield Avenue, West Hartford, CT 06117-1599, USA.

Email: cbaker@hartford.edu

Keywords

food security, food insecurity, United States of America, community colleges, policy recommendations

The United States Department of Agriculture (USDA)¹ defines food security as the access to enough food for an active, healthy life, including at a minimum: “the ready availability of nutritionally adequate and safe foods” and “assured ability to acquire acceptable foods in socially acceptable ways (i.e., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies)” (United States Department of Agriculture Economic Research Service, 2021). In contrast, food *in*security is defined as the “limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways” (United States Department of Agriculture Economic Research Service, 2021). Food insecurity has been an oft-studied topic in the PreK-12 landscape and is gaining awareness and traction at American colleges and universities as well, though peer-reviewed studies specific to food insecurity at American community colleges remain scant. Community colleges—as open access institutions—are often regarded by both policymakers and the public as the means to increasing an individual’s social and professional mobility, which not only benefits the individual and their family, but also offers the potential for those individuals to contribute to a community’s economic vitality (Perry, 2018). In turn, the authors believe it is the responsibility of our campus and local communities, as well as our federal and state constituencies, to acknowledge and address the challenges and barriers to basic needs’ access and, specifically, food security for our American community college populations.

The goal of this systematic literature review is to examine federal, state, local, and institutional recommendations for policy, practice, and research on food insecurity at American community colleges. In addition to providing a detailed methodology and the findings gathered from a range of peer-reviewed articles and one edited monograph based on scholarly research, the authors synthesized and analyzed six significant themes from the literature.

To provide researchers, policymakers, campus leaders, and practitioners with targeted, actionable recommendations, the authors extracted and discussed the findings from the current literature. This allowed the authors to compile a single, timely narrative of strategies, supports, and suggestions related to food insecurity on American community college campuses. Informed policymakers, researchers, and higher education leaders and practitioners may be aware of the abundant literature that focuses on the impacts of food insecurity on student enrollment, retention, and achievement. However, what specific, sustainable approaches to policy and practice can stakeholders take to prioritize food insecurity for the community college population? This research question guided the systematic literature review and grounded the study in both policy and practice.

Methodology

A systematic search of peer-reviewed literature and one edited monograph was conducted to identify food insecurity research with policy recommendations as it relates to community colleges in the United States (U.S.). Using ERIC (both EBSCOhost and ProQuest collections) and Academic Search Premier databases, the key search terms used were “community college food insecurity” OR “community college food insecurity policy” OR “2- year college food insecurity policy recommendations.” Using Google Scholar, the key search phrase used was “policy recommendations for food insecurity at community colleges in the United States.” The sequence of key words used for the ERIC and Academic Search Premier databases differed from the key words used for Google Search due to Google Scholar retrieving too exhaustive a list of community-based (rather than community college-related) articles when using the same key words and sequence used for ERIC and Academic Search Premier.

In an effort to investigate articles that provided recommendations based on more current and/or updated policies, publication dates were limited to the 2013 to 2021 publication range. Only peer-reviewed articles² published in English were considered. In turn, books, theses, dissertations, university policy reports, training models, and non-peer-reviewed articles were filtered out of each search. The authors also excluded the following types of documents from consideration: government or professional development documents, or literature put forward by nonprofit organizations for public announcements or training purposes that were not based on peer-reviewed research. The authors exclusively considered peer-reviewed articles to focus on and grapple with research that had been vetted by multiple content experts and, in turn, increased the academic scientific quality and validity of each piece having survived scrutiny from peer experts.

The initial search yielded 13,467 articles based on the keywords. Together, the authors reviewed search results to identify and filter studies that aligned with these set criteria: (1) articles that addressed food insecurity at community colleges in the United States; (2) articles that offered policy recommendations to address food insecurity; and (3) peer-reviewed studies published in English from 2013 to 2021. Articles went through a four-step process to develop, focus, and refine the relevant research (see Figure 1). First, articles were screened by title and abstract based on the inclusion and exclusion criteria; any article that did not meet the inclusion criteria was removed from the process at this stage, and any article that met the inclusion criteria or had the potential to be further reviewed for relevance was kept.

This first step in the process was repeated separately for all four search engines—Academic Search Premier, ERIC (ProQuest and EBSCOhost), and Google Scholar—which were selected due to their ability to filter certain features of text and the authors’ familiarity with navigating results on them.

Second, once each article potentially matching the inclusion criteria was retained for further evaluation, the full texts were downloaded from their respective databases and duplicate articles were identified and eliminated. The remaining 36 articles were read in their entirety to determine if each retained article, in fact, met the inclusion criteria.

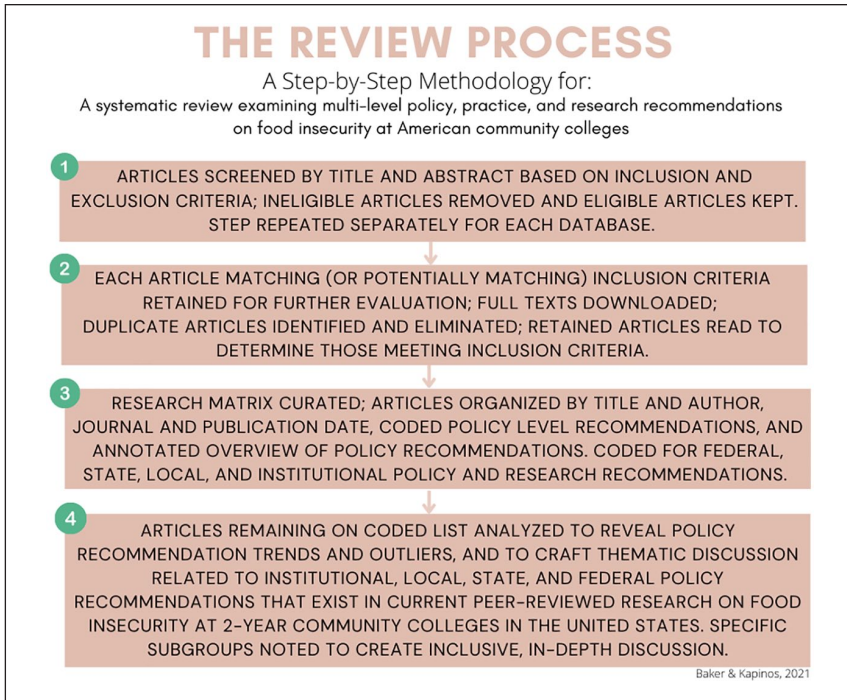


Figure 1. The review process: a step-by-step methodology for the systematic review.

Third, a research matrix was curated, which organized: (1) the title and author; (2) the journal and publication date; (3) the coded policy level(s) for which recommendation(s) were made; and (4) a brief annotated overview of the policy recommendations. The respective headings of policy levels are shown in Figure 2. The coded policy levels included: institutional (INST), which included recommendations made for the college level; local (LOC), which included recommendations made for the city/town, neighborhood/community level; state (ST), which included recommendations made for the state level; federal (FED), which included recommendations made for the national (American) level. Calls for further research were coded as “RSRCH” in the recommendation column on the research matrix. These coding categories were chosen to demonstrate both research implications for the topic and the range of policies with potential impact on practice at various levels. The authors reviewed the coded matrix for clarity and comprehensiveness based on the research keywords and investigation aims.

In the study’s third stage, specific subgroups within the community college population were noted in the “specific policy recommendations” column within the research matrix. This allowed the authors to create an in-depth discussion inclusive of all studied subgroups facing food insecurity at U.S. community colleges. These subgroups centered on gender, race, socioeconomic status, sexual orientation, city, town, or

Title, Author(s)	Journal, Publication Information	Related Policy Level(s)	Specific Recommendations
---------------------	-------------------------------------	----------------------------	-----------------------------

Figure 2. Research matrix headings.

neighborhood location within the United States, self-reported mental health status, first-generation college student status, and full or part-time enrollment status. Articles that discussed research specific to the CoVID-19 pandemic impacts on community college food insecurity were also reviewed and noted to determine their match with the other search criteria and ensure a timely, relevant review of the current literature. To exclude these articles would be dismissive of the potential impacts a pandemic has on the basic needs of students within higher education institutions. Articles that offered state-specific policy recommendations (i.e., Maryland, Washington) were also analyzed to determine their relevance for application to policy and practice in other U.S. states. Articles that did not include policy and/or research recommendations were not considered. At the end of this stage, eight articles remained that aligned with the study's search criteria (see Figure 3).

Fourth, the articles that remained were analyzed to reveal final policy recommendation trends and outliers, as well as to craft a thematic discussion related to institutional, local, state, and federal policy recommendations that exist in current peer-reviewed research on food insecurity at U.S. community colleges. Once the four-step process was completed, both authors contributed to the analysis and discussion of the systematic literature review.

Findings

General Characteristics

Inclusion Criteria and Results. The eight articles in the final stage were included in this systematic review. 62.5% (5/8) of the final reviewed articles were qualitative in methodology, including interviews with students and literature reviews with the groundwork of 22 to 30 sources. The other 37.5% (3/8) of the final reviewed articles were mixed methods, including written student narratives, systematic institutional website examination, descriptive statistics studies on food assistance programs, interviews with community college administrators, gathering comprehensive information from community college leaders who have campus food pantries, and student surveys with participants from 50 to 200+ community college students, dependent on study. The articles represented studies conducted in multiple American geographic locations, including New York, Wisconsin, and Maryland, as well as a systematic website review of 102 community colleges (two community colleges from every state and the District of Columbia).

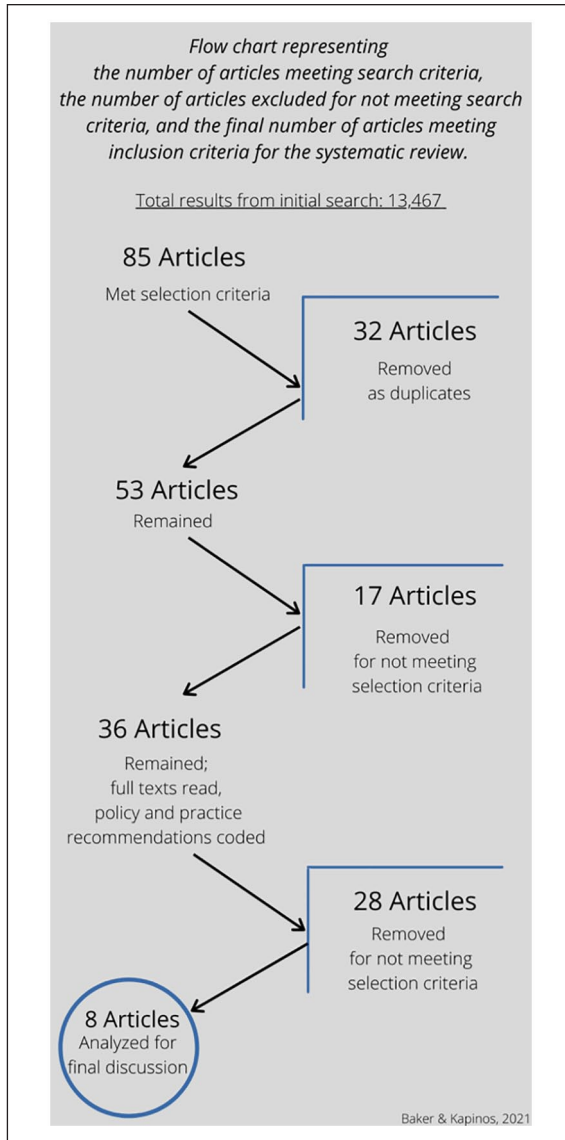


Figure 3. Flow chart of search results based on inclusion criteria.

Three out of the eight final studies covered food insecurity for the community college population in general, while the other five of eight addressed food insecurity relative to a specific subgroup within American community college populations; for example, an urban, Northeastern, Hispanic-Serving Institution (HSI) community college (Ilieva et al., 2018), rural community colleges and rural community organizations

(Waters-Bailey et al., 2019), public two-year American community colleges in all 50 states and DC that were eligible for Title IV funding and offered at least one degree or certificate (Fincher et al., 2018), women (Spaid & Gillet-Karem, 2018), and males of color (Vasquez et al., 2019), respectively. In the studies where participant ages were made available, ages ranged from 18 to 48 years old. In the studies where the use of a federal Pell Grant to assist in paying for college was available, results indicated use of the Pell Grant was a predictor of food insecurity (Spaid & Gillet-Karem, 2018). Available research also showed that women and minority individuals were more likely to be food insecure (Spaid & Gillet-Karem, 2018).

Table 1 summarizes the eight studies included in the systematic review, inclusive of the database in which each article was found, as well as the title and author of the article, the peer-reviewed journal in which the article was included, and the policy recommendations with coding specific to research (RSRCH), institutional (INST), local (LOC) community-based, state (ST), and federal (FED) levels.

Policy and Practice Recommendations: An Overview

As aforementioned, eight articles were included in the final analysis for the systematic literature review. Three notes should be made relative to the summary of policy and practice recommendations. First, the compilation of recommendations is not exhaustive and is not intended to be used in entirety, though most of the items can be combined for an effective approach. The intent of the recommendation compilation is to provide a repertoire of options to inform policy and practice centered on addressing food insecurity on American community college campuses. Second, it should be noted that some of the included recommendations apply to housing insecurity in addition to food insecurity. These recommendations were not removed from the final systematic review for cases in which the housing recommendations could be seamlessly situated in the broader context of providing basic needs support for students, which would apply to both food and housing security. Third, when “campus leaders” are referenced, a broad definition should be applied, which designates “campus leaders” as college administrators and any other constituents who are in positions of leadership and decision-making authority.

Policy and Practice Recommendations: The Federal and State Levels (FED, ST)

None of the eight final articles made specific federal suggestions; however, four of the eight articles mentioned federal policy or programming implications and/or offered recommendations that highlighted the need for federal-institutional connections centered on partnership, advocacy, and/or marketing to support students and bring attention to national benefits. The suggestions include campus leaders utilizing the six-item U.S. Household Food Security Survey (United States Department of Agriculture Economic Research Service, 2021) to assess campus food insecurity

Table 1. Table of Included Articles Based on Inclusion Criteria.

Available database	Title, Author	Academic journal, publication information	Recommendation coding
Academic Search Premier & Google Scholar	Hungry minds: Investigating the food insecurity of minority community college students. Ilieva, R.T., Ahmed, T., & Yan, A.	<i>Journal of Public Affairs</i> , August 2019, Vol. 19, Issue 3.	FED (Referenced, not recommended), INST, RSRCH
Academic Search Premier, EBSCO (ProQuest) and Google Scholar	Serving the Whole Student: Addressing Nonacademic Barriers Facing Rural Community College Students. Waters-Bailey, S., McGraw, M., & Barr, J.	<i>New Directions for Community Colleges</i> . Fall 2019, Vol. 2019 Issue 187.	LOC, INST
Academic Search Premier and ERIC (ProQuest)	Strategies for Campus Leaders. Perry, K.	<i>New Directions for Community Colleges</i> . Winter 2018, Vol. 2018 Issue 184.	ST, LOC, INST
Academic Search Premier and Google Scholar	Food Pantries on Campus to Address Student Hunger. Cady, C. & White, C.C.	<i>New Directions for Community Colleges</i> . Winter 2018, Vol. 2018, Issue 184.	FED, LOC, INST
Academic Search Premier and Google Scholar	Responses to Hunger on the Community College Campus. Fincher, M., Coomer, T., Hicks, J., Johnson, J., Randolph, A.J., Lineros, J., Olivarez, C.P.	<i>New Directions for Community Colleges</i> . Winter 2018, Vol. 2018, Issue 184.	FED (Referenced, not recommended), INST, RSRCH
Academic Search Premier, ERIC (ProQuest) and Google Scholar	Addressing Community College Completion Rates by Securing Students' Basic Needs. Goldrick-Rab, S.	<i>New Directions for Community Colleges</i> . Winter 2018, Vol. 2018, Issue 184.	FED (Referenced, not recommended), INST
EBSCO (ProQuest) and Google Scholar	Food for Thought: Food Insecurity in Women attending Community Colleges. Spaid, R., Gillett-Karam, R.	<i>Forum on Public Policy Online</i> , Vol. 2018, Issue 1.	INST

levels (Cady & White, 2018) or helping eligible students enroll in public benefits such as the USDA's Supplemental Nutrition Assistance Program (SNAP) (Cady & White, 2018; Goldrick-Rab, 2018; Ilieva et al., 2018; Waters-Bailey et al., 2019), Women Infants and Children program (Cady & White, 2018), and/or the Earned Income Tax Credit (Goldrick-Rab, 2018).

At the state policy level, just one of the eight articles offered recommendations (Perry, 2018). The first state-level recommendation explained that campus leaders and taskforces may choose to connect with a 501c3 nonprofit agency or state or regional food bank or organization to engage in a sponsor relationship that allows a campus pantry to join the food bank network and access USDA foods at low or no cost (Perry, 2018). The second recommendation, which was provided in the same article, generally discusses the influence that state laws and regulations have on colleges (Perry, 2018). Therefore, the article calls for careful review of the college's governance when developing plans to address student needs (Perry, 2018). However, beyond this one source, the available literature that specified recommendations for the state level were not peer-reviewed or they were part of nonprofit organizations or government training documents, which were not included in the search criteria. The reviewed qualitative and mixed methods studies represent research conducted in specific states (e.g., New York) but none of the recommendations were aimed at implementation within a particular state. Two themes arose, which are centered on the secondary-postsecondary bridge and local collaboration.

The Secondary-Postsecondary Bridge. Thirteen recommendations addressed policy for the local, community-based level, which were also synthesized for analysis. First, the literature describes the importance of forming a strong connection between the secondary and postsecondary system to address food insecurity. The literature urges campus leaders, faculty, and staff to identify the programs and services that students accessed during their PreK through Grade 12 experiences through the federal Education for Homeless Children and Youth of McKinney-Vento Homeless Act to enhance the transition from secondary to postsecondary education (Cady & White, 2018; Perry, 2018). The identification of such programs and services also allows campus constituents to assign a point of contact on the community college campus to develop relationships with the McKinney-Vento state coordinator and with liaisons at the largest feeder high schools to partner in developing services and resources (Cady & White, 2018; United States Department of Education, 2015).

Although the McKinney-Vento Homeless Act and the National Center for Homeless Education provide resources and supports for youth facing homelessness, the literature demonstrates that food and housing insecurity often occur in tandem. Therefore, utilizing critical information from policies centered on homelessness may create smoother secondary to post-secondary student transitions as it applies to food insecurity as well.

Current literature also encourages community colleges to provide the necessary support for high schoolers to successfully complete dual enrollment classes since research shows that students who complete college credits are more likely to transition to college and successfully complete their courses (Perry, 2018). Therefore, the bond

between secondary and post-secondary institutions can be critical to providing a strong foundation for student support and security.

Local Collaboration. In addition to forming partnerships with secondary schools, current literature also encourages community college leaders to involve constituencies at every level of the campus community and beyond, including community-based organizations and local government entities (Perry, 2018). These partners should be included in creating basic needs plans for students, and also in assessing the effectiveness of these plans over time (Perry, 2018). As actions are considered to better address student homelessness, home insecurity, and food insecurity, understanding the ways in which these issues work in combination should become priority. For example, providing affordable off-campus housing may be a first step in ensuring greater student success since housing and food insecurity often exist in combination (Perry, 2018). Therefore, the available research underscores the importance of intentional collaboration between the college and the community which it serves. The collaboration across local resources cannot only provide viable programs and services, but also ones that are sustainable and make long-term impacts (Perry, 2018).

Rarely can an issue as multifaceted and complex as student food insecurity be addressed in isolation. Instead, to achieve a strategic, sustainable approach, it is vital to consider both authentic collaboration and community engagement, which occur beyond mere coordination or cooperation. These terms are often used interchangeably; however, while coordination and cooperation include working together and sharing information, they are useful approaches, but they are not techniques that will ultimately mold or transform the work itself (Kezar & Gehrke, 2016).

Collaboration, or the partnerships that lead to collaboration, involve connected goals, unified planning, and the sharing of power, authority, and accountability, which are features not typically present in coordination or cooperation (Kezar & Gehrke, 2016). Fundamentally, cooperation refers to “why” teams work together, while collaboration refers to “how” teams network and build relationships toward shared goals. When authentic collaboration occurs, college and community leaders can address the unique features of the campus, which may result in engaging the community in a variety of ways and for a range of student needs. This collaborative work comes with the important understanding that food insecurity often does not exist in isolation but rather is accompanied by additional life challenges, including job insecurity or unemployment, home insecurity or homelessness, lack of affordable or accessible childcare, single parenting, or other.

Therefore, understanding and actively participating in community engagement is critical to address food insecurity. While community service, outreach, and engagement are also terms typically used interchangeably, their processes differ. Community engagement is commonly referred to as a partnership between an institution and its community that, over time, supports a collaborative, reciprocal exchange of knowledge and resources (Jacob et al., 2015; Wills, 2016). Service and outreach are typically one-way delivery mechanisms to spread information, awareness, and services to the public, while engagement describes a two-way approach that includes alliances,

knowledge development, and a shared investment in the community (Wills, 2016). Thus, current research highlights that if institutions strategically solve real-world problems in and with the communities they serve and reject common top-down practices, values of trust and respect can become more authentic, and the university-community relationship can take precedence over a single program or initiative (Pasque et al., 2005).

Full Commitment to the Cause. Campus leaders and taskforces can demonstrate the community college's full commitment to the success of all students in several ways. They can connect with the community through varied, meaningful approaches: (1) create clear support structures and community networks to assist at-risk students; (2) develop a consistent fundraising plan; (3) write grants; (4) seek funding streams like payroll deductions from college employees to ensure funds for ongoing food purchases if the campus does not desire opening to the public (which is a requirement for most food banks' member pantries); and (5) align the basic needs plan with the mission, vision, values, and strategic initiatives of the college (Cady & White, 2018; Perry, 2018; Waters-Bailey, et al., 2019). A combination of these approaches can demonstrate a college's active, ongoing, and holistic commitment to students and their overall wellbeing.

Policy and Practice Recommendations: The Institutional Level (INST)

With 78 recommendations, the institutional policy level offered the greatest number of suggestions for campus leaders, faculty, staff, and students. Within the 78 institution-centered policy recommendations, 61.5% of the recommendations (48/78) were aimed specifically at campus leader efforts, while 26.9% of the recommendations (21/78) targeted campus leaders and taskforces working in tandem. The other 11.5% of recommendations (9/78) were made for campus leaders, faculty, and staff, as well as food pantry staff and financial coaches.

Analysis

To best navigate the range of institutional recommendations and compile them in a single format with recommendations for every level, the authors parsed through the 78 institutional recommendations and combined duplicate recommendations from across sources as applicable. After a thorough analysis of the recommendations, six chief trends emerged that were then embedded into a thematic narrative teasing out multiple policy and practice suggestions. The authors note that some of the recommendations overlap between themes but are only indicated under a single topic for clarity.

For example, student interactions with front line campus staff during the application and registration process is vital to campus awareness, but it is also an integral component of the theme on campus and community collaboration. Readers should be mindful of potential cross-cutting themes as they navigate the summary of recommendations for policy and practice at the community-college (institutional) level. These

themes focus specifically on marketing and communications, decision-making, augmenting food supports, collaboration and connection, thorough and intentional planning, and traversing public benefits programs. To impact the student *experience* more holistically—from the standpoints of both student learning and living—we must acknowledge and address each theme as part of a larger interlacing of the student support and services patchwork. With overlapping challenges also come intersecting opportunities to share strategies within and across departments and campuses.

Theme 1: Raise Awareness and Advocacy Through Marketing and Communications

As reported rates of food insecurity continue to grow on many campuses, it is increasingly critical that campus leaders and taskforces raise awareness and educate the college community about basic needs insecurity. Homelessness, housing insecurity, and/or food insecurity create everyday challenges and roadblocks for students that must be managed for basic life, let alone successful college performance and outcomes (Goldrick-Rab, 2018; Perry, 2018). A clear campus message addressing basic needs insecurity can demonstrate the college's commitment to linking overall well-being with college success (Goldrick-Rab, 2018; Perry, 2018).

Specific to on-campus efforts, campus leaders should clarify which department will provide oversight as well as the management of volunteers and staff before launching a food pantry (Cady & White, 2018; Perry, 2018). Campus leaders must also encourage strong interactions between front line staff members and students facing economic distress. These interactions during the application and registration processes are key to building campus awareness (Perry, 2018). In addition to college-wide communications, student accessibility to resources can also be addressed through active advocacy for policy change. This would make it easier for students to access public benefits, given current regulations either exclude students completely or make it very challenging to enroll (Cady & White, 2018).

Along with campus-wide efforts, such as the marketing and communication of food insecurity initiatives to raise awareness, campus leaders and taskforces must also develop a plan for off-campus communications and marketing strategies (Perry, 2018). This includes advertising food pantries widely for all students, especially those who may not know to ask about a food pantry or related resources, such as first-generation students (Cady & White, 2018). Campus leaders are also encouraged to communicate assessment outcomes to partnering entities both on- and off-campus, especially for prospective students. This can become part of the college's message of commitment to program completion and economic mobility for those facing food insecurity (Perry, 2018). Further, information on food pantries should be available and accessible on the institution's website no matter what stage of planning or implementation exists, so students are aware of formal food assistance on campus and/or informal assistance that may be available through specific offices, such as financial aid (Fincher et al., 2018). Clarity on the college website will also assist in creating a positive school culture,

rather than one based on pressure, shame, or embarrassment related to food insecurity (Fincher et al., 2018).

Theme 2: Make Decisions Based on Ongoing Data Collection and Analyses

Community colleges must also develop clear systems whereby relevant food insecurity data are collected and analyzed (Perry, 2018). A lot of data are typically collected by community colleges as part of the application and financial aid processes; however, data are seldom collected relative to a student's habitual food and housing situation (Perry, 2018). Quantitative data gathered through initial application and financial aid procedures along with qualitative information shared between staff and students can help increase campus awareness, as described earlier. These data sources can also help leaders better understand student needs and consider the ways in which the college directly addresses these needs (Perry, 2018). In turn, data-driven decisions have the potential to increase student retention and completion, as well as implement student and instructional support services to better close equity gaps that are often exacerbated by food insecurity (Perry, 2018).

Campus leaders and taskforces should also consider using data-collection tools and methods proactively. Including supplemental questionnaires in the application process allows community colleges to collect data that are representative of prospective students from a range of backgrounds. This approach can then assist leaders in assessing the effectiveness of programs and services, as well as critical student outcomes such as retention and completion rates for students facing food insecurity compared to those rates of the general student population (Perry, 2018). Both incoming and current students can be positively impacted through focused data-collection systems. One method involves using the Ruffalo Noel Levitz's College Student Inventory to gather additional information about student housing and food stability, which identifies student retention risk factors through a customized inventory of prospective students (Perry, 2018).

Another approach uses the continuous quality improvement (CQI) process to cyclically identify issues and/or outcomes, as well as to collect and analyze data. Once the data are collected, this process allows campus leaders and taskforces to evaluate results, generate ideas, and implement solutions that are centered on identifying and closing gaps between the actual results and the campus goals (Perry, 2018). Through processes such as these, community colleges can assess student learning, determine program effectiveness, plan strategically, and, as appropriate, build institutional capacity (Perry, 2018).

Yet another approach is to use predictive analytics to reach and connect with students in a variety of ways, including offering emergency aid and helping with degree completion, as is done in the Texas Panhandle at Amarillo College's Advocacy and Resource Center (Goldrick-Rab, 2018). With any of these methods, decision-making can be entirely data-driven, which means that solutions can better match the authentic challenges that students face pertaining to food insecurity.

Data can also be gathered from current students, faculty, and staff to investigate how students experience, navigate, and interpret food insecurity on campus, as well as to identify faculty and staff who may have a desire to become more involved in a campus-wide effort that targets issues of basic needs insecurity and economic crises (Ilieva et al., 2018, Perry, 2018). One data gathering approach is the use of surveys. Campus leaders and taskforces can distribute a survey to students, faculty, and staff from the College & University Food Bank Alliance³ CUFBA and Student Government Resource Center (SGRC) toolkits. These resources help determine if a campus pantry is an appropriate response to the college's needs (Cady & White, 2018; College and University Food Bank Alliance, 2016, p. 15). The short form from the USDA's U.S. Household Food Security Survey allows institutions to assess the level of campus food insecurity (Cady & White, 2018; United States Department of Agriculture Economic Research Service, 2021), while applying the Wisconsin HOPE Lab's *Guide to Assessing Basic Needs Insecurity in Higher Education* (Goldrick-Rab, 2018) allows campuses to measure food insecurity and compare campus data to other relevant studies, which provide a useful context for further analysis and action (Cady & White, 2018). Once students are surveyed to assess their basic needs, campus leaders can share data results with taskforces. Collaboratively, taskforces can then determine next steps to increase awareness of the issue and strengthen the campus' understanding of how critical it is to form a unified legion of support (Goldrick-Rab, 2018), which circles back to the importance of advocacy through awareness.

It is increasingly important that efforts are part of a cycle, which includes ongoing investigation and review of the various factors that can contribute to and/or assist student food (in) security. In this way, campus leaders and taskforces should review the institutional mission statement and values, along with applicable laws and regulations at the state level and policies and practices at the local level to inform both on- and off-campus stakeholders of the college's priorities (Perry, 2018). The process of reviewing these documents and materials at the institutional, community, and state levels can also help campus leaders justify the allocation of related resources and better determine program and service offerings (Perry, 2018). Support services for students who are women and, particularly, who are minority women, single women, and/or women receiving a Pell Grant, should also be regularly reviewed, given that several studies show increasing food insecurity for these particular community college students (Goldrick-Rab, 2018; Goldrick-Rab et al., 2017; Spaid & Gillet-Karem, 2018; Wood et al., 2016.)

Theme 3: Augment Food Support With Other Resources and Consider Location

Once food insecurity resources and services are established, an important component in bolstering these resources and ensuring their use lies in augmenting food support centers or pantries to strengthen student financial literacy and education. In addition, logistical support can be provided to assist students in interpreting financial aid

packages or loans, credit repair and home buying support, and other resources that may help build students' financial and food literacy (Goldrick-Rab et al., 2015). These supports are especially integral for lower-income students, those struggling financially and facing food insecurity, or those who may be less versed in major education processes (Cady & White, 2018; Goldrick-Rab et al., 2015; Perry, 2018; Waters-Bailey et al., 2019). Such processes include registering for classes, applying for financial aid, accessing mental health services, obtaining appointments with counselors and/or academic advisors, accessing tutoring and course support services, and utilizing faculty office hours. The constant requirement to use technology to access student services often exacerbates already-prevalent financial and digital equity gaps; implementing clear systems to respond to this increasing reliance on technology can help (Perry, 2018).

Another essential consideration is the location of these resources and services. The housing and food support center or food pantry should be safely and centrally located near a dean's office or student services on campus to create a supportive network for students and connect them with a range of services. Such services include course registration, academic advising, counseling services, financial aid, learning support, student events and activities, and comprehensive information about off-campus programming and resources (Cady & White, 2018; Perry, 2018). Often, food pantries are placed on the outskirts of a campus, which can accentuate feelings of shame and isolation for students seeking resources (Perry, 2018). Visibly locating the campus food support or pantry in a central location provides students with greater access to additional services. This approach provides a single point of contact for applicable resources, while also sending a strong message to all members of the campus community, especially students who may be facing food insecurity, that the college values its students and recognizes the significance of supporting them both on- and off- campus (Cady & White, 2018; Perry, 2018).

When planning to effectively address food insecurity on campus and bearing in mind the importance of augmenting supports and services, it is critical to remember that resources include time, money, *and* people. To that end, campus leaders should develop a plan for ongoing professional development for campus staff and employ resource mapping to identify and reserve program staff, volunteers, space, funding, and equipment (Perry, 2018). The management and training of human resources in matters related to food safety, sensitivity to student privacy both within and outside of the food pantry, and day-to-day operational needs are additional areas for attention and consideration (Cady & White, 2018).

Theme 4: Collaborate and Connect

Once community college leaders are ready to address basic needs insecurity on campus, a housing and food safety taskforce, workgroup, or advisory committee should be formed with the full support—and ideally, involvement—from the college president and should also be representative of all campus voices, including those on the front lines of working with students, such as campus security guards, librarians, and

first-generation college student support staff (Cady & White, 2018; Goldrick-Rab, 2018; Perry, 2018). In addition, these teams must have a clear purpose and focus aimed at addressing and assessing food insecurity on campus and must be empowered to make operation-related decisions, as well as tailor strategies and approaches to best meet the unique needs of their local constructs and campus population (Cady & White, 2018; Goldrick-Rab, 2018; Perry, 2018). Ultimately, the goal is to implement proactive, caring outreach and engagement for students who may prefer to remain off radar to avoid the stigma that often comes with basic needs insecurity (Goldrick-Rab, 2018; Gupton, 2017).

Campus leaders and taskforces can also join the nearly 600 current members and register with CUFBA (Cady & White, 2018; Fincher et al., 2018; Perry, 2018). The college student government should be included in creating, operating, and marketing campus support centers (Perry, 2018), and community-based organizations, along with representatives from colleges with support centers and/or insecurity-based procedures already in place, should also serve as resources (Perry, 2018). Community college members should engage in food security efforts collaboratively and in focused, dedicated teams to affirm they are not alone in their work. There are several current examples of this collaborative work happening across the country. For example, at Bunker Hill Community College, staff can join a team to provide student meal vouchers, or financial coaches can consider partnering with the financial aid office to offer food scholarships, as we find taking place at Houston Community College (Goldrick-Rab, 2018). Other opportunities for collaboration exist in faculty and students becoming allies and actively participating in food security and healthy nutrition initiatives (Ilieva et al., 2018), faculty including a basic needs security statement on syllabi to both increase student awareness of the available services and educate colleagues on the matter (Berman, 2017; Goldrick-Rab, 2018), and faculty and staff supportively directing students to a food pantry (Waters-Bailey et al., 2019).

Campus leaders can also deliberately and thoughtfully use authentic, powerful student and staff experiences to highlight the college's obligation to basic needs security. For example, at an annual award dinner, the Washington Association of College Trustees presents one student from each of the 34 community and technical colleges with a Transforming Lives Award. This award showcases the recipients' personal stories of persistence, along with the ways in which they utilized campus programs and resources amidst homelessness, housing insecurity, and/or food insecurity (Perry, 2018). Ultimately, campus leaders, faculty, staff, and students must find their community within higher education. Two powerful conferences that bring the higher education community together—the Achieving the Dream conference, which partners with more than 300 community colleges across the country, and the #RealCollege conference, which is held by the Hope Center for College, Community, and Justice—convene leaders across policy, research, and practice and offer actionable resources for our schools and communities. Participation and engagement in conferences such as these unify forces and demonstrate the huge impacts that collective work has on addressing food insecurity (Goldrick-Rab, 2018).

Theme 5: First Plan, Then Provide

A major component to effective programming is the detailed and deliberate planning prior to implementation. This includes allocation of emergency funds, specifically for students who are single parents and/or minority women (Spaid & Gillet-Karem, 2018), as well as planning for the creation and implementation of a food pantry (Perry, 2018). Taking proactive initiative also includes planning for affordable and nutritious food offerings for on-campus dining (Perry 2018) and planning food collection and distribution strategies that ensure usable food arrives and is taken before it expires (Cady & White, 2018).

Campuses can establish and sustain food insecurity plans through the assessment of student data, as well as an inventory of current local and campus resources (Perry, 2018). Further, student and resource assessments can inform a deliberate plan that outlines the installation, introduction, and ongoing maintenance of the food security program to guide the process and address how to fill gaps in resources, achieve support from campus leadership, build community partnerships, and write grants (Cady & White, 2018). These factors also align with the importance of basing decisions on authentic data.

The implementation of sound, strategic planning can result in the creation of expanded services and menus for food pantries, discounted cafeteria meals on campus, food scholarships, low-cost childcare with priority access for students, and on-campus student employment opportunities (Perry, 2018; Spaid & Gillet-Karem, 2018). When food and housing insecurity plans are continually reviewed and tailored, campus leaders increase the chances of program and service sustainability (Perry, 2018). In turn, they can make more informed decisions with regards to food procurement, the prioritization of for-profit contractors over affordable, available healthy foods, and the response to limited food pantry funding, which often relies on donations and inconsistent external funding (Ilieva et al., 2018). There are multiple ways to fully utilize materials, finances, and human resources. For example, it is useful for food pantry staff to store “pop-up pantry” materials, such as sign-in sheets and food scales, in a single container for portability and accessibility (Cady & White, 2018; Perry, 2018). It is also important that a small space is secured for leftovers to avoid waste (Perry, 2018; Cady & White, 2018). Campus leaders and taskforces should also codify policies and procedures in an operations manual. This provides community standards and expectations, along with guidelines and requirements for risk management to address food safety, food recall, and steps to follow in the event of an emergency, so information is not lost due to staff or volunteer turnover (Cady & White, 2018; Perry, 2018). Planning for potential shifts in needs and available Resources allows for smoother implementation and sustainability of food insecurity efforts (Cady & White, 2018; Ilieva et al., 2018; Perry, 2018; Spaid & Gillet-Karem, 2018).

Theme 6: Offer Navigational Assistance for Public Benefits Programs

The final trend that was revealed in the institutional recommendations centers on the importance for campus leaders and taskforces to provide students with navigational

assistance regarding the many rules governing access to public benefits programs including work requirements. Such programs include the USDA's Supplemental Nutrition Assistance Program (SNAP) or Women Infants and Children (WIC) program, the Earned Income Tax Credit, and other initiatives like Benefits Access for College Completion, Single Stop, and the Working Students Success Network (Cady & White, 2018; Duke-Benfield & Saunders, 2016; Goldrick-Rab, 2018; Goldrick-Rab et al., 2014; Perry, 2018). These programs can provide students with additional resources to potentially augment their food budgets and/or help to alleviate family financial struggles while they are in school (Cady & White, 2018).

Part of helping students enroll in the aforementioned programs and benefits should also include investigating ease of procedures. For example, college leaders should conduct their own online application process(es) to determine if navigation is accessible and consider offering both a digital and paper copy of the information that students need to apply, register, and/or complete the FAFSA to avoid student confusion in providing required information (Perry, 2018). These forms are often available exclusively online and can highlight digital and financial equity gaps (Perry, 2018).

Limitations. This systematic review has three limitations that warrant acknowledgment. First, in seeking to unearth a comprehensive pool of peer-reviewed and scientifically-grounded research for review, a thorough and focused four-step investigation methodology was conducted across four robust databases. However, some applicable articles could exist in other databases that were not explored for this systematic review. Still, given that this systematic literature review is specific to both food insecurity and community colleges in America, and is based on research found in multiple databases using a wide range and depth of keywords, the authors are confident that the review is a unique contribution to the current literature. Distinctively, the review analyzes the current literature through a policy lens that offers overarching findings not yet discussed for community colleges in other literature.

Second, with just eight final studies matching the inclusion criteria and aims of the systematic review, the number of articles is certainly not an exhaustive collection of studies. However, the final eight studies *do* align with the inclusion criteria and provide stark implications to the tremendous gaps in food insecurity literature that is specific to American community colleges and policy recommendations. Having eliminated more than 13,000 articles through the four-step inclusion process resulted in a relevant, robust pool of literature for analysis.

Third, given the variety of study methods included through the selected articles (i.e., qualitative, quantitative, and mixed methods) and the variety of measurement tools or specific research aims reviewed, there was not always a clean or seamless, "black and white" comparison between the studies. However this systematic review is not a meta-analysis, so reviewing and analyzing the policy recommendations across multiple study types, in fact, allowed several applicable, thematic nuances to surface. Rather than invalidating the findings and analyses, a broader perspective of the topic not limited to a single type of study emerged from this approach.

Policy and Practice Recommendations: Future Research (RSRCH)

Nine recommendations specific to future research needs were present in the literature, and they were combined across articles as applicable for the purposes of a targeted discussion. Researchers are called to examine food practices at the community college level since direct contact with the institution is recognized as vital to students' overall well-being (Ilieva et al., 2018). The authors of this systematic literature review uncovered institutional impacts as the dominant theme in the available literature, speaking directly to institution-related recommendations for policy and practice as they relate to the food insecurity response. Along a similar vein, the existing literature recommends that researchers speak directly to institutional staff to identify both formal and informal ways in which educators can help support students facing food insecurity (Fincher et al., 2018).

The literature also encourages further research and reflection upon the signals that institutions may send unintentionally to students facing food insecurity through institutional food policies. Community colleges can send powerful messages about their care for students' health and wellbeing when, for example, a food pantry is established on campus, but radically unaffordable meals are offered at their commercial food outlets, in turn undermining students' trust in the institution (Ilieva et al., 2018). Consistency in messaging and servicing is critical.

Researchers are tasked with investigating contributing factors for the gap between increased anti-hunger initiatives and continued food insecurity as well, which includes opportunity for several academic-related studies. One such study could center on food insecurity and academic performance and the evaluation of current nutrition assistance (Freudenberg et al., 2011, 2018; Ilieva et al., 2018). Other research could extend reader and practitioner knowledge of how community college students experience and react to food insecurity and campus food policies, including the exploration of students' perceptions of campus food pantries and other food support centers to connect those perceptions with academic outcomes like earned credits or grades (Ilieva et al., 2018). In addition, the research calls future studies to use large student samples to potentially reveal important relationships between student food insecurity, student interpretations of food on campus, and academic performance (Ilieva et al., 2018). Recommendations for future research also hinge on gathering more granular information through interviews or a wider scale survey distribution to prescribe remedies to help alleviate the growing problem of food insecurity (Fincher et al., 2018) and conducting studies aimed at recruiting students from both rural and urban institutions to gather varied perspectives and campus experiences (Ilieva et al., 2018).

Based on these points and the in-depth exploration and analysis of the current literature on this topic, the authors of this systematic literature review eight additional research recommendations for further investigation.

First, some of the policy recommendations made for the general college and University population in other literature could seem applicable to all American institutions of higher education. However, to cast a broad net over *all* universities and colleges with the assumption that the recommendations can be transferred seamlessly

across student populations may overlook the uniqueness of community colleges across the U.S. In this way, the authors believe assumptions cannot be made universally across all higher institution types without the research to support that the recommendations also make sound, viable sense for the community college population. To that end, only peer-reviewed articles and/or edited monographs with research aims specific to American community colleges were considered in this systematic review.

The authors feel strongly that more research must be conducted specific to community colleges and the ways in which these institutions are currently addressing food insecurity challenges for their students, given community colleges typically enroll and serve a unique, diverse (i.e., racial, linguistic, socioeconomic, etc.) population that warrants particular attention. The lack of current literature specific to community colleges demonstrates the need for researchers to continue investing in not just “colleges and universities” but specifically community colleges and policy-driven *action*. In other words, what does current policy state, how (if at all) can and should these current policies be revisited, and what effective practices can stem from intentionally and thoughtfully pinpointing policy at every level within community colleges across the U.S.?

Ultimately, future research should incorporate community college-specific recommendations that campus leaders can then review thoughtfully and thoroughly to tailor to the individual needs of their institution. Certainly, community colleges are unique from four-year colleges and universities in a variety of ways, including but not limited to, student populations that often include underrepresented groups, greater diversity (i.e., racial, linguistic socioeconomic, etc.), and the need for increased academic, financial, or social support compared to four-year counterparts. To that end, future research must explore ways in which community college leaders can incorporate the unique features of their student population, including research for special designation community colleges such as Minority Serving Institutions and underrepresented student groups (i.e., students of color, indigenous students, international students, students with physical or cognitive exceptionalities, first generation students, working class students, parent-students, etc.) in explicit plans for action and advocacy. The broad literature base certainly contributes to our holistic understanding of food insecurity, but the specific context in which the American community college landscape—and more specifically, specific context in which the American community college landscape—and more specifically, unique student sectors—is situated within this topic is yet to be revealed in the current literature.

Second, as the findings from the systematic literature review illustrate, the institutional level offered the greatest number of policy and practice recommendations, and policy and practice recommendations also exist at the local, community-based level and for future research. Therefore, the main finding in the peer-reviewed literature centers on the lack of federal and state-specific recommendations, which highlights the importance of investigating policy and practice at these levels in future research specific to American community colleges.

Though the majority of community college funding comes from local and state budgets, a federally-focused research trajectory could also pinpoint the role

the federal government plays in supporting community colleges as it may apply to assisting food security efforts. For example, the AACC⁴ and the AACT⁵ have a Joint Legislative Agenda for federal student aid, workforce, and economic development (Association of Community College Trustees, 2021) and the HEA⁶ recognizes Minority⁷ Serving Institutions (MSI) for dedicated funding programs (Mayfield et al., 2021), which may underscore the uses of this funding for food security-related resources in future research.

The research that is available and inclusive of federal or state-specific recommendations did not align with the search criteria for this systematic review (i.e., peer-reviewed or edited monographs and community college-focused). The authors investigated several articles that included federal and/or state policy and practice recommendations but since they were theses, dissertations, and/or government documents that are not representative of peer-reviewed research or scholarly, edited monographs, these contributions to the literature did not meet the review inclusion criteria. The existing non-peer-reviewed documents that address food insecurity at American community colleges may indicate a growing awareness of this topic but were not included in this final review due to the articles not meeting the inclusion criteria. In the future, additional research should include a more in-depth look at legislative and regulatory solutions, and the resources that may already be available at the government level, which have potentially not yet been unearthed.

Third, given the range of institutional recommendations provided, the authors expected to find more departmental or faculty recommendations. There was a preconceived understanding that advisors, faculty, and staff regularly working alongside students could potentially have the greatest impact on food security due to the increased opportunities for cultivating strong, trusting relationships whereby students may feel safer sharing basic need insecurities. However, some literature does demonstrate the importance of placing “front line staff” on food insecurity taskforces and in key positions that interact most directly with students during the application and registration processes and others suggest faculty and staff become involved in campus initiatives or faculty place statements in syllabi that address a response to basic needs insecurity (Goldrick-Rab, 2018; Perry, 2018; Spaid & Gillet-Karem, 2018).

The majority of recommendations exemplify the major impacts that college Leaders can have on addressing food insecurity, strengthening a common belief that policy and practice emerge primarily from the top of the college hierarchy and filter down through a responsive culture to other levels within the institution. To this end, most institutional recommendations pertained to college-wide decision-making for those in positions of leadership and authority. As an additional reference point, more than half of the articles that were eliminated from the initial search for not meeting other inclusion criteria focused primarily on institutional recommendations through the establishment of food banks or food pantries, which limits other potential approaches and levels of impact. The body of literature may benefit from additional research specific to faculty-student and staff-student interactions and rapport relative to helping address food insecurity at community colleges.

Fourth, in addition to having expected more departmental or faculty recommendations within the institutional suggestions, more pandemic-related literature was also expected. The authors' original systematic literature review plan was to include articles in the search criteria and analysis that discussed research specific to the post-CoVID-19 pandemic impacts on American community college food insecurity to ensure a timely, relevant review. The authors believed that to exclude these articles would be dismissive of the potential impacts a pandemic has on the basic needs of students within institutions of higher education. The articles that discussed pandemic-related implications did not meet other search criteria for this review (i.e., peer-reviewed journals or edited monographs, community college-focused) and focused solely on the general scope of colleges and universities. As aforementioned, this underscores how new the topic of food insecurity is for American community colleges, especially comparative to pre- and post-pandemic implications, which offers another area for future research.

Fifth, current recommendations call for research to explore students' perceptions of campus food pantries and other food support centers as they relate to academic outcomes. The authors of this study believe that future research could also explore how addressing student perceptions and outcomes related to food insecurity may speak to issues beyond earned credits or grades, including the larger challenge of overall college persistence and completion.

This recommendation for future research could also include student perceptions of the *location* of food resources as they relate to academic outcomes. The available literature recognizes the importance of visibly and centrally locating campus food support to increase access to a range of services and supports, while also sending a clear message to the school community that the college prioritizes issues of basic needs security (Cady & White, 2018; Perry, 2018). However, authors of this study also encourage future research to determine other potential solutions to food locations through community engagement. For example, perhaps in addition to centrally locating pantries on campus, intentional partnerships can be established with other community organizations or restaurants to implement a system for student food access as well. This could increase student options and potentially avoid the stigma that food support must be assigned to certain or singular areas in the community. Future research could further explore the topic of food resource locations and the potential psychosocial or perception effects on students facing food insecurity based on the location of resources.

Related to this topic, it is important to revisit the earlier definitions of collaboration and community engagement, which may provide valuable context for supporting students in a holistic approach. After all, current research demonstrates a range of perspectives from students facing food insecurity relative to academic challenges and to a host of health concerns, such as decreased food intake, binge eating, compensatory behaviors, and bulimia nervosa that can lead to eating disorders, the intake of processed food or foods with little nutritional value, mental health issues with anxiety and/or depression, social isolation, and/or personal shame (Hazzard et al., 2020; Mukigi et al., 2018; Neff, 2019). Research also highlights that the stigma of food insecurity often prevents students from seeking assistance from social services, family networks, or other community resources (Henry, 2017). However, research

also indicates that, despite these challenges, students facing food insecurity also report high levels of motivation to attend college, earn a degree, obtain a better job, and improve overall standards of living, which are often prioritized by the students over concerns of hunger (Henry, 2017); this provides opportunity for research and practice to capitalize on student motivation, engagement, and resilience to best support students' basic needs.

Research exploring perceptions from specific student sectors facing food insecurity also lies ahead. For example, the United States remains the leading destination for cross-border study and welcomes over 1 million international students each academic year (Farrugia & Bhandari, 2017). A variety of background factors, such as race, country and region of origin, or primary language can significantly impact the experiences and outcomes of international students (Quaye et al., 2019), and the potential for food insecurity likely adds an entirely new level of challenge. Current counseling literature indicates that despite reported psychological and adjustment-related challenges, international students do not often seek institutional support (Constantine et al., 2005; Lee & Rice, 2007). To this end, connecting with international students, as a unique student sector, requires international consciousness on campus and a commitment to ongoing education about international students to engage in practices that respond to distinct student needs (Quaye et al., 2019). It is also critical to consider atypical international students who may not fall under the binary of domestic or international students (i.e., refugees, asylees). In some cases, these students may have been in the U.S. for many years while, in other cases, they may also struggle with challenges common to international students, such as language barriers, discrimination, and isolation (Quaye et al., 2019).

Conducting additional, community college-focused research that amplifies the voices and lived experiences of students facing insecurity, and also considers specific student sectors among those facing food insecurity, is imperative to fully understand how researchers, policymakers, and campus leaders and practitioners alike can better address this complex, multifaceted issue.

Sixth, the use of technology to assist the issue of food insecurity was not discussed in the current literature. With an increased focus on the whole student experience, including attention to students' basic needs, comes an increased responsibility for campus leaders to build and promote professional learning networks and use technology to inform and enrich professional practices across campuses and units (Guidry & Ahlquist, 2016). The term "high-tech/high-touch" has become prevalent to describe the importance of consciously integrating technology into higher education and involving oneself in technology-based processes with personal attention (Gemmill & Peterson, 2006). In this regard, the evolution of technology and its ever-increasing sophistication on campuses should not replace face-to-face collegial or staff-to-student interactions. However, the continuous shifts in technology have greatly impacted the ways in which students communicate and interact, as well as access and engage campus resources.

To this end, the use of technology and, specifically, social media, videos, and blogs, may enhance the student experience by contributing to the institutional community, building valuable relationships, and allowing information and innovation to be sought and shared. Future research can explore which technology platforms or social media

applications are used by U.S. community colleges with success and what approaches directly improve food insecurity on campuses (i.e., using social media to communicate on and off campus resources such as food delivery or the use of ghost kitchens potentially occupied by local restaurants or grocers).

Seventh, given the multidimensional nature of this issue, a chronological view of the research could be helpful. To this end, the authors recommend that future research cover this issue through a chronological lens, especially as it applies to the transition from K-12 to higher education (i.e., the McKinney-Vento Act described earlier). Current research indicates that some students report facing food insecurity as early as childhood, while others face food insecurity after reaching college (Mukigi et al., 2018). Future studies should look at students' entire educational landscape and review all dimensions of the issue—from the genesis of the problem potentially in childhood or adolescence to college life.

Finally, the authors recommend a closer examination of community engagement as it applies to understanding food security and providing resources to address it. The current research on food insecurity within community colleges focuses on community outreach, but the authors argue that in order to achieve sustainable and long-term impacts, collaboration must center on strong community *engagement*, not just outreach. The distinction between these approaches was detailed in the section on Local Collaboration.

Thus, current research highlights that if institutions strategically solve real-world problems in and with the communities they serve and reject common top-down practices, values of trust and respect can become more authentic and the university-community relationship can take precedence over a single program or initiative (Pasque et al., 2005). Service and outreach is important to this process, but engagement can be transformative. Engaging with local restaurants by utilizing excess food or developing *food rescue*⁸ programs, or collaborating with corporate partners who wish to exercise social responsibility can help campus leaders reimagine solutions that involve free or substantially discounted options for students facing food insecurity. These approaches have not yet been explored in the current community college literature.

Conclusion

This systematic literature review provides two main contributions to the current body of research. First, this systematic literature review offers a comprehensive compilation of policy and practice recommendations that not only speaks to the breadth of current recommendations for community colleges across the U.S., but also to the depth of current recommendations, given the elaboration offered by many of the peer-reviewed articles and one relevant, edited monograph. The compiled list of recommendations provides a range of actionable strategies that can be implemented and/or tailored to meet the individual needs and nuances of any American community college and its learners based on the authors' deliberate and careful whittling down from a much greater pool of articles. In this way, the authors were able to span multiple policy levels and maintain a focused approach to building a single repertoire of peer-reviewed policy and practice recommendations.

The second advantage to this systematic review is its two-prong lens, which focuses specifically on both policy and practice recommendations and calls for future research for community colleges across the U.S. The authors believe that many of the policy recommendations made for the general college and university population in other literature could seem applicable to all American institutions of higher education and certainly offer valuable contributions to the holistic understanding of food insecurity on college and university campuses. However, researchers, practitioners, and policy-makers are urged to acknowledge the unique landscape of community colleges across the U.S. as it relates to food insecurity, which calls for research aimed specifically at the qualities and needs of the community college population. This systematic literature review sheds light on the importance of targeting the implications of food insecurity for American community colleges in particular.

A common misconception is that the issue of food insecurity is exclusively about food. Contrary to this belief, the research underscores that food insecurity is, in actuality, more about the individuals who require their basic needs be met. In this way, meeting these needs is a matter of not only shifting the supply chain of food and other resources, but also in shifting our culture to promote and embrace a climate of community and collaboration. We must shift our collective mindset in U.S. community colleges and beyond to acknowledge students, augment resources, and address needs explicitly and directly for the greater good.

Acknowledgments

Professor D'Andrea-Baker wishes to extend deepest appreciation to Dr. Karla Loya who encouraged her to seek rich research experiences, and to Dr. Brian Kapinos who guided and supported her along the way in thinking critically, making connections, and advancing her understanding of this critical topic. Professor D'Andrea-Baker would also like to offer her sincerest gratitude to her loyal and loving family, especially her mom, husband, and daughter, who provided wisdom, insight, laughter, and the time needed for engaging in deep research and discovery.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Charity-Ann J. D'Andrea-Baker  <https://orcid.org/0000-0003-4013-4962>

Notes

1. The USDA definition of food security/food insecurity originates from the Life Sciences Research Office, S.A. Andersen, ed., "Core Indicators of Nutritional State for Difficult to Sample Populations" from *The Journal of Nutrition* 120:1557S-1600S, 1990).

2. Two available filters on Academic Search Premier and ERIC are publication date and peer-reviewed status, including one edited monograph, which was based on scholarly, peer-reviewed studies. Google Scholar also allows researchers to filter publication date but not peer-reviewed status; with this in mind, if one seeks to replicate this study's methodology, once a set of articles meeting the search criteria is retrieved, researchers should visit the actual journal site in which the articles are published to determine whether they are peer-reviewed.
3. An organization that provides resources, training, and support to campus pantries, food banks, and other insecurity based initiatives.
4. AACC is the acronym for American Association of Community Colleges.
5. ACCT is the acronym for Association of Community College Trustees.
6. HEA is the acronym for Higher Education Act.
7. The HEA defines "minority" to include: "American Indian, Alaskan Native, Black (not of Hispanic origin), Hispanic (including persons of Mexican, Puerto Rican, Cuban, and Central or South American origin), Asian, Pacific Islander, or "other ethnic group under-represented in science and engineering," and the HEA defines "minority institution" as a higher education institution whose enrollment of a single minority or a combination of minorities exceeds 50% of the total enrollment (Higher Education Act, 2008).
8. Food rescue is the practice of recovering edible food from restaurants, grocery stores, or dining facilities that would otherwise be considered excess food and go to waste. A number of non-profit food rescue organizations are available for partnership and can be found online.

References

- Association of Community College Trustees. (2021). *Impact of federal education dollars on your campus*. https://www.aacc.nche.edu/wp-content/uploads/2018/12/116_Joint_Legislative_Agenda.pdf
- Berman, J. (2017). Why college professors are offering to help students get food and shelter. *Marketwatch*. <https://www.marketwatch.com/story/why-college-professors-are-offering-to-help-students-get-food-and-shelter-2017-08-30>
- Cady, C., & White, C. C. (2018). Food pantries on campus to address student hunger. *New Directions for Community Colleges, 2018*(184), 73–82. <https://doi.org/10.1002/cc.20329>
- College and University Food Bank Alliance. (2016). *Running a campus food pantry: Student government toolkit*. <https://studentgovresources.org/toolkits/>
- Constantine, M. G., Anderson, G. M., Caldwell, L. D., Berkel, L. A., & Utsey, S. O. (2005). Examining the cultural adjustment experiences of African international college students: A qualitative analysis. *Journal of Counseling Psychology, 52*(1), 3–13. <http://doi.org/10.1037/0022-0167.52.57>
- Duke-Benfield, A. E., & Saunders, K. (2016). *Benefits access for college completion: Lessons learned from a community college initiative to help low-income students*. The Center for Law and Social Policy. <https://www.clasp.org/blog/benefits-access-college-completion-lessons-learned-community-college-initiative-help-low-income>
- Farrugia, C. A., & Bhandari, R. (2017). *Open doors 2017. Report on international educational exchange*. Institute of International Education.
- Fincher, M., Coomer, T., Hicks, J., Johnson, J., Randolph, A. J., Lineros, J., & Olivarez, C. P. (2018). Responses to hunger on the community college campus. *New Directions for Community Colleges, 2018*(184), 51–59. <https://doi.org/10.1002/cc.20327>
- Freudenberg, N., Manzo, L., Jones, H., Kwan, A., Tsui, E., & Gagnon, M. (2011). *Food insecurity at CUNY: Results from a survey of CUNY undergraduate students*. The Campaign for a

- Healthy CUNY. https://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Centers/Center%20for%20Human%20Environments/cunyfoodinsecurity.pdf
- Freudenberg, N., Watnick, D., Jones, H., & Lamberson, P. (2018). *Promoting health for academic success: An assessment of challenges and opportunities at City University of New York, CUNY Graduate School of Public Health and Health Policy*. <http://sph.cuny.edu/2018/02/19/healthy-cuny-report/>
- Gemmill, E. L., & Peterson, M. (2006). Technology use among college students: Implications for student affairs professionals. *Journal of Student Affairs Research and Practice*, 43(2), 482–502.
- Goldrick-Rab, S. (2018). Addressing community college completion rates by securing students' basic needs. *New Directions for Community Colleges*, 2018(184), 7–16. <https://doi.org/10.1002/cc.20323>
- Goldrick-Rab, S., Broton, K., & Eisenberg, D. (2015). *Hungry to learn: Addressing food & housing insecurity among undergraduates*. Wisconsin HOPE Lab. <https://hope4college.com/hungry-to-learn-addressing-food-housing-insecurity-among-undergraduates/>
- Goldrick-Rab, S., Broton, K., & Frank, V. M. (2014). *Single Stop USA's community college initiative: Implementation assessment*. Wisconsin HOPE Lab. <http://hope4college.com>
- Goldrick-Rab, S., Richardson, J., & Hernandez, A. (2017). *Hungry and homeless in college: Results from a national study of basic needs insecurity in higher education*. Wisconsin HOPE Lab. <https://hope4college.com/wpcontent/uploads/2018/09/Hungry-and-Homeless-in-College-Report.pdf>
- Guidry, K. R., & Ahlquist, J. (2016). Computer-mediated communication and social media. In G. S. McClellan & J. Stringer (Eds.), *The handbook of student affairs administration* (pp. 595–612). Jossey-Bass.
- Gupton, J. T. (2017). Campus of opportunity: A qualitative analysis of homeless students in community college. *Community College Review*, 45(3), 190–214. <https://doi.org/10.1177/0091552117700475>
- Hazzard, V. M., Loth, K. A., Hooper, L., & Becker, C. B. (2020). Food insecurity and eating disorders: A review of emerging evidence. *Current Psychiatry Reports*, 22, 74. <https://doi.org/10.1007/s11920-020-01200-0>
- Henry, L. (2017). Understanding food insecurity among college students: Experience, motivation, and local solutions. *Annals of Anthropological Practice*, 41(1), 6–19.
- Higher Education Act, Pub. L. No. 20 U.S. Code 1067q (2008). United States: Government Printing Office. <https://www2.ed.gov/about/offices/list/oct/edlite-minorityinst.html>
- Ilieva, R. T., Ahmed, T., & Yan, A. (2018). Hungry Minds: Investigating the food insecurity of minority community college students. *Journal of Public Affairs*, 19(3), 1–13. <https://doi.org/10.1002/pa.1891>
- Jacob, W. J., Sutin, S. E., & Weidman, J. C. (Eds.) (2015). *Community engagement in higher education: Policy reforms and practice* (pp. 1–30). Sense Publishers.
- Kezar, A., & Gehrke, S. (2016). Supporting and enhancing student learning through partnerships with academic colleagues. In G. S. McClellan & J. Stringer (Eds.), *The handbook of student affairs administration* (pp. 433–456). Jossey-Bass.
- Lee, J. J., & Rice, C. (2007). Welcome to America? International student perceptions of discrimination. *Higher Education*, 53(3), 381–409. <http://doi.org/10.1007/s10734-005-4508-3>
- Mayfield, A., White, C. C., Downs, T., & Erlandson, D. (2021). Expanding advocacy for community college success. *New Directions for Community Colleges*, 2022(197), 13–28.
- Mukigi, D., Thornton, K., Binion, A., Brown, K., Church, M., Cook, M., Henry, D., Hopkinson, J., Masucci, C., Pruett, J., Rogers, M., Singleton, O., Vichi-Miller, V., Wofford, R., &

- Brown, O. (2018). Food Insecurity among college students: An exploratory study. *Journal of Nutrition and Health Sciences*, 5(1), 1–9.
- Neff, O. (2019). Food insecurity prevalence on college campuses, the stigma associated with food pantries and the best practices moving forward. *Student Research*. <https://scholarship.depauw.edu/studentresearchother/3>
- Pasque, P. A., Smerek, R. E., Dwyer, B., Bowman, N., & Mallory, B. L. (Eds.) (2005). *Higher education collaboratives for community engagement and improvement*. National Forum on Higher Education for the Public Good. <https://www.thenationalforum.org>
- Perry, K. (2018). Strategies for campus leaders. *New Directions for Community Colleges*, 184, 101–107. <https://doi.org/10.1002/cc.20332>
- Quaye, S. J., Harper, S. R., & Pendakur, S. L. (Eds.). (2019). *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations*. Routledge.
- Spaid, R., & Gillet-Karem, R. (2018). Food for thought: Food insecurity in women attending community colleges. *Forum on Public Policy Online*, 2018(1), 1–9. <https://doi.org/10.1002/cc.20323>
- United States Department of Agriculture Economic Research Service. (2021). *What is Food Security? . . . And Food Insecurity?* <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>
- United States Department of Education. (2015). National Center for Homeless Education. *Elementary and Secondary Education Act Part C—Homeless Education as amended by the Every Student Succeeds Act*. <https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>
- Vasquez, M. C., Vang, M., Garcia, F., & Harris, F. (2019). What do I eat? Where do I sleep?: A concern for men of color in community college. *Community College Journal of Research and Practice*, 43(4), 295–306. <https://doi.org/2048/10.1080/10668926.2018.1478340>
- Waters-Bailey, S., McGraw, M., & Barr, J. (2019). Serving the whole student: Addressing non-academic barriers facing rural community college students. *New Directions for Community Colleges*, 2019(187), 83–93. <https://doi.org/10.1002/cc.20372>
- Wills, P. H. (2016). Partnerships and relationships internal and external to the college. In G. S. McClellan & J. Stringer (Eds.), *The handbook of student affairs administration* (pp. 479–488). Jossey-Bass.
- Wood, J. L., Harris, F. III, & Delgado, N. R. (2016). *Struggling to survive—Striving to succeed: Food and housing insecurities in community college*. Community College Equity Assessment Lab. <https://cceal.org/food-housing-report>

Author Biographies

Charity-Ann J. D’Andrea-Baker is Associate Faculty for Early Childhood and Child Studies at Post University, and Elementary Education at the University of Saint Joseph in Connecticut, with a focus on Reading and Language Arts Education. She is also a former public education teacher and administrator. Professor D’Andrea-Baker is scheduled to defend her Doctoral dissertation in March 2024 towards her Ed.D. from the University of Hartford with an interpretive phenomenological study entitled, “From Practice to Preparation: Examining Teacher-Educator Collaboration for Preservice, Practice-Based Design.” Professor D’Andrea-Baker holds a Sixth-Year Degree in Educational Leadership from the University of Connecticut and a Master’s Degree in Reading and Language Arts from the University of Saint Joseph. Professor D’Andrea-Baker also holds active Connecticut licensure in Elementary Education, English Education, and

Supervision and Administration. She is a First-Generation College Student and also the founder of a Woman-Owned Small Business.

Brian Kapinos holds a doctoral degree in Educational Leadership from the University of Hartford and currently serves as the Regional Advising Director for Connecticut State Community College. Dr. Kapinos has worked in higher education for the last ten years, holding various roles in advising and academic affairs as well as several adjunct faculty roles within the Massachusetts Community College system. Dr. Kapinos is also a part-time faculty member in the Doctoral Program for Educational Leadership at the University of Hartford. Finally, Dr. Kapinos' research focus is on advising systems, middle management, and the coordination of advising services within community colleges and serves as a reviewer for several academic journals including the NACADA Review, Journal of College Student Retention: Research, Theory and Practice and others.