Examining Postsecondary Institutional Characteristics and Student Basic Needs Services: An Exploratory Analysis

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Abstract

This study examines the link between institutional characteristics and the provision of basic needs services at nonprofit, two- and four-year colleges in a high-poverty U.S. state. Basic needs insecurity, including food and housing instability, significantly affects students' academic success, retention, and well-being. Results show that public, four-year colleges are more likely to offer comprehensive basic needs services than community colleges and private institutions. Interestingly, spending on academic and student services per full-time student strongly relates to the availability of emergency housing, health services, and transportation support. Colleges with a higher percentage of students of color are more likely to provide mental health services. The findings contribute to global discussions about institutional capacity, legitimacy, and equity in higher education.

Keywords: basic needs, higher education, student services, institutional characteristics, equity

1. Introduction

Meeting the basic needs of postsecondary students is increasingly important to institutional leaders, educators, and policymakers. Basic needs services encompass a range of programs and initiatives designed to help students meet essential needs, such as food, housing, clothing, childcare, transportation, and medical and mental health services. Basic needs insecurity, including food and financial instability, significantly impacts the academic success and well-being of college students. Research indicates that students experiencing food insecurity often have lower academic performance (Maroto et al., 2015; Collier et al., 2021), decreased retention rates (Hege et al., 2021), and heightened mental health issues such as stress and depression (Raskind et al., 2019; Soria, 2022).

Previous research has consistently linked food and housing insecurity to lower academic performance, decreased persistence, and increased mental distress among college students (Goldrick-Rab et al., 2020; Hege et al., 2021; Raskind et al., 2019). Similarly, Ahmad et al. (2021) observed that students experiencing ongoing insecurities showed less engagement in academic and extracurricular activities. Comprehensive interventions, such as on-campus support programs and improved access to federal aid like SNAP, are vital to addressing these issues and promoting equity in higher education (Cornett & Fletcher, 2022; Steeves et al., 2022).

The National Postsecondary Student Aid Study (NPSAS:20) indicates that 22.6% of all undergraduate students reported low or very low food security in the past 30 days, and 11.9% reported marginal food insecurity. Estimates suggest that Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ+) and Indigenous students are among those at the highest risk of basic needs insecurity (NPSAS:20). Notably, basic needs insecurity was more prevalent among marginalized populations, such as students at community colleges, Black and Indigenous students, students with foster care experience, or part-time enrollees, among others (Baker-Smith et al., 2020; Martinez et al., 2017). Findings from other studies, such as those by Bruening et al. (2016) and Gillis et al. (2021), also support the increased prevalence among marginalized students. For example, a study focused on Historically Black Colleges and Universities (HBCUs), Predominantly Black Institutions (PBIs), and Hispanic-serving institutions (HSIs) found that nearly two-thirds of students at these institutions faced some form of basic needs insecurity (Cornett, 2022).

To date, much of the research on student basic needs insecurity has been focused on describing its causes (Gillis et al., 2023), documenting its prevalence (Goldrick-Rab et al., 2020), and assessing its impacts on students' education (Broton, 2021). Less is known about what contributes to postsecondary institutions providing basic needs services to students. Research (Klaus-Peter, 2022; Broton et al., 2020) suggests that administrators' awareness of basic needs at institutions is related to the creation of basic needs services; however, it is unclear whether institutional characteristics, such as a high proportion of students receiving Pell Grants, contribute to this awareness. This study seeks to help fill the knowledge gap by analyzing the relationships between postsecondary institutional characteristics and the provision of various basic needs services to students.

The research question is, "*What institutional characteristics are associated with the provision of basic needs support services at non-profit (public and private), two- and four-year institutions in Kentucky?"* The Commonwealth of Kentucky provides the context for this study. Kentucky is a useful setting because it faces both high poverty rates (16.5%) and lower postsecondary attainment (29% with a bachelor's degree or higher), making student support especially critical (Baumann, 2021; Statista, 2023). This study contributes to the existing literature by extending beyond student-level analyses to explore how institutional characteristics, such as control, level, mission, and resource allocation, relate to the provision of basic needs services. By focusing on nonprofit two- and four-year institutions in Kentucky, it offers new insights into how context and capacity influence institutional responses to student well-being. Next, the relevant research on how institutional characteristics relate to student basic needs services is reviewed.

2. Literature Review

The literature on institutional characteristics and structures related to student basic needs can be categorized into two main groups. One group explicitly examines how a postsecondary institution's existing structures or features, such as control, level, or the proportion of Pell Grant recipients, affect the number and types of basic needs services offered. The second group centers on students as the unit of analysis, often describing causes, documenting prevalence, and evaluating the impacts of basic needs insecurity. Based on their empirical results, these scholars frequently provide recommendations concerning institutional policies, staffing, and programs. The focus is primarily on the first group, as it is most relevant to our research design and analysis, while the second group is used to provide context for institutional responses.

Within the institutional category, two recent studies have offered essential evidence on how institutional characteristics influence the provision of student basic needs services. Speirs et al. (2022) carried out a national web scan of 448 institutions and compared resource provision among community colleges, four-year public universities, and four-year private colleges. Their analysis revealed that four-year private schools provided significantly fewer total resources than both four-year public institutions and community colleges, particularly in areas such as food pantries, emergency housing, and emergency aid. Zottarelli et al. (2024) examined 102 public postsecondary institutions in Texas. They found that organizational factors such as size, degree level, and campus setting were more strongly linked to the existence of formalized basic needs programs than student demographics. Collectively, these studies emphasize that institutional context—particularly control, mission, and capacity—plays a crucial role in determining service availability.

Research focused on students provides further insight into the importance of these services and how institutions can respond. For example, extensive evidence links food and housing insecurity to lower academic performance, reduced persistence, and increased stress and mental health issues (Broton & Goldrick-Rab, 2016; Goldrick-Rab et al., 2020; Hege et al., 2021; Raskind et al., 2019; Soria, 2022). Other studies highlight the positive effects of institutional efforts such as food pantries, community partnerships, and emergency aid programs (Evans et al., 2019 Kruger et al., 2016; Twill et al., 2016). Policy analyses and evaluation briefs stress that coordinated strategies, like SNAP outreach, single resource centers, and centralized referral systems, are linked to better access and equity in meeting basic needs (Institute of Education Sciences, 2021; Kentucky Council on Postsecondary Education, 2023; Laska et al., 2020).

Across both strands of research, several patterns emerge. First, institutional type (public versus private, two-year versus four-year) is consistently related to the scope of services provided (Speirs et al., 2022). Second, organizational capacity, including institutional size and resources, aligns with the formalization of services (Zottarelli et al., 2024). Third, targeted, structured programs, such as advising-linked emergency aid and community-based partnerships, tend to be more effective than ad hoc or isolated interventions (Geckeler et al., 2008; Kruger et al., 2016).

Despite this growing body of work, two key gaps remain. First, few studies incorporate financial resource measures academic and student services spending per full-time equivalent (FTE) student, which can differentiate between an institution's capacity and its commitment to supporting student needs. Second, existing institutional analyses rarely draw on organizational theory to explain why institutions adopt similar patterns of services. Addressing these gaps, the present study examines how institutional control, level, mission, and per-student spending relate to the provision of basic needs services at nonprofit, two- and four-year institutions in Kentucky. By linking institutional characteristics with the presence of specific services, this study extends prior work by incorporating financial indicators and interpreting observed patterns through a neo-institutional framework.

3. Methods

3.1 Conceptual Framework

This study is guided by neo-institutional theory, which provides a perspective for understanding why higher education institutions adopt certain structures and practices beyond just functional or efficiency reasons. Neo-institutionalism proposes that organizations are influenced by internal and external pressures to conform to socially accepted norms, thereby enhancing their legitimacy (David et al., 2024; Meyer & Rowan, 1977). Using coercive, mimetic, and normative isomorphism mechanisms, institutions may adopt programs that align with current expectations, even if those programs are not directly related to measurable efficiency gains.

In the context of students' basic needs, this framework explains why colleges and universities offer food pantries, emergency aid, or housing support programs even when their budgets are tight. Implementing these services can show a commitment to student success, social responsibility, and equity—values that increasingly matter to policymakers, accreditors, and the public. These efforts serve both symbolic and practical roles, boosting legitimacy while also addressing student well-being.

Building on this theoretical foundation, this research will argue that institutional features such as control, level, mission, and resource distribution influence the adoption of basic needs services as organizations respond to these pressures. We include measures of student body composition—specifically, the percentage of students receiving Pell Grants and the proportion of students of color—to reflect external expectations related to serving diverse or economically vulnerable populations. Neo-institutional theory suggests that institutions facing such pressures may be more likely to formalize visible student-support structures.

This research builds on previous research by including financial resource indicators, specifically, academic support and student services spending per full-time equivalent student, as proxies for institutional capacity and potential value alignment. Higher expenditures may indicate both the ability and the normative commitment to invest in student support. By connecting these financial measures to service availability, we empirically examine how institutional behavior reflects both capacity and conformity under neo-institutional logics.

3.2 Data Collection

To analyze how institutional characteristics relate to providing basic needs services, the research team manually reviewed institutional websites using a standardized protocol. This hand search involved systematically exploring each institution’s public web pages to identify and document evidence of programs that support food, housing, childcare, transportation, and other essential needs. Although labor-intensive, this method captures context-specific information that may not appear in standardized datasets and aligns with prior research (Speirs et al., 2022; Zottarelli et al., 2024).

An initial list of eligible institutions was created using the U.S. Department of Education’s Integrated Postsecondary Education Data System (IPEDS). The sample included all Title IV-eligible, nonprofit two- and four-year schools in Kentucky, excluding fully professional or theological colleges. This resulted in an initial list of 48 institutions, with 44 remaining after exclusions.

The research team, consisting of two faculty investigators and trained graduate research assistants, developed and tested a data collection protocol based on existing literature about student basic needs. The initial version identified key categories (e.g., food insecurity, housing insecurity, mental health), and relevant search terms. Three team members independently tested the protocol on three institutional websites and compared their results to find discrepancies and clarify definitions. Differences in coding decisions were discussed until consensus was reached, and the protocol was refined accordingly. A second round of pilot testing on three additional institutional websites confirmed consistent application across team members. Once finalized, each researcher used the protocol to assess a designated set of institutions, recording findings in a shared spreadsheet that noted whether evidence of service was present and included the corresponding URL. For quality assurance, the principal investigators randomly re-reviewed ten institutions. The final dataset was then combined with IPEDS indicators on enrollment, finance, and student demographics to produce a comprehensive analytic file.

Eleven categories of basic needs services were identified and coded dichotomously (present = 1, absent = 0):

(1) Campus employment/work-study

(2) Mental health services

(3) Year-round housing

(4) Food banks or pantries

(5) Medical health services

(6) Emergency aid or food stipends

(7) Community partnerships

(8) Childcare services

(9) Public transportation support (including transportation vouchers)

(10) Emergency housing

(11) Designated point of contact for basic needs

3.3 Analytic Approach

Given the exploratory nature of this research and the limited sample size, analyses were designed to identify patterns rather than test causal hypotheses. Three analytic strategies were employed. First, bivariate correlations analyzed the relationships between institutional characteristics, such as academic and student services spending per full-time equivalent (FTE), the proportion of students receiving Pell Grants, and the proportion of students of color, and the presence of specific basic-needs services. Correlations among the services were examined to see if certain supports tended to co-occur. Table 1 summarizes the frequency of services listed on institutional websites.

Table 1. Services Listed on Institutional Websites

	Institutions with Services	
Service	Number	%
Campus employment/work-study	39	88.6
Mental health services	37	84.1
Year-round housing	31	70.5
Food bank/pantry	28	63.6
Medical health services	23	52.3
Emergency aid	20	45.5
Community partnership	19	43.2
Childcare services	15	34.1
Public transportation	14	31.8
Transportation vouchers	6	13.6
Emergency housing	6	13.6
Food stipend	6	13.6
Point of Contact	2	4.1

N=44

Next, a hierarchical cluster analysis was performed to examine patterns of similarity among institutions and the types of basic-needs services provided. Hierarchical cluster analysis was applied to discover the data's natural structure, allowing clusters to form without a preset number of clusters. Hierarchical cluster analysis is a statistical method that groups variables based on their similarities. An agglomerative approach was used, starting with individual cases and progressively merging them into clusters. Clustering variables included the types of basic-needs services listed on institutional websites, as shown in Table 1. Since only two institutions had a single point of contact for basic needs, that variable was excluded from the analysis. Besides basic-needs services, the clustering incorporated whether an institution was a partner in a Commonwealth-wide initiative on student basic needs, the institution's control (public or private), sector (two-year or four-year), and institutional size. All variables were coded as dichotomous indicators. Including whether an institution was a partner in the statewide collaboration was based on our assumption that institutions willing to dedicate staff time and resources to such an initiative demonstrated a form of self-selection.

Finally, with the three groups identified from the cluster analysis (discussed further in the Findings section), an analysis of variance (ANOVA) was performed to determine if the selected variables were related to group membership. The variables used in our ANOVAs differed from those in the cluster analysis to prevent circular reasoning. Specifically, characteristics related to student body composition (such as percentage of first-time, full-time (FTFT]) students receiving Pell Grants, percentage of undergraduate students of color, average net price for Pell Grant recipients, and percentage of FTFT students receiving aid) and organizational structure (including academic support spending per full-time equivalent (FTE) enrollment and student-services spending per FTE) were examined. These variables were chosen based on the conceptual framework and the need to limit the number of variables due to sample size, as explained in the Limitations section.

3.4 Description of Institutions

Our analytical sample comprised 44 nonprofit institutions, almost evenly split between public (n = 24) and private not-for-profit (n = 20) institutions (Table 2). Most were four-year or higher, with 28 baccalaureate or advanced-degree institutions and 16 two-year colleges. Overall, institutions were not highly selective in admissions (excluding community colleges), with an average acceptance rate of 74%. Nearly all institutions enrolled students who received financial aid, and about half of first-time, full-time students across these institutions received Pell Grants. Because the Pell Grant is a means-tested federal program, the proportion of Pell recipients serves as an indicator of the financial need represented within an institution's student body.

Table 2. Institutional Characteristics of the Sample

	Count
Control of Institution	
Public	24
Private not-for-profit	20
Level of Institution	
Four or more years	28
At least 2 but less than 4 years	16
Institution size	
Under 1,000	7
1,000 - 4,999	24
5,000 - 9,999	5
10,000 - 19,999	6
20,000 and above	2
Percent admitted	74
Percent receiving aid, FTFT	97
Percent Pell Grant recipients, FTFT	51
N=44	

4. Findings

4.1 Correlational Analysis

We first explored bivariate correlations between the types of services offered by institutions. We found statistically significant correlations among specific offerings (full results available by request). A moderate positive correlation was observed between institutions partnering with community organizations and offering emergency housing services ($\tau = 0.46$, p <.05), suggesting that community partnerships may be leveraged to address housing insecurity. Similarly, public transportation support was moderately correlated with the provision of emergency housing services ($\tau = 0.45$, p <.05). Additionally, public transportation support showed a moderate correlation with the availability of food stipends ($\tau = 0.464$, p <.05), highlighting efforts to address food and transportation insecurities simultaneously. Although most relationships in the dataset were positive, a few negative correlations were identified, none of which reached statistical significance.

The relationship between types of services offered and institutional characteristics, specifically the proportion of first-time, full-time undergraduates receiving Pell Grants, academic spending per FTE, student services spending per FTE, and the percentage of students of color was examined. Emergency housing was positively correlated with academic spending per FTE student τ =0.348, p < .05) and student services spending per FTE (τ =0.123, p < .05), suggesting that institutions with higher investments in these areas are more likely to provide emergency housing. Medical health services exhibited strong positive correlations with student services spending per FTE (τ =0.444, p < .01) and academic spending per FTE (τ =0.333, p < .05), indicating that institutions prioritizing spending in these areas are more likely to offer medical health support. Public transportation services were positively associated with academic spending per FTE (τ =0.221, p < .05). In contrast, childcare services were correlated with academic spending per FTE (τ =0.142, p < .05). Community partnership services were positively associated with academic spending per FTE (τ =0 .345, p < .05) and student services spending per FTE (τ =0.256, p < .05). Finally, mental health services demonstrated a positive relationship with the proportion of students of color (τ == 0.337, p < .005), suggesting a potential focus on diverse student populations. These findings highlight the role of institutional spending in supporting the availability of various basic needs services for students.

4.2 Cluster Analysis

As mentioned above, in our hierarchical cluster analysis, we used dichotomous indicators to determine whether specific basic needs services were provided, along with selected institutional characteristics (i.e., enrollment, control, and level). Our results indicated that institutions could be grouped into three clusters (see Table 3). Cluster one can be described as large, four-year, mostly public institutions providing a relatively high number of basic needs services to students.

Table 3. Results from Cluster Analysis

Group Number	Cases in Cluster	Institutional Characteristics			
		Median # of Basic Needs Services	Mean 12-Month FTE	% Public	% Four-year or above
1	11	8	11,636	64	100
2	16	4	2,526	100	0
3	17	3	1,154	6	100

The second cluster of institutions is public, two-year, relatively small institutions that offer about four basic needs services. Among cluster two institutions, the most offered services were campus employment or work-study, mental health services, a food bank, and year-round housing, in that order. The third cluster comprises predominantly private, four-year, small institutions offering three basic needs services. Among the cluster three institutions, mental health services, medical health services, and campus employment or work-study were the top three most offered services. For ease of description, going forward, we will refer to these clusters as large, four-year (group 1), two-year (group 2), and small four-year (group 3).

Next, using the three clusters as our independent variables, ANOVAs were conducted, using the abovementioned variables (and shown in Table 4). The percentage of first-time, full-time students receiving Pell Grants at an institution was significantly related (F (2,43) =7.58, p = 0.002, η^2 = 0.27) to our grouping, explaining about 27% of the variance in an institutional grouping. Academic support spending per FTE was also statistically significant (F (2,43) =4.99, p = 0.011, η^2 = 0.20) related to institutional groupings, explaining about 20% of the variance. Finally, student services spending per FTE was statistically significant (F (2,43) =15.26, p = <0.001, η^2 = 0.43), explaining about 43% of the variance in grouping.

Table 4. Results from Analyses of Variance

Predictor	Sum of Squares	Mean Square	F	Sig.	η2
% Pell Grants, first-time, full-time undergraduates	9059.159	1223.828	7.589	0.002	0.27
Academic Support Spending/FTE	170845740.5	16725334.8	4.991	0.011	0.196
Student Services Spending/FTE	218437358.9	46780537.2	15.359	<.001	0.428
Percent Undergraduate Students of Color	1.285	0.031	1.026	0.367	0.048
Average net price, grant aid recipients	656871573.8	16137061.3	0.453	0.509	0.25
Percent receiving aid, FTFT	408.909	16.992	1.858	0.169	0.083

*Eta-squared based on the fixed-effects model

To determine which of the three groups (Large, four-year, two-year, and small, four-year) differed significantly on the independent variables that were statistically significant in the ANOVA, post-hoc comparisons using Tukey's Honest Significant Difference (HSD) test (see Table 5) were conducted. We display and discuss only the variables for which we found a statistically significant difference above. The analysis reveals significant differences among institutional types in terms of Pell Grant recipients and spending on academic support and student services per full-time equivalent student.

Table 5. Group Means Comparison, Tukey’s Honest Significant Difference

Variable	Comparison	Mean Difference	95% Confidence Interval		p-value
			Lower Bound	Upper Bound	
% Pell Grants, first-time, full-time undergraduates	Group 1 vs Group 2	-18.443	-30.54	-6.35	0.002
	Group 2 vs Group 3	12.213	1.46	22.97	0.023
	Group 3 vs Group 1	6.230	-5.72	18.18	0.421
Academic Support Spending/FTE	Group 1 vs Group 2	2209.22	465.72	3952.71	0.010
	Group 2 vs Group 3	-1296.09	-2846.57	254.40	0.117
	Group 3 vs Group 1	-913.13	-2635.60	809.35	0.409
Student Services Spending/FTE	Group 1 vs Group 2	1938.35	276.18	3600.51	0.019
	Group 2 vs Group 3	-3362.84	-4841.00	-1884.68	<0.001
	Group 3 vs Group 1	1424.49	-217.64	3066.62	0.100

4.3 Post Hoc Comparisons

4.3.1 Pell Grant Recipients

Two-year institutions enrolled a higher percentage of Pell Grant recipients than both small four-year and large four-year institutions. Specifically, two-year institutions had 12% more Pell Grant recipients than small four-year institutions, while large four-year institutions had 18% fewer Pell Grant recipients than two-year institutions. No significant difference in Pell Grant percentages was observed between large and small four-year institutions. This pattern suggests that institutional missions serving higher-need student populations may align with distinct external expectations and pressures regarding the provision of basic needs, a concept consistent with neo-institutional perspectives on legitimacy and responsiveness.

4.3.2 Academic Support Spending

Large four-year institutions spent significantly more on academic support per full-time equivalent student than two-year institutions, with a mean difference of $2,209.22. No significant differences in academic support spending per FTE were found between two-year and small four-year institutions or between small and large four-year institutions. Greater academic-support investment among large public institutions may reflect both their resource capacity and a normative expectation to demonstrate organizational commitment to student success.

4.3.3 Student Services Spending

Large four-year institutions also spent significantly more on student services per FTE than two-year institutions, with an average difference of $1,938.35. Additionally, small four-year institutions spent significantly more on student services per FTE than two-year institutions, with an average difference of $3,362.84. No significant difference in student services spending was observed between small and large four-year institutions. In summary, large four-year institutions generally allocated more resources to both academic support and student services per FTE than two-year institutions, while small four-year institutions also outspent two-year colleges in student services per FTE. These differences suggest that institutional spending priorities may serve as a visible signal of legitimacy and alignment with sector norms regarding holistic student support.

5. Discussion

This study examined how institutional characteristics, such as control, level, mission, and resource allocation, relate to the provision of basic-needs services at nonprofit, two- and four-year institutions in Kentucky. The results highlight the complex relationship between institutional context, spending capacity, and the visibility of student support programs. Institutions with higher academic and student-services spending per full-time equivalent student were more likely to offer emergency housing, medical health services, and public transportation support. Similarly, institutions that enrolled larger proportions of students of color were more likely to provide mental health services, indicating a responsiveness to student diversity and needs (Dunbar et al., 2018; Soria, 2022; Gillis et al., 2021).

5.1 Institutional Characteristics and Service Provision

The cluster analysis showed that large, four-year public institutions provide the broadest range of services, while smaller, private, four-year and two-year schools tend to offer fewer supports. These results align with previous national studies (Speirs et al., 2022; Zottarelli et al., 2024), which suggest that institutional complexity, size, and funding impact the scope of formal programs. However, our findings go further by demonstrating that spending patterns, especially per-student investments in academic and student-services functions, are closely connected to service availability.

From a neo-institutional viewpoint, these differences result from various organizational pressures. Larger public universities operate within a framework shaped by coercive pressures from policymakers and accrediting bodies, normative standards from professional associations, and mimetic tendencies to emulate peer institutions that openly prioritize student well-being. Implementing and promoting basic-needs services may serve both practical and symbolic purposes, signaling institutional legitimacy and responsiveness to societal calls for fairness and access.

These patterns can also be understood through the lens of neo-institutional theory, which suggests that organizations adopt structures and practices not only for technical efficiency but also to preserve legitimacy within their environments (David et al., 2024; Meyer & Rowan, 1977). In this study, variation in the provision of basic-needs services among institutions reflects different types of isomorphic pressure. Coercive pressures stem from state and federal expectations—such as compliance with student-support mandates or alignment with statewide initiatives—that motivate institutions to respond to student needs. Mimetic pressures are evident as institutions, especially smaller or less-resourced ones, imitate the practices of larger leaders in student support. Normative pressures emerge through professional associations, higher education networks, and accreditation processes, which increasingly frame holistic student support as a hallmark of institutional quality. Together, these forces help explain why institutions with different capacities still tend to converge around a shared legitimacy narrative that positions basic-needs services as vital to student success and equity.

In contrast, two-year schools often face limited resources despite serving a larger share of low-income and Pell-eligible students. Their narrower service offerings likely reflect a mix of financial constraints and organizational missions that prioritize affordability and access over comprehensive services. Small private institutions also operate under tight financial conditions but may focus on personal advising and counseling as alternatives to more resource-intensive programs.

5.2 Financial Capacity and Legitimacy

The findings indicate that financial investments in student services and academic support are more than just budgetary decisions; they serve as organizational signals of commitment to student success. According to neo-institutional theory, such signals strengthen legitimacy by aligning institutional actions with dominant cultural norms around comprehensive student support. Institutions that visibly invest in basic-needs programs can portray themselves as meeting moral and normative standards, even when direct causal links to student outcomes have not yet been fully researched.

This dynamic highlights how legitimacy-seeking behavior can influence campus decisions regarding student-support structures. The growth of basic-needs services may not only stem from internal efficiency or evidence-based planning but also from mimetic isomorphism, as institutions imitate peers seen as models of social responsibility and student-centered practices.

5.3 Implications for Policy and Practice

Understanding these patterns is crucial for policymakers, system leaders, and higher-education administrators. State agencies and coordinating bodies should use these findings to identify where structural supports are most needed and to foster collaborative solutions, such as shared service hubs, cross-campus partnerships, or regional consortia, that help smaller institutions overcome capacity limits. Institutions can further enhance equity and legitimacy by conducting internal audits of their student-support infrastructure to ensure that investments match both student demographics and institutional missions. These audits also serve as evidence of accountability to accreditors and funders, reinforcing the institutional commitment to student success as a key measure of legitimacy and credibility.

Future research should build on this work by exploring how institutional narratives, leadership choices, and external funding incentives interact to sustain or expand basic-needs programs over time. Comparative, longitudinal studies across multiple states or different countries would help determine whether the adoption of basic-needs services signifies a deeper institutionalization of equity-focused practices or mainly a symbolic response to emerging social expectations.

Beyond identifying patterns in service provision, future work should more explicitly explore how institutions operationalize partnerships to meet students' needs. Collaborations between institutions and other organizations, such as local governments, state agencies, and community-based organizations, have the potential to expand service capacity in ways that overcome resource constraints—particularly for the smallest colleges. Shared service hubs, coordinated transportation programs, food-bank partnerships, and joint grant initiatives that pool staff expertise and infrastructure are all potential models. Cross-sector collaboration expands institutional reach but also represents the legitimacy-seeking behaviors outlined in neo-institutional theory, as institutions respond to public expectations of social responsibility and equitable support for students.

Outside the U.S., these findings are also important for international higher-education systems facing student basic-needs insecurities. Across OECD and UNESCO member countries, there is increasing focus on food, housing, and well-being as key parts of student success and educational fairness. Institutions worldwide are under similar pressures to build comprehensive student-support systems while managing budget limits and accountability requirements. Comparative research can better show how these global legitimacy pressures, like policy frameworks that promote sustainable and inclusive higher education (e.g., UNESCO Sustainable Development Goal 4), influence institutional actions and how resources are distributed in different contexts.

6. Limitations

Several limitations should be considered when interpreting these findings. First, the website search method only identifies services that are officially documented and publicly accessible. Some institutions might offer informal or ad hoc support that this method does not capture. For instance, campus "champions" of student basic needs may personally direct students to local food resources or transportation options, but such efforts, while valuable, are unlikely to be listed on institutional websites.

Second, institutional websites may not always show the most current programs and practices. Information about key services is only as accurate as what is listed online. Likewise, having a service on a website does not necessarily reflect its scope, level of use, or the extent to which the institution has invested in it.

However, publicly accessible information on institutional websites provides a straightforward way to determine if support programs exist, using a simple yes-or-no approach. In practical terms, this method enables states or consortia to compile a list of available services without overburdening institutional staff, who often work in resource-limited environments. This approach can also serve as a foundation for future evaluations and needs assessments that examine the prevalence and effectiveness of student basic needs programs.

Finally, the relatively small sample size (n = 44) limits the generalizability and stability of the cluster analysis results. With fewer cases, clusters may reflect unique patterns in this dataset rather than fully representing broader institutional trends. However, given the exploratory nature of the study, steps were taken to address this concern by limiting the number of variables and focusing on those most aligned with the conceptual framework.

7. Conclusion

Addressing students' basic needs, particularly those related to food, housing, and financial insecurity, requires a coordinated, institution-wide approach that integrates resources, reduces barriers, and promotes equity. Prior research, much of which has focused on students as the primary unit of analysis (e.g., Broton, 2019; Goldrick-Rab et al., 2020; Soria, 2022), emphasizes the importance of centralizing information and making it more accessible. Effective strategies include creating one-stop resource hubs or centralized websites that gather information on available services, eligibility, and applications, as well as integrating these resources into syllabi and campus systems (Gillis, 2022). Simplifying application processes and providing guided support can further lower barriers, especially for non-citizen and non-permanent resident students who might face language or bureaucratic difficulties (EAB, 2021; Jangjou, 2020).

At the institutional level, proactive identification of at-risk students through financial aid data and targeted outreach can mitigate stigma and ensure timely assistance (Broton et al., 2022; Collier et al., 2019). Developing campus-wide referral networks, in which faculty and staff are trained to recognize and respond to indicators of need, establishes a culture of shared responsibility for student well-being (Gillis, 2022). Sustaining such efforts, however, depends on investments in infrastructure, technology, and staffing. For example, maintaining centralized information platforms requires ongoing resources for software development, data management, and student support. Similarly, faculty and staff training programs require time, coordination, and continuing professional development to remain effective.

These realities highlight that addressing student basic needs is not simply a matter of policy adoption—it is an organizational choice that requires aligning institutional resources with social and normative expectations. In neo-institutional terms, expanding basic-needs services represents a form of legitimacy work, where colleges and universities demonstrate conformity with evolving societal values of access and equity. Resource allocation thus becomes both a practical and symbolic act, signaling institutional commitment to student success.

The findings demonstrate that financial investments in academic and student-services functions are associated with the breadth of basic-needs supports available on campus. Yet, finances alone do not fully determine service provision. Instead, institutional mission, size, and culture interact with financial capacity to shape the emergence of services. Future research should further explore these dynamics by examining how leadership decisions, external partnerships, and accountability structures influence the diffusion and sustainability of basic-needs programs.

For practitioners, these findings underscore the importance of strategic alignment, leveraging existing financial, human, and programmatic resources to expand supports even in constrained environments. For policymakers, the results point to the potential of cross-sector collaboration. State-level initiatives such as California’s CalFresh Outreach Program, which connects students to Supplemental Nutrition Assistance Program (SNAP) benefits, illustrate how external partnerships can enhance institutional efforts and reduce duplication. Similar models could be adapted in other states to promote sustainable, equity-driven approaches to meeting students’ basic needs.

Ultimately, this study contributes to a growing understanding of how institutional structures, resources, and external pressures shape organizational responses to student needs. Viewing these responses through a neo-institutional lens clarifies that efforts to address basic needs are both acts of compassion and strategies of organizational legitimacy, central to how higher education institutions define and sustain their social role.

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