



# Guide to Assessing Basic Needs Insecurity in Higher Education

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## Introduction

Is every student on your college campus ready to learn? High school grades and/or standardized test scores are often used to answer that question, but those numbers do not consider a more essential form of readiness: basic needs security. If a student has not eaten sufficient nutritious food or slept the night before a class or exam, they will have difficulty mastering the material and performing well.<sup>1</sup>

There is growing evidence that food and housing insecurity compromise the well-being of thousands of undergraduates across the country, reducing the odds that they will complete degrees. A recent study of more than 43,000 students found widespread basic needs insecurity at both 2-year and 4-year colleges. At community colleges, 42% were food insecure, 46% were housing insecure, and 12% were homeless. Of university students surveyed, 36% were food insecure, 36% were housing insecure, and 9% were homeless.<sup>2</sup> Studies conducted at other institutions have yielded similar results.<sup>3</sup>

Assessing food and housing security among students produces numbers that may be used to support educational success. For example, the results will help answer questions such as:

- How many students could benefit from additional supports from campus food pantries, emergency aid, crisis housing, or other interventions?
- Which students ought to be flagged in early alert systems for additional outreach?
- To what extent should the security of students' basic needs become a campus priority, especially when it comes to retention efforts?

The results can be used to support fundraising efforts, guide campus decision-making about key investments, and generate new ideas for how to improve degree completion rates. They can also help inform conversations about student well-being.

This guide describes how to perform two types of studies:

- Surveys to assess basic needs security; and
- Opportunistic small scale experiments to evaluate the effectiveness of programs meant to address basic needs security.

Drawing on our experiences conducting research on basic needs security at colleges around the nation, our team at the Wisconsin HOPE Lab produced this guide to support your own efforts. The most effective assessments of basic needs security will occur with the cooperation of institutional administrators and include the entire student body in the survey effort, but the practices we describe can be used by those conducting smaller surveys, too. Once the need for more support is established and programs developed, evaluations of those efforts should occur in order to ensure that they are effective. We provide guidance for those evaluations as well.

As you read this guide, please keep in mind that basic needs security among college students is an emergent field. Many of the best practices are still developing. One of the most difficult questions is how best to assess whether students' basic needs are met, and the survey items and recommendations for analysis contained in this guide may change as researchers develop further understanding of how students experience and communicate material hardships. This guide therefore represents the current state of the field. We expect to update it as we learn more and plan to release version 3.0 in summer 2019.

## Defining and Assessing Basic Needs Security

An individual's basic needs begin with food and shelter, along with water and safety, and assessments of basic needs security in higher education therefore focus on measuring food and housing insecurity, as well as homelessness.

**Food insecurity** is the limited or uncertain availability of nutritionally adequate and safe foods, or the ability to acquire such foods in a socially acceptable manner.<sup>4</sup> The most extreme form is often accompanied with physiological sensations of hunger. **Homelessness** means that a person is without a place to live, often residing in a shelter, an automobile, an abandoned building or outside, while **housing insecurity** includes a broader set of challenges such as the inability to pay rent or utilities or the need to move frequently.

Accurately assessing basic needs security requires using validated, standardized measures that are respected by the scientific, policy, and advocacy communities. This is easier to do with regard to food security, where measures are widely agreed upon, than with housing security, where more controversy over appropriate measurement exists. Next, we provide the measures employed by the Wisconsin HOPE Lab as well as other researchers studying higher education, and recommend their use to facilitate national comparisons.

### Food Insecurity:

We recommend assessing food insecurity using either the U.S. Department of Agriculture (USDA)-approved 18-item, 10-item, or 6-item survey modules of food security. The USDA recommends using the 10-item scale,<sup>5</sup> although the 6-item scale has been shown to give similar results.<sup>6</sup> Researchers should choose the scale that best fits their context and the space available in their surveys. The questions can refer to either the prior 30 days or 12 months, and that timing should be considered when deciding when to distribute the survey.<sup>7</sup> This scale is most appropriate for students without children, and an alternative scale with additional questions may be used for parenting students.<sup>8</sup>

## USDA Food Security Survey Module: 18-Item Household Food Security Survey Module

Please note that the USDA 10-item Adult Food Security Survey Module consists of the first 10 items (Adult Stages 1, 2, and 3) of the 18-item Household Food Security Survey Module.

### ADULT STAGE 1

1. "I worried whether my food would run out before I got money to buy more." Was that often true, sometimes true, or never true for you in the last 30 days (12 months)?
2. "The food that I bought just didn't last, and I didn't have money to get more." Was that often, sometimes, or never true for you in the last 30 days (12 months)?
3. "I couldn't afford to eat balanced meals." Was that often, sometimes, or never true for you in the last 30 days (12 months)?

IF THE RESPONDENT ANSWERS "OFTEN TRUE" OR "SOMETIMES TRUE" TO ANY OF THE THREE QUESTIONS IN ADULT STAGE 1, THEN PROCEED TO ADULT STAGE 2.

### ADULT STAGE 2 (YES/NO QUESTIONS)

4. In the last 30 days (12 months, since last (name of current month)), did you ever cut the size of your meals or skip meals because there wasn't enough money for food?
5. [IF YES TO QUESTION 4, ASK]  
If using the 30 day version: In the last 30 days, how many days did this happen?  
If using the 12 month version: How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
6. In the last 30 days (12 months), did you ever eat less than you felt you should because there wasn't enough money for food?
7. In the last 30 days (12 months), were you ever hungry but didn't eat because there wasn't enough money for food?
8. In the last 30 days (12 months), did you lose weight because there wasn't enough money for food?

IF THE RESPONDENT ANSWERS "YES" TO ANY OF THE QUESTIONS IN ADULT STAGE 2, THEN PROCEED TO ADULT STAGE 3.

### ADULT STAGE 3

9. In the last 30 days (12 months), did you ever not eat for a whole day because there wasn't enough money for food?
10. [IF YES TO QUESTION 9, ASK]  
If using the 30 day version: In the last 30 days, how many days did this happen?  
If using the 12 month version: How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?

IF THE RESPONDENT HAS INDICATED THAT CHILDREN UNDER 18 ARE PRESENT IN THE HOUSEHOLD, THEN PROCEED TO CHILD STAGE 1.

#### CHILD STAGE 1

11. "I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food." Was that often, sometimes, or never true for you in the last 30 days (12 months)?
12. "I couldn't feed my children a balanced meal, because I couldn't afford that." Was that often, sometimes, or never true for you in the last 30 days (12 months)?
13. "My child was not eating enough because I just couldn't afford enough food." Was that often, sometimes, or never true for you in the last 30 days (12 months)?

IF THE RESPONDENT ANSWERS "OFTEN TRUE" OR "SOMETIMES TRUE" TO ANY OF THE THREE QUESTIONS IN CHILD STAGE 1, THEN PROCEED TO CHILD STAGE 2.

#### CHILD STAGE 2

14. In the last 30 days (12 months), did you ever cut the size of your children's meals because there wasn't enough money for food?
15. In the last 30 days (12 months), did your children ever skip meals because there wasn't enough money for food?
16. [IF YES TO QUESTION 15, ASK]  
If using the 30 day version: In the last 30 days, how often did this happen?  
If using the 12 month version: How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
17. In the last 30 days (12 months), were your children ever hungry but you just couldn't afford more food?
18. In the last 30 days (12 months), did any of your children ever not eat for a whole day because there wasn't enough money for food?

## USDA Food Security Survey Module: Six-Item Short Form

1. The food that I bought just didn't last, and I didn't have money to get more. Was that often, sometimes, or never true for you in the last 30 days (12 months)?
2. I couldn't afford to eat balanced meals. Was that often, sometimes, or never true for you in the last 30 days (12 months)?
3. In the last 30 days (12 months), did you ever cut the size of your meals or skip meals because there wasn't enough money for food?
4. [IF YES TO QUESTION 3, ASK]  
If using the 30 day version: In the last 30 days, how many days did this happen?  
If using the 12 month version: How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
5. In the last 30 days (12 months) did you ever eat less than you felt you should because there wasn't enough money for food?
6. In the last 30 days (12 months), were you ever hungry but didn't eat because there wasn't enough money for food?

### Housing Insecurity and Homelessness:

There is widespread debate over the best ways to measure housing security, and homelessness in particular.<sup>9</sup> One reason is that housing security takes somewhat different forms depending on age and circumstances. Noted researcher Paul Toro recently remarked that the phrase “homeless college student” seems like “a contradiction in terms”.<sup>10</sup> Consider that couchsurfing may look different for an 11-year-old whose parents have passed away as compared to a 40-year-old with relationship troubles who is staying with friends while he figures out his next move. When it comes to serving homeless youth, a more inclusive definition of housing security is preferable. But given persistent stereotypes of undergraduates that undergird resistance to addressing housing for that population, the Wisconsin HOPE Lab utilizes a narrower approach to measurement, relying on a series of questions adapted from the national Survey of Income and Program Participation (SIPP) Adult Well-Being Module to measure students' access to and ability to pay for safe and reliable housing.<sup>11</sup> For measuring homelessness among college students, we recommend Crutchfield and Maguire's (2017) instrument that is based on definitions of homelessness developed by the U.S. Department of Housing and Urban Development and the U.S. Department of Education.<sup>12</sup>

For housing insecurity and homelessness, we recommend surveying students on their experiences both in the past 30 days and in the past 12 months. Students who indicate housing insecurity or homelessness in the past 30 days may be more insecure than students who indicate insecurity only in the past 12 months. Surveying students on both time periods provides a more nuanced measure of student need.

## Housing Insecurity

1. In the past 30 days (12 months), was there a rent or mortgage increase that made it difficult to pay?<sup>13</sup>
2. In the past 30 days (12 months), did you not pay or underpay your rent or mortgage?
3. In the past 30 days (12 months), did you not pay the full amount of a gas, oil, or electricity bill?
4. In the past 30 days (12 months), have you moved two times or more?
5. In the past 30 days (12 months), did you move in with other people, even for a little while, because of financial problems?
6. In the past 30 days (12 months), did you “live with others beyond the expected capacity of the house or apartment”?

## Homelessness

1. Since starting college, have you ever been homeless?
2. In the past 30 days (12 months), have you slept in any of the following places? Please check all that apply?
  - a. Campus or university housing
  - b. Sorority/fraternity house
  - c. In a rented or owned house, mobile home, or apartment (alone or with roommates or friends)
  - d. In a rented or owned house, mobile home, or apartment with my family (parent, guardian, or relative)
  - e. At a shelter
  - f. In a camper
  - g. Temporarily staying with a relative, friend, or couch surfing until I find other housing
  - h. Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)
  - i. In transitional housing or independent living program
  - j. At a group home such as halfway house or residential program for mental health or substance abuse
  - k. At a treatment center (such as detox, hospital, etc.)
  - l. Outdoor location such as street, sidewalk, or alley, bus or train stop, campground or woods, park, beach, or riverbed, under bridge or overpass
  - m. In a closed area/space with a roof not meant for human habitation such as abandoned building, car or truck, van, RV, or camper, encampment or tent, or unconverted garage, attic, or basement

\*\*\* Note that students are counted as homeless if they respond YES to any one of questions 1 or 2d-2m.

When assessing food insecurity, housing insecurity, and homelessness, it can be useful to also ask additional questions to help contextualize the responses. For example, the survey might include information about whether a student works, receives financial aid, and/or accesses supports such as food from campus food pantries. Examples of those questions and the sorts of analyses that could be conducted can be found in the Wisconsin HOPE Lab reports and books listed at the end of this guide.

## Gathering Data on Basic Needs Security

College transcripts and financial aid applications provide little information about the security of students' basic needs. While the Free Application for Federal Student Aid (FAFSA) asks some questions about homelessness, the results greatly underestimate the number of students experiencing that condition since only students who complete the FAFSA and paperwork or an interview verifying their homelessness are counted.<sup>14</sup> Instead, student surveys are the best way to assess how many students experience food and/or housing insecurity. Here are responses to common questions about how to conduct those surveys:<sup>15</sup>

***Q: What is involved in fielding a basic needs security survey, and who should do it?***

**A:** Successfully fielding a high-quality survey requires asking good questions, identifying appropriate samples, recruiting students and gaining their participation, analyzing data, and writing up the results. The person conducting the survey needs to have access to accurate contact information for students, preferably including more than one email address. It is also important to have resources to offer incentives to students for participation, and the scientific knowledge required to execute the steps described above. For these reasons, the Institutional Research (IR) office is the best-equipped to lead these survey efforts, along with professional researchers, and students and staff should endeavor to work with the IR office if possible.

***Q: What legal permissions are needed in order to do a basic needs security survey?***

**A:** In order to protect students, the approval of each participating institution's Institutional Review Board (IRB) may need to be secured before surveys may be conducted. Unfortunately, every IRB makes its own rules and has its own application and review procedures.

If the survey is led by an employee of the college or university in order to better serve students, it may not be necessary to get students' consent or IRB approval, but if the data is being collected for public reporting, or for more general research purposes, then students' consent may need to be obtained and all proper legal channels utilized.

Therefore, we strongly recommend that before initiating a basic needs security survey, contact each participating college or university's IRB and ask whether it is necessary to apply for approval. Be sure to provide the following information:

- The research team's intent to survey students.
- The goal(s) of the survey—is it strictly to improve services for students at the institution, or does the research team intend to use the data to generalize beyond the institution, building knowledge in the field?
- Whether and how the research team intends to share the results, for example, in an internal campus report or in a published research paper.

**Q: Which students—and how many students—should be included in a basic needs security survey?**

**A:** If the basic needs security assessment aims to describe the prevalence of food and housing insecurity on campus, then the full population of enrolled students should be included in the survey. Utilize a list of enrolled students provided by the institution rather than recruiting students using tables on campus or other methods driven by convenience. This is critical to ensuring that students in the survey are representative of students on campus. The assessment could focus on a specific group—for example, undergraduates only, rather than all students—but it should be administered to everyone in that group.

Of course, where resources are limited, focusing on a smaller sample of students may be necessary. Using a smaller sample requires additional expertise, however, and in particular it demands additional information upfront—and time to devote to the sampling process—so that the resulting sample is useful.<sup>16</sup> Simply sampling a smaller group of students at random is inadvisable, since the resulting group may include too few members of key subgroups. Instead, identify the groups of students who might be at risk of basic needs insecurity, and then draw samples within those groups. This is called a “stratified sampling strategy” and the samples should be proportional and drawn at random.

*Example: A large university wishes to survey just 1,000 of its students and is especially concerned about Pell Grant recipients (40% of its students). The researcher must first divide the total student body into two groups (Pell recipients and non-Pell recipients). Next, the researcher should randomly select 400 Pell recipients and 600 non-Pell recipients in order to ensure that the proportion of Pell recipients in the survey sample matches the proportion in the total student body.*

If only a sample of students will be surveyed, rather than all students, then it is important to ensure that enough students are included so that the sample can be used to accurately represent the prevalence of basic needs security on campus. One major determinant of how many people the survey should include is the expected response rate. If the research team can convince most

students to take the survey, then it can be sent to fewer people. But if, like at many colleges and universities, expected response rates are low, then the research team will need to survey many students. In the next section we discuss ways to maximize response rates. Generally, without sizable incentives to pay to students and resources to track down those who do not answer, the research team should anticipate low response rates—around 5 to 10 percent.

Another consideration is how confident the research team wants to be in estimating the prevalence of basic needs security on campus. More certainty requires more students in the survey. For example, if there are 10,000 students on campus and the research team wants to be at least 95% sure that the estimate is on target, then aim to get at least 400 students to take the survey – which likely requires contacting at least 4,000 students.<sup>17</sup>

**Q: How should we recruit students to a basic needs security survey?**

**A:** It can be very difficult to get students to take surveys, and especially surveys administered online—which are often the only feasible option given scarce resources. Since estimates of basic needs security on campus depend on who takes the survey, it is important to do everything possible to maximize response rates—in other words, to get surveyed students to answer the questions.

But what researchers cannot do, without risking biasing the results, is to recruit for the survey by talking about hunger and homelessness on campus and urging people to take the survey because they might be at risk. This will likely lead to results that over-state how common these issues are on campus. For example, avoid:

- Engaging in surveys in or near programs focusing on food insecurity, such as a campus food pantry.
- Calling out food or housing insecurity in recruitment materials, such as hashtags or phrases calling out student hunger.
- Advertising surveys as part of campus-wide initiatives to address basic needs insecurity.

Instead, the research team should administer the survey as an effort to generally understand how students are doing, and treat every student the same when fielding the survey. When designing a successful recruitment process, include the following steps:

1. **Design an effective invitation to the survey.** At the Wisconsin HOPE Lab, we appeal to the student’s sense of social responsibility to their peers and to their college (see Sample

## KEY TERMS

**Response rate** – the number of people who answered a survey divided by the number of people who received an offer to take the survey.

**Bias** – when a sample statistic is systematically different than the actual value in the overall population. For example, a homelessness statistic from a college survey will be biased if the students answering the survey are more likely to be homeless than students in the overall college population.

Survey Recruitment Letter in Appendix A1), helping motivate them to participate. Campus basic needs assessments are often undertaken as a component of a larger strategy to help students graduate. When students understand that taking the survey will directly inform that strategy and improve the lives of their friends and colleagues, they are more likely to respond.

2. **Provide incentives.** What will students receive as compensation for doing the survey? Ideally, every student would be offered a little money upfront and a payment for doing the survey, but this is often impossible. Instead, consider raffling off gift cards, iPads, etc. Check with each participating campus's Institutional Research office for ideas, and reach out to the institution's Foundation for support. The information used from the basic needs security survey can be successfully leveraged for fundraising purposes, and so the Foundation may consider it a good investment to support efforts to get students' responses.

**Q: How should we administer a basic needs security survey?**

**A:** Surveys can be administered in a variety of ways, including by phone, via mail, or in person. Each form of administration has its own mix of benefits and drawbacks in terms of relative data quality, level of student response, and cost. Web-based internet surveys are generally the most effective and inexpensive way to gather student data for campus basic needs security assessments. Online survey software such as Qualtrics or Survey Monkey can simplify both survey creation and administration and are often free to college campuses. For more information about the advantages and limitations of web-surveys, as well as of other forms of survey administration, we refer the reader to this excellent and practical guide by Don Dillman and colleagues on survey design and administration.<sup>18</sup>

**Q: How should we analyze and report on the results of a basic needs security survey?**

**A:** When students finish taking the survey, prepare to look at the data. Begin by looking to see how many students responded, and in particular how many responded to the questions on food and housing insecurity (versus other questions included on the survey). Then, proceed to analyze the data in the following manner:

**Step 1: Look at who took the survey.**

Are the respondents similar to other students on campus? Find ways to compare them, for example by checking their self-reported demographic and academic characteristics against campus averages. Be sure to focus on attributes that matter for how students fare in college—things like gender, race, age, marital status, number of children, Pell-eligibility status, and first generation status, as well as academic information such as enrollment level and year in school. If some groups are over-represented or under-represented in the survey's sample, make a note of that. It

may be possible to use “survey weights” to adjust the results so that they are more representative of the full student body, and on-campus experts on the faculty or staff might be able to help do that.

### Step 2: Calculate rates of food and housing insecurity

Along with the Food Security Survey Module, the USDA provides a simple methodology for determining survey respondents’ levels of food security. To calculate a raw score, simply count the number of questions that a student answers affirmatively (questions with choices of “often true”, “sometimes true”, and “never true” should be counted as a “Yes” if students answer “often” or “sometimes.” For questions that ask about the frequency of an occurrence, answers of 3 days or more should be counted as “Yes” in the 30-day version, and answers of “almost every month” and “some months but not every month” should be counted as “Yes” in the 12-month version. Translate the raw score into food security levels as follows:<sup>19</sup>

Raw Score				
18 item (children present)	18-item (no children present)	10-item	6-item	Food security level
0	0	0	0	High
1-2	1-2	1-2	1	Marginal
3-7	3-5	3-5	2-4	Low
8-18	6-10	6-10	5-6	Very Low

Students are counted as housing insecure if they answered “Yes” to any of the six housing insecurity questions above. Similarly, students are counted as homeless if they answered affirmatively to any of questions 1 or 2d–2m of the homelessness questions. Researchers should calculate food and housing insecurity status for both the full sample and by important demographic subgroups, e.g. race, first generation status, Pell receipt, etc.

### Step 3: Examine the relationship between other student issues and food and housing insecurity

Do students who are food-insecure receive financial aid? Do they work? How often are homeless students finding that they are financially stressed? These are the sorts of questions the research team can examine next based on which additional questions were included in the survey.

#### **Step 4: Prepare the report**

As the research team writes up the results from the campus basic needs security survey, be sure to include details on how the survey was conducted - information on who was surveyed, what incentives were provided, etc. - these things are critical for readers trying to understand the results. Include information not only on how many students responded, but how many were surveyed, and include the results of the analysis on how those groups differ.

The report itself may wish to reference prior studies of basic needs security at other institutions, and the Wisconsin HOPE Lab is maintaining a useful compilation of studies for that purpose. Go to our website to find the [“annotated bibliography”](#) and include information for readers on how the results compare to results at other comparable institutions.

#### ***Q: How can we effectively disseminate the results of a basic needs security survey?***

**A:** Surveys of student food and housing insecurity can be effective tools for motivating federal, state, and institutional policy changes to help struggling students. For this reason, it is important to ensure that survey results reach a wide audience. Successful dissemination strategies include:

- Sharing results with key audiences on campus – administration, student support services offices, financial aid, and student government are well-positioned to address food and housing issues.
- Release to the media – prepare a press release and contact education reporters for local outlets. Sharing via social media accounts (Twitter, Facebook, etc.) can also be effective strategies for reaching a wider audience.
- Publish – studies published in academic journals reach a large community of researchers who can learn from, and build on, survey findings.

### **Evaluating Programs to Address Basic Needs Security**

With growing recognition of the prevalence of student food and housing insecurity, institutions and communities have created numerous services to help students become more secure. To date, practitioners have had little guidance in these efforts because few if any food and housing programs have been rigorously evaluated. Moving forward, the program development process must include high-quality evaluation to ensure that students receive the help they need and that institutions are effectively investing their scarce resources.

To know whether a program “works,” institutions must be confident that it causes meaningful improvements in student outcomes. However, establishing a causal link in college settings can be difficult because different types of students receive different services. An evaluator comparing the outcomes of program recipients to those of non-recipients may be measuring differences in

the students themselves and not program impacts. Consider an evaluation of a cafeteria voucher program. An evaluator comparing voucher recipients to non-recipients is likely to find that recipients measure lower on indices of food security and academic achievement. This does not mean that the vouchers have a negative impact on students, however, because non-recipients are not similar to recipients. Because vouchers are need-based, recipients' worse outcomes are likely due to their financial circumstances, not the vouchers themselves. Due to the inherent challenges in evaluating college programs, high-quality research design is essential for determining whether a food or housing program causes improved student outcomes. While there are multiple methods for evaluating effectiveness, all high-quality studies compare the outcomes of students receiving services to a comparison group, a similar set of students who do not receive the service. Without a comparable control group, evaluations are likely measuring the impacts of external factors, such as financial need, rather than the impact of the service itself, as in the voucher example above.

## KEY TERMS

**Causality** – The relationship between cause and effect; in other words, does a program or service cause the observed changes in outcomes?

**Comparison Group** – a group of students who did not participate in the program or receive the service being evaluated but are similar to those who did.

High-quality evaluation designs are either experimental or quasi-experimental. Experimental designs randomly assign students into either treatment (recipient) or control groups, whereas quasi-experimental designs attempt to identify a control group without using random assignment. Typical quasi-experimental designs use “before and after” approaches that compare changes in the outcomes of recipients in relation to the changes in outcomes of a similar group of non-recipients. While evaluators often prefer these designs due to concerns regarding random assignment (see below), college environments limit their usefulness. Typically, colleges offer services to all students who request them or on a first-come first-served basis. Either method can prevent identification of a satisfactory control group. Again, consider the example of cafeteria vouchers. For programs that serve all comers, students who request vouchers likely have greater financial need than those who do not. For first-come first-served programs, students who are quick to sign up for vouchers may be more motivated or have better support than those who are slower, which would lead to better outcomes regardless of the efficacy of the vouchers. In addition, colleges will often introduce several, related programs at the same time. Before and after approaches are unable to differentiate the impacts of these services. For example, if a cafeteria voucher was rolled out at the same time as a housing program and a food pantry, a before and after approach would measure the combined impacts of all the programs but could not measure the impact of the vouchers themselves.

## Embedding Opportunistic, Small-Scale Experiments

Experimental evaluation designs using randomized controlled trials (RCTs) provide the best possible evidence of program effectiveness and can be simple and inexpensive. A recent U.S. Department of Education guide illustrates how experiments featuring random assignment can be easily implemented in school environments.<sup>20</sup> What follows is a short overview of this guide's recommendations.

Experiments are the gold standard for determining program effectiveness because, when done properly, they ensure that the students who receive the service and those who do not are as similar as possible. Using the cafeteria voucher example, in an RCT the evaluator would randomly assign vouchers among a group of students with similar characteristics, financial need in particular, and academic achievement.

Sometimes college administrators, faculty, and staff are uncomfortable with RCTs due to concerns regarding fairness and expense. Most common of those concerns is whether it is ethical to deny a service to students who need it. Without knowing whether that service actually works, however, we cannot know whether we are preventing students from using something that would help them. Also, random assignment can be a fair method for distributing these services when small-scale pilots cannot serve all possible recipients. Another common concern is cost. However, an RCT does not have to be costly if colleges can easily identify participants and already collect the necessary data. Implementing an RCT can be simple and, most importantly, will provide the best evidence for whether a service helps students. RCTs involve several steps:

1. **Find a research partner.** Colleges that would like to conduct an RCT but lack staff with the requisite knowledge should first find a research partner that can provide design guidance and data and analytics expertise. HEART researchers can be hired to provide this expertise.
2. **Identify the students who will be in the study.** For food and housing programs, these students will typically have financial need.
3. **Conduct and monitor random assignment.** Random-number generators can be found in spreadsheet or statistical programs. Research partners can help with randomization.
4. **Collect data.** These data may be from administrative records, such as retention or GPA, or from survey responses to questions about hunger, homelessness, and other material need.
5. **Analyze data.** Analysis of an RCT can be very simple because advanced statistical knowledge is unnecessary when a high-quality control group is already identified.
6. **Share the results.** Research will have the most impact when it is shared widely, particularly with administrators and other policymakers who make decisions regarding services and funding.

## More Support

We hope that these resources prove useful in your efforts to address basic needs security in higher education. Here are several additional supports for your work:

- For a sample survey of college students' basic needs insecurity, please see Appendix B.
- If you require additional assistance with surveys or in constructing more rigorous program evaluations, please reach out to Dr. Sara Goldrick-Rab ([sgr@temple.edu](mailto:sgr@temple.edu)) for help.
- To aid in producing comparisons between institution-specific data and national trends, the Wisconsin HOPE Lab has published an [annotated bibliography](#) of extant studies to date.
- For assistance in developing a campus food pantry, please contact Clare Cady ([clare.cady@temple.edu](mailto:clare.cady@temple.edu)) of Temple University and the College and University Food Bank Alliance.

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## Wisconsin HOPE Lab Books and Reports Using Food and Housing Insecurity Data

- Goldrick-Rab, S. (2016). *Paying the Price: College Costs, Financial Aid, and the Betrayal of the American Dream*. Chicago, IL: University of Chicago Press.
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## Appendix A: Basic Needs Security Research Guide Sample Survey Recruitment Letter

### [STUDY NAME] Cover and Reminder Letter

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[DATE]

Dear [fill student first name],

We need your help. College is expensive and getting harder to afford every day. We need to know more about the challenges that you face. In order to create colleges that can help students like you overcome these challenges and finish college, we are conducting the [STUDY NAME] on behalf of [ORGANIZATION NAME] and want you to participate!

We have included a link to a questionnaire for you to fill out and share your experiences with us. You are not obligated to participate, but we do hope that you will help!

[SURVEY LINK]

To thank you for your help, after you complete the survey you can choose to enter a random drawing to receive one of ten \$100 awards that will be given to students at your college.

Thank you in advance for your participation! If you have any questions about this study, please call me at [SURVEY CONTACT'S PHONE NUMBER].

Sincerely,

[SURVEY CONTACT NAME, TITLE, AND CONTACT INFORMATION]

## Appendix B: Basic Needs Security Research Guide Sample Survey

### I. Your college experience

*Let's begin by learning about how you are experiencing college.*

*Please note that the survey refers to both undergraduate and graduate education as "college".*

- Q1. As of today, which college or university do you attend? (answers will be by dropdown options)
- Q2. As of today, are you attending college full-time or part-time?
1. Full-time (at least 12 credits)
  2. Part-time (less than 12 credits)
- Q3. As of today, are you an undergraduate or graduate student?
1. Undergraduate
  2. Graduate

#### **If answered "Undergraduate" to Q3, then**

- Q4. How many years have you been in college?
- Q5. Thinking about the past academic year, which of the following best describes your grades?
1. A
  2. B
  3. C
  4. D
  5. F
  6. No grade or don't know

## II. How you pay for college

*Transition text: Next let's talk about how you are working to make ends meet.*

Q6. Which of the following ways do you pay for the expenses associated with attending college? (check all that apply)

1. A work-study job
2. A job that isn't work-study (including self-employment)
3. Pell Grant
4. Other grants from the federal or state government
5. Other grants from my college or university
6. Student loans
7. Stipend or fellowship
8. Tuition remission
9. Help from family or friends
10. Savings
11. Credit cards
12. Employer support
13. Other \_\_\_\_\_

### If select 1 or 2 for Q6

Q7. About how many hours do you generally work each week (include all your jobs)?

Q8. Thinking about all of your jobs, on average, about how much do you earn per hour?

1. \$7.25/hour
2. \$7.26 - \$10/hour
3. \$10.01 - \$15/hour
4. More than \$15/hour

### If didn't select 1 or 2 for Q6, then

Q9. **In the past 30 days** have you been looking for work?

1. Yes
2. No

*Transition: Now we'd like to learn a bit about what your life is like these days.*

### III. Your economic experiences

Q10. **In the past 12 months**, did you experience any of the following?

1. Not pay or underpay your rent or mortgage?
2. Receive a summons to appear in housing court?
3. Not pay the full amount of a gas, oil, or electricity bill?
4. Borrow money from friends or family to help pay bills?
5. Have an account default or go into collections?
6. Move in with other people, even for a little while, because of financial problems?
7. Live with others beyond the expected capacity of the house or apartment?

Q11. In the past 12 months, was there a rent or mortgage increase that made it difficult to pay?"

1. Yes
2. No

Q12. **In the past 12 months**, how many times have you moved?

Q13. **In the past 12 months**, did you leave your household because you felt unsafe?

1. Yes
2. No

Q14. How safe do you feel where you currently live?

1. Not at all safe
2. A little bit safe
3. Somewhat safe
4. Very safe
5. Extremely safe

Q15. **In the past 12 months**, have you ever been homeless?

Q16. **In the past 12 months**, did you couch surf – that is, moved from one temporary housing arrangement to another because you had no other place to live?

Q17. **In the past 12 months**, have you slept in any of the following places? Please check all that apply?

1. Campus or university housing
2. Sorority/fraternity house
3. In a rented or owned house, mobile home, or apartment (alone or with roommates or friends)
4. In a rented or owned house, mobile home, or apartment with my family (parent, guardian, or relative)
5. At a shelter
6. In a camper
7. Temporarily staying with a relative, friend, or couch surfing until I find other housing
8. Temporarily at a hotel or motel without a permanent home to return to (not on vacation or business travel)
9. In transitional housing or independent living program
10. At a group home such as halfway house or residential program for mental health or substance abuse
11. At a treatment center (such as detox, hospital, etc.)
12. Outdoor location such as street, sidewalk, or alley, bus or train stop, campground or woods, park, beach, or riverbed, under bridge or overpass
13. In a closed area/space with a roof not meant for human habitation such as abandoned building, car or truck, van, RV, or camper, encampment or tent, or unconverted garage, attic, or basement

Q18. Is your home in a public housing project, owned by a local housing authority or other public agency?

1. Yes
2. No

Q19. Do you receive a public housing voucher, such as Section 8, to subsidize the cost of private housing?

1. Yes
2. No

Q20. Do you have any biological, adopted, step or foster children who live in your household?

1. Yes
2. No

**If yes to Q20, then:**

Q21: Please indicate the number of biological, adopted, step, or foster children who live in your household.

Q22. These next questions are about the food you have eaten in your household **in the last 30 days**, and whether you were able to afford the food you need.

**In the last 30 days**, were the following situations often true, sometimes true, or never true for you?

Q22a. "I worried whether my food would run out before I got money to buy more." Was that often true, sometimes true, or never true for you in the last 30 days?

- a. Often true
- b. Sometimes true
- c. Never true

Q22b. "The food that I bought just didn't last and I didn't have money to get more." Was that often, sometimes, or never true for you in the last 30 days?

- d. Often true
- e. Sometimes true
- f. Never true

Q22c. "I couldn't afford to eat balanced meals." Was that often, sometimes, or never true for you in the last 30 days?

- g. Often true
- h. Sometimes true
- i. Never true

**If respondent answers “Often true” or “Sometimes true” for any one of questions Q22a, Q22b, or Q22c, then:**

Q22d. **In the last 30 days**, did you ever cut the size of your meals or skip meals because there wasn't enough money for food?

1. Yes
2. No

**If yes, then:**

Q22e. **In the last 30 days**, how often did this happen (you cut the size of your meals or skipped meals because there wasn't enough money for food)?

Q22f. **In the last 30 days**, did you ever eat less than you felt you should because there wasn't enough money for food?

1. Yes
2. No

Q22g. **In the last 30 days**, were you ever hungry but didn't eat because there wasn't enough money for food?

1. Yes
2. No

Q22h. **In the last 30 days**, did you lose weight because there wasn't enough money for food?

1. Yes
2. No

**If respondent answers “Yes” to any one of questions Q22d, Q22f, Q22g, or Q22h, then:**

Q22i. **In the last 30 days**, did you ever not eat for a whole day because there wasn’t enough money for food?

1. Yes
2. No

**If yes, then:**

Q22j. **In the last 30 days**, how often did this happen (you did not eat for a whole day because there wasn’t enough money for food)?

**If respondent answers “Yes” to Q20 (they have at least one child who lives in the household)**

*The next questions are statements that people have made about the food situation of their children.*

Q22k. “I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food.” Was that often, sometimes, or never true for you in the last 30 days?

1. Often true
2. Sometimes true
3. Never true

Q22l. “I couldn’t feed my children a balanced meal, because I couldn’t afford that.” Was that often, sometimes, or never true for you in the last 30 days?

1. Often true
2. Sometimes true
3. Never true

Q22m. “My child was not eating enough because I just couldn’t afford enough food.” Was that often, sometimes, or never true for you in the last 30 days?

1. Often true
2. Sometimes true
3. Never true

**If respondent answered “Often true” or Sometimes true” for any one of questions Q22k, Q22l, or Q22m, then:**

Q22n. **In the last 30 days**, did you ever cut the size of your children’s meals because there wasn’t enough money for food?

1. Yes
2. No

Q22o. **In the last 30 days**, did your children ever skip meals because there wasn’t enough money for food?

1. Yes
2. No

**If yes, then:**

Q22p. **In the last 30 days**, how often did this happen (your children skipped meals because there wasn’t enough money for food)?

Q22q. **In the last 30 days**, were your children ever hungry but you just couldn’t afford more food?

1. Yes
2. No

Q22r. **In the last 30 days**, did any of your children ever not eat for a whole day because there wasn’t enough money for food?

1. Yes
2. No

Q23. Do you purchase a college meal plan?

1. Yes
2. No

**If yes to Q23, then:**

Q24. What type of meal plan do you have?

1. I purchase a set number of meals
2. I purchase flexible points (or dining hall dollars) that can be used to purchase meals
3. I purchase a combination of meals and points
4. Other – please specify

Q25. How many meals does your meal plan provide each week?

1. 0-11
2. 12-15
3. 16 or more

Q26. How many meals do you think you eat in the dining hall in a typical week?

- a. I never plan to eat there
- b. 1-5 meals per week
- c. 6-10 meals per week
- d. 11-15 meals per week
- e. 16 or more meals per week

Q27. **In the past 12 months**, did you ever not eat or eat less than you felt you should during winter and spring breaks because the dining halls were closed?

1. Yes
2. No

**Only if respondent answered that they had stayed in “Campus or university housing” for Q17**

Q28. Does your college have on-campus residence halls?

1. Yes
2. No

Q29. **In the last 12 months**, have you ever not known where you would stay during winter/spring breaks because the on-campus residence halls were closed?

1. Yes
2. No

Q30. **In the past 12 months**, were there times when you stayed in someone else’s room in an on-campus residence hall because you didn’t have anywhere else to sleep?

1. Yes
2. No

Q31. **In the past 12 months**, were there times you stayed in someone else’s room in an on-campus residence hall but had to leave because of administration rules?

1. Yes
2. No

Q32. **In the past 12 months**, from which of the following programs did you receive assistance? (check Yes/No)

1. SNAP (food stamps)
2. WIC (nutritional assistance for pregnant women and children)
3. TANF (public cash assistance; formerly called ADC or ADFC)
4. SSI (supplemental security income)
5. SSDI (social security disability income)
6. Medicaid or Public health insurance
7. Child care assistance
8. Unemployment compensation/insurance
9. Utility assistance (e.g. help paying for heat or water)
10. Housing assistance
11. Transportation assistance
12. Tax refunds (including EITC)
13. Veterans benefits (Veteran’s Administration benefits for a servicemen’s, widow’s, or survivor’s pension, service disability or the GI bill)

#### IV. About you

*Transition: Finally, just a few more questions about yourself.*

Q33. At birth, what sex were you assigned on your birth certificate?

1. Female
2. Male

Q34. Currently, how do you describe yourself? (check all that apply)

1. Male
2. Female
3. Transgender
4. Do not identify as female, male, or transgender.

Q35. Do you consider yourself to be:

1. Heterosexual or straight
2. Gay or lesbian
3. Bisexual
4. Not sure or neither heterosexual, gay, lesbian, or bisexual

Q36. In what year were you born?

Q37. Are you a U.S. citizen or permanent resident?

Q38. Have you ever served in the U.S. Armed Forces, military Reserves, or National Guard?  
(Please select the answer that is most applicable)

Q39. How do you usually describe your race and/or ethnicity? (Select all that apply)

1. White or Caucasian
2. African American or Black
3. Hispanic or Latino
4. American Indian or Alaskan Native
5. Middle Eastern or North African or Arab or Arab American
6. Southeast Asian
7. Pacific Islander or Native Hawaiian
8. Other Asian or Asian-American
9. Other (please specify)
10. Not applicable-I would prefer not to identify my race/ethnicity

Q40. What is the highest level of education completed by either of your parents and/or guardians?

1. Eighth grade or lower
2. Between 9th and 12th grade (but no high school diploma)
3. High school diploma
4. GED
5. Some college (but no college degree)
6. College certificate or diploma
7. Associate's degree
8. Bachelor's degree
9. Graduate degree
10. Don't know

Q41. **In the last year**, did a parent or guardian claim you as a “dependent” for tax purposes?

Q42. Do you have any of the following disabilities or medical conditions? (Mark Yes or No for each item)

1. Learning disability (dyslexia, etc.)
2. Attention deficit hyperactivity disorder (ADHD)
3. Autism spectrum disorder
4. Physical disability (speech, sight, mobility, hearing, etc.)
5. Chronic illness (cancer, diabetes, autoimmune disorders, etc.)
6. Psychological disorder (depression, etc.)
7. Other

Q43. How would you describe your current relationship status?

1. Single
2. In a relationship
3. Married or domestic partnership
4. Divorced
5. Widowed

Q44. Have you ever been in foster care?

1. Yes
2. No

Q45. Thinking back to the last full week that began on a Monday and ended on a Sunday, for about how many total hours and minutes did you spend doing each of the following activities?

If you did not do an activity during the last full week, please enter “0” hours and “0” minutes.

1. Q34a. Working for pay
2. Q34b. Commuting to or from work or school
3. Q34c. Sleeping
4. Q34d. Leisure activities (for example, spending time with friends, watching TV or movies, using the internet for leisure, talking or texting on the phone)
5. Q34e. Taking care of a child or adult family member
6. Q34f. Attending college classes, labs, or discussion sections either in person or online
7. Q34g. Preparing for class by yourself or with others by studying, reading, writing, rehearsing, or doing other academic activities