

# Toward a framework for assessing managerial intentions: A review of support for market managers' engagement with nutrition incentive programs

Cody Gusto<sup>a\*</sup> and John M. Diaz<sup>b</sup>  
University of Florida

Submitted June 3, 2020 / Revised September 1 and October 6, 2020 / Accepted October 8, 2020 /  
Published online December 10, 2020

Citation: Gusto, C., & Diaz, J. M. (2020). Toward a framework for assessing managerial intentions: A review of support for market managers' engagement with nutrition incentive programs. *Journal of Agriculture, Food Systems, and Community Development*, 10(1), 151–169.  
<https://doi.org/10.5304/jafscd.2020.101.026>

Copyright © 2020 by the Authors. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC-BY license.

## Abstract

The last several years have seen a rapid expansion in the number of nutrition incentive programs implemented at farmers markets. While there has been increased attention paid to these efforts in terms of influencing consumer health indicators, there has been less focus on the farmers market managers responsible for implementing and administering the programs. To date, most studies that have addressed manager perspectives have been qualitative case-studies where findings may have limited generalizability to other market contexts. In this integrative review of literature, we examine the current state of both scholarly and practitioner literature regarding market manager perspectives

on nutrition incentive programming. Given the identification of critical gaps and salient factors in efforts to promote nutrition incentive programming at markets, we call for the advancement of a framework that may be shared between organizations. This framework will capture essential data that inform market managers' behavioral intention towards the nutrition incentive programs they currently administer. We propose that the development of a comprehensive survey tool designed to capture managerial intentions may ultimately prompt multistate, cross-organizational collaboration on improving nutritional program outcomes at farmers markets.

## Keywords

Literature Review, Barriers, Farmers Markets, Food Access, Market Managers, Nutrition Incentives, SNAP, Behavioral Intentions

## Introduction

Farmers market managers in the United States increasingly leverage federal funds to offer Supple-

---

<sup>a\*</sup> *Corresponding author:* Cody Gusto, Graduate Assistant, Department of Agricultural Education and Communication, University of Florida; Rolfs Hall; Gainesville, FL 32611 USA; [cgusto@ufl.edu](mailto:cgusto@ufl.edu)

<sup>b</sup> John M. Diaz, Assistant Professor, Department of Agricultural Education and Communication, University of Florida; 1200 North Park Road; Plant City, FL 33563 USA; [john.diaz@ufl.edu](mailto:john.diaz@ufl.edu)

mental Nutrition Assistance Program (SNAP)-based incentive programs (SBIPs) to help resource-limited shoppers afford fresh fruits and vegetables (FFVs) at local markets through price matching (Misiaszek et al., 2020). While there are a variety of nutrition incentive program models, many adopt the “Double Up” framework practiced by early incentive pilot programs (Durward et al., 2018). This model typically involves an internal currency system at farmers markets. An internal currency system may involve the circulation of chips, tokens, paper notes, or some other object to be used as a medium of exchange exclusively within the market space (Oberholtzer, Dimitri, & Schumacher, 2012). A SNAP shopper interested in purchasing FFVs can swipe their Electronic Benefits Transfer (EBT) card to exchange the benefit amount for a predetermined match amount in some internal currency (Oberholtzer, Dimitri, & Schumacher, 2012). Encouraged by successful outcomes through related SBIP models, federal support for these programs continues to grow. Title IV reauthorizations with the 2018 Agriculture Improvement Act (commonly known as the farm bill) have boosted the continued expansion of SBIPs across the U.S. (U.S. Department of Agriculture Economic Research Service [USDA ERS], 2019). The bill authorized permanent funding of approximately US\$50 million per year to the Gus Schumacher Food Insecurity and Nutrition Incentive Program (GusNIP) to match funds for projects that incentivize the point of sale purchase of FFVs for SNAP recipients. This financial support has stimulated a complex and continually evolving organizational ecosystem, a phenomenon that is addressed in more detail in the organizational literature review section.

It is expected that the proliferation of nutrition incentive programming around the country is due to the concomitant rise of both academic interest in the subject, as well as practitioner-based efforts to evaluate programmatic outcomes. Approaches in the academic literature range from nutritional impact modeling on consumers to quasi-experimental analysis of FFV purchase and consumption trends (Dimitri, Oberholtzer, Zive, & Sandolo, 2015; Olsho et al., 2015). Practitioner literature (e.g., organizational evaluation reports) published

for public consumption predominately focuses on overall market sales, produce consumption rates, and the discrete impact nutrition incentives have on SNAP redemption rates. Public organizational reports often leverage economic assessment standards (e.g., IMPLAN), models to assess changes in consumers’ nutritional knowledge, or frameworks designed to determine a market’s characteristics (e.g., Rapid Market Assessments) (Anderson, Blackwell, Gerndt, & Martin, 2015; Dimitri & Oberholtzer, 2015; Lev, Brewer, & Stephenson, 2008).

While SBIPs have been analyzed through distinct orientations and methodological frameworks in both academic and organizational literature, many of these assessments focus on consumer-driven outcomes (e.g., improved economic access or increased consumption of FFVs). This collective emphasis skew is expected, considering that SNAP shoppers are the end-state subjects of incentive interventions. As the nutrition incentive field advances, however, researchers and practitioners alike are recognizing the importance of exploring the views of farmers, vendors, and market managers relative to their general attitudes towards SBIPs and their perceptions of the barriers that engagement with SBIPs presents (Misiaszek et al., 2020; Payne et al., 2013). Market managers remain an under-researched subpopulation despite the critical role they play in the success and sustainability of SBIPs at markets (Hasin & Smith, 2018). Where market managers *have* been the object of study, researchers have either examined their perspectives in relation to a different behavior (e.g., offering EBT technology at markets) or have only explored their views through exploratory case studies where generalizability is limited (Gusto, Diaz, Warner & Monaghan, 2020; Hecht et al., 2019; Roubal, Morales, Timberlake, & Martinez-Donate, 2016). In this integrative review of academic and organizational literature, we examine these and other related tendencies to frame our purpose and objectives as well as recommendations for future research.

### *Purpose and Objectives*

The purpose of this review is twofold. First, we aim to determine the gaps in researchers’ and

organizational administrators' evaluation of market managers' experiences with implementing and administering SBIPs. We then leverage these findings to recommend a systematic framework that may be adopted by researchers and practitioners alike to capture market manager feedback and, ultimately, better assess the barriers associated with implementing and administering SBIPs. We pursue this overarching effort through three distinct objectives.

First, we examine academic literature that centers on the attitudes and perspectives of farmers market managers. Here, we aim to establish how researchers situate, prioritize, and interpret meaning from the views of market managers relative to other actors in a market environment (e.g., shoppers, vendors, farmers). We demonstrate the importance of distinguishing between two salient behaviors of interest: managerial implementation and administration of SNAP EBT infrastructure, and managerial implementation and administration of SBIPs. We show that the latter area of inquiry is featured less prominently in the literature and deserves greater representation, especially given the proliferation of innovative programs across the country (USDA ERS, 2019).

The second objective is to establish the prevailing consensus of evaluative strategy from organizational and practitioner-based literature. We review a segment of practitioner literature from the various organizations that either advocate for or directly administer SBIPs at local, regional, and national scales. In addition to the annual reports, white papers, and executive summaries produced by these organizations, we incorporate findings from relevant USDA studies to build a holistic picture of the state of SBIP evaluations.

To meet our third and final objective, we synthesize findings between the academic and organizational outputs to identify and contextualize a gap in assessing market manager attitudes and perceptions regarding SBIP implementation and administration. Through this effort, we demonstrate not only that such a gap exists, but that the gap must be bridged in order to assess overall SBIP impact at markets effectively.

## Methods

We applied Torraco's (2005) integrative literature review method to guide our examination of manager-centered literature produced by academic researchers and organizational evaluators alike. An integrative literature review "is a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated" (Torraco, 2005, p. 356). Although researchers organize integrative reviews in various ways according to context and need, adherence to the method requires applying standard conventions for reporting how each study was conducted (Torraco, 2005). These conventions refer to how an author identifies, analyzes, synthesizes, and reports findings from the literature. Torraco's method was chosen for this study because of the detailed guidance it provides in the identification, organization, analysis, and synthesis of literature resources.

Our data collection approach differed between the search for academic literature and organizational literature. For the former, we collected data from various online library databases and indexing search engines. We used ProQuest, EBSCOhost, Google Scholar, and the University of Florida's George A. Smathers digital library archives as our primary search outlets, applying select keywords in search of existing literature. Key search terms used included *farmers market managers*, *nutrition incentive programs*, *market manager perspectives*, *Double Up Food Bucks*, *SNAP-based incentive programs*, and *market manager evaluations*. The resources we found through this initial search phase helped us generate additional sources, such as relevant new articles from the reference lists of preceding articles.

We applied a more deliberate and targeted search approach to examine organizational and practitioner literature due to the lack of these types of resources represented within indexed databases. Instead of indexed databases, we explored the websites of specific organizations to find any published resources (e.g., white papers, annual reports, evaluation summaries) that might include data on partner markets generally or market manager perspectives specifically. While there are dozens of organizations at various scales that directly administer

SBIPs or provide administrative support to market managers, we specifically targeted organizations that were regionally and nationally scaled (e.g., Wholesome Wave, Fair Food Network), recognizing that these organizations are more likely to have the capacity to either conduct evaluations internally or contract evaluation specialists to assess their program's impact. We added relevant resources from both categories to a database spreadsheet with structured fields for resource category, topic, population or audience segment of interest, methods used, research questions posed, and implications generated. This categorization process allowed us to create and synthesize new knowledge more effectively (Torraco, 2005). Overall, we conducted full-text reviews of 32 resources, several of which we reference in the following sections. We compiled those resources ( $n=26$ ) that addressed (directly or tangentially) the role of managers in SBIP processes into Table 1, which we included in the Appendix. While this sample is relatively small, we recognize that it may soon be subject to amendment as the topic continues to gain more scholarly attention. At present, the list represents known current efforts to address the role of market managers in SBIP programming.

## Results

### *Academic Review*

#### *Towards a managerial perspective on process*

The implementation of federal assistance benefits and SBIP at farmers markets is evolving as an emerging research topic. To date, most research addressing the subject has been outcome-oriented, focusing on metrics such as generated revenue for vendors, SNAP redemption rates, or increased FFV consumption by limited-resource shoppers (Savoie-Roskos, Durward, Jeweks & LeBlanc, 2016). Research centering on consumer experiences and perceptions has aided this broad effort by identifying economic and environmental factors that both inhibit and facilitate farmers market use (Amaro & Roberts, 2017; Conner, Colasanti, Ross & Smalley, 2010; Freedman et al., 2016; Savoie-Roskos et al., 2016). Karakus, MacAllum, Milfort, and Hao (2014), for example, reported that SNAP

recipients were significantly more likely to shop and become repeat customers at a farmers market if they knew the market offered a nutrition incentive service. Abelló, Palma, Waller, and Anderson (2014) found that shoppers in certain demographic brackets responded positively to the presence of educational activities and events at markets, suggesting targeted promotional activities could positively influence the frequency of market visits and FFV consumption.

These and other related efforts explicitly consider shoppers' perceptions of factors that either inhibit or facilitate their sustained patronage. These factors produce tangible implications for assessing the impact of farmers markets through common metrics such as SNAP redemption rates and FFV intake. As Karakus et al. (2014) conclude from their nationally scaled mixed-method study for the USDA Food and Nutrition Service, capturing SNAP shoppers' perceptions of price, value, convenience, and other factors provide "valuable insights...to guide ongoing initiatives to improve access to healthy foods for SNAP participants, particularly the effort to work with [markets] and direct marketing farmers to improve participants' access to locally grown produce" (p. 123).

These studies illustrate the logic of leveraging the attitudes and perceptions of market stakeholders to inform operational decisions and SBIP intervention efforts. Researchers indicated that understanding consumer perspectives was a critical first step to achieving and evaluating outcome-oriented objectives (Ritter, Walkinshaw, Quinn, Ickes, & Johnson, 2019; Wetherill & Gray, 2015). Survey data indicating that shoppers would spend more of their SNAP dollars at markets if they saw more explicit and more frequent inventive program advertising, for example, is an actionable insight that may help achieve a desired outcome. While acknowledging the importance of consumer perspectives, other researchers have called for greater representation of the views of farmers market managers in research. (Cole, McNees, Kinney, Fisher, & Krieger, 2013; Roubal et al., 2016).

While consumercentric research informs outcome-oriented evaluations (e.g., the impact of a SBIP on FFV intake) at a market, studies addressing the perceptions of those actors responsible for

implementing and administering the program appear critical to several of the *process* evaluations we reviewed. In their investigation of the barriers and facilitators managers face to successfully implement EBT infrastructure, Roubal et al. (2016) concluded that manager feedback provided “a deeper understanding of the processes market managers interweave and navigate in the course of establishing an EBT program” (pp. 151–152). The authors reiterated that “understanding the main barriers as well as effective strategies for successful implementation of EBT in farmers markets is imperative to realize the full potential of these outlets” (p. 155).

Currently, scholarly emphasis on market manager perceptions exists outside of SBIP contexts, with a specific focus on the provisioning of SNAP EBT access at markets. We conducted full-text reviews of nine articles with this criterion. Researchers employed distinct methodological approaches and reached unique conclusions, despite the topical similarities between the studies. Roubal et al. (2016) found that managers’ attitudes toward the implementation of EBT were affected by considerations related to training, advertising, and community support. Managers expressed dissatisfaction with the excessive paperwork, high fee payments, and the time required to maintain EBT equipment. Additionally, managers indicated that supervising vendor reimbursements and staff training were also time-intensive and ultimately served as barriers to implementing and sustaining the EBT program (Roubal et al., 2016).

Ward, Slawson, Wu, and Jilcott Pitts (2015) similarly examined manager attitudes to better understand factors that facilitated increased SNAP EBT adoption at markets. The authors found that managers’ perception of economic growth (or the potential for economic growth) for the market and increased financial security for themselves were central motivators to adopt and maintain use of the SNAP EBT system (Ward et al., 2015). They also found that managers’ internal motivations (e.g., a concern about food access for underserved communities) moderately influenced managers’ adoption or sustained use of EBT at their markets (Ward et al., 2015). Hasin and Smith (2018) applied the diffusion of innovations theory to analyze how market managers’ communication and technology

use affected EBT adoption rates. The authors identified a range of sociodemographic characteristics, communication techniques, and technology use levels as influential to EBT adoption for managers. From logistic regression results, the authors concluded that managers who established partnerships with external organizations and actively maintained their market’s presence on social media were more likely to adopt EBT technology (Hasin & Smith, 2018).

Mino, Chung, and Montri (2018) used an ethnographic approach to explore the day-to-day operational experiences of market managers and other market staff administering food assistance programs at select markets in Michigan. The authors demonstrated that all market staff experienced administrative burdens (e.g., engaging in tasks such as SNAP-specific sales tracking) in maintaining SNAP EBT access that affected the time they could dedicate to normal market functioning. Not all markets, however, experienced these burdens to the same degree, as markets with fewer staff members and less overall resources struggled more acutely with the surge in EBT transactions. The authors argued this finding suggests that a market’s organizational capacity (i.e., its access to adequate staffing, financial resources, and professional partnerships) is a highly salient factor in whether managers are successful in implementing and administering SNAP (Mino et al., 2018). While this finding had been previously identified in outcome-oriented evaluation efforts, this conclusion reflected the self-efficacy and agency perceptions of managers and other market personnel. The authors reached these conclusions by centering the *process* of SNAP (and in one case, SBIP) administration, providing market managers an opportunity to share the logistic burdens of incorporating such efforts at their markets in an in-depth format. The authors justified their decision to focus on managerial perspectives, citing an earlier effort to collect data on the internal decision-making processes at markets:

Very little work examines the nature of farmers markets as providers of these programs. Stephenson (2008) took an in-depth look at farmers markets in Oregon and put an ethno-

graphic lens to the functioning of these markets. Acknowledging that each market faces a unique set of constraints, Stephenson (2008) makes the case for understanding the decision-making that occurs at farmers markets in context and concludes that organizational development is important for sustained market success. (Mino et al., 2018, p. 824)

Increasingly, researchers recognize that “there is a gap in the understanding” of how farmers market managers experience the implementation and administration of SNAP EBT programs, and attempt to close this gap by investigating the “processes, facilitators, and barriers” encountered by them (Roubal et al., 2016, p. 145; Ward et al., 2015, p. 128). Other researchers, however, have also realized that the issue of SNAP EBT adoption is a different process than the implementation and administration of SBIPs, and therefore requires specific examination. We address the emergence of these inquiries and trace their progression towards calls for a systematic framework to examine managerial attitudes, perspectives, and motivations.

*Incentive programming: Beyond the exploratory*

To date, there is little research that explicitly centers the perspectives of farmers market managers regarding their experiences with administering SBIPs (particularly with “doubling” incentive programs). We could only find three articles that directly examined market manager perspectives on SBIP implementation and administration. We conducted full-text reviews of these studies and synthesized the similarities and differences between them.

Two of the three articles we reviewed used the case study method, conducting semi-structured interviews with managers to “understand [farmers market] managers’ perceptions of barriers and facilitators” with implementing and administering SBIPs (Hecht et al., 2019, p. 927). Within formative, exploratory frames, these studies collected valuable in-depth feedback, highlighting “the wealth of accumulated knowledge” from managers (Hecht et al., 2019, p. 933). In a case study by Gusto et al. (2020), the authors applied a behavioral framework known as the Integrated Behavioral

Model (IBM) as an analytical tool to better understand how market managers who had already adopted a SBIP viewed their engagement with the program, the experiences of their vendors and customers with the program, their level of confidence with the future of the program, and the likelihood they would continue offering the program given particular barriers. The authors focused on managers’ perceptions of the degree of personal agency they felt regarding the implementation and administration of a SBIP “doubling” program, where personal agency refers to one’s perceptions of one’s ability to exert influence and control in the face of environmental constraints (Bandura, 2006). The authors found that certain environmental constraints, such as the level of funding managers received from their SBIP organizational support partners for staffing, equipment, and marketing, affected managers’ sense of control at the market (Gusto et al., 2020). While the authors identified related environmental and interpersonal barriers (e.g., lack of buy-in from vendors in implementing the SBIP), they also discovered strategies managers had employed (e.g., using grassroots or word-of-mouth advertising) that facilitated their sense of self-efficacy or self-confidence (Gusto et al., 2020).

The qualitative case study by Hecht et al. (2019) produced similar conclusions from the barriers identified by managers. Managers made several recommendations to address these issues, including “increasing funding security, improving promotion and education, and reducing the data collection burden through program digitalization” (Hecht et al., 2019, p. 933). Managers also provided strategic recommendations to improve SBIP functioning at the respective markets, suggesting that more experienced managers “could share strategies they developed related to increasing vendor buy-in, better promoting the incentive within the market, and explaining the program to customers” (Hecht et al., 2019, p. 933). As the authors note, while these barriers and facilitators may have currency for other researchers and practitioners, results are context-bound by the nature of the methods used. The authors, therefore, recommend a continued focus on market manager perspectives regarding SBIP implementation and administration, including the suggestion that program organizers consider

“systematically soliciting feedback from managers, vendors, and customers to identify targeted strategies to strengthen their programs” (Hecht et al., 2019, p. 934). In the following section, we investigate the extent to which organizational evaluators heed this call.

### *Organizational Literature Review*

#### *Evaluative praxis*

We reviewed 13 publications to determine prevailing standards for how organizations evaluate SBIPs. Eleven of these resources were evaluative outputs from various nonprofit organizations that provide administrative support for SBIP implementation at state, regional, or national-scale markets. The remaining two resources are reports from the U.S. Department of Agriculture’s Agricultural Marketing Service (USDA AMS) and Food and Nutrition Service (USDA FNS) departments (King, Dixit-Joshi, MacAllum, Steketee, & Leard, 2014; USDA AMS, 2014). Several of these resources were aggregative, compiling data from several smaller-scale evaluation reports from SBIP projects around the country. We therefore believe that the apparently small number of reviewed resources in fact provides a reasonably comprehensive snapshot of how SBIP impact is evaluated nationally. We found a consistent focus across the organizational literature on outcome-oriented market performance indicators, such as SBIP sales volume, rates of increased FFV consumption by shoppers, and self-reported intentions to boost FFV supply by farmers. In an end-of-year report for 2016, the California-based Market Match program (an effort run by the Ecology Center) shared a series of survey data from partner markets across the state. The report includes snippets of data regarding consumer impact, such as “79% of Market Match customers are return shoppers” and “80% of Market Match customers report their families’ health has improved due to Market Match” (Ecology Center & Market Match, 2017, p. 1). The report represents farmer impact by asserting that “81% of farmers report increased sales due to Market Match” (Ecology Center & Market Match 2017, p. 1).

Another report produced by the Farmers Mar-

ket Coalition (2017) aggregated data from 13 mid- and large-scale organizations and projects that were the original recipients of the 2015 GusNIP grant (then known as the FINI grant). By representing data from the major SBIP-providing organizations operating in 27 states across the U.S. at the time, the document provides a critical snapshot of the types of evaluative data collection protocols organizations prioritized. The report contains a series of summary statements addressing FFV purchasing and consumption, food security alleviation, revenue generation for farmers and rural communities, and incentive redemption rates (Farmers Market Coalition, 2017). In addressing the aggregated consumption rate increases, the report suggested that:

Combined across all sites, during the first year of the FINI program, farmers markets distributed over \$3,000,000 in nutrition incentives and over \$5,000,000 in SNAP through more than 200,000 transactions. These purchases resulted in approximately 16-32 million additional servings of fruits and vegetables for SNAP households. (Farmers Market Coalition, 2017, p. 2)

The report also included data on SNAP-based incentive redemption rates:

Grantees reported consistently high rates of redemption for incentives in farmers market settings, with most reporting rates between 88% and 95%. Only three grantees reported redemption rates lower than 88%, with the lowest at 78%. These redemption rates refer to the percentage of tokens/vouchers redeemed by farmers as compared with those given out to customers, or in the case of loyalty cards, the percentage of funds redeemed with farmers versus the amount loaded onto the cards. (Farmers Market Coalition, 2017, p. 4)

A report jointly issued by three nationally scaled incentive organization projects, Fair Food Network, Wholesome Wave, and The Food Trust echoed the emphasis on these types of outcomes. Beyond providing an overarching history of the evolution of SBIPs and the state of current SBIP

operations in the U.S., the report aggregated data regarding redemption rates, FFV consumption rates, and market revenue increases, among other indicators. In addressing nutritional impact, for example, the report indicates “over 3/4 of farmers market shoppers using incentives reported that they were buying or eating more fruits and vegetables” (Fair Food Network, Wholesome Wave, & The Food Trust, 2018, p. 9).

We found a significant presence of these types of external impact metrics, but little discernable focus on internal *process* evaluation metrics centering market managers’ experiences. We did find instances of evaluations that tangentially addressed managers’ attitudes towards the incentive programs they implemented at their markets. The previously mentioned Farmers Market Coalition report (2017) did briefly mention manager sentiment, but without any indication of how the feedback was collected or how many managers were able to express their views:

Market managers and FINI Grant administrators report that incentive programs help anchor farmers markets, particularly in communities with high SNAP eligible populations where access to healthy, high-quality produce is often limited. Market operators reported that incentive programs increased SNAP spending at farmers markets, increased the number of both new and repeat shoppers, and increased the diversity of customers. (Farmers Market Coalition, 2017, p. 3)

One of the most likely places to find direct explorations of manager views in the organizational literature, given its scope and degree of methodological rigor, would be the USDA FNS Farmers Market Incentive Provider Study, or FMIPS (King et al., 2014). As the first nationally representative examination of the SBIP environment, the FMIPS had three core objectives:

1. Understanding the characteristics of organizations involved with SBIPs, their SBIP objectives, role in SBIP implementation, and involvement in SBIP monitoring and evaluations.

2. Exploring the relationships among SBIP organizations and between these organizations and FMs.
3. Examining and assessing SBIP organization self-evaluation data to measure the impacts of SBIPs on the individual FMs. (King et al., 2014, p. xi)

These objectives set expansive parameters for the study. The FMIPS examined a host of factors related to the SBIP ecosystem and remains the most comprehensive examination to date of how SBIP organizations are classified, how they function, and, relevant to our interests, how they evaluate the success of their programs at markets (articulated through the study’s third objective). Despite the scale of issues examined, King et al. (2014) explicitly addressed the types of evaluation methods these organizations employ as one of only a handful of key findings:

About 80 percent of the organizations are involved in data collection and evaluation activities. For the most part, data collection and evaluation revolve around tracking the volume of EBT and incentive redemptions with some organizations also tracking the number of redemptions. (King et al., 2014, p. 107)

King et al. (2014) based this finding on original data collected from 75 representatives from distinct organizations, as well as a descriptive analysis of internal evaluation data. The result corroborated our findings from other organizational reports that there is a distinct lack of emphasis, at least within publicly accessible resources, on addressing the views, attitudes, perspectives, and motivations of farmers market managers.

## Discussion

### *Making Motivations Visible: Toward a Systematic Behavioral Framework*

In our review of both academic and practitioner literature, we found a distinct lack of focus on farmers market managers’ perspectives as a method to evaluate the success of SBIPs. With an overwhelming academic and organizational focus on

consumer-driven outcome metrics such as total FFV sales and SNAP redemption rates, there appears to be a reinforced tendency to consider managers only insofar as they service those goals. In their process evaluation of the implementation of New York City's Health Bucks Program, Payne et al. (2013) suggested that targeting managers' views on implementation and administration processes is critical to achieving a program's core outcomes:

Farmers market managers are integrally involved in implementation and day-to-day Health Bucks program operations. They are responsible for program administration and oversight at the market level and often directly distribute coupons to SNAP participants at the market. In some cases, managers serve a dual role as market owner/operator and can provide additional insight into a market's decision about participating in Health Bucks or accepting SNAP benefits. (p. 3)

From the organizational perspective, we found that organizations that have solicited manager perspectives have typically done so only in a tangential way. These efforts cited manager consensus on a topic untethered from specific details on how manager views were collected or how many managers participated in feedback sharing (Fair Food Network et al., 2018). As King et al. (2014) indicated, evaluation data from organizations revolve almost exclusively around tracking the volume of EBT and incentive redemptions and other, related, outcome measures. To be sure, these types of data are indispensable for markets and SBIP facilitating organizations to use to demonstrate the impact of their efforts to external funders. We identify this dynamic not as an *ipso facto* issue, but rather to indicate that the lack of systematic data concerning the logistical and environmental constraints that managers experience when implementing these innovative programs inhibits the goals and objectives of these organizations. In other words, pursuing a standard organizational objective such as improving FFV intake for SNAP shoppers may be fundamentally constrained if organizations do not seriously consider the role

market managers play in implementing and administering SBIPs, and the significant barriers they face in doing so (King et al., 2014).

In the academic literature, researchers have increasingly recognized market managers as critical facilitators of nutrition incentive campaigns at markets across the country (Freedman et al., 2016; Roubal et al., 2016). As we have shown, many studies that do address the perspectives of market managers employ an exploratory case study frame (Gusto et al., 2020; Hecht et al., 2019). The findings produced in these studies are compelling due to the emphasis placed on an open-ended, in-depth approach to data collection and analysis. They are limited, however, in their capacity for generalizability and transferability to other market contexts. This is, of course, not a novel observation—a case study focuses on a granular unit of analysis (i.e., a case) by design (Merriam & Tisdell, 2015). That this in-depth focus on contextual conditions may be salient to the phenomenon under study is an undisputed strength of the method and not the subject of criticism (Baxter & Jack, 2008). While exploratory studies designed to capture market manager perspectives are useful to explore an emergent context with an underrepresented population segment, the current state of need necessitates that future researchers should consider advancing the subject through a more expansive frame. Researchers have explicitly called for this shift. While referring to their role in implementing SNAP EBT access at markets, Ward et al. (2015) addressed their focus on market managers

as a starting point for elucidating specific managerial characteristics that could converge with other important facilitators to maximize the potential of farmers markets to simultaneously improve food access for customers and business opportunities for farmers. Future studies with a larger sample of managers should aim to clarify which characteristics influence these opportunities. As our study suggests, this could lend more insight into how managers' business motivation and pay influence vendor participation at farmers markets. . . . Additional work is needed to identify barriers to offering SNAP/EBT at farmers markets, particularly among

managers who perceive food access issues as being important, but do not operate markets with SNAP/EBT. Addressing managers' motivations, whether they are business-oriented, healthy food access-oriented, or both, will be critical to improving the food environment through farmers markets. (p. 128)

This recommendation echoes calls from other researchers for the need to systematically address the barriers and facilitating factors that affect the motivations of market managers, as well as the likelihood (i.e., the degree of intention) that they will adopt or effectively sustain a SBIP at their market (Gusto et al., 2020; Hecht et al., 2019). When they have been the subjects of study, market managers are asked to respond to highly contextual barriers to their work, or some broad feelings about a behavior or situation (Hasin & Smith, 2018; Mino et al., 2018). We demonstrate that while these inquiries are valuable exploratory contributions to the literature, they are limited in their generalizability, given that they occur as case-studies and are not grounded within a systematic theoretical framework. Hecht et al. (2019), addressing their own study's limitations, call for future researchers and practitioners to "consider systematically soliciting feedback from managers, vendors, and customers to identify targeted strategies to strengthen their programs" (p. 934).

Theoretically grounded examinations of manager experiences are rare. Hecht et al. (2019) used a framework designed to implement evidence-based change based upon the identification of barriers and incentives; the model is situated in the clinical literature (Grol & Wensing, 2004). Gusto et al. (2020) argued for the continued application of the IBM as a comprehensive behavioral framework to better understand and predict managers' behavioral intentions regarding SBIP adoption and administration. After applying a construct from the IBM to guide their analysis of managerial perspectives, the authors wrote that such a framework was

crucial to understand in the broader effort to achieve long-term, sustained growth of related nutrition incentive programs at farmers markets. We, therefore, recommend more expan-

sive examinations of managers' perceptions of nutrition incentive program management through either a personal agency frame specifically or a behavioral theory frame broadly. (Gusto et al., 2020, p. 13)

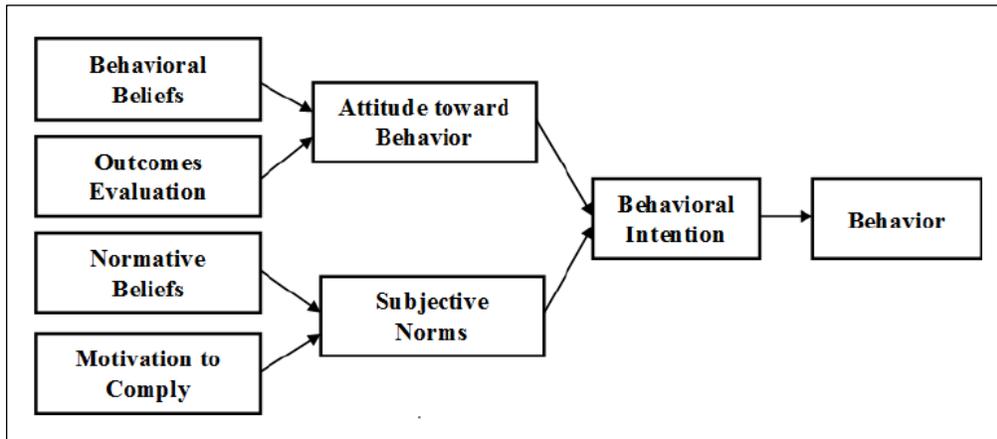
The IBM emerged from the historical development and synthesis of social psychology, persuasion models, and attitudinal and behavioral theories (Montano & Kasprzyk, 2015). The model integrates two prior behavioral frameworks describing individual motivational factors that influence the likelihood that an individual will perform an action or behavior (Montano & Kasprzyk, 2015). The IBM, like the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1991), states that behavioral intention is the most significant factor in whether an individual performs a behavior in a given context (Montano & Kasprzyk, 2015). Figures 1, 2, and 3 depict the TRA, TPB, and IBM, respectively.

The IBM appears unique in its comprehensiveness of factors and considerations that might affect the performance of a behavior. Beyond the attitudinal, normative, and agency beliefs that can have some predictive capacity for an individual's behavioral intention, the model includes four additional factors that may transcend intention and directly affect whether an individual carries out the desired behavior (Montano & Kasprzyk, 2015). With the addition of (1) knowledge and skills to perform the behavior, (2) salience of the behavior, (3) environmental constraints, and (4) habit, the IBM may account for factors that might escape or confound other research efforts. We address the potential utility of this framework to current academic and organizational efforts more explicitly in the following section.

## Conclusion and Recommendations

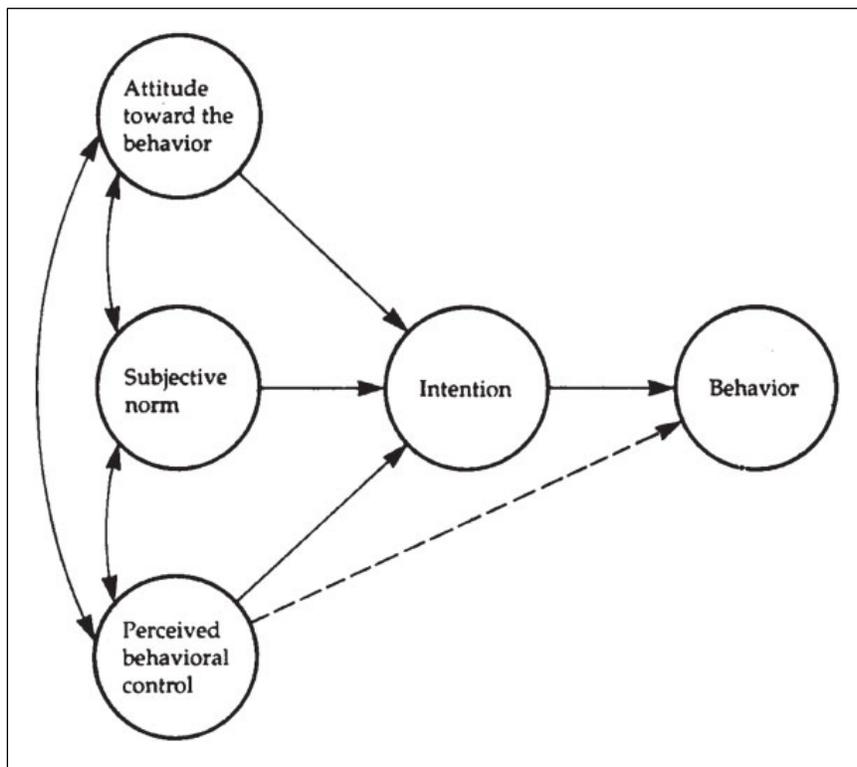
In this integrative review, we explored the current state of the academic and organizational literature relative to how researchers study market managers of SBIP contexts. As part of this effort, we assessed the extent to which researchers, governmental agencies, or nonprofit organizations (often the coordinating partners of SBIPs) have performed formal or informal surveying of market managers.

**Figure 1. Theory of Reasoned Action**



Source: Fishbein & Ajzen, 1975.

**Figure 2. Theory of Planned Behavior**



Source: Ajzen, 1991.

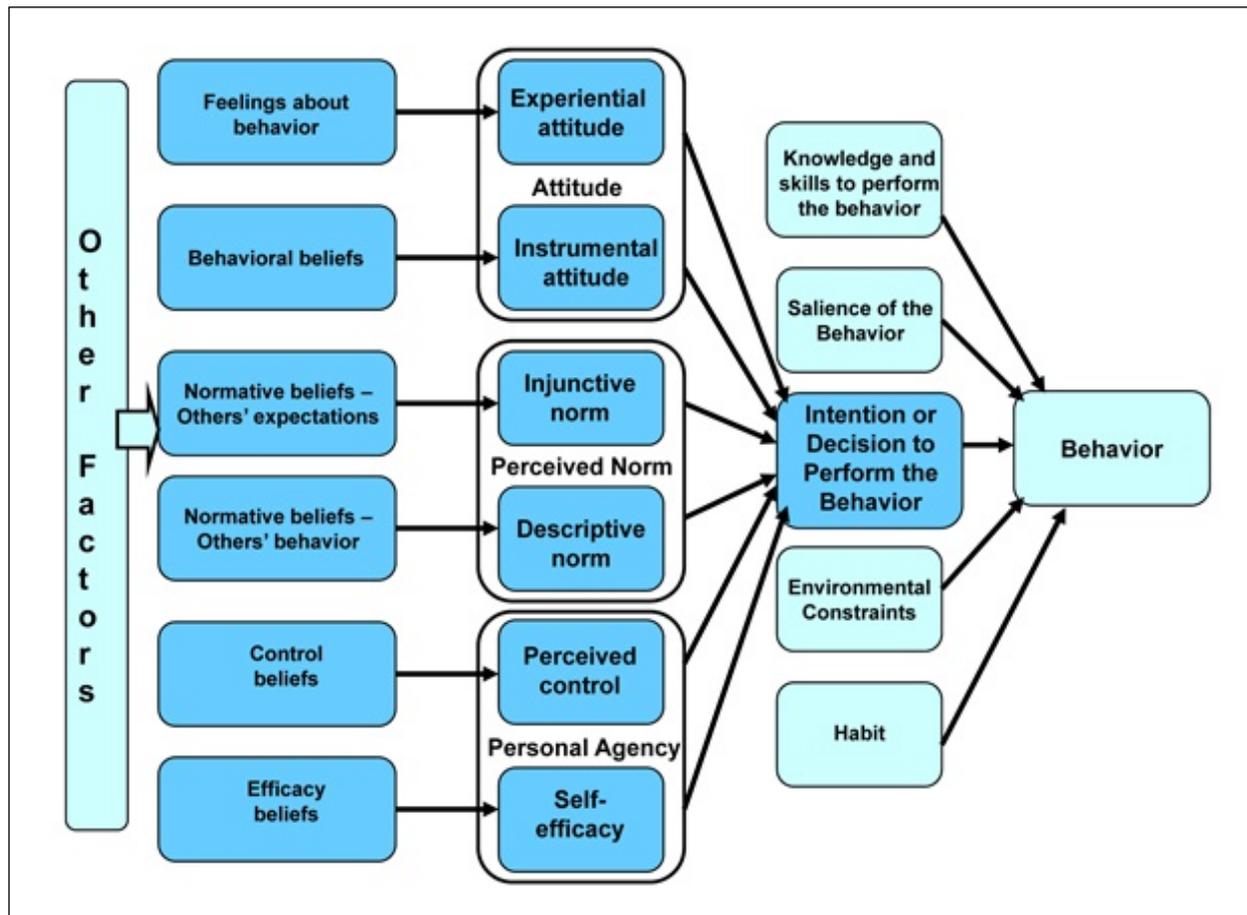
We found that farmers market managers' views on the experience of administrating nutrition incentive programs are currently underrepresented in both academic and organizational (i.e., practitioner) literature. Studies that address market manager perspectives on the subject are formative and exploratory,

limiting their transferability and generalizability to other contexts (Gusto et al., 2020; Hecht et al., 2019).

We follow calls for the application of a more systematic, theoretically grounded, and generalizable approach to

assessing managerial perceptions, motivations, and attitudes. We suggest that there is a need to advance an analytical framework for practitioners to capture essential data related to market managers' behavioral intention (i.e., their cumulative attitudinal, normative, and efficacy-driven perceptions) towards the nutrition incentive programs they currently administer at markets. We believe that frameworks such as the TRA, TPB, or IBM are appropriately equipped for this task. Given its advancement from the earlier models and its recent application in an SBIP context, the IBM may be particularly appropriate to center managers' experiences in future studies while also advancing an organization's objectives (Gusto et al., 2020).

We suggest that by providing more incisive data on managers' perceptions, motivations, and the barriers they face in administering SBIPs, a framework such as the IBM can assist organizations of all scales and types in advancing their mission. In this way, researchers applying the IBM may reduce the

**Figure 3. Integrated Behavioral Model**

Source: Montano & Kasprzyk, 2015.

gap we found between process evaluation and outcome evaluation efforts and transform it into a more complementary form of institutional praxis. The issue of *how* to apply this framework is a salient one. While Gusto et al.'s (2020) exploratory focus on a select construct within the IBM provided valuable data, expanding the framework's application within a survey format would increase the number of normative, attitudinal, and efficacy-based variables that researchers could examine. A survey approach may also provide future researchers with the opportunity to expand their sampling frame to managers at various stages of engagement with SBIPs. Savoie-Roskos et al. (2016) called for this procedure, suggesting that "incorporating a theoretical model into the development of survey tools would strengthen future study results" (p. 74).

A comprehensive survey tool could include question items that reflect each of the IBM's core constructs (e.g., attitudes, perceived norms, personal agency). The environmental constraints construct in the model, for example, could inform the creation of a survey item designed to characterize effects driven by differences between nutrition incentive organizations' internal structures. Gusto et al. (2020) identified that while some markets independently administer SBIPs, most partner with organizations that have the knowledge and resource capacity to navigate federal grant applications, deliver the programs, and appropriately evaluate their outcomes. King and co-authors' (2014) inclusion of a systematic typology of nutrition incentive-providing organizations by the scale, funding structure, and other characteristics contex-

tualized this observation. The report's findings demonstrate these organizational features are highly influential to the end-state success of SBIPs at markets. Survey items within each of the attitude, perceived norm, and personal agency constructs could also be developed to address a growing need to highlight the specific barriers Black, Indigenous, and other People of Color (BIPOC) managers face in adopting nutrition assistance programs in predominately BIPOC market spaces. As Meyers (2015) indicates, Black managers, farmers, and vendors in particular are increasingly participating in the development of alternative market spaces without traditional profit-based incentive structures, that is, where commerce and exchange serve a decolonial function and enhance the sovereignty of formerly disenfranchised Black communities. Given a general lack of research attention, collecting more data on these and other factors is critically important.

Finally, we recommend that multiple institutions drive such a collaborative survey develop-

ment effort. While an IBM-driven survey may be useful if distributed within a single institutional or environmental context, we reaffirm the recommendations of previous researchers who suggest that multi-state, cross-organizational collaboration can advance our current understanding of market managers' perspectives towards engaging or sustaining SBIPs (Hecht et al., 2019; Ward et al., 2015). A systematic, standardized, and theoretically grounded survey tool could drastically improve the breadth and scope of findings that have import across market contexts. We believe a deliberately coordinated multi-institutional effort to develop the survey, validate its contents, pilot its distribution, and analyze the data it generates would significantly advance the state of SBIP literature. By expanding efforts to center managers' perspectives, we believe researchers and practitioners can bridge the gap between process and outcome evaluation, taking what may be an essential step toward improving nutritional access for SNAP shoppers at farmers markets around the country. 

## References

- Abelló, F. J., Palma, M. A., Waller, M. L., & Anderson, D. P. (2014). Evaluating the factors influencing the number of visits to farmers markets. *Journal of Food Products Marketing*, 20(1), 17–35. <https://doi.org/10.1080/10454446.2013.807406>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Amaro, C. M., & Roberts, M. C. (2017). An evaluation of a dollar-for-dollar match program at farmers markets for families using Supplemental Nutrition Assistance Program benefits. *Journal of Child and Family Studies*, 26(10), 2790–2796. <https://doi.org/10.1007/s10826-017-0779-4>
- Anderson, C., Blackwell, S., Gerndt, E., & Martin, I. (2015). *Evaluation of Wholesome Wave Georgia's double value coupon program*. Retrieved from Wholesome Wave Georgia website: <https://www.wholesomewavegeorgia.org/s/Final-Evaluation-Report-1.pdf>
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164–180. <https://doi.org/10.1111/j.1745-6916.2006.00011.x>
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559. Retrieved from <https://nsuworks.nova.edu/tqr/vol13/iss4/2>
- Cole, K., McNeese, M., Kinney, K., Fisher, K., & Krieger, J. W. (2013). Increasing access to farmers markets for beneficiaries of nutrition assistance: Evaluation of the farmers market access project. *Preventing Chronic Disease*, 10, E168–E168. <https://doi.org/10.5888/pcd10.130121>
- Community Science. (2013). *SNAP healthy food incentives cluster evaluation 2013 final report*. Gaithersburg, MD: Community Science. Retrieved from [https://fairfoodnetwork.org/wp-content/uploads/2016/09/2013-Cluster-Evaluation-Final-Report\\_-final\\_10.4.13\\_Dec2013.pdf](https://fairfoodnetwork.org/wp-content/uploads/2016/09/2013-Cluster-Evaluation-Final-Report_-final_10.4.13_Dec2013.pdf)
- Conner, D., Colasanti, K., Ross, R. B., & Smalley, S. B. (2010). Locally grown foods and farmers markets: Consumer attitudes and behaviors. *Sustainability*, 2(3), 742–756. <https://doi.org/10.3390/su2030742>

- Dimitri, C., & Oberholtzer, L. (2015). Potential national economic benefits of the Food Insecurity and Nutrition Incentives Program of the U.S. Agricultural Act of 2014. *Journal of Agriculture, Food Systems, and Community Development*, 5(4), 49–61. <https://doi.org/10.5304/jafscd.2015.054.006>
- Dimitri, C., Oberholtzer, L., Zive, M., & Sandolo, C. (2015). Enhancing food security of low-income consumers: An investigation of financial incentives for use at farmers markets. *Food Policy*, 52, 64–70. <https://doi.org/10.1016/j.foodpol.2014.06.002>
- Durward, C. M., Savoie-Roskos, M., Atoloye, A., Isabella, P., Jewkes, M. D., Ralls, B., ... & LeBlanc, H. (2018). Double Up Food Bucks participation is associated with increased fruit and vegetable consumption and food security among low-income adults. *Journal of Nutrition Education and Behavior*, 51(3), 342–347. <https://doi.org/10.1016/j.jneb.2018.08.011>
- Ecology Center & Market Match. (2017). *2016 FINI preliminary results*. Retrieved from <https://marketmatch.org/impact/>
- Fair Food Network. (2012). *Double Up Food Bucks Program. 2011 evaluation report*. Retrieved from <https://fairfoodnetwork.org/resources/>
- Fair Food Network. (2019). *Food Insecurity Nutrition Incentive: Overview*. Retrieved from <https://fairfoodnetwork.org/resources/food-insecurity-nutrition-incentive-overview/>
- Fair Food Network, Wholesome Wave, & The Food Trust. (2018). *Special report: The power of produce*. Retrieved from [https://fairfoodnetwork.org/wp-content/uploads/2018/04/PowerofProduce\\_June2018.pdf](https://fairfoodnetwork.org/wp-content/uploads/2018/04/PowerofProduce_June2018.pdf)
- Farmers Market Coalition. (2017). *Year one of the USDA FINI Program: Incentivizing the purchase of fruits and vegetables among SNAP customers at the farmers market*. Retrieved from [https://farmersmarketcoalition.org/wp-content/uploads/2017/04/FINI\\_FarmersMarkets\\_Year1\\_FMC\\_170426.pdf](https://farmersmarketcoalition.org/wp-content/uploads/2017/04/FINI_FarmersMarkets_Year1_FMC_170426.pdf)
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Freedman, D. A., Vaudrin, N., Schneider, C., Trapl, E., Ohri-Vachaspati, P., Taggart, M., . . . & Flocke, S. (2016). Systematic review of factors influencing farmers market use overall and among low-income populations. *Journal of the Academy of Nutrition and Dietetics*, 116(7), 1136–1155. <https://doi.org/10.1016/j.jand.2016.02.010>
- Grol, R., & Wensing, M. (2004). What drives change? Barriers to and incentives for achieving evidence-based practice. *Medical Journal of Australia*, 180(S6), S57–S60. <https://doi.org/10.5694/j.1326-5377.2004.tb05948.x>
- Gusto, C., Diaz, J. M., Warner, L. A., & Monaghan, P. (2020). Advancing ideas for farmers market incentives: Barriers, strategies, and agency perceptions from market managers. *Journal of Agriculture, Food Systems, and Community Development*, 9(3), 1–16. <https://doi.org/10.5304/jafscd.2020.093.022>
- Hasin, A., & Smith, S. (2018). Farmers market manager's level of communication and influence on Electronic Benefits Transfer (EBT) adoption at Midwest farmers markets. *Journal of Nutrition Education and Behavior*, 50(1), 43–50. <https://doi.org/10.1016/j.jneb.2017.09.005>
- Hecht, A. A., Misiaszek, C., Headrick, G., Brosius, S., Crone, A., & Surkan, P. J. (2019). Manager perspectives on implementation of a farmers market incentive program in Maryland. *Journal of Nutrition Education and Behavior*, 51(8), 926–935. <https://doi.org/10.1016/j.jneb.2019.04.001>
- Houghtaling, B., Serrano, E., Dobson, L., Chen, S., Kraak, V. I., Harden, S. M., . . . Misyak, S. (2019). Rural independent and corporate Supplemental Nutrition Assistance Program (SNAP)-authorized store owners' and managers' perceived feasibility to implement marketing-mix and choice-architecture strategies to encourage healthy consumer purchases. *Translational Behavioral Medicine*, 9(5), 888–898. <https://doi.org/10.1093/tbm/ibz091>
- Karakus, M., MacAllum, K., Milfort, R., & Hao, H. (2014). *Nutrition assistance in farmers markets: Understanding the shopping patterns of SNAP participants*. Prepared by Westat for the U.S. Department of Agriculture, Food and Nutrition Service. Retrieved from <http://www.fns.usda.gov/sites/default/files/FarmersMarkets-Shopping-Patterns.pdf>
- King, M., Dixit-Joshi, S., MacAllum, K., Steketee, M., & Leard, S. (2014). *Farmers market incentive provider study*. United States Department of Agriculture, Food and Nutrition Service, Office of Policy Support. Retrieved from <https://www.fns.usda.gov/snap/farmers-market-incentive-provider-study>

- Krokowski, K. (2014). Evaluating the economic and nutrition benefits and program challenges of EBT programs at farmers markets. *Journal of Agriculture, Food Systems, and Community Development*, 4(2), 37–44. <https://doi.org/10.5304/jafscd.2014.042.011>
- Lev, L., Brewer, L. J., & Stephenson, G. O. (2008). *Tools for rapid market assessments*. Oregon State University Extension Service. Retrieved from <https://catalog.extension.oregonstate.edu/sr1088>
- Market Match. (2018). *Impact report: Food Insecurity Nutrition Incentive (FINI) grant & California's Market Match*. Retrieved from [https://marketmatch.org/wp-content/uploads/2018/09/Market-Match-Impact-Report-2018\\_web.pdf](https://marketmatch.org/wp-content/uploads/2018/09/Market-Match-Impact-Report-2018_web.pdf)
- McCormack, L., Brandenburger, S., Wells, K., & Stluka, S. (2018). Qualitative analysis of grocery store and farmers market manager perceptions regarding use of fruit and vegetable educational materials. *Journal of Human Sciences and Extension*, 6(3), 77–91. <https://www.jhseonline.com/>
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Meyers, G. P. (2015). Decolonizing a food system: Freedom farmers' market as a place for resistance and analysis. *Journal of Agriculture, Food Systems, and Community Development*, 5(4), 149–152. <https://doi.org/10.5304/jafscd.2015.054.025>
- Mino, R., Chung, K., & Montri, D. (2018). A look from the inside: Perspectives on the expansion of food assistance programs at Michigan farmers markets. *Agriculture and Human Values*, 35(4), 823–835. <https://doi.org/10.1007/s10460-018-9877-1>
- Misiaszek, C. A., Hecht, A. A., Headrick, G., Brosius, S., Crone, A., & Surkan, P. J. (2020). Implementation of a farmers market incentive program in Maryland. *Journal of Agriculture, Food Systems, and Community Development*, 9(2), 1–12. <https://doi.org/10.5304/jafscd.2020.092.004>
- Montano, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior: Theory, research and practice* (pp. 95–124). Jossey-Bass.
- Oberholtzer, L., Dimitri, C., & Schumacher, G. (2012). Linking farmers, healthy foods, and underserved consumers: Exploring the impact of nutrition incentive programs on farmers and farmers markets. *Journal of Agriculture, Food Systems, and Community Development*, 2(4), 63–77. <https://doi.org/10.5304/jafscd.2012.024.002>
- Olsho, L. E., Payne, G. H., Walker, D. K., Baronberg, S., Jernigan, J., & Abrami, A. (2015). Impacts of a farmers market incentive program on fruit and vegetable access, purchase and consumption. *Public Health Nutrition*, 18(15), 2712–2721. <https://doi.org/10.1017/S1368980015001056>
- Payne, G. H., Wethington, H., Olsho, L., Jernigan, J., Farris, R., & Walker, D. K. (2013). Implementing a farmers market incentive program: Perspectives on the New York City Health Bucks Program. *Preventing Chronic Disease*, 10. <https://doi.org/10.5888/pcd10.120285>
- Ritter, G., Walkinshaw, L. P., Quinn, E. L., Ickes, S., & Johnson, D. B. (2019). An assessment of perceived barriers to farmers market access. *Journal of Nutrition Education and Behavior*, 51(1), 48–56. <https://doi.org/10.1016/j.jneb.2018.07.020>
- Roubal, A. M., Morales, A., Timberlake, K., & Martinez-Donate, A. (2016). Examining barriers to implementation of electronic benefit transfer (EBT) in farmers markets: Perspectives from market managers. *Journal of Agriculture, Food Systems, and Community Development*, 6(3), 141–161. <https://doi.org/10.5304/jafscd.2016.063.011>
- Savoie-Roskos, M., Durward, C., Jeweks, M., & LeBlanc, H. (2016). Reducing food insecurity and improving fruit and vegetable intake among farmers market incentive program participants. *Journal of Nutrition Education and Behavior*, 48(1), 70–76. <https://doi.org/10.1016/j.jneb.2015.10.003>
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4(3), 356–367. <https://doi.org/10.1177/1534484305278283>
- U.S. Department of Agriculture (USDA), Agricultural Marketing Service. (2014). *Farmers Market Manager survey summary report 2014*. Retrieved from <https://www.ams.usda.gov/sites/default/files/media/2014%20Farmers%20Market%20Managers%20Survey%20Summary%20Report%20final%20July%2024%202015.pdf>

- USDA Economic Research Service. (2019). *Agriculture Improvement Act of 2018: Highlights and implications*. Retrieved from <https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/nutrition/>
- Ward, R., Slawson, D., Wu, Q., & Jilcott Pitts, S. (2015). Associations between farmers market managers' motivations and market-level Supplemental Nutrition Assistance Program Electronic Benefit Transfer (SNAP/EBT) availability and business vitality. *Journal of Agriculture, Food Systems, and Community Development*, 6(1), 121–130. <https://doi.org/10.5304/jafscd.2015.061.010>
- Wetherill, M. S., & Gray, K. A. (2015). Farmers markets and the local food environment: Identifying perceived accessibility barriers for SNAP consumers receiving temporary assistance for needy families (TANF) in an urban Oklahoma community. *Journal of Nutrition Education and Behavior*, 47(2), 127–133. <https://doi.org/10.1016/j.jneb.2014.12.008>
- Wholesome Wave. (2014). *2009–2013: SNAP-Doubling outcomes & trends summary*. Electronic copy in possession of the lead author.
- Wholesome Wave. (2017). *Wholesome Wave 2016 annual report: Changing the world through food*. Electronic copy in possession of the lead author and the JAFSCD office.

## Appendix. SNAP and SBIP Resources Addressing Manager Perspectives

Source	Resource Category	Topic	Population of Interest	Methodology
Anderson, C., Blackwell, S., Gerndt, E., & Martin, I. (2015). <i>Evaluation of Wholesome Wave Georgia's double value coupon program.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Cole, K., McNees, M., Kinney, K., Fisher, K., & Krieger, J. W. (2013). <i>Increasing access to farmers markets for beneficiaries of nutrition assistance: evaluation of the farmers market access project.</i>	Scholarly Publication	Incentive/ Double Up Programming	Market Managers/ Market Staff	Mixed-Method
Community Science. (2013). <i>SNAP healthy food incentives cluster evaluation 2013 final report.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Ecology Center & Market Match. (2017). <i>2016 FINI preliminary results.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Fair Food Network. (2012). <i>Double Up Food Bucks Program 2011 evaluation report.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Fair Food Network. (2019). <i>Food Insecurity Nutrition Incentive: Overview.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Fair Food Network, Wholesome Wave, & The Food Trust. (2018). <i>Special report: The power of produce.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Farmers Market Coalition. (2017). <i>Year one of the USDA FINI Program: Incentivizing the purchase of fruits and vegetables among SNAP customers at the farmers market.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Gusto, C., Diaz, J., Warner, L., & Monaghan, P. (2020). <i>Advancing ideas for farmers market incentives: Barriers, strategies, and agency perceptions from market managers.</i>	Scholarly Publication	Incentive/ Double Up Programming	Market Managers	Qualitative Case Study
Hasin, A., & Smith, S. (2018). <i>Farmers market manager's level of communication and influence on Electronic Benefits Transfer (EBT) adoption at Midwest farmers markets.</i>	Scholarly Publication	General Nutrition Assistance Programming	Market Managers	Quantitative
Hecht, A. A., Misiaszek, C., Headrick, G., Brosius, S., Crone, A., & Surkan, P. J. (2019). <i>Manager perspectives on implementation of a farmers market incentive program in Maryland.</i>	Scholarly Publication	Incentive/ Double Up Programming	Market Managers/ Market Staff	Qualitative

Source	Resource Category	Topic	Population of Interest	Methodology
Houghtaling, B., Serrano, E., Dobson, L., Chen, S., Kraak, V. I., Harden, S. M., . . . Misyak, S. (2019). <i>Rural independent and corporate Supplemental Nutrition Assistance Program (SNAP)-authorized store owners' and managers' perceived feasibility to implement marketing-mix and choice-architecture strategies to encourage healthy consumer purchases.</i>	Scholarly Publication	General Nutrition Assistance Programming	Store Owners/Market Managers	Mixed-Method
King, M., Dixit-Joshi, S., MacAllum, K., Steketee, M., & Leard, S. (2014). <i>Farmers market incentive provider study.</i>	Governmental Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Mixed-Method
Krokowski, K. (2014). <i>Evaluating the economic and nutrition benefits and program challenges of EBT programs at farmers markets.</i>	Scholarly Publication	General Nutrition Assistance Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Mixed-Method
Market Match. (2018). <i>Impact report: Food Insecurity Nutrition Incentive (FINI) grant &amp; California's Market Match</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
McCormack, L., Brandenburger, S., Wells, K., & Stluka, S. (2018). <i>Qualitative analysis of grocery store and farmers market manager perceptions regarding use of fruit and vegetable educational materials.</i>	Scholarly Publication	General Nutrition Assistance Programming	Market Managers/Market Staff	Qualitative
Mino, R., Chung, K., & Montri, D. (2018). <i>A look from the inside: Perspectives on the expansion of food assistance programs at Michigan farmers markets.</i>	Scholarly Publication	General Nutrition Assistance Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Qualitative
Misiaszek, C., Hecht, A., Headrick, G., Brosius, S., Crone, A., & Surkan, P. (2020). <i>Implementation of a farmers market incentive program in Maryland.</i>	Scholarly Publication	Incentive/ Double Up Programming	Cross-Section (Farmers, Vendors, Managers)	Qualitative
Payne, G. H., Wethington, H., Olsho, L., Jernigan, J., Farris, R., & Walker, D. K. (2013). <i>Implementing a farmers market incentive program: Perspectives on the New York City Health Bucks Program.</i>	Scholarly Publication	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Mixed-Method
Roubal, A. M., Morales, A., Timberlake, K., & Martinez-Donate, A. (2016). <i>Examining barriers to implementation of electronic benefit transfer (EBT) in farmers markets: Perspectives from market managers.</i>	Scholarly Publication	General Nutrition Assistance Programming	Market Managers/Market Staff	Qualitative

Source	Resource Category	Topic	Population of Interest	Methodology
Savoie-Roskos, M., Durward, C., Jeweks, M., & LeBlanc, H. (2016). <i>Reducing food insecurity and improving fruit and vegetable intake among farmers market incentive program participants.</i>	Scholarly Publication	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Quantitative
U.S. Department of Agriculture, Agricultural Marketing Service. (2014). <i>Farmers Market Manager Survey summary report 2014.</i>	Governmental Report	General Nutrition Assistance Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Quantitative
Ward, R., Slawson, D., Wu, Q., & Pitts, S. J. (2015). <i>Associations between farmers market managers' motivations and market-level Supplemental Nutrition Assistance Program Electronic Benefit Transfer (SNAP/EBT) availability and business vitality.</i>	Scholarly Publication	General Nutrition Assistance Programming	Market Managers/ Market Staff	Mixed-Method
Wholesome Wave. (2014). <i>2009–2013: SNAP-Doubling outcomes &amp; trends summary.</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review
Wholesome Wave. (2017). <i>Wholesome Wave 2016 annual report: Changing the world through food..</i>	Organizational Report	Incentive/ Double Up Programming	Cross-Section (Managers, Vendors, Farmers, Shoppers)	Evaluative Review