Contents lists available at ScienceDirect

SSM -Population Health

Article

Self-efficacy is associated with increased food security in novel food pantry program

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ARTICLE INFO

ABSTRACT

We examined the effect of a novel food pantry intervention (Freshplace) that includes client-choice and motivational interviewing on self-efficacy and food security in food pantry clients. The study was designed as a randomized control trial. Participants were recruited over one year from traditional food pantries in Hartford, CT. Participants were randomized to Freshplace or traditional food pantries (controls) and data collection occurred at baseline with quarterly follow-ups for 18 months. Food security was measured using the USDA 18-item Food Security Module. A newly developed scale was utilized to measure self-efficacy. Scale reliability was measured using a Cronbach alpha test; validity was measured via correlating with a related variable. Analyses included chi-square tests for bivariate analyses and hierarchical linear modeling for longitudinal analyses. A total of 227 adults were randomized to the Freshplace intervention ($n=112$) or control group ($n=115$). The overall group was 60% female, 73% Black, mean age=51. The new self-efficacy scale showed good reliability and validity. Self-efficacy was significantly inversely associated with very low food security ($p < .05$). Being in the Freshplace intervention ($p=.01$) and higher self-efficacy ($p=.04$) were independently associated with decreased very low food security. The traditional food pantry model fails to recognize the influence of self-efficacy on a person's food security. A food pantry model with client-choice, motivational interviewing and targeted referral services can increase self-efficacy of clients. Prioritizing the self-efficacy of clients over the efficiency of pantry operations is required to increase food security among disadvantaged populations.

Introduction

Food insecurity, or not having the resources to obtain enough safe, nutritionally adequate food to support an active, healthy life, is a significant public health issue in the United States. In 2013, 14.3% (17.5 million) of American households experienced food insecurity at some point during that year (U.S. Department of Agriculture, 2015). The underlying risk factors for food insecurity include unemployment, low levels of income and education, high housing and heating costs, lack of access to transportation, poor mental health and low social capital (U.S. Department of Agriculture, 2015; Poppendieck, 1998; Gorton, Bullen & Mhurchu,

2010). The private emergency food system, comprised of food banks, food pantries, and soup kitchens, has grown tremendously over time and currently provides a vital source of assistance for millions of Americans (Daponte & Bade, 2006). In 2014, Feeding America, the largest organization of emergency food providers in the country, served an estimated 46 million people, an increase of almost 25% from 2009 (Feeding America, 2014). The Feeding America network consists of 200 food banks and 60,000 local charitable agencies. Since 2009 the number of food pantries and meal programs providing food has decreased by 1,000 agencies, meaning there are fewer programs providing more meals to families in need.

Food insecurity is associated with a range of negative health outcomes, including poor physical health of infants, low educational achievement among children, mental health issues among adolescents and adults, and nutrient deficiencies (Fox and Cole, 2004). The diets of food insecure individuals and families increase risk for chronic health conditions, including obesity (Fox and Cole, 2004; Seligman, Bindman, Vittinghoff, Kanaya, & Kushel, 2007), diabetes (Seligman et al., 2007), heart disease (Stuff, Casey, &

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Connell, 2007), high blood pressure (Fox and Cole, 2004) and high cholesterol (Stuff et al., 2007).

While food pantries were designed to provide "emergency", short-term food assistance, many clients visit pantries regularly (Martin, Wu, Wolff, Colantonio, & Grady, 2013; Weinfield, Mills, & Borger, 2014). Food bank directors and food pantry staff are increasingly looking for ways to address the underlying issues of poverty rather than only give away food (Martin, Wu, Wolff, Colantonio, & Grady, 2013; Saul & Curtis, 2013).

The role of self-efficacy in increasing food security

The national food bank network has grown in numbers and scope over three decades while the prevalence of food insecurity has also risen (U.S. Department of Agriculture, 2015; Feeding America, 2014). Many food pantry clients are not just in need of food, but are also in need of employment with livable wages, additional education, affordable health care, improved affordable housing conditions, mental health services, and affordable child-care (Poppendieck, 1998; Feeding America, 2014). Families facing these challenges likely experience very low confidence in their ability to become self-sufficient.

The Freshplace food pantry intervention in Hartford, CT was designed to address the underlying causes of poverty through a community approach. Freshplace originated from a collaboration between three community organizations (Foodshare, Chrysalis Center, and Junior League of Hartford) to help residents living in the North End neighborhood of Hartford acquire long-term food security and self-sufficiency (Martin, Shuckerow, O'Rouke, & Schmitz, 2012). Freshplace strives to offer a more fundamental approach to the problem of hunger, and uses case management, motivational interviewing, and wrap-around services within the greater community to address the root causes of poverty. The history of Freshplace has been described previously (Martin, Shuckerow, O'Rouke, & Schmitz, 2012). People who attend Fresh-place are called members.

Recognizing the obstacles impeding food security, the Fresh-place intervention uses Bandura's Social Cognitive Theory and its core set of determinants to address the problems of hunger and food insecurity (Bandura, 1998; Van Ryzin, Ronda, & Muzzio, 2001). These determinants include knowledge of risks and bene-fits of health behaviors, perceived self-efficacy, outcome expecta-tions, health goals, perceived facilitators, and social and environ-mental impediments that may present barriers to achieving health goals.

Self-efficacy refers to an individual's confidence in their ability to plan and follow through with a series of actions that will result in desired outcomes or achievements (Bandura, 1998). Without a sense of self-efficacy, individuals will not feel compelled to change their behavior, believe in themselves, or persevere through chal-lenges to reaching their goals (Bandura, 2004). Research studies examining the association between self-efficacy and behavior change related to weight loss (Walpole, Dettmer, Morrongiello, McCrindle, & Hamilton, 2013), nutrition (Richert et al., 2010; Anderson, Winett, Wojcik, & Williams, 2010), exercise (Anderson, Winett, Wojcik, & Williams et al., 2010; Williams and French, 2011), and chronic disease management (King, Glasgow, & Toobert, 2010; Lyles, Wolf, & Schillinger, 2013), have demonstrated the pivotal role of self-efficacy in improving health.

Knowing that behavior change is a process that involves several stages, the Freshplace intervention also uses the Stages of Change Model (Prochaska, 1983) to help clients make positive changes in behavior by setting small, achievable goals. Given that self-efficacy appears to regulate transitioning between all stages of change bidirectionally, high self-efficacy acts as a universal facilitator of progression through all stages of behavior change (Bandura, 1998).

Research goals

This study builds upon previous research on food security, diet quality and obesity (Robaina & Martin, 2013) and tests the hypothesis that participating in Freshplace increases self-efficacy, which in turn decreases the prevalence of food insecurity. The research team developed a self-efficacy scale for food security to measure self-efficacy within the context of an emergency food assistance program intervention. Hereafter, the term "self-efficacy" refers to "self-efficacy for food security" specific for this inter-vention. To the authors' knowledge, no other study has explored the relationship between food insecurity and self-efficacy in this context. As such, the goals of this study were to (1) identify associations between self-efficacy and food security; (2) evaluate whether the Freshplace intervention increases self-efficacy; and (3) evaluate whether self-efficacy reduces the food insecurity of study participants over 18 months.

The freshplace food pantry intervention

There are three major components of Freshplace that make it different from traditional food pantries, each of which are designed to increase the food security and self-efficacy of mem-bers: (1) fresh food, including fruits, vegetables, meat, and dairy, is provided in client-choice format where members choose their own food and shop with dignity, and nutrition education is offered on site; (2) program members attend monthly case management meetings with a Project Manager during which they receive motivational interviewing; and (3) individualized referral services to community programs and social services, providing assistance with housing, education, employment, health care, and other basic needs, are offered to members based on their goals (Robaina & Martin, 2013). Another core feature of Freshplace is that members are given appointment times so they do not wait in line. Tradi-tional food pantries commonly hand out pre-packaged bags of non-perishable food to clients who wait in line and do not offer any additional services.

Materials and methods

Study design

The evaluation of Freshplace consisted of an experimental study with a randomized, control group design. Freshplace opened in 2010 and outcomes were measured for study participants over 18 months. The primary outcomes of interest for this study were the food security and self-efficacy status of Freshplace members in comparison to a control group participating in traditional food pantries. The University of Connecticut Institutional Review Board approved the study protocol.

Participants and recruitment

Recruitment of study participants took place in two traditional food pantries located near the Freshplace food pantry in the North End of Hartford. After receiving consent and collecting baseline data, participants assisted with randomization into either the Freshplace intervention group or the traditional food pantry con-trol group by blindly selecting one of two colored balls from a bag indicating either Freshplace (red) or control group (blue). Sample

size was determined by program goals of serving 100 people within the first year, matched with 100 people in the control group, with oversampling to accommodate attrition. Participants were recruited on a rolling basis throughout one year to achieve the overall sample of 227 participants. Participants randomized to the intervention were invited by the research team to participate in Freshplace and given a scheduled appointment. The control group continued to receive food from traditional food pantries. Additional details about study recruitment and study design are provided in previous publications (Martin, Wu, Wolff, Colantonio, & Grady, 2013; Robaina & Martin, 2013).

A survey instrument was administered in-person by a member of the research team to participants at baseline, then every three months for 18 months. All study participants received a monetary incentive of $10 at baseline and the 12-month follow-up, and $5 for other quarterly interviews.

Measures

Basic demographic information was collected, including age, race/ethnicity, level of education, marital status, employment status, household size, use of food pantries, and participation in federal assistance programs.

Household food security was measured using the validated USDA Food Security Module (U.S. Department of Agriculture Economic Research Service, 2015). The module includes 18 questions, ordered by severity of food insecurity, that ask about a household's experiences with food insufficiency during the previous twelve months, and for the quarterly surveys in this study was adapted to ask about the previous three months. Based on responses, study participants were classified as having high, marginal, low, or very low food security (VLFS). Those with low or VLFS are considered food insecure. For some analyses, responses were dichotomized into VLFS versus all other categories (high, marginal and low food security), because approximately half of all participants were categorized as having very low food security and were expected to benefit the most from the intervention.

Self-efficacy for food security scale

Self-efficacy was measured using a newly developed self-efficacy for food security scale. This scale was developed based on similar scales for self-efficacy in other domains (Fortinsky, Kercher, & Burant, 2002; Steffen, McKibbin, Zeiss, Gallagher-Thompson, & Bandura, 2002), based on years of food security research by the PI working with families who struggle with food insecurity, and is based on Social Cognitive theory (Bandura, 1998). The scale consists of six questions, using the following response categories: 1=not at all confident, 2=not very confident, 3=somewhat confident, 4=very confident. The six questions asked, "How confident are you that you can":

1) Plan meals ahead of time?
2) Make your food money last all month?
3) Make a shopping list before going to the grocery store?
4) Compare prices before you buy food to get the best deal?
5) Make low-cost meals?
6) Buy foods that you think are healthy for your family?

Based on the data distribution, participants' average responses of above 3 (3.1-4.0) were classified as high self-efficacy, and 3 or below (1-3) were classified as low self-efficacy.

Data analysis

Data were analyzed using SPSS v. 20.0 and Hierarchical Linear Modeling (HLM v7) (IBM; Raudenbush, Bryk, & Congdon, 2011). To report demographic statistics, frequencies and chi-square tests for bivariate analyses were used. To test the reliability of the self-efficacy for food security scale, Cronbach α test was used. When testing the reliability of a scale, a Cronbach α value of 0.60 is considered minimally acceptable, with a Cronbach α value of at least 0.70 recommended (Wyker, Jordan, & Quigley, 2012). The scale's construct validity was tested via correlating responses with a variable expected to be related to the scale (how confident are you that you can pay for your most basic living expenses such as housing, food and clothing?). To measure the change in food security and self-efficacy over time, the growth trajectory of participants in the study was modeled in HLM 7.

Longitudinal analyses using HLM

Hierarchical linear models were fitted to examine changes over time. A two-level growth model, with time nested in individuals, was fitted to the data, and slopes and intercepts were allowed to vary randomly. Several models were fitted, and final contextual models determined by best fit using Aikaike information criteria (AIC).

Model 1: does the Freshplace intervention increase self-efficacy over time?

The outcome of interest in the first model was self-efficacy (SE). SE was predicted by time at level one, Freshplace, and the cross-level interaction between Freshplace and time at level two. Gender, age, education, and employment were included in the model as time-invariant control variables.

For this analysis we consecutively fitted (1) a null model with no predictors, (2) an unconditional growth model with time as the only predictor, and then (3) we added the previously mentioned time-invariant covariates at the second level. All covariates were added to the model simultaneously, slopes and intercepts were allowed to vary randomly before being trimmed for best fit.

Model 2: does self-efficacy help reduce VLFS status over time?

The second model examined VLFS as the dependent variable, using a dichotomous variable categorized as having VLFS (VLFS=1) versus not (VLFS=0). Because VLFS was a dichotomous variable, we conducted a logistic HLM assuming a Bernoulli distribution with adaptive Gaussian quadrature.

The full contextual model consisted of time and self-efficacy (SE) as level 1 covariates with the SE slope specified as non-randomly varying, and program (Freshplace=1, Control=0) as a contextual variable at level two. The latter was specified as a predictor of the time and self-efficacy slopes, which allowed for the examination of cross-level interactions between Freshplace and the foregoing variables.

Interpretation of logistic HLM

Much like logistic regression for single level variables, logistic analyses for dichotomous outcomes in HLM model the odds of success of an event's occurrence (i.e., the odds that the dependent variable=1) and estimate the effects of predictor variables on these odds. Results are usually reported in logits (denoting log odds of success) but are most commonly interpreted using odds ratios (OR), obtained by exponentiating logits. To facilitate easier interpretation of the results, OR can also be transformed into percents using the formula, 100% x (OR-1). Here, negative values

would imply a percentage decrease in the odds of success for every unit increase in a given continuous explanatory variable. On the other hand, positive values are interpreted as a percentage increase in the odds of success (of the DV) for every unit increase in a given continuous independent variable.

Results

Demographic characteristics

A total of 227 individuals were recruited into the study, for which baseline demographic data were collected. Of the 227 participants, 115 were randomized to the control group and 112 were randomized to the Freshplace intervention group. Baseline demographics are provided in Table 1. There were no significant differences in demographics of the study groups, with the exception of household size, for which the intervention group had a larger household size ($p < .01$, Table 1). In a sub-analysis of household size, there were no significant differences in household size at baseline or at follow-up when comparing those with and without high self-efficacy and with and without very low food security; and no correlation was found between household size and raw scores for food security, self-efficacy and food pantry visit frequency.

Food security and self-efficacy status

Baseline food security and self-efficacy status are provided in Table 2. Over 80% of all study participants were food insecure (not shown). There was no significant difference in the rate of VLFS in the Freshplace intervention group (51.8%) compared to the controls (47.8%).

The reliability of the self-efficacy scale for food security was evaluated with a Cronbach α test at all time points and scored between 0.74–0.84 (KMO=0.79, $p < .001$). In a test of construct validity, the scale positively correlated with a related variable that recorded participants' confidence in their ability to pay for basic

Table 1
Demographic characteristics of control and Freshplace intervention groups at baseline ($n=227$).

Characteristic	Overall	Control	Freshplace
Sample size	**227 (100)**	**115 (50.7)**	**112 (49.3)**
Gender			
Male	92 (40.5)	48 (41.7)	44 (39.3)
Female	135 (59.5)	67 (58.3)	68 (60.7)
Age, mean (SD)	51.4 (11.9)	51.1 (11.8)	51.7 (12)
Race			
Black/African American	164 (72.6)	84 (73)	80 (72.1)
West Indian	43 (19.0)	21 (18.3)	22 (19.8)
Hispanic/mixed/other	19 (8.4)	10 (8.7)	9 (8.1)
Education			
< High school degree	96 (42.3)	52 (45.2)	44 (39.3)
High School degree or greater	131 (57.7)	63 (54.8)	68 (60.7)
Marital status			
Single	136 (59.9)	70 (60.9)	65 (58.0)
Married/Living with Partner	42 (18.5)	21 (18.3)	21 (18.8)
Separated/Divorced/Widowed	49 (21.6)	24 (20.8)	26 (23.3)
Employment status			
Employed	46 (20.4)	25 (21.7)	21 (18.9)
Unemployed	154 (68.1)	76 (66.1)	78 (70.3)
Retired	26 (11.5)	14 (12.2)	12 (10.8)
Household size, mean (SD)	**2.8 (1.6)**	**2.56 (1.6)**	**3.08 (1.6)**[**]

Note. Data expressed as N (%) or Mean (± Standard Deviation). Missing data excluded from table.
[*] $p < 0.05$.
[**] $p < 0.01$.

Table 2
Food security and self-efficacy characteristics of control and Freshplace intervention groups at baseline ($n=227$).

Variable	Control N (%)	Freshplace N (%)
Food security score		
High	9 (7.8)	9 (8.0)
Marginal	8 (7.0)	10 (8.9)
Low	43 (37.4)	35 (31.3)
Very Low	55 (47.8)	58 (51.8)
Food pantry frequency		
Less than once per week	34 (29.6)	50 (44.6)
Once per week	44 (38.3)	34 (30.4)
More than once per week	37 (32.2)	28 (25)
Food pantry use		
1-2 food pantries	71 (61.7)	68 (60.7)
3 or more food pantries	44 (38.3)	42 (37.5)
Federal benefits		
Food Stamps	70 (60.9)	63 (56.3)
Free/Reduced-price school meals	26 (22.6)	27 (24.1)
Self-efficacy	Mean (SD)	Mean (SD)
Low	57 (49.6)	49 (43.8)
High	58 (50.4)	63 (56.2)

Note. Data expressed as N (%) or Mean (± Standard Deviation). Missing data excluded from table.

living expenses like housing, food and clothing ($r=.272$, $p < .01$). There were no significant differences between intervention and control groups in self-efficacy status or mean score on each of the six self-efficacy scale questions at baseline.

Relationship between food security, self-efficacy and Freshplace participation

Low self-efficacy was significantly associated with VLFS at every time point (x^2, $p < .05$), results not shown. Tables 3 and 4 present the results of the HLM analyses. Changes in self-efficacy over time were predicted by age, gender and Freshplace participation. Being in the Freshplace intervention increased self-efficacy by an extra .03 points every quarter ($p = .04$, Table 3).

In the second model (Table 4) predicting VLFS as the dependent variable, being in the Freshplace program significantly decreased the odds of VLFS over time by a factor of .71 (or an additional 29%, $p=.01$) after adjusting for self-efficacy. Also, controlling for program effects, a unit increase in self-efficacy reduced VLFS by 56%. This drop was statistically significant ($p=.01$), but not moderated by being in the Freshplace program ($p > .05$). The results revealed that both Freshplace and self-efficacy have independent effects on reducing food insecurity.

Discussion

This study produced a reliable scale for measuring self-efficacy for food security. The scale represents a novel survey instrument to measure self-efficacy among food insecure populations; however, additional research is needed to confirm its reliability with other populations of different demographics.

Self-efficacy was strongly associated with food security at each quarter. Similar to other health interventions that find self-efficacy as a key lever for behavior change, (Walpole, Dettmer, Morrongiello, McCrindle, & Hamilton 2013; Richert et al., 2010; King, Glasgow, & Toobert, 2010) our results document significant improvements in food security with increased self-efficacy. The

Table 3
Hierarchical linear model predicting self-efficacy.

Parameter	Model 1 (Full contextual model)	Model 2 (Reduced model)	Model 3 (Final contextual model)
Fixed effects estimate (SE)			
Grand intercept	3.12 (.06)***	3.12 (.06)***	3.10 (.04)***
Freshplace	−.05 (.09)	−.05 (.09)	–
Age	.001 (.003)	–	–
Gender	.28 (.09)**	.28 (.09)**	.27 (.09)**
Time slope (SE)			
Intercept	.03 (.02)	.03 (.02)	.03 (.02)†
Freshplace	.04 (.02)*	.05 (.02)*	.04 (.02)*
Age	.001 (.001)	.002 (.001)*	.002 (.001)*
Gender	−.04 (.02)†	−.04 (.02)†	−.04 (.02)†

SE=Standard Error
Note.
*** $p < .001$.
** $p < .01$.
* $p < .05$.
† $p = .07$.

Table 4
Hierarchical linear model predicting very low food security.

Parameter	Model 1 (Null)	Model 2 (Unconditional growth)	Model 3 (Conditional growth)	Model 4 (Contextual)
Fixed effects				
Grand Intercept	−.80 (.15)***	−.22 (.18)	−.34 (.18)†	−.34 (.18)†
Time slope				
Intercept		−.38 (.07)***	−.32 (.07)***	−.15 (.09)
Freshplace time	*			−.34 (.12)**
Self-efficacy slope				
Intercept			−.98 (.20)***	−.83 (.27)**
Freshplace				−.31 (.37)

Note. Model building fit statistics for the final contextual model.
*** $p < .001$.
** $p < .01$.
* p $< .05$.
† $p = .06$.

Freshplace intervention decreased VLFS and improved self-efficacy among members. High self-efficacy was also associated with a decrease in VLFS among study participants. Based on these outcomes, food pantries are encouraged to adopt strategies for boosting self-efficacy, such as serving food in a client-choice format, offering motivational interviewing, and providing targeted referral services.

The role of self-efficacy in behavior change has been evaluated in the context of chronic disease management (King, Glasgow, & Toobert, 2010; Lyles, Wolf, & Schillinger, 2013) , weight loss (Walpole, Dettmer, Morrongiello, McCrindle, & Hamilton, 2013), nutrition (Richert et al., 2010; Anderson, Winett, Wojcik, & Williams, 2010), and exercise programs (Anderson, Winett, Wojcik, & Williamsc, 2010; Williams & French, 2011), but there is no research on the effect of self-efficacy on food security in the setting of an emergency food assistance program. It is important to explore the association between self-efficacy and food security in disadvantaged populations, because they often experience chronic diseases and poor nutrition, and self-efficacy can be a powerful mechanism for managing disease and utilizing existing health promotion programs.

In order to reduce food insecurity, a new approach to private emergency food assistance is needed. Traditional food pantries have become run like businesses, as they have expanded over the past three decades (Saul and Curtis, 2013). However, a business model of efficiency, and the typical outcomes of charity – measured by giving more bags of food to more people each year – can create a cycle of dependency that reduces self confidence in one's ability to help oneself. It also fails to recognize the human elements of dignity and self-efficacy that factor into a person's ability to be food secure. By relying on handouts from food pantries, food insecure individuals are not able to take an active role in choosing their food or work on other issues related to food insecurity, which undermines their self-efficacy (Poppendieck, 1998). More holistic pantries such as client-choice are designed to give autonomy, dignity and choice to clients when obtaining food.

Prioritizing the self-efficacy of individuals over the efficiency of operations is required to increase food security among disadvantaged populations. Simultaneously, when individuals build their self-efficacy to become more food secure, it also requires that community resources are available to support them. Rather than working independently to distribute food, food pantries can partner with other existing social service agencies, such as SNAP outreach, affordable housing networks, health care screenings, and to advocate for living wages in the local community. This paradigm shift will require systemic changes on the part of food pantry directors, along with the important practical changes to the roles of food pantry volunteers and staff, as well as the way they interact with clients.

Limitations

The data collected through interviews with study participants were self reported, which potentially introduces a response bias into the data collection and analysis. Completing surveys as an interview, rather than individually and anonymously, may have influenced how participants answered questions based on how they thought their answers would be perceived or interpreted. The demographics of the sample limit the ability to generalize study outcomes to other groups of a different age, race, or region.

The attrition of participants from each study group was an anticipated limitation of the study design, and was addressed during recruitment. Attrition over time reduced sample sizes and may have altered the ability to detect significant associations between variables of interest.

Finally, the power of the study may not have been high enough to detect an interaction between the Freshplace intervention and self-efficacy. More research is needed to measure this interaction and identify the components of the Freshplace intervention that have the greatest influence on self-efficacy. More sophisticated structural equation modeling may be required to test for potential moderators and mediators of self-efficacy.

Implications for research and practice

Despite decades of attempts to address hunger and food insecurity in the U.S. through public and private food assistance programs, food insecurity remains a serious issue in our society, with significant public health consequences. In an effort to develop a different strategy to increase long-term food security and self-sufficiency, and prevent chronic dependence on food assistance programs among those in need, the innovative Freshplace food pantry program was developed. Combining a client-choice format with access to fresh foods, case management using motivational interviewing, and targeting referral services to local resources, the

Freshplace food pantry provides a new model for delivering food assistance. The evaluation of Freshplace is the first randomized control trial of a food pantry intervention, which provides valuable insights for improving private food assistance programs and increasing household food security. This analysis suggests that methods to increase self-efficacy will be an essential component of the evidence-based food pantry model. Rather than focusing on serving more food to more people, these results stress the importance of building relationships with a smaller cohort of pantry clients. This paradigm shift will address clients' reasons for being food insecure, will boost their self-efficacy for becoming food secure, and will partner with other community agencies to increase participation in federal food assistance programs and other social service programs to improve economic well-being.

A food pantry that is able to address the root causes of food insecurity, and help clients achieve long-term food security and self-sufficiency could prevent the negative physical and mental health consequences of food insecurity and provide a model for more effectively promoting community food security across the country (Robaina and Martin, 2013).

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