

# How to Engage Small Retail Businesses in Workplace Violence Prevention: Perspectives From Small Businesses and Influential Organizations

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**Background** Small retail businesses experience high robbery and violent crime rates leading to injury and death. Workplace violence prevention programs (WVPP) based on Crime Prevention Through Environmental Design reduce this risk, but low small business participation limits their effectiveness. Recent dissemination models of occupational safety and health information recommend collaborating with an intermediary organization to engage small businesses.

**Methods** Qualitative interviews with 70 small business operators and 32 representatives of organizations with small business influence were conducted to identify factors and recommendations for improving dissemination of a WVPP.

**Results** Both study groups recommended promoting WVPPs through personal contacts but differed on other promotion methods and the type of influential groups to target. Small business operators indicated few connections to formal business networks.

**Conclusions** Dissemination of WVPPs to small businesses may require models inclusive of influential individuals (e.g., respected business owners) as intermediaries to reach small businesses with few formal connections. *Am. J. Ind. Med.*

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**KEY WORDS:** workplace violence; qualitative research; small business; occupational safety; intervention model; prevention; information dissemination

## INTRODUCTION

Workplace homicide imposes a large societal cost, particularly in the retail, accommodations, and food services

sectors, which experienced 164 of the 397 total workplace homicides in the United States in 2013 [BLS, 2014b]. The monetary cost of all workplace homicides between 1992 and 2001 was over 2.6 billion dollars [Hartley and Biddle, 2005]. In 2013, the most common workplace homicide assailant across all industry sectors for male victims was robbers, and robbers were the second most common assailant of female victims [BLS, 2014a], indicating that violent crime is a major contributor to workplace fatal injury. Small retail and service businesses (e.g., convenience stores, gas stations, bars, and liquor stores) are among those most at-risk for workplace violence leading to employee and customer injury and death [Loomis et al., 2001; Peek-Asa et al., 2006].

Many interventions designed to prevent violent crime in the retail small business workplace are based on the Crime Prevention Through Environmental Design (CPTED) model, which emphasizes altering design features of the store environment and employee training to improve factors such

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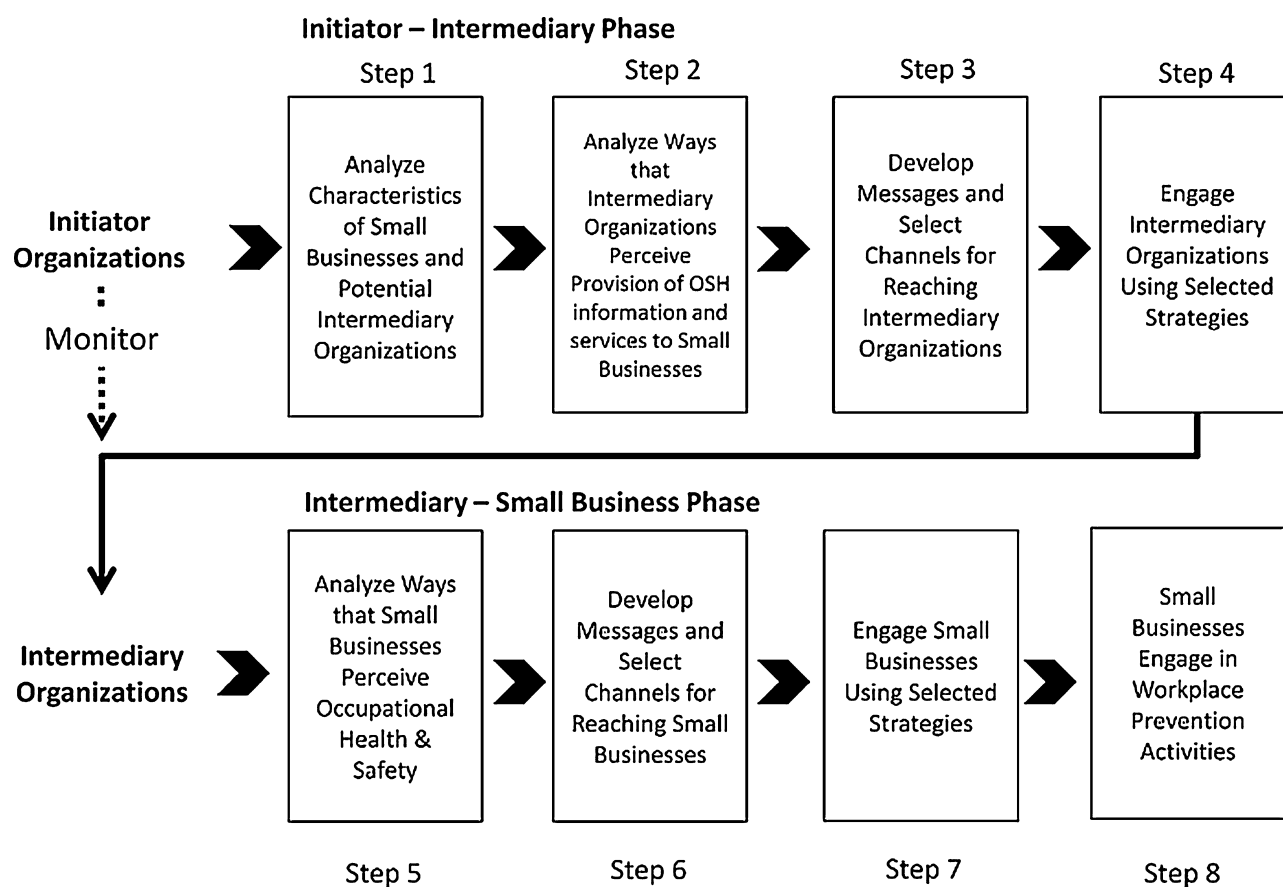
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as natural surveillance and access control (as reviewed in Casteel and Peek-Asa, 2000). One workplace violence prevention program, the focus of the current study, based on the CPTED model has been shown to effectively reduce robbery and violent crime in small retail and service businesses [Casteel et al., 2008]. Such businesses tend to have fewer resources for workplace violence and crime prevention than those with corporate or franchise support and, therefore, are likely at greater risk for experiencing robbery and violent crime leading to injury and death [Casteel and Peek-Asa, 2000]. CPTED-based interventions, when implemented fully, are generally effective for reducing crime and improving employee safety, but small businesses experience barriers to program participation [Wassell, 2009]. The challenge of engaging small businesses in prevention programs extends to other areas of occupational safety and health (OSH) as well [Eakin 1992; Eakin et al., 2003, 2010; Parker et al., 2012].

Small businesses with fewer than ten employees comprise 79.2% of firms and 11% of workers in the United States [US Census Bureau, 2012]. Workers in smaller establishments experience the highest risk for occupational injury but have the fewest resources to address safety risks as compared to larger businesses [Hasle and Limborg, 2006]. To address this challenge, researchers have proposed various

models for disseminating OSH information and interventions to small businesses [Hasle and Limborg, 2006; Olsen et al., 2012; Sinclair et al., 2013]. These dissemination models typically begin with an “initiator” organization, such as a public health department or occupational safety organization, that develops or utilizes an existing OSH intervention and aims to deliver it to small businesses [Olsen et al., 2012; Sinclair et al., 2013]. To reach small businesses, the models assume that the initiator works through an “intermediary” organization, such as an insurance company or chamber of commerce, that interfaces directly with small business operators (“operators”) [Hasle and Limborg, 2006; Olsen et al., 2012; Sinclair et al., 2013]. The intermediary organization then disseminates the OSH information or program to the operators, resulting in improved safety, health practices and outcomes for small businesses.

The Extended Model for Small Business OSH Intervention proposed by Sinclair et al. [2013] builds upon these models by incorporating ideas from social exchange theory and diffusion of innovations theory into the initiator–intermediary interaction. It prompts fuller consideration of the intermediary organization and operator’s perspectives, and it emphasizes that the initiator must market the OSH intervention to both groups (Fig. 1). Sinclair et al. [2013] called for further study of



**FIGURE 1.** Extended model for small business OSH intervention, reproduced from Sinclair et al. [2013].

the role that multiple intermediaries could play in disseminating OSH interventions and influencing operators. Subsequently, Cunningham and Sinclair [2014] conducted case studies applying the Extended Model for Small Business OSH Intervention to safety and hazard-reduction interventions for the construction, restaurant, boat repair, and general small business industries. The authors reported variability in the success of these intermediary collaborations in reaching operators with OSH information.

The aims of the current study are to (a) examine the perspectives of operators and potential intermediaries on disseminating a workplace violence prevention program (WVPP) to small businesses, and (b) characterize a range of possible intermediaries for disseminating the program to the prioritized small business population.

## METHODS

The current qualitative study examines factors influencing the dissemination of a retail workplace violence prevention program utilizing interviews with small business “operators” (owners and managers) and community influential groups. Police departments delivered the intervention to small businesses between 2008 and 2011 in six implementation police jurisdiction sites in the United States (“sites”), including urban and rural jurisdictions and diverse business communities [Casteel et al., 2008]. The program includes a group or one-on-one training session on crime prevention and two site assessments of the business environment to individualize the program.

The primary aim of the Business Operator interviews was to understand factors related to program uptake and operators’ social support networks among small businesses in the six 2008–2011 WVPP implementation sites. The Community Influential interviews were conducted outside of the original implementation sites and designed to investigate ways to improve dissemination of the program by interviewing representatives of organizations that interface with small businesses. These organizations were chosen because of their potential to influence operators to engage in a WVPP or their potential role as intermediaries for delivering the intervention. Both studies were informed by a realist, post-positivist epistemology [Grbich, 2007] in their design and analysis. Post-positivist realism assumes that an objective truth can be inferred from observations that can be broadly generalized, but that care must be taken to account for bias and errors in interpretation. Each study was approved by the Institutional Review Board at the University of North Carolina, Chapel Hill.

### Business Operator Study

Law enforcement officers and crime prevention specialists approached a total of 1,326 businesses across the six law

enforcement jurisdictions (“sites”) where the WVPP was implemented. Approximately, one-quarter (22%) of businesses enrolled in or completed all phases of the program. Officers and crime prevention specialists certified 73 of the 144 businesses completing all program phases (51%). Over three-quarters (77%) of the businesses approached with the program did not participate in the training (the first step) and thus did not progress in the program.

For selection of respondents for this study, businesses in the six sites were eligible if they were located in a program implementation site. Respondents (1) agreed to participate and attended business operator training session; (2) declined to participate; or (3) reported no knowledge of the program. The businesses were then stratified by number of employees (<5, 5+ employees) and business type (independently owned, franchise/corporate). Within each combination of strata, businesses were randomly sampled to be approached by research staff for a face-to-face interview with the owner or manager (“operator”). Interviews were conducted until information saturation (i.e., the point at which subsequent interviews would unlikely yield new information) was achieved [Kuzel, 1999].

Between April and June 2012, the research team approached 114 eligible businesses to participate in the study. A total of 70 operators, of whom 56 (80%) were operators of independent (not corporate or franchise) businesses, completed interviews. The size of the businesses ranged from 1 to 49 employees, with 54 (80%) of the interviewed operators’ businesses having fewer than 10 employees. To focus on the primary intended audience for the WVPP, only data from independent operators were analyzed in the current study. Of the 56 independent operators interviewed, 25 had no knowledge or recall of the WVPP, 18 had personally participated in the WVPP, and 13 had personally declined to participate in the WVPP. Convenience stores, gas stations, and other retail stores were the most common industry categories represented in the sample (Table I).

Oral informed consent was obtained for each participant. Interviews were conducted using a semi-structured guide (see Supplementary Appendix A), based on the Health Belief Model and Social Support Theory [Janz and Becker, 1984; Heaney and Israel, 2008], with questions regarding (1) factors (e.g., characteristics of the program, outcome expectations, barriers, and motivators) related to program participation; (2) current strategies used to reduce workplace crime; (3) operators’ social connections and support; and (4) operator demographics. Some questions were unique to each group. For instance, only those who participated in the WVPP were asked about reasons for participating and what changes to the program they would recommend. Similarly, only those who declined to participate in the WVPP were asked about barriers to participation. Operators received \$50 in cash for completing the interview lasting approximately

**TABLE I.** Number of Independent Small Business Operators Interviewed, by Participation in Crime Free Business and Industry Category

Industry	Participated	Declined	No knowledge	All participation types
Bakery	1	0	1	2
Bar/night club	1	1	2	4
Convenience store/Gas station	4	2	12	18
Grocery store	0	1	1	2
Hotel/motel	1	0	0	1
Liquor store	0	0	1	1
Other retail	3	6	2	11
Other service	5	1	2	8
Pharmacy	0	1	0	1
Restaurant	3	1	4	8
Total	17	13	25	56

30 min. All interviews were audio-recorded with permission from the respondent. The interviewer also took notes on the interview questionnaire. The interviewer used the audio recording following the interviews to fill in any missing information.

Data were entered by interview question and participant ID into a Microsoft Excel spreadsheet. Comparisons of themes within interview questions and across program participation categories were represented and analyzed in tabular format. In some cases, theme frequency counts were extracted for comparisons across participation categories.

## Community Influential Study

Representatives of organizations that interface with small businesses located primarily in the southeastern US were identified using Internet searches or referrals from other study participants. Recruitment focused on organizations with a local, rather than inter-state or national, presence, and substantial experience with small businesses in their own communities. These organizations included non-profit, for-profit, and governmental organizations, including business membership, crime prevention, economic development, insurance, regulatory, and security organizations and entities. They were identified as Community Influentials using “typical case” and “snowball” purposive sampling [Ulin et al., 2005] of those with experience serving, regulating, or marketing products or services such as insurance and fire inspections to business operators. A maximum of five contact attempts by telephone or email were made to 51 representatives, with 32 of those recruited to the study (Table II), 15 that declined, and 14 that could not be reached. Recruitment ended when no new organization types or contacts were mentioned and thematic saturation had been achieved.

Oral informed consent and permission to audio record the interview was obtained from each participant. The 30–50 min telephone interviews, conducted from April to July 2013 by

the first and second author, were based on a semi-structured interview guide containing questions on the organization’s communication with operators, methods of outreach, and thoughts on disseminating programs like the WVPP. Transcribed interview data were coded and analyzed in QSR NVivo 10 for Windows by the first author, who used an iterative process of coding and recoding, memoing, and conceptual modeling to identify, map, and analyze emergent themes. The codebook for this analysis was developed collaboratively with the co-authors. Examples of emergent themes include “credibility,” “fear, uncertainty, doubt pitch,” and “peer competition.”

## RESULTS

Interviews with Business Operators and Community Influentials yielded information about engaging operators in WVPPs from two overarching perspectives. The Business Operator perspective is that of the immediate consumer of the WVPP. The Community Influentials’ perspective reflects the view of people in organizations that serve, regulate, and market products and services to operators. Both sets of participants provided data related to four thematic categories: (1) barriers to operator participation in WVPPs; (2) WVPP design recommendations and preferences; (3) outreach strategies and messages to engage operators in WVPPs; and (4) groups and individuals who are influential to operators. The following sections present a comparison of Business Operator and Community Influentials perspectives on each of these themes.

### Barriers to Operator Participation in WVPPs

To compare the Business Operator and Community Influential views on barriers to participation in WVPPs, responses from operators who declined to participate were compared with those of all Community Influentials. These

**TABLE II.** Number of Participants in Each Organization Category

Organization classification	Participant count	Participant roles
Business membership/accreditation organization	5	Membership chair, founder, director of business development, political director, communications specialist
Community association	2	Vice president, board secretary
Crime prevention/law enforcement organization	4	Executive director, crime prevention specialist, president, community resource officer
Economic development organization	4	President of initiative capital, micro-enterprise loan program director, president and CEO, jobs and leadership development director
Insurance company or agency	2	Insurance agent, manager of small business insurance unit
Lending institution	2	Senior vice president, branch sales manager
Licensing or regulatory agency	3	General inspections supervisor, assistant fire marshal, code consultant
Property management company	1	Tenant liaison
Security company/association	4	Owner, marketing staff (two), vice president of education, vice president of marketing
Small business assistance organization	3	Director, volunteer mentor, ombudsman
Trade association	2	Membership director, communications staff
Total	32	

Business Operators were asked why they declined to participate in the WVPP, and their responses largely mirror the barriers that Community Influentials cited. Limited time, limited staffing, and scheduling constraints emerged in both studies as major barriers to operator attendance at WVPP training sessions. Both groups also indicated that learning about crime prevention was not a high priority for many operators and that language could be a barrier to participation in the WVPP.

### WVPP Design Recommendations and Preferences

In accordance with the notion of limited time, limited staffing, and scheduling constraints as major barriers to operator involvement in WVPP training sessions, both Business Operators and Community Influentials indicated strategies for overcoming those barriers. Recommendations to offer a WVPP training session of no more than 2 hr at a variety of times in or near the business location emerged from both sets of interviews. Some Community Influentials suggested offering the WVPP in conjunction with another event, such as an alcohol compliance training, that many operators are already required to attend. This idea of “piggybacking” the WVPP onto another program did not arise in interviews with Business Operators.

### Outreach Strategies and Messages to Engage Operators in WVPPs

The main strategies that both Business Operators and Community Influentials recommended for promoting

WVPPs to operators involve personal outreach. Among Business Operators and Community Influentials alike, peer-to-peer outreach was commonly cited as an effective approach for engaging operators in programs. Several Business Operators suggested asking operators who had completed the WVPP to reach out to other operators and to endorse the program, noting that “the best advertisement is word of mouth.” Similarly, a few Community Influentials recommended “generating referrals” by asking current members or clients “to reach out on your behalf to sort of to help you network and communicate.” Aside from peer-to-peer methods, several Business Operators and Community Influentials recommended “door-to-door promotion,” visiting the business establishment and talking directly with the operator, and targeting businesses that have experienced crime. Community Influentials also emphasized meeting with operators in-person at trade and business networking events to promote the program, with one respondent noting, “it’s harder to blow off a person than it is a piece of paper.”

Another frequently cited approach to operator outreach was through partnership with business membership and assistance organizations. Business Operators focused more on channeling promotional communications through trade associations and business membership organizations, such as Chambers of Commerce, to recruit operators to the WVPP. In contrast, many Community Influentials felt that community and business development organizations, such as Small Business (Development) Centers, and commercial service providers, such as certified public accountants, play a significant role in promoting programs through personal referrals.

A few individuals in each study group noted the importance of creating a promotional campaign that does not

appear to operators as a solicitation. The credibility of the promotional messaging source emerged in some Business Operator interviews as a counter against operator perceptions of being solicited. Likewise, in several Community Influentials interviews credibility, familiarity, and rapport were key to getting promotional messages across to operators.

The three main categories of WVPP promotional messages that Business Operators, particularly those with five or more employees, and Community Influentials both recommended include (1) safety and prevention; (2) risk of and susceptibility to crime; and (3) benefits to the business (Table III). Safety and prevention messages such as, “creating a safer environment” and “You work hard, why wouldn’t you take steps to protect it?” emerged from both study groups, emphasizing the effectiveness of the WVPP in preventing crime and protecting employees. Both Business Operators and Community Influentials offered messaging ideas related to perceived risk of robbery and violent crime, specifically suggesting that WVPP promoters use profiles or statistics on victimized businesses that are similar to the audience of operators by industry or geography. A few Business Operators with fewer than five employees warned against using messages that might “scare” operators by using the word “robbery” or failing to reassure operators that the WVPP is to help them, not perform a regulatory “check” on them. One of these smaller business operators suggested asking business owners about their concerns and being responsive to those concerns in promoting the WVPP. Business Operators who had participated in the WVPP recommended promoting other benefits to businesses as well, such as tips for dealing with customers, potential sales increases because of an improved store environment, and the free program materials that accompany the training. On the other hand, Community Influentials suggested promoting benefits such as insurance savings and being able to attract more or better employees to the business. Aside from these

three categories of messages, the promotional messages Business Operators and Community Influentials recommended did not generally overlap (Table III).

Business Operators and Community Influentials differed substantially on the best modes of communication, other than in-person outreach, for promoting programs to operators. Whereas direct mailing was mentioned by both study groups, all other recommended modes of communication were mentioned by only one study group respectively (Table IV). Community Influentials tended to emphasize referrals from peer organizations, such as Small Business Centers, and creating web pages that operators can find easily in online searches as the major channels for program promotion. On the other hand, Business Operators discussed a variety of communication modes, from trade publication and newspaper advertisements to mailings. Additionally, operators of larger businesses (those with five or more employees) recommended distributing fliers and brochures and using mass media channels such as television, radio, and Internet. Several Business Operators and Community Influentials mentioned cold calling, or calling without an introduction or pre-existing relationship with the operator, but one Business Operator recommended against cold calling and one Community Influential indicated that it was not a successful strategy for engaging operators in programs.

## Groups and Individuals Who Are Influential to Operators

When asked which individuals, groups, and settings might influence operators to participate in a WVPP, Business Operators and Community Influentials provided numerous examples (Supplementary Appendices B and C). By far, the

**TABLE III.** Comparison of Recommended Workplace Violence Prevention Program Promotion Messages Recommended by Each Study Group

Messaging theme	Business operators	Community influentials
Benefits of police relationship	X	
Benefits to the business	X	X
Benefits to the community	X	
Gaining information/new knowledge	X	
Liability/reducing future losses		X
Program convenience	X	
Program price (free)	X	X
Risk/susceptibility to crime	X	X
Safety and prevention	X	X

**TABLE IV.** Comparison of Recommended Modes of Communication for Engaging Operators in Workplace Violence Prevention Programs Mentioned by Each Study Group

Communication mode	Business operators	Community influentials
Advertisements in newspapers	X	
Advertisements in trade Publications	X	
Cold calling	X	
Direct mailing	X	X
Faxes	X	
Other	X	
Personal invitations	X	
Referrals from business development organizations		X
Referrals from for-profit small-business-serving companies		X
Operator internet searches		X

single most frequently cited influential group among Business Operators with more than five employees and Community Influentials was the Chamber of Commerce. Many independent Business Operators interviewed mentioned the Chamber of Commerce as influential or a favorable setting for hearing about a WVPP. However, only four Business Operators reported being active members of the Chamber, two others had membership but did not attend meetings, one was a past member, and one only associated with the Chamber via her husband, who is a member. Those who mentioned the Chamber ranged from operators of hotels and restaurants to grocery stores and hair salons, and included those who participated in the WVPP as well as those who declined or had not heard of it. Similarly, many Community Influentials recommended working with local Chambers of Commerce, particularly in “rural communities” where they have the most connection to small businesses, to promote a WVPP. Indeed, Chambers of Commerce and Small Business (Development) Centers were central nodes in the small business client-referral network we constructed from the Community Influentials interviews (Supplementary Appendix D).

In addition to the Chamber of Commerce, Downtown Business District organizations, and Business Networking International groups, other roundtable and business coalition groups were frequently cited, such as trade associations. Business Operators tended to emphasize professional associations tied to specific ethnic or immigrant groups, such as a Hispanic Chamber of Commerce, a Korean American Business Association, and “Korean, Indian, Latino...” restaurant owner associations. On the other hand, Community Influentials rarely discussed ethnically-tied professional associations.

Another influential group that many in both study groups mentioned is respected small business owners, essentially Business Operators’ well-regarded peers. For many Business Operators with five or more employees, they described small business owners who would influence them to participate in a WVPP as those who have achieved long-term business success, are involved in the life of the community, sponsor community events, are well known, and hold leadership positions. Those to whom Business Operators can relate—those in the same industry, locality, ethnic group, or who are family or friends—were reported as especially influential. Operators of businesses with fewer than five employees generally were unable to name or describe respected small business owners in their community. Community Influentials also talked of “key leaders” and “higher-profile businesses in a community” as having influence over other operators.

In the context of interviews about a WVPP delivered by local law enforcement, many Business Operators and Community Influentials asserted that police are influential to operators because of their “authority” and many operators’ desire to develop a positive relationship with local law

enforcement. Many more Community Influentials than Business Operators mentioned regulatory agencies such as the Alcoholic Beverage Control Commission, the Fire Marshal, and the Department of Commerce.

Both Business Operators and Community Influentials perceived community- or neighborhood-based groups as influential; however, Community Influentials primarily mentioned crime-related groups such as neighborhood watch groups, whereas Business Operators mentioned more residential and ethnic community groups such as the Korean Restaurant Owners Association. Community Influentials felt that neighborhood or business watch groups would have the power to influence operators to participate in WVPPs, yet few Business Operators cited crime prevention groups; instead, more mentioned residential organizations, community centers, recreation centers, and ethnic (i.e., Latino, Korean, and Chinese) community associations. Furthermore, some Business Operators suggested that religious institutions such as churches and temples could influence the operators that attend their services. Only one Community Influential suggested places of worship as influencers of operators.

Some Business Operators with five or more employees named wholesalers, suppliers, and vendors of their pharmacies, gas stations, convenience stores, and other retail stores as influential groups, whereas Community Influentials and smaller Business Operators did not.

Although most Business Operators identified influential organizations and groups, only one fourth of independent Business Operators interviewed affiliated with other operators through formal business, professional, or other membership organizations like the ones they mentioned. Seventeen Business Operators reported informal contact with friends or local operators, and 24 Business Operators reported no regular personal contact with other operators aside from family members. The Business Operators who participated in the WVPP were generally those most connected to formal business networks and organizations, as compared to those who declined to participate or had no knowledge of the WVPP.

## DISCUSSION

The current study reveals two overarching challenges to disseminating WVPPs via intermediary organizations: (1) low operator participation in formal business networks, and (2) discrepancies in the strategies that operators (Business Operators) and potential intermediary organizations (Community Influentials) recommend for engaging operators in WVPPs. These challenges may have implications for dissemination of other OSH efforts directed at small, independent storefront businesses.

A minority of the operators interviewed in this study were affiliated with formal business and professional

organizations, such as Chambers of Commerce and trade associations, even though many Business Operators mentioned such groups. This finding mirrors that of a qualitative study conducted in the UK, which found that urban small business operators perceived few benefits from joining chambers of commerce, and therefore were not members, even though they identified such organizations as a focal point for local small business [Curran et al., 2000]. Those operators cited time limitations and competition with other businesses as reasons for not formally associating with other operators [Curran et al., 2000]. Instead, most operators in the current study indicated that any contact they had with other operators—and, potentially, business-related information as well—occurred through informal contact with neighboring businesses and suppliers; within residential, religious, and ethnic communities; and among family and friends. Certain other professional relationships, such as with a certified public accountant, may also supply operators with business-related information (Hasle et al., 2010). The informal networks among small, independent storefront businesses found in the current study have been described in previous studies of a variety of small business types [Greve and Salaff, 2003; Todeva, 2011]. Research indicates that operators rely on such connections for business information and resources throughout the business development cycle [Greve and Salaff, 2003; Todeva, 2011].

Small business reliance on complex, informal networks of fellow business owners, family members, and friends poses a challenge to disseminating occupational safety and health information and programs using intermediary organizations alone. The Extended Model for Small Business OSH Intervention does not explicitly account for the role of informal networks and “word of mouth” dissemination mechanisms, both of which were major themes in the current study [Sinclair et al., 2013].

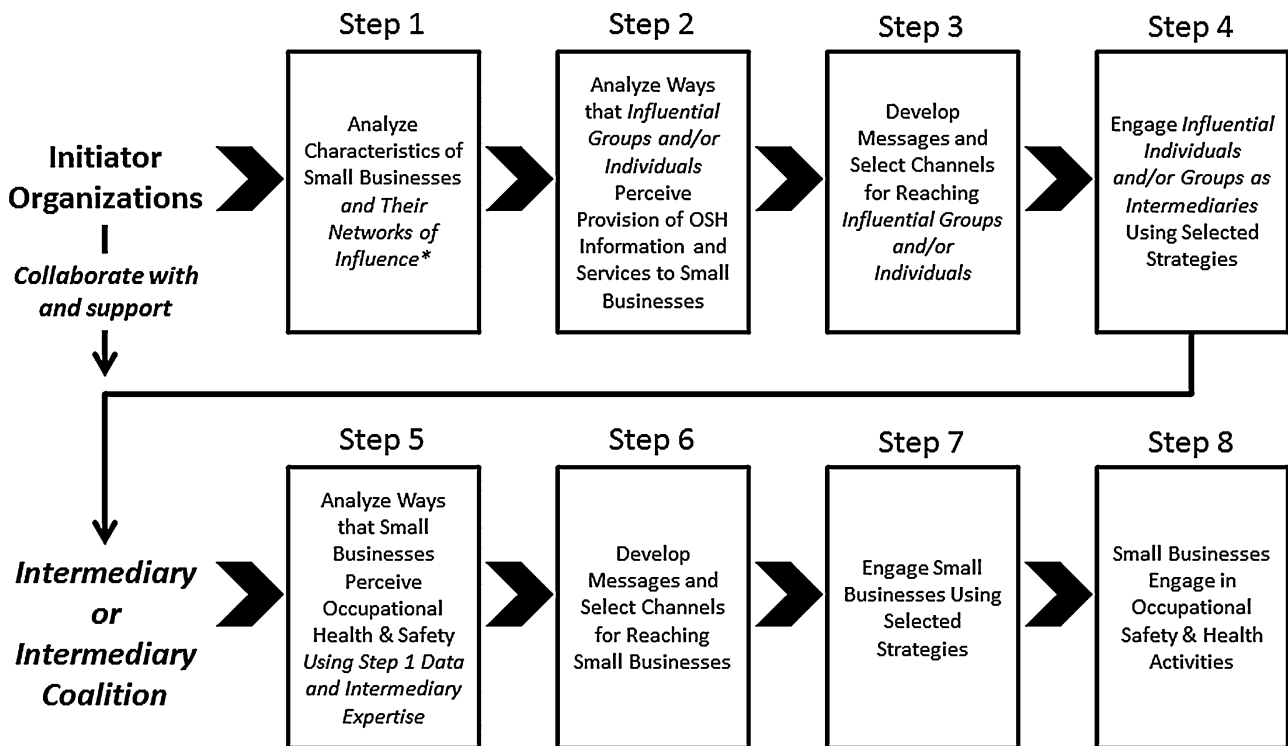
Another challenge to the Extended Model for Small Business OSH Intervention and similar models is the difference in perspectives between operators and potential intermediaries found in the current study [Sinclair et al., 2013]. Whereas there were many areas of agreement between both groups, particularly about barriers to participating in WVPPs—time and staff limitations, as well as low perceived risk of workplace safety issues [Eakin, 1992]—there were some differences in identified facilitators, preferred communication channels, and messages for promoting WVPPs. This study was not designed to empirically test the effect of these factors on WVPP dissemination, but it is conceivable that a dissemination strategy based only on the intermediary’s ideas for how to reach operators, for example, could ultimately be less effective than a strategy based on the operators’ ideas.

To address these challenges, we offer three recommendations for enhancing the OSH diffusion model proposed by Sinclair et al. [2013]:

- (1) The first step in planning an OSH information dissemination program should be to identify the small business population(s) with the most pressing OSH need, as suggested previously [Sinclair et al., 2013] (Fig. 2, step 1). The initiator organization should conduct formative research with business operators in these priority populations to identify influential community leaders (e.g., respected local business owners), networked peers, sub-communities, and influential groups (e.g., insurance providers, suppliers) that could potentially serve in the formal role of “intermediary” for promoting and/or disseminating OSH information. In a review of OSH small business interventions, Hasle and Limborg [2006] found that, although rigorous evaluation of many interventions was lacking, there were indications that OSH dissemination through personal contact with trusted intermediaries was most effective. Additionally, the initiator should investigate the business operators’ preferred communication strategies, barriers to adopting the OSH practice, and motivational factors. Methods for gathering this information include semi-structured interviews, questionnaire surveys, and focus group discussions with identified priority small business operators.
- (2) The initiator organization should not only market its OSH initiative to potential intermediary organizations, as suggested by Sinclair et al. [2013] but also potentially to influential individuals identified in formative research with operators (Fig. 2, steps 2–4). The initiator should be ready to take advantage of the social capital that already may exist in individuals or informal networks in the small business community to influence the uptake of OSH practices.
- (3) Instead of leaving the intermediaries to devise an OSH marketing strategy for operators, which some informal network intermediaries (e.g., local business owners or community leaders) may not have the training to do alone, the initiator organization should be an active collaborator with the intermediaries, as Cunningham and Sinclair [2014] have suggested in a review of case studies based on the Extended Model for Small Business OSH Intervention. Using formative research with operators, the initiator organization can make marketing recommendations based on information gathered from the prioritized small business population about preferred marketing approaches, barriers, and motivators to engaging in the OSH program or intervention (Fig. 2, steps 5–8).

These modifications to the OSH intervention diffusion model would guide OSH researchers and practitioners to consider partnerships with individuals and groups that influence the prioritized operators via informal and formal





**FIGURE 2.** Revised extended small business OSH intervention diffusion model, based on Sinclair et al. [2013] model. \*Text in *italics* represents a modification of the Sinclair et al. [2013] model.

networks. Furthermore, these enhancements prompt OSH researchers and practitioners to take on a more active role in the outreach efforts of the selected intermediary(ies) by using formative work on how to market OSH to small businesses to inform those efforts.

## Limitations

The current study has some limitations regarding the validity of the comparison of Business Operator and Community Influentials data and for transferability of the findings. It is possible that the business operator groups that the Community Influentials interface with are fundamentally different from the Business Operators interviewed for this study, despite efforts to interview primarily Community Influentials connected to small, independent retailers. This might be partly because the Community Influentials for this study were from a different geographical setting than the Business Operators. To account for differences by region and setting, the study team designed the interview questions to elicit more general responses about interfacing with operators. Other study factors may influence the difference in views between the Business Operator and Community Influentials perspectives on WVPP dissemination and participation. The Business Operator interviews were not

transcribed verbatim like the Community Influential interviews which may have limited the interpretability of the data collected. In both sets of interviews, many participants had no direct experience with workplace violence prevention programs and therefore responded to hypothetical questions about such programs, a circumstance which may have generated less valid responses than would have been obtained from those with firsthand experience.

Both the Business Operator and Community Influentials interviews were conducted in a limited number of areas within the United States and the focus of the interviews was on workplace violence prevention. The findings and recommendations from this study may therefore not reliably transfer to other OSH topics, corporate, franchise, or non-storefront small businesses, or to OSH dissemination in other countries or other regions of the United States.

## Future Research

Future investigations of OSH dissemination to small businesses should address (1) ways to effectively disseminate WVPPs; (2) the efficacy of the revised OSH dissemination model (Fig. 2); and (3) operator networks of influence. The recommendations for marketing WVPPs to operators that emerged from interviews in the current study

should undergo empirical testing with a variety of operator populations and business types to determine their effect on operator recruitment and retention in such programs. Initiator organizations disseminating OSH interventions according to the revised Extended Small Business OSH Intervention Diffusion Model should evaluate their efforts, and thereby contribute to an evaluation of the model itself. As Hasle and Limborg [2006] found in their review of OSH small business intervention studies, rigorous evaluation of such approaches has been limited. More recently, Cunningham and Sinclair [2014] have reported on case studies in which the involvement of multiple trusted intermediaries in OSH dissemination, where the intermediaries' interests converge with the initiator's and the initiator takes an active role in the intermediaries' marketing efforts, can result in effective outreach to operators. They call for more research on the "adoptability" of OSH interventions and the effectiveness of different types of intermediary groups in disseminating such interventions. To date, the available evidence lends preliminary support to the Extended Small Business OSH Intervention Diffusion Model, but more evaluation research is needed. Additionally, more research is needed on the specific ways that individuals and entities—peers, influential business owners, formal business networks and organizations, regulatory agencies, and others—interact in networks of influence with operators and have the potential to influence small business owners by promoting, implementing, modeling participation in, or even incentivizing or enforcing OSH programs [Hasle and Limborg, 2006; Cunningham and Sinclair, 2014]. Finally, others have suggested that initiator organizations themselves may have internal barriers to prioritizing and reaching small businesses to improve safety and health, so further examination of the measures that initiator organizations must take prior to reaching out to intermediaries may be warranted [Eakin et al., 2010]. Such investigations could inform further refinements of OSH dissemination models [Sinclair et al., 2013].

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## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher's web-site.

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