

Building Leadership Through Partnerships: Using Concept Mapping to Develop Community Capacity to Address Gender- Based Violence

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ABSTRACT

Background: To address an unmet need for community-driven gender-based violence (GBV) responses in areas with high levels of precarious employment, a community-based organization partnered with academic researchers and community members to use concept mapping to inform the design of a leadership development program.

Objectives: The objectives of the research were to identify and prioritize the skills, knowledge, and resources that “worker-leaders” (informal activists) need to help prevent and reduce acts of GBV directed towards individuals working in low-wage and precarious employment situations.

Methods: Using concept mapping as part of a community-based participatory project, the community-academic research team elicited input from Latinx and Korean residents from low-income immigrant communities. Individuals brainstormed, sorted, and rated the skills and resources necessary to reduce and respond to GBV. Quantitative analyses were jointly interpreted by community and academic researchers.

Results: 69 individuals participated in at least one concept mapping activity. 21 unique skills and resources across seven thematic constructs were identified. Participants believed that skills and resources related to Workplace Violence would be most effective at building trainee capacity to address GBV, but Employee and Survivor Support topics were more likely to draw worker-leaders to a program. Access to organizations that support survivors was considered both highly effective and likely to be of great interest.

Conclusions: This research ensures that the GBV leadership training program is grounded in community-generated evidence. The process of undertaking this research was at least as useful in the development of the leadership of the program as the results themselves.

KEYWORDS:

Community-Based Participatory Research, Gender-based violence, Concept mapping,
Community health partnerships < Community-Based Participatory Research, Occupational
Health, Public Health

INTRODUCTION

While the “Me Too” movement raised attention to employer-perpetrated sexual violence, few community initiatives have dealt explicitly with the reciprocal relationship between gender-based violence (GBV)- both at work and in the home - and precarious, unstable employment.¹⁻⁴ GBV, defined as physical or psychological violence used against a person because of their gender, impacts the home and work lives of thousands of individuals in the U.S. annually.⁵ While workplace harassment policies and mandating training has become commonplace, addressing other forms of GBV - including partner violence – has not, and the programs that exist are neither well evaluated nor applicable to informal workplaces with minimal infrastructure (e.g., a human resource department).⁶ Precarious employment, including temporary jobs, part-time jobs, domestic work, and jobs with low wages, no benefits, and limited protections against dangerous working conditions, makes help-seeking during business hours difficult, and likely discourages victims from seeing employers as a resource. Finally, evidence confirms that individuals abused by partners are more likely to turn to friends, family, or colleagues before seeking support from service providers.⁷ Taken together, these factors illustrate the importance of improving community-level response to GBV.

Over the past 30 years, community-based activists have been largely responsible for establishing the domestic violence response system (e.g., hotlines, shelters, community-based services,^{8,9} and programs organized on principles of empowerment¹⁰⁻¹³) More recently, multisectoral “coordinated community responses” have been promoted, requiring non-GBV-centered organizations to adopt victim- and survivor-centered approaches to service provision.¹⁴ Models of effective community-level prevention and response highlight the importance of addressing community-level norms and values, rather than merely offering services to

victims,^{15,16} and a notable shift towards a communal rejection of GBV behaviors has been seen over the last three decades.¹⁷

In the spirit of these early movements and building on Chicago's history of community activism,^{18,19} a Chicago-based organization focused on workers-rights and GBV launched a grassroots community-organizing effort to address GBV in underserved communities where large proportions of members are precariously employed.²⁰ The Co-Directors of the Community Based Organization (*CBO partners*) collaborated with academic researchers (*academic partners*) to conduct formative research for the development of a leadership program aimed at building community capacity to respond to GBV survivors and to organize members to prevent GBV.

To guide the development of this capacity building process, our community-academic research team engaged individuals from two low-income communities in concept mapping, an iterative, participatory research method ideal for identifying and prioritizing the needs of communities.^{21,22}

Research Objectives

Research objectives were to identify and prioritize the skills, knowledge, and resources that “worker-leaders” (WLs--individuals employed in precarious employment and working to change community responses to GBV) need to help reduce acts of GBV directed towards their peers working in low-wage and precarious employment situations.

Positioning Ourselves

To acknowledge the standpoint of all research partners, we provide a brief background on the three key groups in this project. The CBO, (*name redacted*), grew out of a coalition between Chicago's labor and anti-violence communities. (*Name redacted*)'s vision centers on working with primarily low-income, black and brown, immigrant, LGBTQ and disability communities.

The leadership program arose in response to a symposium in which 100 violence survivors across multiple industries and cultures demanded to be seen as leaders in the work against GBV.²³ Committed to a worker-driven model, the CBO leaders recognized the need for community input into what the WLs would need to undertake this activity. Seeking a systematic method that could identify program components across multiple communities without undue influence from the CBO, they approached a university researcher.

The academic research team consisted of a principal investigator (PI), two co-investigators (Co-Is), and two research assistants (RAs). As individual researchers, the PI and Co-Is brought expertise in GBV and concept mapping (*Name redacted*), community-based participatory research (CBPR) (*Redacted*) and occupational health (*Redacted*). All researchers were committed to partner-driven processes that prioritize the perspectives of community stakeholders.

To increase community ownership and leadership, six Spanish-speaking community members were hired and trained to serve as “Community Researchers” (CRs) to assist with leading research activities. The CRs completed a concept mapping training, an IRB-approved workshop on human subjects research, and additional concept mapping training in Spanish. After completion, the CRs assisted with recruitment, data collection, and analysis.

METHODS

Concept mapping (CM) is a participatory, mixed methods research process that allows investigators and stakeholders to gather and organize ideas, create a shared understanding of a concept, and develop a framework for planning and evaluation. CM involves a series of data collection and analysis phases: *brainstorming*, *idea structuring* (e.g. *sorting and rating*), *analysis and mapping*, and *participatory interpretation*, with participants and researchers serving as co-

learners and co-creators of knowledge.²⁴ Because CM provides every participant an equal voice in the outcome,^{22,25} it is an ideal methodology for community-engaged participatory action research.²⁶

Participant Recruitment

In the interest of reaching populations with high levels of precarious employment, the CBO partners intentionally connected with organizations serving immigrant and non-English speaking communities. Recruitment efforts drew mostly Korean and/or Latinx participants. Sorting and rating sessions were repeated 3-4 months later.

All events had bilingual staff or a professional interpreter present. Participants received \$5 - \$25 for their time, depending on the number of activities they completed. Institutional Review Board (IRB) approval was obtained from the PI's university.

Concept Mapping

To prepare for data collection, the PI and CBO leaders iteratively developed a brainstorming prompt to generate the information the CBO needed and could be meaningfully translated into Spanish and Korean (Figure 1). Group brainstorming activities were integrated into events sponsored by the CBO and held in partnership with community organizations, which publicized the events with their client base. Spanish-language events were conducted by one of the Spanish-speaking CBO leaders and a research assistant, and the Korean-language groups were conducted using a professional interpreter. Notes were taken primarily in English.

“One resource or skill that worker-leaders in my community would need to effectively reduce gender-based violence would be ____.”

By “gender-based violence,” we mean physically or emotionally harmful actions that are used against someone because of their gender or sex. These actions may take place at home, at work, or in the community.

By a “worker,” we mean someone who is employed in low-wage, temporary work, or in the informal labor market, the kind of work that has no benefits and may be unstable.

By a “worker-leader,” we mean a worker who wants to change the way their community responds to gender-based violence. This is someone who is not paid to make these changes, but who is voluntarily committed to taking action to help people in their community.

Figure 1: Focal Question and Definitions

At the conclusion of brainstorming, the CBO partners, academic partners, and CRs systematically condensed 90 responses by eliminating duplicate responses and combining similar ideas. This finalized list of 21 unique ideas was then translated into Spanish and Korean, serving as the basis for the sorting and rating activities.

Sorting and rating events took place at the same local organizations that hosted brainstorming sessions. Participants were recruited in two ways: our CBO partner reached out directly to brainstorming participants, and the local host organization publicized the events through newsletters and other mechanisms that reach the priority population. At these sessions,

participants were asked to sort slips of paper with the items on them into groups that made sense to them. Next, they rated the statements according to (a) their *effectiveness* at helping worker-leaders prevent GBV and b) the *likelihood* that a worker-leader would attend a program or workshop centered on that topic. For each rating exercise, participants were given a sheet with the rating question printed at the top, followed by the 21 statements with accompanying Likert-like scales, anchored between 1 and 5 (Figure 2).

Effectiveness:

“Please evaluate how effective each idea would be in helping worker leaders to prevent gender-based violence in their communities.”

1 = Not very effective

5 = Very effective

Likelihood to Attend:

“Please evaluate the likelihood that worker leaders would attend a program that focused on this skill or resource.”

1 = Not very likely

5 = Very likely

Figure 2: Rating Questions and Anchor Statements

Because creating a deeper understanding of the constructs identified through the CM process was part of the goal of the leadership development program, both partners agreed that the participatory interpretation step was unnecessary.

Partner Roles:

Engaging participants in a process where they would ultimately set the agenda was central, given the CBO's goal of nurturing individual capacity among those who traditionally have little voice or authority to prevent GBV in their communities. These values also played out in developing the research methodology within our partnership. The CBO partners developed recruitment strategies to engage individuals who are often overlooked in traditional research and found creative ways to conduct CM activities, making them more accessible for non-English speaking participants. The academic partners concentrated on solving methodological problems, provided logistical support for the activities, and facilitated data analysis. CM activities were led by the CBO partner, and CRs assisted heavily with sorting and rating. All research processes, guides, and recruitment materials were co-developed across the partners.

Analysis

Data were analyzed using Concept Systems Global Max©. Multidimensional scaling (MDS) was used to generate visual point “maps” illustrating the relationship between individual items using sort data. MDS translates information about pairwise distances in the meaning of those items by placing points on an abstract map. Hierarchical cluster analysis generated sets of higher-level themes, visually represented by polygon-shaped clusters of items (the items in one cluster are more similar to one another than the items in other clusters). In-depth descriptions of multidimensional scaling²⁷ and cluster analysis²⁸ may be found in multiple sources, including as they are used in CM methodology.²⁴

We ran seven cluster analyses, decreasing the number of clusters generated each time by one. Starting with a set of 11 clusters and ending with a set of four clusters, the academic partners, CBO partners, and CRs examined each configuration, looking specifically at the items that were grouped in each cluster. Through iterative processing, consensus was reached on which

configuration represented the best fit based on the intention of the research (called the cluster map). Each cluster was assigned a thematic label, and a brief description of the items in the cluster was developed. A consensus on labels and descriptions was reached by all partners.

Bivariate correlation analyses using data from the rating exercise identified the priority areas (both clusters and individual items) for training.

RESULTS

In total, 70 unique participants were included: 31 participants completed brainstorming only, and 16 participants completed brainstorming and sorting and/or rating for a total of 47 brainstorming participants. Thirty-nine participants engaged in sorting and/or rating, with 20 people completing the sorting activity and 24 people completing at least one rating exercise. (Table 1). Fifteen participants engaged in sorting, but not rating, and 19 people engaged in at least one rating activity, but did not sort.

***** Table 1 *****

Forty-seven participants engaged in group brainstorming in Spanish, Korean, and English, resulting in 90 responses which were reduced to 21 unique ideas (items) (Table 2, *Idea* column). The resulting list of skills, resources, or knowledge included a variety of different items/ideas: addressing bullying; education about gender identity and differences between sex, gender and traditional ideologies of gender roles; information about resources and organizations in the community to support efforts; and skills about communicating about difficult topics. Numerous responses centered on educating and working with men and youth to address GBV.

*****Table 2 *****

Twenty individuals participated in the sorting activity. Thirty-nine people participated in rating activities, although only 24 people provided complete data for one or both questions and are included in our analysis.

A point map illustrating the relationship between individual ideas was generated using the sorting data. The stress indicator (the statistic used to determine how well the map represents the sorting data) was calculated, and the value (0.31) fell within the accepted range of 0.21 - 0.37.²⁴ Based on the hierarchical cluster analysis, all partners agreed that a 7-cluster model represented the best fit based on the intention of the research (Table 2). Figure 3 shows the individual points as well as the final cluster map. Each point on the map corresponds to an individual statement, and each colored group represents a cluster.

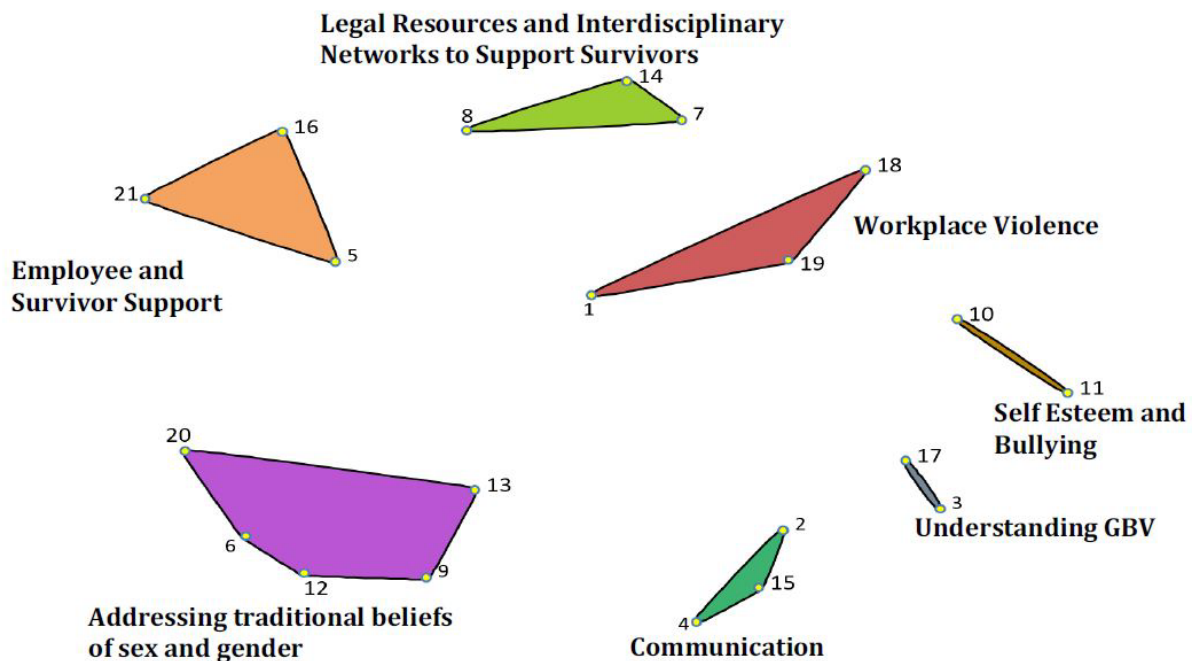


Figure 3. Seven Cluster Concept Map with Cluster Labels

We prioritized the clusters for each of the rating constructs: *effectiveness* (clusters that were likely to help worker-leaders address GBV) and *likelihood* (those topics they would be

most likely to attend a training/educational session about) (Table 2). Participants generally rated all clusters as effective at helping WLs prevent GBV, with the lowest cluster average scoring 4.28 out of 5. *Workplace Violence* and *Employee Survivor and Support* clusters were tied as the most effective (average score = 4.64).

The scores representing the likelihood of community members attending events that addressed those topics, however, were significantly lower ($p < 0.05$) except for the cluster *Understanding GBV* (average scores ranged from 4.05 - 3.51). We examined the correlation between how effective participants believed cluster items would be and the likelihood that participants would attend workshops focused on those topics ($r=0.60$) (Figure 4). The *Workplace Violence* cluster, which included statements about training ideas to address GBV in the workplace and helping employees learn their rights, ranked highest in effectiveness (4.64) but ranked fifth in terms of likelihood (cluster average = 3.72), representing the largest discrepancy between effectiveness and likelihood. *Employee and Survivor Support* ranked highest in both effectiveness and likelihood, but there was still a significant difference in cluster score averages.

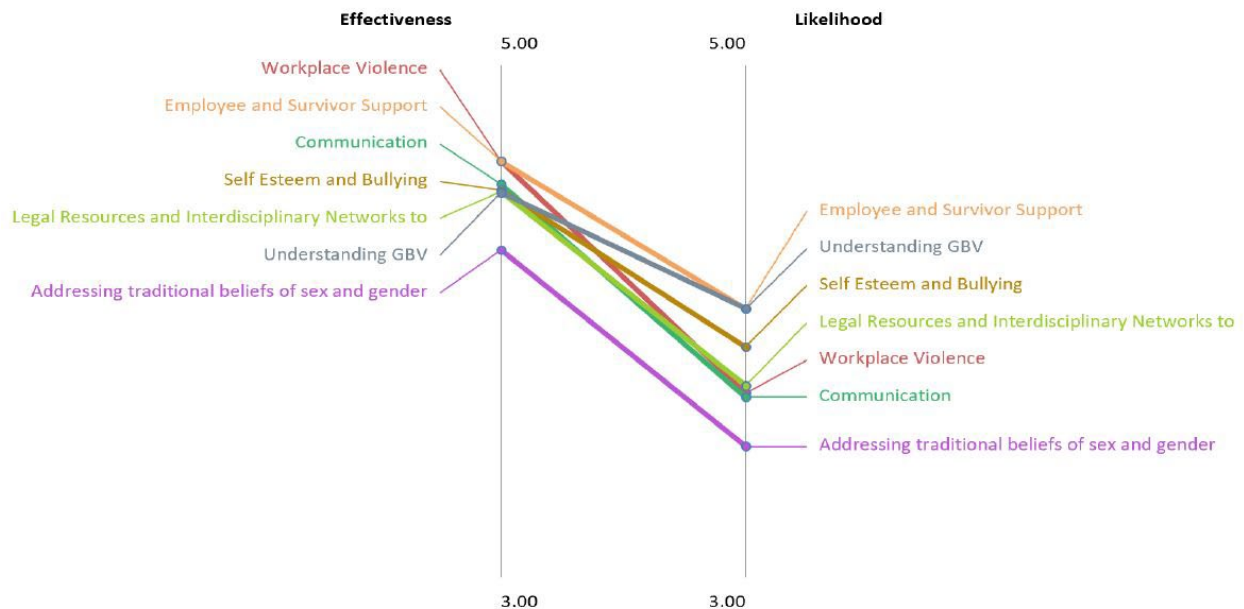


Figure 4. Pattern match showing correlation between participants’ perceptions of how effective items would be at preventing gender-based violence and the likelihood that workerleaders might attend an event or training focused on items in the cluster. $r=0.60$.

Finally, we compared the rating scores of the individual items. This is illustrated by a quadrant map (called a “Go Zone”), which shows the correlation of individual items by effectiveness and likelihood (Figure 5). The top right-hand corner of the Go-Zone (Zone I) represents the items rated as most effective and most likely to be of interest to participants (see the final column of Table 2). One topic that stands out is the desire for education, resources, and services. For example, item #5 (“Free access to organizations that support and protect survivors, including healing services like psychological and emotional support”) was rated highest in terms of Effectiveness and Likelihood, suggesting that participants see improving access to resources

for survivors as an important component to any GBV program. Other items in this zone included having a network of professionals who can support victims, as well as workshops that could educate community members about GBV, building self-esteem, and negotiating skills.

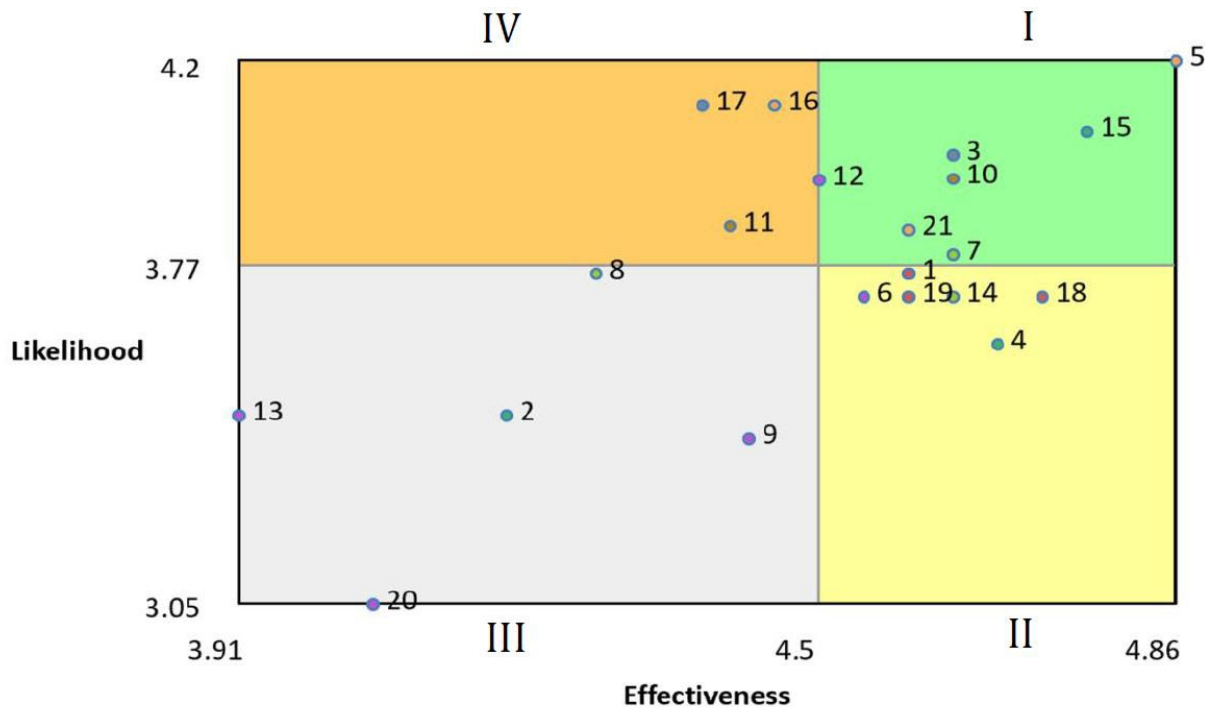


Figure 5. Go-Zone showing participants' perceptions of effectiveness of individual items at preventing gender-based violence and the likelihood that worker-leaders might attend a focused training on the item. $r = 0.62$.

DISCUSSION

Using CM methodology, a team of organizers, researchers, and community members identified 21 unique items representing skills, knowledge, or resources that WLs in communities with high levels of precarious employment would likely need in order to address GBV.

Conceptualized by community members and organized through an iterative, systematic process, the findings provide the groundwork for a grassroots leadership training program focused on supporting precariously employed WLs who want to change the way their community responds to GBV.

It was informative to see that strategies to address GBV in workplace settings were identified as some of the most effective approaches, given that roughly 30% of women experience physical or sexual violence or stalking by a romantic partner in their lifetimes.⁵ While it is possible that the term “worker-leader” led participants to prioritize workplace forms of GBV, it seems just as likely that considering violence that happens outside of family situations was easier to conceptualize. First, violence that occurs in workplace situations may be thought of as more “clear cut” in terms of right-and-wrong, and because the relationship between victim and perpetrator is not necessarily familial, it may be easier to discuss. Next, evidence suggests that workers in precarious employment are more prone to experience violence at work (although not necessarily GBV),²⁹ making this a topic that feels relevant. Finally, workplaces that rely on temporary laborers and under-the-table employment are less likely to have institutional mechanisms to address GBV, leaving individual workers to help one another. Building a network of worker-leaders who can support one another’s efforts to address workplace incidents of GBV could increase the confidence of individuals to intervene in these situations and may prove to be an ideal starting point for community-wide conversations about other forms of GBV.

From the perspective of the CBO partners, the data that emerged from this project and the process itself were of nearly equal value. CM methodology allowed engagement in a process that values stakeholder voices and opinions yet is rigorous and informed by strong research practices. The findings were immediately used to create the leadership development program, with great success. As part of the preparation of this manuscript, our CBO partners concluded that most of the learning objectives for the 8-week program emerged from the CM findings. Workshop topics such as *creating an intergenerational understanding of sex, gender, and sexual orientation, building culturally-competent skills to work with adults across cultures who may*

have 'traditional' ideas about gender-roles, and increasing individual and collective confidence and self-esteem can be seen as evolving from many of the items rated in the highest quadrant of the go-zone, as can sessions on bystander intervention training and understanding the psychological impact of violence and supporting survivors. While some of these topics are likely to be found in Western feminist approaches to domestic violence/GBV prevention, the inclusion of topics like addressing GBV within the context of traditional gender norms (and the absence of a focus on using the criminal justice system to hold perpetrators accountable) is notable. “Our curriculum ended up being very focused on the future, on imagining and creating new ideas that had generational impact, and I think part of this is attributable to the discussions that surfaced in the CM sessions,” acknowledged one of our co-authors. “We would have had a different curriculum without this process.”

Limitations

In addition to the well-documented limitations common to CBPR (e.g., recruitment difficulties, small sample sizes, non-generalizability), we faced challenges conducting CM in multiple languages, often in the same session. While one of the CBO leaders and one RA were fluent in both English and Spanish, the rest of the team spoke predominantly English or Spanish. Having to rely on a Korean interpreter to translate both instructions and the responses during the brainstorming activities made it difficult for facilitators to fully comprehend the conversations. Because some participants were not comfortable reading/writing in any language, we modified activities, using CRs to work one-on-one with participants who needed assistance. The CBO partners and a RA worked with the CRs to test all activities, soliciting feedback to simplify the process.

Another limitation is the percentage of participants who initiated, but did not complete, rating. While it is not uncommon for participants to skip items or not finish a rating exercise, this was compounded by a photocopying error in which the back page of one set of Spanish rating questions was inadvertently omitted. Efforts to conduct additional sessions were limited by poor weather conditions and deadlines. When we examined the demographic characteristics for those with and without complete rating data, we found that that 8 out of the 15 Spanish-speaking women affected by this error identified as “homemakers” (compared to 3 out of 24 with completed rating sheets).

As with many smaller CBPR projects, our findings are not generalizable beyond the communities represented by our participants, however, we do not see this as a substantial limitation. As research aimed at gathering the perspectives of members of specific communities and initiating the process of mobilizing interested individuals to action, external validity was not an aim. Our sample was identified through local organizations that provide services to immigrant families with limited resources; these agencies served as appropriate recruitment sources, and we consider this a strength, rather than a limitation, given the focus of our project. Additionally, because the data were gathered to inform a community mobilization effort, the fact that our participants self-selected to attend these events (in Chicago winter weather) suggests they were exactly the population our CBO partners were hoping to learn from: individuals who wish to contribute to the reduction of GBV.

By far the largest limitation in our project was the small number of Korean participants who engaged in sorting and rating. A series of winter storms and other logistical problems resulted in no participants attending the scheduled Korean sorting/rating events. Prior to concluding data collection, we held one “encounter-style” rating session, where an RA and

interpreter approached individuals in a predominantly Korean-speaking neighborhood and asked them to complete one of the rating forms, but this was laborious and not fruitful. This severely limits our ability to apply these findings to the Korean community. To address this, the CBO leaders engaged in data collection after the formal research ended, applying a broader range of data in the analysis they used for program design.

Concept Mapping as a Community-Engaged, Community-Building Process

Both the CBO and the academic partners felt excited by this application of CM. From the outset, both groups hoped to accomplish two goals: first, to provide rigorous formative research for the CBO's leadership program, and second, to build trusting relationships between participants, partner organizations, and the CBO. This latter outcome was at least as important as the former, and the process underlying CM enabled this to happen.

The democratic and participatory nature of CM allowed the CBO partner to demonstrate commitment to grassroots organizing processes. By including academic researchers, the project ran the risk of generating discomfort from participants and partner organizations, given the historical abuses of power that research has, at times, inflicted on marginalized communities and the sense that even ethical research is done in service to researchers, not residents.^{30,31} However, this project was initiated by the CBO partner, not the researchers, and the academic partners took a backseat to both the CBO leaders and the CRs. Additionally, the CBO leaders invested time working with their partnering service organizations to tailor the activities to increase participant engagement. For example, rather than sorting items into free-form piles using index cards, we provided individual "buckets" (paper cups) that helped to make the task of grouping ideas more conceptually concrete. Finally, the inclusion of CRs in both data collection and analysis demonstrated a commitment to shared power.

This process models the empowerment-focus described in the mission of the CBO. Several of the relationships established during the study carried forward into the leadership development program. All CRs and several CM participants returned as participants in the leadership program. While it is impossible to know how implementation of the leadership training would have gone without undertaking CM, our CBO partners strongly believe that the involvement of CM participants and CRs in the development of the program was key to its success. They describe these leaders as demonstrating a deep sense of ownership and investment in the program. As one of our co-authors recalled, when the second cohort of leadership participants entered the program, the leaders from the first cohort in the early CM project “shared the story of building the program from scratch and emphasized the core value of shared decision-making in the organization.”

Now, more than two years into its programming, the CBO continues to center the voices and perspectives of those communities where they work. While several of the stakeholders with whom the CBO worked expected a movement to target a specific employer or industry, the actual campaign that emerged from the initial leadership workshops instead addressed the lack of adequate sexual health education in community schools where high levels of GBV take place. In the words of our co-author (*redacted*), “The fact that leaders opted instead to focus on public education and prevention of GBV for young people definitely ties (in my view, at least) to their emphasis on building a future free from GBV, rather than focusing on responding to incidents in their own lives.”

Additionally, this action research project highlights the import of addressing occupational health at the community level. Individuals who work in non-standard work arrangements – independent contractors, temporary staffing workers, hourly/part time/nightshift workers—are

difficult to access in their workplaces. Many of these individuals and families live and work in poverty, and “fall through the cracks” of labor rights, occupational safety and health, and GBV protections, despite the fact that they operate in workplaces that are often hazardous and prone to labor violations, including GBV.³³ That the resulting program centered addressing GBV as a community issue – rather than as an action directed at a single employer or industry – does not negate this in any way: the chosen focus on public education and prevention of GBV among young people is a recognition that real change must happen outside of specific institutions.

As a team of community-based and academic researchers, our primary take-away from this project is that community based participatory action research and CM are uniquely suited to addressing inequities experienced by communities facing structural oppression, including those at the intersection of racism, poverty, employment precarity, and the current wave of nationalism and anti-immigrant fervor. The findings from this project -- and the resulting worker-led movement -- exemplify new approaches to building both evidence-informed and community-generated approaches to addressing systemic and structural forms of violence.

Citations

1. LaMontagne AD, Smith PM, Louie AM, Quinlan M, Shoveller J, Ostry AS. Unwanted sexual advances at work: variations by employment arrangement in a sample of working Australians. *Aust N Z J Public Health*. 2009;33(2):173–9.
2. Muntaner C, Solar O, Vanroelen C, Martínez JM, Vergara M, Santana V, et al. Unemployment, informal work, precarious employment, child labor, slavery, and health inequalities: pathways and mechanisms. *Int J Health Serv*. 2010;40(2):281–95.
3. Reeves C, O’Leary-Kelly AM. The Effects and Costs of Intimate Partner Violence for Work Organizations. *J Interpers Violence*. 2007 Mar 1;22(3):327–44.
4. Sherman MF, Gershon RR, Samar SM, Pearson JM, Canton AN, Damsky MR. Safety factors predictive of job satisfaction and job retention among home healthcare aides. *J Occup Env Med [Internet]*. 2008;50. Available from: <http://dx.doi.org/10.1097/JOM.0b013e31818a388e>
5. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, et al. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2011 Nov.
6. Adhia A, Gelaye B, Friedman LE, Marlow LY, Mercy JA, Williams MA. Workplace interventions for intimate partner violence: A systematic review. *J Workplace Behav Health*. 2019 Jul 3;34(3):149–66.

7. Ingram EM. A comparison of help seeking between Latino and non-Latino victims of intimate partner violence. *Violence Women*. 2007;13(2):159–71.
8. Douglas JA, Grills CT, Villanueva S, Subica AM. Empowerment Praxis: Community Organizing to Redress Systemic Health Disparities. *Am J Community Psychol*. 2016;58(3–4):488–98.
9. Goodman LA, Banyard V, Woulfe J, Ash S, Mattern G. Bringing a network-oriented approach to domestic violence services: A focus group exploration of promising practices. *Violence Women*. 2016;22(1):64–89.
10. Garcia ER, Stoeber JK, Wang P, Yim IS. Empowerment, Stress, and Depressive Symptoms Among Female Survivors of Intimate Partner Violence Attending Personal Empowerment Programs. *J Interpers Violence*. 2019 Aug 17;0886260519869693.
11. Hahn SA, Postmus JL. Economic Empowerment of Impoverished IPV Survivors: A Review of Best Practice Literature and Implications for Policy. *Trauma Violence Abuse*. 2014 Apr 1;15(2):79–93.
12. Peled E, Krigel K. The path to economic independence among survivors of intimate partner violence: A critical review of the literature and courses for action. *Aggress Violent Behav*. 2016 Nov 1;31:127–35.
13. Estefan LF, Armstead TL, Rivera MS, Kearns MC, Carter D, Crowell J, et al. Enhancing the National Dialogue on the Prevention of Intimate Partner Violence. *Am J Community Psychol*. 2019;63(1–2):153–67.

14. Shorey RC, Tirone V, Stuart GL. Coordinated community response components for victims of intimate partner violence: A review of the literature. *Aggress Violent Behav.* 2014 Jul 1;19(4):363–71.
15. White JW, Sienkiewicz HC. Victim Empowerment, Safety, and Perpetrator Accountability Through Collaboration: A Crisis to Transformation Conceptual Model. *Violence Women.* 2018 Nov 1;24(14):1678–96.
16. White JW, Sienkiewicz HC, Smith PH. Envisioning future directions: Conversations with leaders in domestic and sexual assault advocacy, policy, service, and research. *Violence Women.* 2019;25(1):105–27.
17. Stith SM, McCollum EE, Amanor-Boadu Y, Smith D. Systemic Perspectives on Intimate Partner Violence Treatment. *J Marital Fam Ther.* 2012 Jan;38(1):220–40.
18. Deegan MJ. Hull House and the Chicago schools of sociology on race, gender, class and peace 1892- 1920. In: Low J, Bowden G, editors. *The Chicago school diaspora: Epistemology and substance.* McGill-Queen’s Press-MQUP; 2013. p. 1–29.
19. Green J. *Death in the Haymarket: A Story of Chicago, the first labor movement and the bombing that divided Gilded Age America.* Anchor; 2017.
20. Altmayer K, Alemzadeh S. *Healing to Action: A Worker-Led Movement* [Internet]. 2019. Available from: <https://www.healingtoaction.org/>. Accessed 2/6/2022.
21. Velonis AJ, Molnar A, Lee-Foon N, Rahim A, Boushel M, O’Campo P. “One program that could improve health in this neighbourhood is-?” using concept mapping to engage

- communities as part of a health and human services needs assessment. *BMC Health Serv Res.* 2018;18(1).
22. Burke JG, O’Campo P, Peak GL, Gielen AC, McDonnell KA, Trochim WM. An Introduction to Concept Mapping as a Participatory Public Health Research Method. *Qual Health Res.* 2005;15(10):1392–410.
23. Coalition Against Workplace Sexual Violence. Restoring Dignity in the Workplace: Fighting for a Woman’s Health and Safety [Internet]. 2016 [cited 2020 Jun 29]. Available from: https://docs.wixstatic.com/ugd/54befc_0d0f14cb7fa84056afa169300ca461f5.pdf
24. Kane M, Trochim WM. *Concept Mapping for Planning and Evaluation*. Thousand Oaks, CA: Sage; 2007. (Bickman L, Rog D, editors. Applied Social Research Methods Series).
25. Maddox R, O’Campo P, Grove J, Yonas M, Chan C, Kassam A, et al. Identifying how to Engage Men in Domestic Violence Research: a Concept Mapping Study. *J Fam Violence.* 2019 Nov 1;34(8):781–93.
26. Wallerstein N, Duran B, Oetzel J, Minkler M. On Community-Based Participatory Research. In: *Community-based participatory research for health: Advancing social and health equity*. San Francisco CA: Jossey-Bos; 2017.
27. Borg, I.; Groenen, P. *Modern Multidimensional Scaling: theory and applications* (2nd ed.). New York: Springer-Verlag; 2005; pp. 207–212; ISBN 978-0-387-94845-4
28. Everitt, B. *Cluster analysis*. Chichester, West Sussex, U.K: Wiley; 2011;
[ISBN 9780470749913](#).

29. Mayhew C, Quinlan M. The Relationship between Precarious Employment and Patterns of Occupational Violence. In 2002. p. 183–205.
30. Chicago Beyond. Why am I always being researched? A guidebook for community organization, researchers, and funders to help us get from insufficient understanding to more authentic truth [Internet]. Chicago Beyond Equity Series; 2018 [cited 2020 Jun 28]. Available from: https://chicagobeyond.org/wp-content/uploads/2019/05/ChicagoBeyond_2019Guidebook.pdf
31. Schnarch B. Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. *Int J Indig Health*. 2004;1(1):80.
32. Healing to Action 2019 Impact Report. Available from: https://f2133d36-387a-4a8d-aeba-d7668d6c6f33.filesusr.com/ugd/54befc_0be0d63b7ea3418ba15be7be86d0970c.pdf?index=true. Accessed 2/6/2022.
33. Howard J. Nonstandard work arrangements and worker health and safety. *Am J Ind Med*. 2017;60(1):1–10.

Table 1. Demographics for Participants Included in CM Analysis *

	Brainstorming (N=47) n (%)	Sorting (N=20) n (%)	Rating (N=24) n (%)
Gender			
Female	44 (96)	20 (100)	19 (79)
Male	0	0 (0)	4 (17)
Gender Non-Conforming	1 (2)	0 (0)	0 (0)
Unknown	2 (4)	0 (0)	1 (4)
Age			
18-24	1 (2)	1 (5)	1 (4)
25-34	5 (11)	3 (15)	6 (25)
35-44	17 (36)	7 (35)	4 (17)
45-54	11 (23)	5 (25)	5 (21)
55-64	7 (15)	4 (20)	6 (25)
65+	5 (11)	0 (0)	2 (8)
Language at home			
English	4 (9)	0 (0)	0 (0)
Spanish	26 (55)	16 (80)	15 (63)
Korean	7 (15)	0 (0)	5 (21)
Tagalog	1 (2)	0 (0)	0 (0)
English and another language	9 (19)	4 (20)	4 (17)
Ethnicity/Race			
Non-Hispanic White	4 (9)	3 (15)	3 (13)
Hispanic/Latino/a	26 (55)	17 (85)	14 (58)
Asian/Pacific Islander	16 (34)	0 (0)	7 (29)
No Response	1 (2)	0 (0)	0 (0)
Employment Situation			
Full time, single employer	11 (23)	3 (15)	9 (38)
Part time, single employer, wages	3 (6)	2 (10)	3 (13)
Two employers, wages	2 (4)	0 (0)	3 (13)
Unemployed, but want to work	4 (9)	2 (10)	2 (8)
Self employed	0	0 (0)	2 (8)
Homemaker/stay at home	17 (36)	8 (40)	3 (13)
Unable to work	1 (2)	1 (5)	0 (0)
Retired	3 (6)	0 (0)	0 (0)
Student (may also work)	1 (2)	0 (0)	1 (4)
No response/unclear	5 (11)	2 (10)	1 (4)

* These data contain duplicate participants. 39 people engaged in sorting and/or rating; 20 participants completed Sorting; 24 participants completed at least one Rating Question; 15 people only sorted, and 19 people only rated.

Table 1. Demographics for Participants Included in CM Analysis *

Brainstorming (N=47) n (%)	Sorting (N=20) n (%)	Rating (N=24) n (%)
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Table 2: Final Concept Mapping Items, by Cluster

Item #	Item Detail	Cluster Rank: Effectiveness (av. score)	Cluster Rank: Likelihood (av. score)	Item Rated High Impact & High Prevalence
Cluster: Workplace Violence		1 (4.64)	5(3.72)	
1	Training to intervene and address gender-based violence when someone sees it happening in the workplace to someone else.			
18	Training on how to go into a workplace and educate workers about their rights to be free from gender-based violence at work.			
19	Training on how to support survivors of gender-based violence, including those who do not want to speak up and need help coming forward.			
Cluster: Legal Resources and Interdisciplinary Networks to Support Survivors		4 (4.52)	4 (3.75)	
7	A strong network that includes medical professionals, clinics, social workers, lawyers, counselors and law enforcement working together to support survivors in the community.			X
14	Information about the legal rights for survivors of gender-based violence, and how to enforce them through the legal system, including resources to support survivors going through a legal process.			
8	Resources that provide justice for survivors outside of the legal system, like alternative conflict resolution or peace circles.			
Cluster: Employee and Survivor Support		1 (4.64)	1 (4.05)	
5	Free access to organizations that support and protect survivors, including healing services like psychological and emotional support.			X
16	Information and resources about job opportunities, both for oneself and to help others.			
21	Negotiation skills to confront employers who do not respect employees' rights and help other workers do this too.			X
Cluster: Communication		3 (4.55)	6 (3.70)	
2	Skills to be able to communicate and share information about gender-based violence at events that unite the community like health fairs or cultural performances.			
4	Skills to help men and women to talk about gender-based violence together.			
15	Workshops on how to talk about gender-based violence as a family, particularly for parents to talk to their children.			X
Cluster: Understanding GBV		5 (4.51)	1(4.05)	
3	Workshops or classes to develop an understanding of gender-based violence, including what it means, who it affects, and how it affects people.			X
17	Opportunities to communicate and explore one's own needs and experiences around gender-based violence in different ways, like through art therapy.			
Cluster: Self Esteem and Bullying		4 (4.52)	3 (3.90)	
10	Workshops that boost personal self-esteem in order to help others.			X
11	Workshops to learn how to prevent bullying.			
Cluster: Addressing traditional beliefs of sex and gender		6 (4.28)	7 (3.51)	
6	Training in order to build trust and work with communities that have different beliefs.			
12	Education about sex and gender that is open-minded and includes different age groups and sexual orientations.			X
20	Education about the root causes of gender-based violence, including its history and origins in different cultures.			
9	Training specifically for men that is taught by other men to learn how to value women and families and overcome stereotypes about masculinity.			
13	Training and skills on how to work with adults across cultures who may have "traditional" ideas about gender roles.			

