Examining the role of a community coalition in facilitating policy and environmental changes to promote physical activity: the case of Get Fit Kauaʻi

Lehua B. Choy, DrPH,¹ Jay E. Maddock, PhD,² Beverley Brody,¹ Katherine L. Richards, MPH,³ Kathryn L. Braun, DrPH¹

¹Department of Public Health Sciences,
University of Hawaiʻi at Mānoa,
Honolulu, HI 96822, USA

²School of Public Health,
Texas A & M Health Science Center,
College Station, TX, USA

³Healthy Hawaiʻi Initiative,
Hawaiʻi State Department of Health,
Honolulu, HI, USA

Correspondence to: L Choy
lehuac@hawaii.edu

Cite this as: *TBM* 2016;6:638–647
doi: 10.1007/s13142-015-0379-z

Abstract

Community coalitions help to generate policy and environmental changes that address community health problems. This qualitative study examined how one community coalition, Get Fit Kauaʻi, catalyzed built environment (BE) policy and infrastructure changes in a rural county in Hawaiʻi. The purpose was to develop a theory that explained the process by which the community coalition facilitated BE changes to support physical activity. Using a grounded theory approach, semi-structured interviews were conducted with a purposeful sample of 25 stakeholders engaged in the coalition's BE activities. The model to emerge from the coalition interviews consisted of five phases: (1) coalition formation, (2) capacity building, (3) policy development, (4) policy passage, and (5) policy implementation. Community context influenced all of these phases. Although community context limits generalizability, other community coalitions pursuing BE changes can learn from the process of the coalition under study.

Keywords

Collaboration, Multisector, Built environment, Physical activity, Policy

To increase population levels of physical activity (PA), the Community Guide of the U.S. Preventive Services Task Force [1] recommends enacting policies that address urban design and land use at both the community and street scales. These policies would help to shape a supportive built environment (BE) that promotes recreational PA and active modes of transportation (e.g., walking and bicycling). However, the actual process for achieving the recommended types of BE policy changes has not been described previously in detail. A focus on the process of creating and implementing BE policy changes will help to identify “best processes” as well as best practices in BE interventions [2].

Collaboration for BE change is essential because the BE is under the purview of a diversity of disciplines, sectors, and organizations [3]. Public health professionals need to partner with representatives from

Implications

Practice: An important role for community coalitions is providing capacity - building activities to its multisectoral partners in the built environment.

Policy: A community coalition focused on the built environment may need to adapt its role from leading policy change efforts to supporting policy implementation.

Research: To improve the generalizability of this study, the influence of community context on other coalitions working on built environment issues should be further studied.

Electronic supplementary material

The online version of this article (doi:10.1007/s13142-015-0379-z) contains supplementary material, which is available to authorized users.

disciplines such as urban planning, transportation, architecture, policy studies, and recreation and leisure [4]. Community coalitions are commonly used in public health practice to foster collaboration among multiple organizations and sectors. A community coalition is a multisectoral group that addresses community needs and focuses on local issues to bring about community change [5]. Community coalitions represent an ecological approach to engaging communities in “creating and sustaining conditions that promote and maintain behaviors associated with widespread health and well being” [[6], p370].

Community coalitions can be effective vehicles for policy change by undertaking advocacy and educational activities, as demonstrated by the success community coalitions have had in changing policies related to tobacco control and prevention [7]. However, the role of community coalitions in the process of creating BE policy changes has not been described in depth in the literature. Previous studies have focused more broadly on describing the characteristics of partnerships and collaborative groups that seek to

impact the BE for PA promotion. For example, an evaluation of the partnerships in the Active Living by Design initiative found that flexible governance structures, strong leadership, and use of group management techniques contributed to partnership success [8].

Despite the widespread usage of community coalitions, the theoretical base is limited for explaining how community coalitions achieve community health outcomes. One theory that attempts to fill that gap is the Community Coalition Action Theory (CCAT), which was developed through both empirical research and practice wisdom [9]. CCAT is a complex theory comprised of 14 constructs that are inter-related through 21 propositions, encompassing the stages of coalition development, community context, coalition operations, and coalition outcomes. CCAT asserts that coalitions with more formalized rules, roles, and procedures are more effective at generating collaborative synergy, which results from the pooling of coalition members' perspectives, resources, and skills. There is emerging evidence to support aspects of CCAT [10, 11], but additional research is needed to operationalize the constructs and validate the propositions. It is not yet known how CCAT applies to community coalitions that focus on the BE, given that BE collaborations are a relatively new field of study.

GET FIT KAUA'I

This study examined the role of a community coalition in facilitating BE policy change using the case of Get Fit Kaua'i (GFK), the Nutrition and Physical Activity Coalition of Kaua'i County, a rural island county in Hawai'i. Convened in 2009, GFK maintains two coalition task forces—one focused on the BE and one focused on Safe Routes to School (SRTS)—that have made major inroads to address Kaua'i's BE and to promote walking, bicycling, and other forms of active transportation. The two task forces helped to break down silos between county government agencies like Planning and Public Works, launched walking school buses in several elementary schools, and engaged in policy advocacy for Complete Streets and SRTS.

Between 2009 and 2013, the coalition played a critical role in passing three policies at the local and state levels: (1) in 2010, a county resolution for Complete Streets (Resolution 2010–48, Draft 1); (2) in 2012, the state-level SRTS bill (Act 317) that channeled funding from traffic fines to counties for SRTS programs; and (3) in 2013, a county subdivision ordinance change (Ordinance 946) that addressed Complete Streets by shortening block lengths and requiring sidewalks in new developments. Notably, all of the policy change efforts pursued by GFK were passed in the same legislative session in which the policy was introduced. Through SRTS programs, GFK also facilitated several infrastructure changes around schools to enhance the safety of crossings. The primary purpose of this study was to develop a theory that explains the process by

which a community coalition, GFK, created BE policy and infrastructure changes that promote PA.

METHODS

Qualitative approach

This qualitative study consisted primarily of semi-structured interviews to explore the perspectives of coalition stakeholders who were engaged in BE activities. A grounded theory approach was used because it was well-suited to the study goal of developing a theory about the process of BE change based on the experiences and views of coalition participants. The constructivist approach to grounded theory proposed by Charmaz [12] was adopted to acknowledge that the grounded theory would be based on multiple lived realities and influenced by the perspective of the researcher who created the theory. For this study, the primary researcher who conducted the interviews and analyzed the data (LC) had provided evaluation support to the coalition for several years. Thus, LC had an established relationship with the coalition director and had interacted with several coalition members involved in BE activities. The previous interactions for program evaluation purposes provided background knowledge of the coalition for LC to draw upon.

Although the intent of grounded theory is on building theory rather than testing theory [13], CCAT was used as an organizing framework for developing the interview questions. This fulfilled a secondary study aim of exploring the applicability of CCAT to a community coalition focused on BE change. Strauss and Corbin indicate that grounded theory can be used to elaborate upon and modify existing theories that are relevant to the current study if “incoming data are meticulously played” against the existing theory [[14], p273]. Thus, grounded theory was considered a suitable approach for developing a theory specific to the process GFK undertook to create BE changes.

Sample

A purposeful sampling strategy [13] was used to select participants involved in GFK who could provide a range of perspectives into BE efforts. The coalition director and several coalition leaders provided help with selecting the sample; in addition, interview participants were asked to recommend other potential participants. Potential participants were recruited through email by LC. Twenty-five individuals were interviewed, including coalition leaders (e.g., Steering Committee Chair, BE Task Force Chair and Vice-Chair), coalition staff (current and past), task force members, county government leaders (e.g., Planning, Public Works, County Council), a representative from the funding agency, a national expert who served as a paid consultant, and community members who participated as private citizens. Two invited participants were not interviewed due to scheduling conflicts, and one invited person declined to participate. The final sample size is congruent with Creswell's

Table 1 | Descriptive characteristics of interview participants ($n = 25$)

	Number	Percent
Gender		
Male	12	48
Female	13	52
Age (years)		
18–24	1	4
25–34	6	24
35–44	2	8
45–54	5	20
55–64	9	36
≥65	2	8
Highest education level completed		
Some high school	0	0
High school graduate	0	0
Some college	2	8
Associate's degree	0	0
Bachelor's degree	11	44
Master's degree or higher	12	48
Race/ethnicity		
Caucasian	14	56
Native Hawaiian ^a	4	16
Japanese	4	16
Other	3	12
Type of organization represented		
County government agency	11	44
State government agency	4	16
Community-based agency	3	12
None—participate as private citizen	6	24
Coalition staff (<i>current</i>)	1	4
Participation in coalition groups ^b		
Coalition member	21	84
Built Environment Task Force member	16	64
Safe Routes to School Task Force member	9	36
Steering Committee member	8	32
Current level of coalition involvement		
Low	1	4
Low–moderate	3	12
Moderate	3	12
Moderate–high	7	28
High	11	44

^a Includes participants who identified being Native Hawaiian in part or in full^b Categories are not mutually exclusive. Participants belonged to multiple coalition groups

recommendation for interviewing 20–30 people to achieve saturation for a grounded theory study [15].

Measures

An interview guide with a core set of standardized, open-ended questions was developed with input from GFK stakeholders and consideration of CCAT constructs. In the initial stages of study development, the coalition director, chair of the Steering Committee, and Department of Health contract manager (i.e., representative from the funding agency) were asked for their feedback on a preliminary list of interview questions. The coalition director expressed a desire to learn how GFK could improve its efforts; thus, one interview question was added to gather this information. In

addition, three coalition members helped to pilot test the draft interview guide, and their feedback was incorporated to improve the clarity and flow of interview questions.

To begin each interview, participants were asked to identify the BE changes achieved by GFK that were most significant to them. They then shared their perspectives on how the BE changes occurred. Subsequent interview questions solicited perceptions of CCAT constructs including community context and community capacity. Coalition staff and leaders were asked additional questions about coalition structures (e.g., task forces), coalition staffing/leadership, and BE strategy development. The primary interview questions are available as a [supplementary file](#). Participants also completed a brief demographic questionnaire to

capture age, race/ethnicity, and level of coalition involvement.

Procedures

Interviews were conducted in August–November 2013 by the lead researcher (LC). Potential participants were invited by email to be interviewed for the study at a location of their choice. Interviews were conducted face-to-face at various locations on Kaua'i (e.g., work offices, coffee shops), except for one interview conducted by phone for a participant who no longer lived on island. Participants were emailed the main interview questions prior to the interview. The average interview duration was 51 min ($SD = 17$ min). Participants received a \$10 gift card to thank them for their time.

This study was approved by the University of Hawai'i Human Studies Program. All participants consented to be interviewed and audio recorded, and they were provided with an explanation of the study prior to beginning the interview. The interviewer took notes during the interview and wrote up a brief summary after the interview was finished. In line with the grounded theory approach, preliminary analysis of the data and memo writing was conducted between interviews. The audio recordings were transcribed verbatim for analysis.

Data analysis

Interview transcripts and memos were imported into the NVivo 10 qualitative software program [16] for coding and analysis. Following an inductive and iterative approach, the primary researcher first coded each interview transcript line-by-line and then engaged in focused coding to link the key concepts in the process of BE change [12]. Analytic memos were written throughout the coding phases to help focus the coding and to develop propositions for the emerging theory. Following the indicative analysis, a deductive analysis strategy was used to determine how themes aligned with CCAT constructs.

Several data validation strategies were used to improve the interpretation of the data. The first strategy was peer review by a colleague with an interest in community coalitions. The colleague independently coded a subset of the interview transcripts ($n = 5$). The primary researcher and colleague then met to discuss their codes and found that they agreed on the major themes for each transcript. The colleague later reviewed the preliminary grounded theory model and agreed that her analysis supported the model; there were no suggestions for altering the model.

The second validation strategy was member checking to incorporate feedback from interview participants and other GFK stakeholders. Multiple opportunities were provided, including one meeting to discuss preliminary findings, one presentation of major interview themes, and one presentation of the grounded theory model. A written report was also disseminated by email with a request to provide feedback. Coalition stakeholders provided both oral feedback and written comments, which were documented and used to refine

data interpretation. Overall, coalition feedback indicated agreement with the major themes to emerge from the interviews and helped to identify the components of the grounded theory model.

RESULTS

Participant characteristics

The final sample consisted of 25 adults, including 11 from six county government agencies, three from community-based agencies, and six who participate in GFK as private citizens. There was an almost equal split between male and female participants, and approximately two-thirds of participants were aged 45 years or older (Table 1). About half (56 %) identified as Caucasian, 16 % as Native Hawaiian, and 16 % as Japanese. All participants reported some level of college education.

Major themes

Capacity building

Capacity building was a central theme in GFK's efforts to generate momentum for BE policy and infrastructure change. The primary form of capacity building was utilizing an intentional progression of national experts in the design of healthy communities, SRTS, and Complete Streets to provide education, training, and technical assistance to GFK and its partners. The experts first helped to create the case for why BE policy changes were needed through targeted presentations to elected officials, county departments, and coalition members. As the coalition matured and was able to successfully pass policies, consultants with engineering expertise were called upon to help with implementation of the policies (e.g., updating roadway standards to be compliant with the Complete Streets resolution). One of the coalition members who represented a county government agency said:

“[The consultants have] contributed so much to just, you know, us seeing it. How it can be, the possibilities is what they've enlightened us to and actually providing us with tools and training to be able to have the ability to apply the changes ourselves as well.” (*Participant 13*)

The second form of capacity building was sending several key coalition stakeholders to national conferences such as New Partners for Smart Growth. Attending conferences together helped with more than just knowledge building—participants also bonded and strengthened relationships with each other, which helped to facilitate the BE work once they returned to Kaua'i. The national consultant who was interviewed for this study spoke of how having a Kaua'i contingent at the Smart Growth Conference and associated mobile study tour accelerated progress in the county:

“When you get 14 [of the right] people to come from one county to an event, and you

have a bus of 55 people and the next largest congregation of people is maybe two... you're picking up energy. When you get 14 people to come and brainstorm and to think it through and to fly back and talk about what they learned, that's powerful stuff." (*Participant 7*)

As a result of capacity building activities, GFK helped county departments to start speaking the same language. As one interview participant put it, across sectors, staff knew what a roundabout was, what a road diet was. Moreover, capacity building activities helped to break down silos between county agencies—especially Planning and Public Works—to improve communication and coordination for BE changes.

Effective coalition staff leader

All interview participants felt that the coalition director, the only full-time staff member, was integral to the effectiveness of GFK. The coalition director was described as a driving force who built and maintained important relationships, served as the mouthpiece to promote the coalition, and made things happen by working tirelessly and motivating coalition members. Some of the characteristics that made her effective were her dynamic personality, passion, energy, ability to make the work fun, and persistence in following-up with members to move coalition activities forward.

"She's a leader, and I'll tell you it's not very often you see leaders that are transformational in vision... She's definitely transformational. Because at the end of the day, you want somebody that believes in what they're saying and can help you in the paradigm shift, bring you to that paradigm shift... She has shifted her focus and shifted our way of thinking. And anytime you have somebody who does that, with a level of enthusiasm and consistency, there's buy-in." (*Participant 21*)

Community-government partnership

The capacity building activities helped to develop a mutually beneficial relationship between GFK and the county of Kaua'i government. The community-government partnership encompassed the Mayor and multiple departments, particularly Planning and Public Works.

"If the County's Planning and Public Works were not part of the coalition, this would go nowhere... They are a critical partner, but it's a two-way relationship." (*Participant 10*)

The partnership between the Mayor and GFK was formed early in the coalition's development, facilitated by the working relationship and friendship that the

coalition director and Mayor had established prior to his election. Several participants referred to the congruence between GFK's BE policy change objectives and the Mayor's *Holo Holo 2020* vision, which explicitly calls for implementing Complete Streets and SRTS and for creating BE improvements [17]. To carry out his vision, the Mayor directed his newly appointed department leaders to "make it happen." The new department leaders displayed a willingness to partner with GFK and encouraged their staff to engage in GFK activities as part of their jobs. County staff participated in BE and SRTS Task Force meetings and helped to carry out work behind the scenes, such as drafting policy documents.

Community events helped to solidify the partnership between the coalition and the county. The most frequently mentioned community event was the Mayor-a-thon, an annual celebration of an existing BE resource, *Ke Ala Hele Makalae*, a 4-mi multi-use coastal path. Hundreds of community members attended each Mayor-a-thon to walk, run, or ride bicycles along the path. Interviewees felt that the Mayor-a-thon helped community members better understand the connection between the BE and health, while building political will:

"[The first Mayor-a-thon] really kind of celebrated him [the Mayor], gave him some really high visibility on a wonderful facility... It was just a really joyous thing. And when you can find those things which make people happy, that's the best way to bring them on board." (*Participant 15*)

Influence of community context

Community context was viewed as a primarily positive influence that enabled GFK to move forward quickly on BE issues. One national consultant observed that the stars appeared to be aligned for Kaua'i County because GFK was able to capitalize on political support, openness of leaders in county agencies to developing partnerships, and funding resources. Political support was present from both the Mayor and elected County Council members, several of whom attended BE Task Force meetings. Furthermore, Kaua'i County was seen as having a culture of citizen activism, in which residents were used to participating in political processes. GFK mobilized its members to provide written and oral testimony that supported BE policy changes.

Another noted contextual factor was the smallness of the island county. Coalition members knew each other and had a history of working together. The smallness of the island was also reflected in the small county departments. Thus, coalition members had relatively easy access to the department leaders and were able to build relationships with them. Finally, the smallness of Kaua'i made it easier to partner with local media and generate earned media coverage of its activities.

Fig. 1 | Process of a community coalition influencing the built environment through policy change

To a minor extent, community context also was seen as hindering the ability of GFK to make changes to the BE. Some community members expressed resistance to the term, “Complete Streets,” viewing it as a “mainland” (i.e., Continental U.S.) concept that threatened the rural character of Kaua‘i. Therefore, an identified next step for GFK was community education and outreach that would improve communities’ knowledge of how Complete Streets policy implementation could help preserve Kaua‘i’s rural character.

Theoretical model of how a community coalition facilitates built environment changes

The major themes and codes were organized into a theoretical model that explains how GFK was able to successfully change policies that will lead to BE improvements. The grounded theory model to emerge from the data analysis consisted of five phases:

(1) coalition formation, (2) capacity building, (3) policy development, (4) policy passage, and (5) policy implementation (Fig. 1). Community context influenced all coalition phases. The boundaries (i.e., dashed lines) that delineate the phases are not concrete; overlapping coalition activities took place throughout the policy change process.

Feedback from coalition stakeholders was used to construct and refine the model. For example, coalition stakeholders viewed earlier versions of the model and suggested additional pathways to link components. Written comments from a presentation of preliminary findings indicated that involving the County Council was an important part of the BE policy development phase and that the importance of funding needed to be acknowledged. Finally, coalition stakeholders recognized the challenge in condensing a large amount of qualitative data into a simplified model. Overall, their feedback indicated that the resulting model was a good

representation of GFK's process; however, in reality, the process was more of a complex web than a linear sequence, with overlapping phases and many concurrent activities.

1. Coalition formation

Interviewees highlighted two important aspects of coalition formation: funding that was associated with a policy/environmental change mission and hiring a very effective staff person to lead the coalition. The Hawai'i State Department of Health provided funding to establish a county coalition that would focus on policy and environmental changes promoting PA and healthy nutrition. GFK had existed in a previous incarnation as a county-wide weight-loss challenge program. Therefore, one of the critical first steps for GFK was to build a common understanding of the coalition's new charge of policy and environmental change. This required a shift in thinking for the GFK director who was used to running programs. She asked her boss for an example of policy and environmental change and was told about another county passing a law that would require sidewalks:

"I can't explain to you what happened in my head, but I got it. This—not a light bulb, I mean, a torch went off in my head. And I got it. I totally got it...And in that very moment, I never wanted to do another program ever! ...And from that point on, Get Fit Kaua'i changed." (*Participant 9*)

The initial tasks that the coalition director was responsible for were engaging county agencies and elected officials, recruiting coalition members, and hiring national experts in the BE and healthy community design to provide education and technical assistance. The coalition director was able to rely on her long-established relationships in the community to recruit members to GFK. Moreover, because the coalition director had a good relationship with the Mayor, she was able to approach county agencies and engage department leaders and staff in GFK task forces. In building a partnership between GFK and the county, the coalition director also made sure to engage County Council members, either by having them join task forces or by creating opportunities to educate them about BE issues. The coalition director was also responsible for hiring national experts as consultants to GFK, who contributed to the next phase, capacity building.

2. Capacity building

The capacity building phase was highlighted by interview participants as the most critical component of the process. A flurry of activities took place in this phase, in which capacity building efforts were directed simultaneously at coalition members and county government partners. During this phase, the BE and SRTS task forces were convened and brought stakeholders

together through monthly meetings. Capacity building activities helped to increase the knowledge of task force members and facilitated the formation of relationships. The task forces served as an important structure for facilitating BE policy changes:

"[The BE Task Force provides] that space where we all come together on a monthly basis to discuss the built environment, much as it aligns itself with Complete Streets... [It provided] that space not just for members of the public, but I think even more importantly, for the administrations, the agencies to come together. 'Cause often we do these things, you know, the left hand, the right hand—they don't know—Public Works doing one thing, Planning doing another thing. It brings us together over this one unique issue that kind of when we go back and do our daily jobs, kind of just keeps on percolating through." (*Participant 8*)

3. Policy development

In the policy development stage, there were several concurrent coalition processes that involved deciding upon policy strategies, engaging in advocacy, carrying out programs and community events, and generating earned media. The activities directly related to passing BE policies were developing policy strategies and organizing advocacy activities. In its monthly meetings, the BE task force members discussed and vetted policy strategies. Task force members also reviewed draft policy language and provided feedback to the Planning Department staff responsible for crafting the proposed policies. The coalition director organized efforts to have task force members provide testimony, ensuring that a diverse group of members represented the coalition before the County Council. National experts continued to help educate decision makers by giving presentations to the County Council, Planning Commission, and Mayor's leadership team.

In parallel with policy development efforts, task forces carried out complementary programs and community events to increase awareness of GFK and the BE. For example, the SRTS task force organized Walk to School Days at several elementary schools to promote walking and bicycling among students, parents, and school officials. Leaders and staff in the Department of Public Works belonged to the SRTS task force and helped to develop plans to make it safer for the students to walk to school (e.g., crosswalk improvements and traffic calming measures). Several physical improvements were made around schools, indicating that programmatic activities also can lead directly to BE improvements.

The fourth component of this stage, earned media, was used to generate awareness of GFK's activities throughout the policy change process. The coalition director contributed articles to the local newspaper and hosted a weekly radio show. Interviewees felt that

the earned media helped to build interest about BE issues and SRTS programs and resulted in community support for proposed policy changes.

“I think what it’s gonna take is...looking for opportunities to get the word out for every victory that we have... Just celebrating the victories and at the same time using it as an opportunity to educate the public because, I mean, the public’s going to see these [articles] and, you know, they’ll be familiar with [the policy changes] and be more supportive and accepting—they see all the good that’s coming out of it. Little by little, they’ll start seeing it happening.” (*Participant 13*)

4. Policy passage

As a result of the coalition’s relationship- and capacity-building activities, GFK played a key role in passing several BE policies. Input from policy makers, county departments, and community representatives already had been taken into consideration, which minimized the potential delay in the policy passage process. As one BE Task Force member put it:

“I think [GFK] did a really good job at...getting everything lined up ahead of time so that by the time it got put in front of the Council, they could vote on it.” (*Participant 20*)

5. Policy implementation

Once policies were passed, GFK had to ensure that they were implemented to lead to actual BE changes. Interviewees described how the role of GFK evolved from leading BE policy change to: (1) supporting county implementation efforts, and (2) holding the county accountable and monitoring progress.

“In terms of the actual implementation...it’s the county’s responsibility... The road, the road network, doing construction and implementation, that’s really the county’s job and not Get Fit Kaua’i’s job... The county needs to take the lead and Get Fit Kaua’i is the support... There’s two things that I think are probably [GFK’s] role. One is helping [the county with] community outreach and building their support and educating. And the other is holding our feet to the fire to make sure we’re actually doing what we had promised we would do at these community meetings and calling us out if we’re not...holding the county accountable to get these things done.” (*Participant 11*)

To support the county, GFK would continue to run SRTS programmatic activities and increase

community outreach for BE issues. The coalition director took on responsibility for holding the county accountable and was persistent in checking up on the progress of BE plans and projects. To monitor implementation efforts, the BE task force developed performance measures for the Complete Streets policy and tracks indicators through annual reports. The coalition director initially felt somewhat “lost” in the transition from policy change to policy implementation, but was coming to terms with GFK’s newly supportive role:

“We are the core, we are the base, we are the meeting place, we are the gathering place. We are the people that bring all the people together.” (*Participant 9*)

6. Community context

Finally, the influence of community context spanned all stages of the model. As previously described, community context shaped the formation of relationships and facilitated the BE activities carried out in partnership between the coalition and county government.

DISCUSSION

The diverse perspectives of interviewees guided development of a theory of how GFK successfully influenced the BE in Kaua’i County through policy change. This study contributes to what is known about collaborative approaches to improving the BE for PA. Previous studies have explored the successes and challenges of other collaborations that focus on the BE. For example, Litt and colleagues [18] found that active living collaborative groups that provided testimony in public hearings were more likely to achieve policy change, while Gustat and colleagues [19] found that the main challenges experienced by these groups were funding and personnel changes. However, the actual process for achieving BE policy and infrastructure changes has not been previously described in detail.

The results of this study can help to inform community coalitions seeking to improve the BE. For GFK, the use of national experts was an effective strategy for increasing awareness of BE issues in the community, improving the ability of county government partners to make BE policy and infrastructure changes, and educating coalition stakeholders about BE policy changes. GFK had the resources to hire these consultants, and the interviewees felt that they were a vital part of the Complete Streets and SRTS initiatives. However, the consultants were not needed on a permanent basis. Once community and county capacity had been developed sufficiently, the county was able to take over responsibility for implementing BE policies. For example, the county was leading efforts to rewrite roadway design standards and coordinating community charrettes to gather feedback from communities for plans and projects to improve walking, bicycling, and use of public transit. This meant that GFK took a

step back from leading capacity building and policy change efforts to becoming more supportive to the county. Interview participants saw an evolving role for GFK, which involved more intensive community outreach and education for the BE and keeping the county accountable for implementation.

Limitations

One of the main limitations of this study was that it focused on just one coalition. Additional research is needed to determine the generalizability of these findings to other coalitions. In this case, the coalition was highly successful at shepherding multiple policy changes within a relatively short time period. Therefore, some barriers to BE policy and infrastructure change may be missing from the theoretical model. Given the overarching influence of community context, it is yet to be determined if the strategies employed by GFK would work for other community coalitions. Further consideration of community context should involve identification of leverage points that enable BE change.

This study was not designed to comprehensively examine the utility of CCAT for coalitions tackling the BE. Because of the complexity of CCAT, it is difficult to assess the many constructs and propositions through qualitative interviews. A comprehensive case study consisting of multiple data sources would be better suited to validate CCAT. Nevertheless, the results of this study suggest that CCAT can be extended to apply to coalitions focused on BE changes by emphasizing capacity building processes that increase the buy-in, knowledge, skills, and tools of coalition stakeholders.

Furthermore, there are several well-known limitations to interviews as a qualitative methodology including recall and social desirability biases. Participants may have felt that their responses might be linked to funding for GFK, so may have minimized any coalition problems and instead focused on successful aspects of the coalition. In addition, the constructivist approach to grounded theory acknowledges the active role of the researcher in developing the grounded theory. The primary researcher's pre-existing relationship with the coalition may have facilitated gathering input from stakeholders and data collection, while familiarity with the coalition work influenced data interpretation.

CONCLUSION

In summary, GFK is a successful model of how a community coalition can serve as a catalyst for BE policy and infrastructure change. Other coalitions may benefit from the theory that emerged from this study, which highlights engaging government partners, spearheading policy change efforts, organizing community events and programs, and building the capacity of all BE stakeholders. Once BE policies are in place, community coalitions can play a key role in

keeping partners engaged in policy implementation to ensure that meaningful changes take place.

Acknowledgments: This study was funded by the Healthy Hawai'i Initiative, Hawai'i State Department of Health, using Tobacco Settlement Special Funds and through a contract with the University of Hawai'i, Office of Public Health Studies (Jay Maddock served as Principal Investigator). Get Fit Kaua'i also received funding from the Healthy Hawai'i Initiative, Hawai'i State Department of Health. The authors would like to thank Jodi Drisko, Marie Williams, and Lee Steinmetz for their guidance with carrying out this study. We are also grateful to all of the interview participants who shared their valuable insights.

Compliance with ethical standards The authors have complied with ethical standards.

Funding: This study was funded by the Hawai'i State Department of Health, Healthy Hawai'i Initiative, using Tobacco Settlement Special Funds.

Conflict of interest: The authors declare that they have no competing interests.

Ethical approval: This study was approved by the University of Hawai'i Human Studies Program.

Informed consent: Informed consent was obtained from all individual participants included in the study.

1. Community Preventive Services Task Force. The community guide: increasing physical activity. Available at <http://www.thecommunityguide.org/pa/index.html>. Accessed February 16, 2015.
2. Glasgow RE, King DK. Implications of active living by design for broad adoption, successful implementation, and long-term sustainability. *Am J Prev Med*. 2009; 37(6S2): S450-S452.
3. Chehimi S, Cohen L, Valdovinos E. In the first place: community prevention's promise to advance health and equity. *Environ Urban*. 2011; 23(1): 71-89.
4. Sallis JF, Cervero RB, Ascher W, Henderson KA, Kraft MK, Kerr J. An ecological approach to creating active living communities. *Annu Rev Public Health*. 2006; 27: 297-322.
5. Wolff T. Community coalition building—contemporary practice and research: introduction. *Am J Community Psychol*. 2001; 29(2): 165-172.
6. Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health*. 2000; 21: 369-402.
7. Butterfoss FD, Kegler MC. A coalition model for community action. In: Minkler M, ed. *Community organizing and community building for health and welfare*. 3rd ed. New Brunswick: Rutgers University Press; 2012: 309-328.
8. Baker EA, Wilkerson R, Brennan LK. Identifying the role of community partnerships in creating change to support active living. *Am J Prev Med*. 2012; 43(5 Suppl 4): S290-S299.
9. Butterfoss FD, Kegler MC. The community coalition action theory. In: DiClemente RJ, Crosby RA, Kegler MC, eds. *Emerging theories in health promotion practice and research*. 2nd ed. San Francisco: Jossey-Bass; 2009: 237-276.
10. Kegler MC, Rigler J, Honeycutt S. How does community context influence coalitions in the formation stage? A multiple case study based on the Community Coalition Action Theory. *BMC Public Health*. 2010; 10: 90.
11. Kegler MC, Swan DW. An initial attempt at operationalizing and testing the Community Coalition Action Theory. *Health Educ Behav*. 2011; 38(3): 261-70.
12. Charmaz K. *Constructing grounded theory: a practical guide through qualitative analysis*. Thousand Oaks: Sage Publications, Inc.; 2006.
13. Patton MQ. *Qualitative research & evaluation methods*. Thousand Oaks: Sage Publications, Inc.; 2002.
14. Strauss A, Corbin J. Grounded theory methodology: an overview. In: Denzin NK, Lincoln YS, eds. *Handbook of qualitative research*. Thousand Oaks: Sage Publications, Inc; 1994: 273-285.
15. Creswell JW. *Qualitative inquiry & research design: choosing among five approaches*. Thousand Oaks: Sage Publications, Inc.; 2013.
16. NVivo (for Windows) [computer program]. Version 10.0. Available from www.qsrinternational.com
17. Carvalho Jr. BP. Holo Holo 2020: growing Kauai responsibly [PDF document]. Available at <http://health.hawaii.gov/physical-activity->

- [nutrition/files/2014/01/Day1-HealthyIslandVisions.pdf](#). Accessed November 16, 2014.
18. Litt J, Reed H, Zieff SG, et al. Advancing environmental and policy change through active living collaboratives: compositional and stakeholder engagement correlates of group effectiveness. *J Public Health Manag Pract*. 2013; 19(3 Suppl 1): S49-57.
 19. Gustat J, Healy I, Litt J, et al. Lessons in promoting active living: the collaborative perspective. *J Public Health Manag Pract*. 2013; 19(3 Suppl 1): S58-64.