COMMUNITY OF PRACTICE:
ADDRESSING YOUTH DATING VIOLENCE

Best Practices in Participatory Resource Mapping

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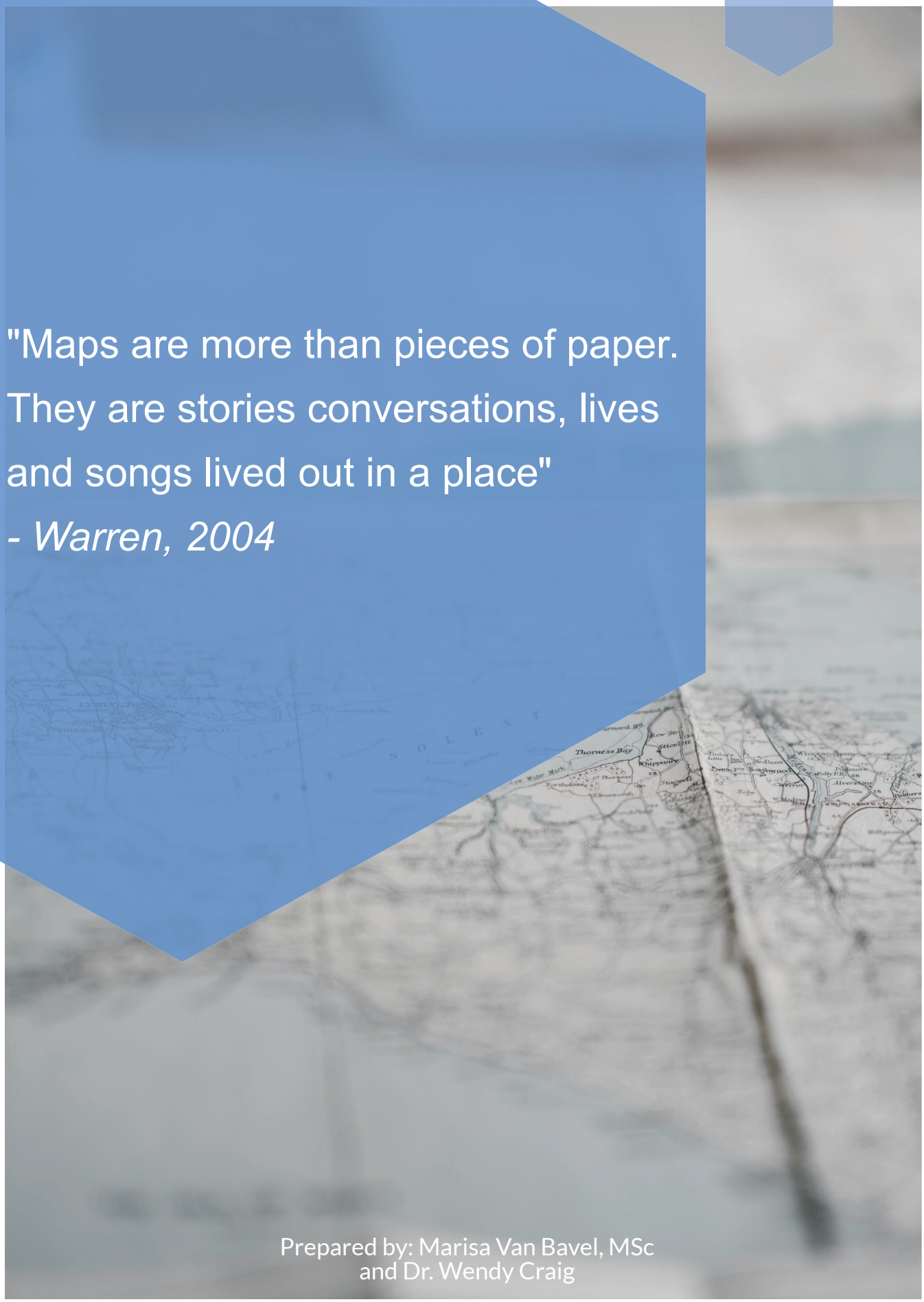

"Maps are more than pieces of paper. They are stories conversations, lives and songs lived out in a place"

- Warren, 2004

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What is Participatory Resource Mapping?

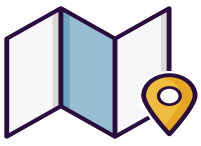
Participatory resource mapping, or asset mapping, is **the process of sharing and communicating knowledge through maps** (Brown & Kytta, 2018; Corbett, 2009; Mucedola, 2019). Illustrating the physical environment can help to identify assets, barriers to service delivery, information for program design, or discussions on land use. The process enables communities to **make the unseen visible** (Brown & Kytta, 2018). Generally, mapping can be categorized into five main purposes:

1) to share spatial information with outsiders,
2) to record local knowledge,
3) to document land-use and resource management or conflict,
4) to advocate for change and,
5) to increase capacity within communities (Corbett 2009).

Participatory mapping has been used informally across cultures for a long time (Cochrane, Corbett, & Keller, n.d.), such as drawing lines on walls or making oral agreements on mental maps of territory. Now, participatory maps are created by asking individuals to **draw what locations, activities, and resources are most important to them or what is lacking in their community** based on their experiences (Chan, et al., 2014; Corbett, 2009). Participatory research mapping offers **a unique approach to build community rapport** and answer a variety of research questions.

The Participatory Nature of Resource Mapping

The value of participatory resource mapping is its ability to support partnerships, consensus, and community agency and control (Kramer et al., 2012). Participatory action research (PAR) aims to **inspire change by encouraging input from those directly impacted by the research** (HeartWood Centre for Community Youth Development, 2005; Ozer, 2017). The focus on participatory approaches arises from the belief that communities best understand their needs and solutions (Kalibo & Medley, 2007), and is a valuable tool for including community members as partners in social science research (Chirowodza, et al., 2009). Children and youth, women of color, and Indigenous communities are groups who typically have research done on them and not with them (HeartWood Centre for Community



Youth Development, 2005; Ozer, 2017). Resource mapping has the potential to **empower** those individuals who are often excluded from decision making (Anau, et al., 2003). By inviting community members to **co-design** the research, they are able to **advocate** for change and feel empowered to share their voice. For example, Chan and colleagues (2014) used geographic information system (GIS) mapping with individuals with disabilities who experienced homelessness to gauge their level of community integration and social location (see Appendix B). Community development should contribute to equity, thus it is important to engage marginalized communities in discussions on access to services and socio-economic opportunities (Leuenberger & Wakin, 2007). A sense of participation, agency, and inclusivity can be brought about through critical discussions (Mason, McNulty, & Aubel, 2001).

Strengths and Benefits

Participatory resource mapping has several advantages including **ease of use, integration of local knowledge, and relationship building** between community members and stakeholders (Chirowodza, et al., 2009). Both rural and urban communities can utilize resource mapping to meet their goals as both informal (i.e., sketch maps on the ground) and formal (i.e., digital maps) methods are increasingly **affordable and user-friendly**. Further, the maps can provide evidence of communities' needs or assets and can be used to **support advocacy efforts.**

Resource mapping can be used to **plan interventions,** increasing community buy-in and contributing to program success (i.e., social locations of Kenyan youth to inform the location of an HIV prevention program; see Green, Warren, Broverman, Ogwang, & Puffer, 2016). Often, resource maps are beneficial when starting a new program as it is helpful to map out what exists already and what is lacking. Once assets and concerns are established, the map can provide direction for an existing program, or identify need for a new program. For example, are food bank programs available and are they accessible to families in the community? (see Mucedola, 2019).

In addition to advocacy and program development, participatory mapping may be a **means for communities to record knowledge.** For example, Indigenous communities may wish to map and preserve original versions of maps for future generations. Participatory resource mapping would enable a community to document land according to their customs and legends, as opposed to using precise cartographic maps that would not be able to take historical and cultural information into account.

Resource mapping is beneficial because it can lead to the creation of an **informative product** and because the process can **engender community participation**. Resource mapping can be used to answer a variety of questions including those about public services, land use, natural resources, or mental health services (Nabwire & Nyabenge, 2006). This versatile method offers **key insights into invisible needs/resources/assets/services** and thus has direct implications. The evidence gathered produces many narratives that require knowledge holders and users to consider each other's point of view (Anderson et al., 2017). Upon comparing and contrasting perspectives both between and within groups, policy and development can be shaped to improve the quality of community life.

The process of creating a resource map has the potential to empower community voice. A key characteristic of resource mapping is the participatory nature evoked. Participatory action research principles should be utilized. More specifically, **community-based participatory research (CBPR) methods can be utilized.** CBPR criteria to consider include: (a) formation of a genuine partnership that involves co-learning between academics and community partners, (b) research efforts include capacity building among community members, (c) findings benefit all partners, and (d) there is a commitment to reduce disparities (Wallerstein & Duran, 2006).

While resource mapping is a beneficial method for conducting a needs assessment, it is equally important to document assets. A review by Kramer and colleagues (2011) found that asset-based approaches positively engage community members. By focusing on what is going well, community agency and ownership increases (Kramer, Seedat, Lazarus, & Suffla, 2011). Further, **by emphasizing assets, the community is conceptualized as inherently resourceful and resilient** (Kramer, et al., 2011).

How to Conduct Participatory Resource Mapping

Methods

Maps can exist in many forms with varying degrees of detail and expression. General tools and processes exist to map resources and assets. Geographic Information System (GIS) software and GPS can be used to digitize accurate and reliable locations, but other avenues can be used to gather information on community members perceptions and experiences.

Traditional Mapping Methods (Chan, et al., 2014; Corbett, 2009; Rambaldi, 2004; Mascarenhas, & Kumar, 1991)

- Ground Mapping – requires little resources/funds because participants draw maps from memory on the ground to be put on paper. This is a traditional mapping method. The map can be drawn to any size and many people can gather around.

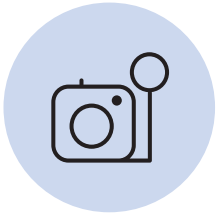
- Sketch Mapping – freehand drawing from a birds-eye view with no scale or referencing. While size may be limited, this is advantageous as the map is portable. Further, details can be added using colored paper or markers, stickers, etc.

- Scale Mapping – Maps are drawn to scale to ensure accuracy. When working with communities that do not have maps, it can be beneficial to first utilize one of the methods above in order to understand their perception of resource accessibility. Scale mapping can then be utilized by measuring the distance between landmarks or resources.

Creative Mapping Methods (Dennis, et al., 2019; Green, et al., 2016)

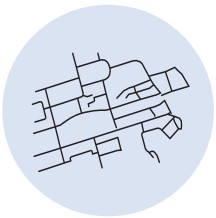
- 'Dot Map' Focus Groups - Provide individuals with a map and a sheet of colored sticker dots. They then place certain colored dots on the map in correspondence to specific questions (e.g., What are places where youth can get into trouble?)

- Geocaching Games/ Photo Scavenger Hunts - To better understand locations and their meaning, provide participants with a series of questions on desirable/ less desirable spaces and ask them to physically locate the space and take a photo. Participants will need a hand-held GPS unit for navigation and to tag locations, along with a camera. Photographs are then reviewed and categorized.



- Photo Mapping - Using a polaroid, digital camera, or cell phone camera, individuals can take pictures of spaces in their community. The pictures provide context and can be utilized during interviews or focus groups to tell a story. The photos can be captioned and then placed on a map.

Geospatial Technology (Chan, et al., 2014; Green, et al., 2016; Larrain & McCall, 2018; Luke, 2005).



- Includes geographic information systems (GIS), remote sensing (e.g., satellite imagery), and global positioning systems (GPS)·
- These methods are accurate and increasingly affordable. However, they do require training and protocols.·
- GPS devices can be used to identify and locate community features. This is particularly necessary for communities that do not have accurate paper or digital maps.
- These methods are often used for natural resource mapping.
- Multimedia mapping: This method has the added features of linking pictures, videos, and written text onto the map.

Google Mapping

- This method is free, versatile, and easy to use.
- Markers can be placed using a variety of icons and context can be added into popup bubbles.
- Using lines and shapes, boundaries, travel routes, common locations, etc.
- Links can be added to relevant websites of organizations placed on the map, or to relevant news articles.
- If used after photo mapping, consider embedding images.

Key Considerations in the Process

(HeartWood Center for Community Youth Development, 2005)

Consider what information is needed and why

Spend time thinking about how the mapping will be done, where it will take place, and who will be involved. It is important to include community stakeholders in the planning process. Consider why this information is needed. If unsure, think about holding a focus group and conduct a needs assessment so the information gathered is beneficial to the community. Participatory research must include community voices and encourage research ownership.

Build Community Relationships

Participatory mapping should involve community members with various perspectives, ideas, and issues to provide more insight. Upon enabling community voice, valuable information

can be shared with policymakers, stakeholders, researchers, newcomers, etc. The process may even require the support of external organizations, such as government officials, NGO's, or researchers (Anderson, et al., 2017; Corbett, 2009). By engaging external organizations for community collaboration, information is triangulated and feasible solutions can be offered to local needs and problems (Anderson, et al., 2017). However, if time is not taken to build relationships and create space for participants' input, there is the potential for dissonance and conflict.

Don't control the process

Allow individuals to draw maps according to their perception and areas of importance. Facilitate as necessary to ensure everyone is involved and voicing their thoughts. If needed, facilitate conversation on the size and details of the map t to ensure the main features are included.

Ask Good Questions

When asking people to create a map, ensure the questions are clear, thought-provoking, and open-ended. When using focus groups or interviews to discuss the maps, stimulate discussion by challenging assumptions and reflecting what has been said.

Consider Power Differentials

Important issues to consider when working with traditionally marginalized groups includes trust-building and active efforts to reduce power dynamics. To encourage open and honest communication, it is important to spend time building a relationship so power can be shared. When working with youth, consider consent and developmental age. While interviews and focus groups can be difficult to conduct with youth given their developmental age, resource mapping may be more appropriate.

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Appendices

Appendix A: Resources

Brown and Kytta (2018) highlighted the emergence of resource mapping in the last 20 years and shared importance pieces of literature and knowledge sharing. Important books and journal reviews of participatory mapping include those by McCall (2003), Rambaldi et al. (2006), Sieber (2006), Dunn (2007), McCall and Dunn (2012), Brown and Kyttä (2014), Brown and Fagerholm (2015), McCall, Martinez, and Verplanke (2015), Mukherjee (2015), and Pánek, J. (2016).

As well as numerous conferences, workshops, and symposiums:

- Workshop on Access and Participatory Approaches in Using Geographic Information, Spoleto, Italy, 2001
- Indigenous Mapping: Mapping for Indigenous Advocacy and Empowerment Conference, Vancouver, BC, 2004
- Mapping for Change, Nairobi, Kenya, 2005
- Workshop on Volunteered Geographic Information, Santa Barbara, CA, 2007
- Symposium on The Future of Participatory GIS: Learning from Practice? Enschede, Netherlands, 2013
- Modern Methods and Tools for Public Participation in Urban Planning, Poznan, Poland, 2017

Appendix B: Mapping Examples

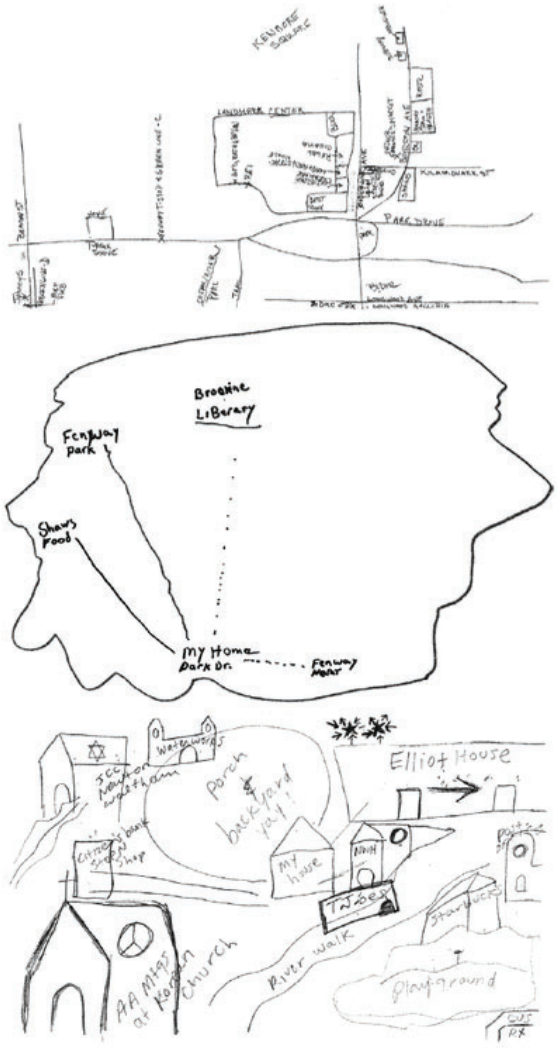

Figure 1. Sketch Map

Chan, et al., 2014

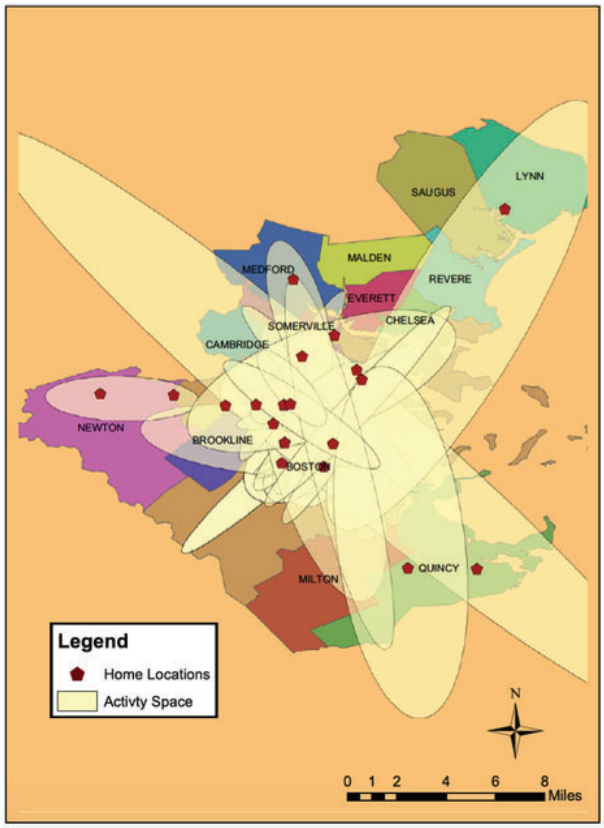

Figure 2. GIS Map

Appendix C: Example of a script used during a mapping workshop

"When we think of a map we often think of a geographical map, like a map of Halifax, or of natural landscapes; but, maps can represent things like timelines, power and decision making structures, a train of thought, and many other things. We also tend to think that map-making should be left to the experts, but we're going to make a map ourselves right now. This map is a geographical map. We're going to add to this map I've drawn of your school and all your school property." (Get a map from the school or school board weeks in advance, and then trace the main components of the property and school).

(Visualization) "Individually, I'd like you to imagine J.L. Ilsley High School's property. Outside, the places you go, the places that you don't tend to go. Take a minute to trace the whole property around in your mind. Look at what you like, what has 'potential' and also the areas that you don't tend to like or spend time in. (1 min.) Now, I'd like you think about this question: 'What would a greener J.L. Ilsley look like?' Now, draw some of your ideas, if two of you have different ideas for the same area, just make room for both. Use your imagination!" (6 min).

(To encourage conversation look at the map and see if there are areas where no one has put anything - either existing structures or potential additions. Ask the group what is in a particular area of the site. Or ask what its like to be there, if anyone hangs out there.

Ask questions to find out where people do/do not hang out and why).

Adapted from HeartWood Center for Community Youth Development, 2005