Co-designing Services for Youth With Mental Health Issues: Novel Elicitation Approaches

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Abstract
Experience-based co-design (EBCD) is an innovative, evidence-based approach to health and social system change based on principles of participatory action research, narrative and learning theory, and design thinking. Unique elicitation strategies such as experience mapping, trigger videos, and prototype development are used in EBCD to engage service users and service providers in a collaborative process of identifying touchpoints and solutions to system-level problems. In this article, we present findings from interviewing a purposeful sample of 18 participants (4 youth, 6 service providers, 6 family members, and 2 employers) across three co-design projects designed to address either mental health or employment services for youth (aged 16–24) with mental health issues in one urban center. Through interviewing participants, perceptions were explored relating to three elicitation techniques: creating experience maps, creating and viewing trigger videos, and co-designing visual “prototype” solutions. Analysis of participants’ comments indicated that these techniques can be powerful tools to foster mutual understanding and collaborative ideas, but they require a social, spatial, and temporal context that optimizes their value. A “safe space” is needed within which the essential elements of elicitation—building trust, finding voice, sharing perspectives, and creating a common vision—can occur. Three core, overlapping processes of co-design elicitation were identified: “building common perspectives,” “building mutual understanding,” and “building innovation.” We present a conceptual framework depicting the interplay of processes and elicitation techniques, essential to building mutual understanding and innovation during the EBCD process.

Keywords
experience-based co-design (EBCD), elicitation methods, experience mapping, videos, animations, prototypes, youth, mental health system

Introduction
Experience-based co-design (EBCD) is an innovative, evidence-based approach to health and social system change that engages key stakeholders in a systematic, participatory process of reflection and collaboration (Bate & Robert, 2007). EBCD originated in the United Kingdom in 2005 as an approach to quality improvement in the health-care sector and has since expanded to a variety of clinical areas, from emergency medicine to cancer, diabetes care, and mental health services (Donetto, Tsianakas, & Robert, 2014). An online survey of 107 EBCD practitioners and researchers conducted in 2013 noted that over 57 EBCD projects across seven different countries have been implemented since 2005, with another 24 projects in the planning stages (Donetto et al., 2014). The popularity of an EBCD approach has been attributed, in part, to the increased importance placed upon patient-centered care within the health-care system and the importance of the patient voice in service design and delivery (Bate & Robert, 2006).

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The theoretical foundations of EBCD are based on participatory action research, narrative theory, learning theories, and design thinking (Bate & Robert, 2006; Donetto et al., 2014; Palmer et al., 2015). EBCD is consistent with participatory action principles in its focus on authentic, equitable collaboration with service users in all stages of the process, with the ultimate goal of effecting positive social change (MacDonald, 2012). The approach is informed by narrative theory, with a core focus on narratives or subjective experiences, rather than attitudes or opinions (Borgstrom & Barclay, 2017). Locock et al. (2014), for example, argue that service user narratives are “a rich source of learning about people’s experiences.” They provide “a deep appreciative understanding of the strengths and weaknesses of a particular health care service and what is needed for the future” (p. 4). Narratives or stories are utilized as a primary vehicle for emotionally connecting with care providers and prompting reflection on issues that need to be addressed (Borgstrom & Barclay, 2017). Learning theory also informs the EBCD process, with an emphasis on the importance of reflection, pausing, and considering the perspectives of others (Locock et al., 2014). The final important theoretical foundation of EBCD is design thinking. User-centered design principles, for example, focus on the service user’s subjective experience, engaging both users and providers in a collaborative co-design process. Design tools and methods, such as creating prototypes, are often incorporated into the co-design process. Bate and Robert (2006) explained that appropriate design relates to the “functionality (fit for purpose performance), the safety (good engineering and reliability), and the usability (the interaction with the aesthetics) of a system or service” (p. 308).

The process of implementing an EBCD approach, as described by Bate and Robert (2007), unfolds in a series of six steps. The first step involves setting up the project, including securing support from others (e.g., organizational leaders, staff, service users). Steps 2 and 3 involve exploring the experiences of service providers and service users via narrative interviews and observation to identify emotional touchpoints in either providing or receiving care. Interviews with service users are often videotaped and then edited to create a short trigger film regarding key themes in their experience. Step 4 is an initial co-design event, engaging service providers and service users (and support persons) in a collaborative process of exploring issues and identifying priorities for change. Step 5 involves smaller mixed co-design working group meetings. Each working group focuses on an identified priority and then designs and implements desired recommendations for service improvements. The final stage in the process is an event where accomplishments are reviewed and celebrated.

Several guides have been developed on how to facilitate the EBCD implementation process (NHS Institute for Innovation and Improvement, 2009; The King’s Fund, 2018; Waitemata District Health Board, 2010). Rather than a rigid process, it has been acknowledged that there is some flexibility to the way that EBCD is implemented, with adaptations according to the context of a particular research question or study (Mathews, Cowman, & Denieffe, 2017). It is estimated that most projects typically take 6–12 months, with a variety of methods to capture experiences and co-design system improvements (The Kings Fund, 2013).

Despite differences in the way EBCD is operationalized, three key elicitation techniques are core to the process. These techniques are the focus of this article: (1) experience mapping, (2) trigger videos, and (3) prototype development. **Experience maps** are an elicitation strategy used to move from an individual to a collective understanding of key touchpoints in the service delivery process. This strategy draws upon the initial phase of exploring individual experiences of service provision, emphasizing the touchpoints, or emotionally charged moments that occur over time (Bate & Robert, 2007). Although the process varies from one project to the next, the NHS Institute for Innovation and Improvement (2009) details several key features. For example, stakeholder focus group meetings can facilitate collective discussion of individual touchpoints and mapping their relative position as a high or low point (vertical axis) at different stages of the service delivery experience (horizontal axis). Differences of opinion become an opportunity to discuss details of what made the experience stand out for participants. Once the touchpoints have been placed on the map, the group works together to build consensus on the touchpoint ratings and the priorities for action.

**Trigger videos** are another common elicitation tool in the EBCD process. The trigger video is typically a compilation of filmed narratives of service users that are edited to highlight key touchpoints in their experiences (Papoulias, 2018). The video is shown at the start of a co-design event to reflect service user experiences and emphasize their importance as core to the co-design process. Papoulias (2018) explains that the video conveys a sense of “emotional authenticity” and fosters empathy among service providers. The video also becomes a tool for reflective learning (for service users and service providers); it provides data to drive the co-design process, establishes an emotional connection between the service providers and users, and facilitates reflection and discussion regarding shared priorities for change (Locock et al., 2014; Papoulias, 2018).

**Prototype development** is another key elicitation strategy, which draws upon principles of design thinking. Coughlan, Fulton, and Canales (2007) explain the principles and process of prototypes as design tools. They emphasize that a “prototype” within this framework is not a finished product, but more like a learning tool, that helps a group move from abstract ideas to concrete, tangible solutions. Participants work collaboratively to share perspectives and try out ideas, with permission to do things differently, and to learn from what does and does not work. Prototypes often start out as rudimentary, sketches, or products that facilitate exploration and discussion about what might be possible. The emphasis is on moving rapidly from abstract ideas and theories to specific, concrete products. Prototype development is designed to help
a group move beyond simply talking and thinking about a problem toward concrete action (Coughlan, Fulton, & Canales, 2007).

**EBCD With Youth Who Experience Mental Health Issues**

The focus of this article is on the application of the EBCD process to improve health and social services for youth who experience mental health problems. Youth aged 16-24 are a vulnerable group whose voice may not be heard due to their limited power in the health-care system and perceived limitations in their ability to articulate their position (Yates, 2010). They are a group that is at a high risk of mental health problems, yet often “falls through the cracks” in standard models of care. Challenges here are found in the connects between funding, governance, and service delivery approaches in child versus adult mental health care (Singh, 2009). It is important to understand and identify ways to improve the service delivery experience for this group. The grassroots nature of EBCD, as well as the potential for tangible system impact is an ideal way to simultaneously empower young people with mental health issues and their family members. It is consistent with a recovery orientation to mental health services (Deegan, 1997; Jacobson & Curtis, 2000; Piat & Sabetti, 2012), yet ensures service provider input regarding practical concerns in creating service improvements.

Several unique challenges have been identified in applying this approach within a mental health service context. Historical power imbalances between service providers and service users, including symptoms and the stigma associated with mental illness (Larkin, Boeden, & Newton, 2015) can be a challenge in recruitment and participation. Confidentiality of service users also needs to be protected when filming experiences for a trigger film (Matthews, Cowman, & Denieffe, 2017). Limited attention has been paid to the ethical and logistical challenges of EBCD elicitation approaches, particularly as they relate to engaging youth and their support providers in the participatory process.

The purpose of this article is to review and reflect upon three elicitation methods within the EBCD process, as experienced by stakeholders involved in service provision related to youth with mental health issues. Data from three different studies informed the identification of the benefits and challenges of these elicitation approaches and generate a conceptual framework for optimizing their implementation with vulnerable youth.

**Context—Background Studies**

The wide array of services and funding bodies makes it particularly challenging to offer coordinated, holistic services to support transition-aged youth with mental health issues. In Hamilton, Ontario, Canada, there are numerous services available for youth up to age 18 after which youth must transition to different settings and services in the adult sector. The first two studies focused on improving coordination of mental health care and related supports (the myCo-Design study—Study 1) and transitions to adult care (the myTransitions study—Study 2). The third study (the Young Workers co-design study—Study 3) focused on improving employment supports for youth with mental health issues. Table 1 provides an overview of the study objectives and methods of each study.

**Participants and Recruitment**

Participants in all three background studies included youth, aged 16–25, with a range of mental health issues such as depression, anxiety, eating disorders, and psychotic disorders. Youth were recruited through service providers in the mental health system (Studies 1 and 2) or the employment system (Study 3) using the following strategies at each service and follow-up by the study team: (i) recruitment posters, (ii) information sessions with existing youth groups, and (iii) recruitment flyers shared by service providers with eligible youth.

In Studies 1 and 2, family members (designated by the youth and typically a parent) were included as participants. In Study 1, the research team invited family members of participating youth to be involved. In Study 2, families were recruited through service providers. There was one member from each family except for one case in Study 2 where there were two members from one family. In Study 3, managers or supervisors were recruited from a variety of private and public businesses that employ youth including construction, horticulture, education, and retail sectors.

Service providers for Studies 1 and 2 included health-care professionals who worked directly with youth (e.g., nursing, psychiatry, allied health professionals), who were recruited through the public mental health system. Service providers for Study 3 were counselors purposefully recruited from a range of local community-based youth employment programs to include diversity in size and industry sector.

**Elicitation Techniques**

The three elicitation techniques discussed in the Introduction section (experience maps, a trigger video/animation, and prototype co-design) were central to implementing EBCD in each study. The process of incorporating these techniques was similar across all three studies, with a few important differences, as noted below.

Experience mapping was used to build collective understanding during stakeholder focus group discussions. A set of 30–60 touchpoint cards (derived from interview data) was initially given to each focus group participant. The cards were color coded to represent different stages in the journey through the system. Participants initially worked individually or in pairs to review sets of touchpoint cards, add touchpoints that may have been missing, and then rank the cards according to their importance or relevance in the service journey. Moving from individual to group consensus
was facilitated through discussion of individual rankings and then posting each touchpoint card on a wall map according to the consensus rating. If there were differences of opinion, comments were added to capture these differences (see Figure 1).

“Trigger films” presented in Studies 2 and 3 were 2- to 5-min videos based on an edited compilation of video-recorded individual interviews conducted with participant volunteers at the end of each focus group. In Study 1, an animated film was developed for the same purpose based on quotes and paraphrased material from the interview data. Animation was used to avoid potential stigma or power imbalances associated with in-person video recordings. The videos were played at the start of the co-design events.

Prototype co-design used in the final co-design phase was informed by data that were synthesized from earlier phases. Participants worked in small groups through facilitated exercises to (a) decide on the core problem they wanted to address at a particular touchpoint, (b) brainstorm solutions individually, (c) cluster common themes across participants, (d) prioritize an idea to focus on, and then (e) develop a visual prototype of a solution to address the priority issue. This was a rapid process, designed to be completed within 45–90 min. We used two different structured processes to provide a road map for facilitators to elicit individual and group perspectives and ensure the prototypes were co-designed. In Studies 1 and 2, participants initiated the prototyping exercise in small groups with a single stakeholder perspective in each group. The small groups then rotated to view the other two prototypes and augment the prototypes from their perspective (carousel approach). In Study 3, mixed groups of stakeholders worked together to brainstorm and develop the prototypes. In both approaches, each small group shared their visual prototypes with the large group to elicit and incorporated further suggestions for improvement. Figure 2 presents an example of a prototype.

Method

To understand application of EBCD elicitation methods, the authors reflected on two primary questions: (1) How did participants (i.e., youth with mental health issues, their family members or employers, and service providers) respond to each of the

| Study       | Objectives                                                                 | Participants                                                                 | Data Collection Methods                                                                 |
|-------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Study 1: myCo-Design | To improve coordination and transitions to adult care for adolescents with mental illness in Ontario | Triads of youth (Y) with diagnosed mental health issues aged 16–25, family members (or other lay support: F) and service providers (S) | Two phases: August 2015–July 2017
1. Smartphone and web app questionnaires over 12 months with parallel interviews at intake, 6 and 12 months (12Y, 12F, 12S). Due to expected attrition, we over recruited youth (n = 19) and service providers (n = 14) in the early stages to result in 12 triads
2. Combined focus group discussions and co-design event (6Y, 5F, 6S) This includes one youth and one family member engager participants who had experience in co-design |
| Study 2: myTransitions  | To improve transitions from child to adult mental health services in Ontario |• Transition-aged youth with diagnosed mental health issues
• Family members (or other lay support person)
• Service providers from eight organizations | Three phases: Aug 2016–March 2017
1. Analysis of secondary interview data (16Y, 9F, 10S) from an earlier policy analysis of youth mental health transitions in Ontario (Randall et al., 2016)
2. Focus group discussions with each stakeholder group (8Y, 10F, 15S)
3. Final co-design event (4Y, 6F, 6S) |
| Study 3: Young workers  | To improve employment supports for youth with mental health issues in Hamilton | • Youth with both mental health and employment challenges (Y)
• Youth employment support providers (S)
• Employers (E) | Three phases: February–November 2017
1. Individual interviews (6Y, 6S, 6E)
2. Focus group discussions with each stakeholder group (2Y, 5S, 5E)
3. Final co-design event (1Y, 5S, 5E) |
three elicitation methods used in our EBCD studies? and (2) What influences the impact of the elicitation strategies?

**Data Sources re. Elicitation Techniques**

A two-stage process of data collection and analysis was adopted, informed by interpretive description (Hunt, 2009; Thorne, Kirkham, & O’Flynn-Magee, 2004). Figure 3 provides an overview of the stages and timing of the data collection.

The first stage (Wave 1 [W1] data) was collected during evaluation interviews in the three background studies. All participants who completed the focus group or co-design stage in the background studies (Study 1: 6Y, 5F, 6S; Study 2: 8Y, 10F, 15S; Study 3: 2Y, 5S, 5E) were invited to participate in an optional 30- to 45-min follow-up interview about their experiences. Eighteen of the 62 invited participants (29%) agreed to participate in the evaluation interviews. This included four youth (three female, one male), six family members (three female, three male), six service providers (four female, two male), and two employers (both male). The 18 interviewees reflected a cross section of the overall sample of 83 participants involved from the beginning of the three studies (11% of youth,
28% of family members, 21% of service providers, and 33% of employers).

Those who volunteered were interviewed by one of the researchers by phone or in person to explore their perceptions of each elicitation strategy as well as the overall EBCD process. The interviews explicitly probed the use of touchpoint cards (e.g., To what extent did you feel the touchpoints discussed reflected your priorities?), the experience mapping process (e.g., How effective was the experience mapping exercise?), trigger film/animation (e.g., How did you feel about the video that was played at the beginning of the event? This was intended to build a sense of common purpose for participants. Did you find this effective?), and the prototype development (e.g., How did you find the process of developing a solution prototype? Were you able to come up with concrete ideas about ways to address the touchpoint?). The interviews were audio-recorded and transcribed verbatim.
The second stage (Wave 2 [W2] data) included the reflections of the project team that included a youth (K.R.), family member (L.M.-L.), service provider participant (R.S.; one participant from each of the three studies), and three researchers (G.M., A.M., and S.M.) involved in one or more of the studies. W2 involved more in-depth, cross-case analysis of the data through a series of reflexive discussions with the project team. The core research team (G.M., S.M., and A.M.) initially reviewed all of the data from both waves, with a particular focus on quotes that referenced one of the three elicitation techniques. Consistent with an interpretive description approach, we engaged in an iterative, inductive process of synthesizing data and generating conceptual explanations for participants’ perspectives and experiences (Thorne et al., 2004). The relationships among the identified themes were assembled into a conceptual framework. Critical reflections on the data focused on contextual forces that shaped differential responses to the elicitation techniques.

Quotes included in this article are attributed to participants by wave (W1 or W2) and type (youth [Y], family [F], service provider [S], employer [E], or researcher [R]). For the W1 data, we indicate participant number (1, 2, 3, etc.) and study number (1, 2, or 3). For example, W1-Y2-3 refers to evaluation interview data collected from Youth 2 in Study 3; W2-Y1-3 refers to the reflections of the youth author of this article about Study 3 (K.R.). The Hamilton Integrated Research Ethics Board approved all three studies, project numbers 15-059 (Study 1), 2017-1982 (Study 2), 2584 (Study 3).

### Findings

Analysis of the interviews and W2 reflections led to identification of three inter-related processes (building common perspectives, building mutual understanding, and building innovation) that were linked to each of the elicitation techniques. In addition, there were a series of broader factors that were central to effective elicitation as shown in Figure 4.

#### Experience Maps: Elicitation to Build a Common Perspective

Following participants’ individual rankings of the importance of the touchpoint cards during the focus groups described above, participants collectively discussed where each touchpoint should be placed on the experience maps. Several participants indicated that the process was confusing at first, but once they understood it, they were impressed with its thoroughness and effectiveness. Many participants commented that the experience mapping process built a common perspective. One of the youth, for example, explained that the process exposed her to the perspectives of other youth: “...it made me see why everyone else is concerned” (W1-Y3-2). In addition, it helped to create a collective vision of “the things that we really need” (W2-Y1-3). Family members also commented on the value of sharing perspectives, noting that that the touchpoint cards elicited a lot of discussion and recognition that experiences could differ.
It’s a good way of getting ideas out there and discussing them... very insightful... which kind of opens your eyes to different situations that you haven’t been exposed to. (W1-F2-1)

Participants appreciated that additional touchpoints could be added, which helped them to feel that their voices were heard. One of the employers described the process as “reassuring” (W1-E1-3), explaining that regardless of business sector, there were clearly common experiences. Another employer described the process as “incredibly useful,” explaining “you can really visually grasp those areas where everyone is saying the same kind of thing—it’s immediately obvious where the areas of focus for individual employers/employees are...” (W1-E2-3). Overall, there appeared to be consensus that the process of discussing and “mapping” participant experiences yielded insights and enhanced awareness of common perspectives and experiences within each stakeholder group.

The Trigger Film: Elicitation to Build Mutual Understanding

Participant comments about the trigger film related to their experiences in both creating the film, as well as in viewing the film as part of the co-design event. Some comments reflected the challenge of building trust and finding one’s voice. Several participants expressed discomfort about being captured on film following the focus groups, and others felt they needed more time to reflect and opt out not to participate. Some participants talked about the challenge of being spontaneous in sharing their ideas and of needing time to think about what they wanted to say. For other participants, this reluctance changed as participants became more comfortable with the process. A service provider commented on being more comfortable saying things on a camera that they might not say to a person (W1-S4-2). A family member talked about the opportunity to “really voice their opinions about issues that are close to them” (W1-F4-2).

When asked about the impact of viewing the video at the co-design event, participant responses reflected the process of building mutual understanding. As an elicitation technique, the video was intended to share perspectives, particularly of youth and their families, thereby reducing power differentials. Several participants commented on the value of hearing the youth voice and the significant impression it made. An employer stated that it was “very powerful” to hear from “someone who’s been directly affected” because “it’s there, this is the evidence” (W1-E2-3). Similarly, a service provider stated that it was “powerful to hear the voices of the youth and families and see their faces” (W2-S2).

There were a few concerns, however, about the extent to which the voices were adequately represented. Since the clips were edited to produce a brief 2- to 3-min video, there were concerns that the video clips could be “taken out of context” (W1-S6-3). One youth expressed concern that the film was hard to follow; “...some parts were choppy and cut people off mid-sentence, so this was a bit distracting” (W2-Y-3). Another expressed concern that the animated video may have minimized the impact of the issues; “I would have rather have seen... youth in real life. It would probably give everybody a little bit more serious view on how the things are out there” (W1-F2-1). One employer suggested that a “mini-documentary” (W1-E1-3) was needed to better spur conversation and thoughtful reflection.

Participants found the video useful at the co-design event because it helped “in pulling things back up to the surface” (W2-F7-2) that had been discussed during the focus groups. It also reportedly helped participants to focus “on the task at hand” (W1-E2-3) as a springboard for co-design. A service provider also perceived it to be “a good icebreaker” to motivate discussions (W1-S5-3). An employer commented that the film brought people together to establish an environment of teamwork and mutual understanding for the co-design work.

The variety... made me feel like OK, we’re part of a big collective of people with similar goals—so it creates that team atmosphere. It was very unifying. (W1-E2-3)

Co-design Prototypes: Elicitation to Build Innovation

Participants shared many perspectives about the process of innovation in co-designing prototypes, which for most was a novel experience. One youth commented about feeling proud of contributing to the process and having the freedom to not necessarily “get it right” the first time.

It was great, sometimes I forgot that it was just a prototype and it was fine to have mistakes. It felt like we were inventing something. (W2-Y3-2)

Collaboration and sharing power was key to this process. One youth talked about being frustrated when a group member dominated the creation of the visual prototype, without passing the pen to others in the group so they could also contribute.

...I found that only one person was always drawing...we had similar ideas, but the way it was drawn didn’t really make sense for me...it felt like they were kind of taking it a whole other way. (W2-Y3)

In contrast, a participant from another study talked about the process as being very inclusive, allowing and expecting every voice (youth, family, service provider) to add something to the prototype. Creating a visual solution within a short period of time that was compatible with the needs of three different stakeholder groups was not easy but was seen as valuable. An employer explained that the visual prototypes captured the solution more effectively than a 10-page summary report. It was “...good to see, not just to hear” (W1-E1-3). One family member noted that she “really liked the different drawings...because it was a window to a whole new world of perspectives” (W2-F7-2). It prompted her to think about how she might augment what was prepared. One service provider reported that the visual...
prototype was helpful, but noted there was a risk that some of the details could be missed.

Things tend to become more clear and make better sense to me if presented visually, although there is always the risk of some details being lost...in a simple visual reference. (W2-S3-2)

It was helpful to recognize that prototypes were a basis for further development. “It was difficult to do with such a stringent time constraint. But it gives you a framework at least to work with...it’s a prototype” (W1-E1-3).

Finally, one of the service providers highlighted the value of coming to a “collective” solution that everyone supports. She felt that this really instilled hope that change could be made and was very encouraged by the openness to new directions and commitment to tackling solutions together.

The processes embedded in each elicitation strategy were interrelated; building a common perspective was a step toward building mutual understanding and both of these processes were a foundation for building innovation. As noted in Figure 4, the stages unfold over time.

Factors Shaping Effective Elicitation

There were several core dimensions of the elicitation process that appeared to serve a dual role as both precursors for effective EBCD elicitation and outcomes of the process: building trust, finding voice, sharing power, sharing perspectives, and creating a collective vision. Each of these dimensions was embedded in descriptions provided by participants across all three studies.

Youth and family members specifically mentioned that developing trust was an important first dimension of elicitation that was needed from the outset of the EBCD process and which had to be sustained and enhanced over time. It is important that youth, who often feel that their input is asked for in a tokenistic manner, see evidence that they are really being listened to during EBCD, or they may disengage from the process.

...is it actually going to make a difference?...a lot of the time...a service provider will ask me because they need to fill a quota rather than because...they really want to know what’s going on....They [youth] are kind of burnt out from sharing. (W2-Y-3)

Similarly, one of the family members explained that families have often been dismissed in adult mental health services.

I think it is a little bit...of, “Is it really going to have an impact? I’ve tried to speak up before and nothing happened.” There is a bit of time to learn to trust in this process... (W2-F7-2)

The second essential dimension of elicitation was the process of finding voice. Some participants did this through sharing opinions on the trigger video and others through the opportunity to edit and add touchpoints to the experience maps. As one family member explained, the video provided people with “...a chance to really voice their opinions about issues that are close to them” (W1-F4-2). One service provider reported that the experience mapping process provided “a sense of being heard, being validated, which was nice” (W1-S1-1).

A third key dimension of the elicitation process was the process of power sharing. Power was shared by following techniques of deliberative dialogue (Boyko, Lavis, Abelson, Dobbins, & Carter, 2012; Fearon, 1998; McCoy & Scully, 2002), which recognizes that “conversation works best instead of being talked to, or talked at” (W1-S5-3). As one of the youth stated, “When I go to these kinds of things, sometimes people would try to talk over each other and I didn’t find any of that when I was there” (W1-Y1-2). Another youth commented that it was critically important that power was equalized across and held by participants rather than by the research team.

...a lot of why this works well is that if you’re looking at everyone’s ideas that were brought forward at the beginning and you bring them all together in the group, it’s the group members kind of evaluating them together and it’s not the people who are doing the research who are saying “oh no that’s wrong”...So, I think that helps with gaining that trust between the researcher and the participants...you may get some conflict between the participants [but] it is better to have it...at that level. (W2-Y3)

Sharing different perspectives was another key dimension of the process. One of the service providers explained that there was a “...warm, welcoming environment where everyone had a voice and no-one’s ideas were quashed” (W1-S5-3); this was seen as a rare opportunity to connect and have respectful discussion. Although stakeholders did not always agree with the perspectives that others shared, many acknowledged the importance of the process. One family member reported feeling less connected to a service provider prototype, but recognized its value—“especially from their perspective” (W1-F2-1). Another family member explained that:

...you started to understand where everybody was coming from, and...it’s almost like an epiphany, like “Oh, I get it...” and that was very satisfying. (W1-FM4-2)

The final essential dimension of elicitation noted by participants was creating a collective vision. In Study 3, for example, one of the employers talked about the importance of creating a “we’re all in this together” type of environment, and the value of hearing from others, particularly the youth. He explained “...as soon as she [the youth] said something, I thought it was great, I’m glad I heard it from you, I wouldn’t have thought of that” (W1-E2-3).

In addition to the five essential dimensions of elicitation, time and skillful facilitation were two key aspects discussed as being important throughout the EBCD process by participants from all stakeholder perspectives. Time was needed to build
experience maps, create videos, or co-design solutions. Time was also needed to share perspectives, build trust, and create group cohesion. “The more time we had to talk, the more time we had to expand the vision and potential solutions to accommodate everyone’s perspective” (W2-F7-2). Yet time limits were also needed to create a concrete solution.

... there is this tension ... in the elicitation process, between creating a very narrow amount of time and being very focused versus, we could spend all day on any of these exercises, so ... it’s hard to say what it would have been like had we not had the tight timelines ... I think there is something about having to be very focused and giving ourselves limits. (W2-F7-2)

Skillful facilitation was needed to balance the right amount of time to discuss fully, so people would feel valued and not lose trust in the process, with the need to develop a concrete solution.

There is this tension I think between needing to move people along, because we could talk all day right and not move anywhere, and end up with nothing that is tangible at the end ... I think for the facilitator to know when it is time that yes, this group has come to a place, and I am not sure how to tangibly say that, but there is this place where okay now we are ready. (W2-R1-1)

**Impact**

There were reports of both individual- and system-level impacts of EBCD elicitation processes. At an individual level, several service providers noted the value of connecting and networking with others who are doing similar work. They explained, “when you are involved in doing this type of work, it sometimes feels like you are on your own with no support... [it was] reassuring to hear that we face the same challenges” (W1-S5-3). Similar comments were made by family members and by employers. An employer, for example, stated: “You’ve got these employers with these completely different business models all agreeing on the same things. So that was very reassuring” (W2-E1-3). One youth explained appreciated making “these connections” and to “be able to have these experiences” (W2-Y1-3). The process was also reported to be inspiring because people became open to new ideas:

After this process, I am more passionate about addressing mental health issues... Encouraged by the openness to new directions— we can all tackle solutions together. (W1-S5-3)

In addition, the potential to build capacity for system change was evident. One of the family members talked about the value of the experience maps in her family engagement work, as “useful resources for families just embarking on the journey through services with their youth” that can enable them to “look ahead and prepare somewhat for that” (W1-F7-3). There was a tension, however, between identifying “quick fixes” that could be implemented immediately versus system-level “game changing solutions” that would take time to implement (W1-F2-1). One of the service providers indicated that they tried to narrow the solution down to something that they could do within their own “scope of practice,” explaining that “we can’t solve the whole bureaucratic structure thing... but what can we do between each other?” (W1-S2-1). A youth appreciated “feeling valued within the conversation’ that could lead to system change “because I feel I am making a difference” (W2-Y1-3).

**Discussion**

The findings highlight the ways in which EBCD elicitation techniques were embedded in a dynamic, progressive, relational process, moving from an individual to a collective vision for change. Bringing together stakeholders from different perspectives within the system of service delivery for youth with mental health issues was a powerful strategy to build mutual understanding and ideas for change that were grounded in the experiences of both service providers and service users. The co-design activities involving all three perspectives allowed opportunity for visioning, as well as consideration of practicalities, and fostered deep discussions of the human perspectives of multiple groups.

Elicitation techniques such as experience maps, trigger videos, and prototype creation can be powerful tools to foster mutual understanding and collaborative ideas for system change; however, the overall principles and practices of EBCD must be considered. As noted in the conceptual framework, the elicitation tools need to be positioned within a social, spatial, and temporal context that optimizes their value. The tools and processes can collectively create “a safe space” within which the essential elements of elicitation—finding voice, sharing perspectives and power—are embedded in a progressive process of building common perspectives within groups, mutual understanding across groups, and innovation over time. As noted by several researchers in the field of co-design, it is not the visual products themselves but the process of cocreation through making space for reflection and dialogue between stakeholders that is essential (Coughlan et al., 2007; Papoulias, 2018). The effectiveness of elicitation is dependent on having enough time and skillful facilitation at each stage to accomplish a rich, yet focused dialogue.

It is evident from the findings that this is a relational process, where relationships and communication between participants and researchers are fundamental to success (Palmer et al., 2018). “Relational engagement” stresses the importance of “the human and fundamentally interactive nature of engagement in research” and promotes “socially responsible and protective relationships for the participants involved” (Richard et al., 2017, p. 3). In this approach, the personal stories and identities of stakeholders and participants are paramount to understanding how the narratives of vulnerable groups shape their decisions and actions. The relational nature of EBCD means attention must be paid to an essential and demanding element...
in facilitation: how the project team relates to participants and how they relate to each other.

We consistently heard from participants about the importance of building trust, layering ideas, sharing power, building community, and developing a collective vision, in addition to ensuring the right mix of participants in the room. The latter can mean having diversity within a perspective (e.g., a mix of service providers across organizations in a region), or ensuring strong representation of youth and family perspectives. One individual voice reflecting a different perspective can shift the direction of the conversation, as was evident in Study 3, when a youth joined the co-design discussion among employers and service providers. For project leads, this involves careful consideration to recruiting participants and allowing enough time for discussion, to avoid arriving at a premature consensus that might be poorly received in practice. Although other findings point to concerns that EBCD studies take too long to complete (Donetto et al., 2014), our studies emphasize that taking sufficient time is a critical element of an effective process involving vulnerable participants.

A common challenge across all three projects was sustaining meaningful engagement of youth with mental health issues. A core principle of EBCD involves empowering service users to identify and share their voice with service providers. Although youth were initially eager to participate, barriers to sustained engagement included competing demands related to school, work, housing, and the legal system, as well as struggles with ongoing, episodic mental health issues (e.g., foster home in new city, rehospitalization). Suggested approaches include overrecruiting youth, using youth engagers, and employing youth as part of the study team throughout all project stages.

In addition, power imbalances at this life stage can be a challenge when asking youth to share feedback and suggestions for system change in a setting involving family members and service providers. Nakarada-Kordi, Hayes, Reay, Corbet, and Chan (2017) noted that traditional research methodologies can be both boring and intimidating in their co-design work with youth who experience psychosis. They emphasize the importance of flexibility with vulnerable participants who may have complex behaviors, emotions, and needs. Incorporating engaging, simple, yet creative approaches to build capacity was important, including visual approaches to storytelling and group approaches to prototype creation.

When successful, the EBCD process can provide the opportunity for youth to find their voice and share perspectives and power, which can be important to their well-being. The EBCD process is also consistent with a recovery orientation that calls for people with lived experience of mental health issues to be actively involved in their own treatment and mental health service design (Donetto et al., 2014). Honoraria are a necessity for vulnerable groups to participate in these types of studies; however, youth stated that they would only stay engaged if they were benefiting from the process in some way. Making connections, feeling opinions are valued, and contributing to system change were important motivators for some youth. The importance of fostering intrinsic motivation is consistent with insights from other co-design research with youth. For example, youth appreciate opportunities to be seen as experts, to share their ideas and opinions, and to work together to shape solutions that will be of direct benefit to them and their peers (Nakarada-Kordi, Hayes, Reay, Corbet, & Chan, 2017).

In previous EBCD literature, challenges in engaging service providers are often described (Donetto et al., 2014). In this study, service providers were eager to participate and highly engaged. Successful strategies included the use of steering committees that created bridges to providers in different organizations, and time initially invested to build relationships with senior managers.

EBCD methodology is rooted in principles of participatory action research including empowerment (“research with” rather than “research on”), translating knowledge to action, and social justice (Cargo & Mercer, 2008). As such, the EBCD process should not become overly formulaic; a responsive approach is recommended to generate deep understanding. Purposive sampling, for example, can assist in recruiting the right mix and numbers of participants to achieve data saturation. A unique aspect of EBCD compared to many other qualitative research traditions is the focus on innovation and tangible outcomes. The “double diamond” of design thinking necessitates moving between divergent and convergent thinking through discovering touchpoints, defining key issues, developing potential solutions, and then co-creating a focused plan for service change (Design Council, 2018; Tschimmel, 2012). Understanding of the theoretical and methodological principles of EBCD is recommended to optimize outcomes.

Study Strengths and Limitations

One of the strengths of this article is that it reflects a synthesis of findings from three studies focused on improving services for youth with mental health issues. Purposive sampling was conducted to include varied perspectives across all three studies and four stakeholder groups. Triangulation of data sources, methods, and researchers helped to enrich our understanding of the process from different perspectives. An iterative process of member checking was part of the EBCD process, and the composition of our authorship team functioned as an informal member checking strategy in reflecting on each stakeholder perspective. It should be noted, however, that the findings are based on input from a subgroup of participants and do not necessarily reflect the perspectives of everyone who engaged in the process across the three studies. In particular, only 4 of the 18 interview participants for this article were youth. This is a significant limitation since youth are the primary service users, and their voice was central to the EBCD process. Understanding the perspectives of those who did not participate is critical, since their silence may reflect fundamental power imbalances that interfere with the EBCD process. Future research is needed to explore their perspectives in more detail to identify and critically reflect on the forces that impact engagement. It can be challenging to follow-up with nonresponders in a way that respects their decision not to engage;
however, their viewpoint is an important part of the puzzle. Further research is also needed to explore differences in engagement related to age, gender, education, and ethnicity. A final limitation to transferability of the findings relates to the three studies being conducted primarily in one urban center. Although the central principles outlined here could be transferable to other settings, additional research is needed to systematically evaluate the process and impact of elicitation techniques in a range of research contexts.

Conclusion

EBCD is a relatively new approach to engaging stakeholders in a process of co-designing system change. Novel EBCD elicitation approaches such as experience mapping, trigger videos, and prototype creation are promising strategies to actively engage participants from different standpoints in a process of building common perspectives, mutual understanding, and innovative solutions to system-level problems. When working with vulnerable populations such as youth with mental health issues, sufficient time and skilled application of the EBCD process are needed to create and implement a collective vision for system change.

Authors’ Note

The views expressed in this article are the views of the authors and should not be taken to represent the views of the Government of Ontario.

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