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Research Article

Plotting Your Job Hunt: The Use of Visual Timeline for Investigating the Job Search Process

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Abstract

Objective – This article discusses the use of a visual timeline activity in qualitative research investigating a process. This was part of a larger project exploring the experience of former library staff and their searches for academic librarian positions. It will also discuss the impact a visual method had in shaping the quality of the data.

Methods – In 2023, the author conducted in-depth virtual interviews with 22 former library staff working in U.S.-based academic libraries about their experiences applying for academic librarian positions. A timeline worksheet was incorporated into the interviews, in which participants were asked to chronologically plot out their searches, as well as discuss significance of their selections. Both transcripts and timelines were analyzed using inductive thematic analysis, with the derived codes applied to both. Timelines were analyzed for visual connection to themes.

Results – Participants used the timelines as a way to explain steps taken during their job searches, eventually leading to the start of their new jobs. Completing the activity helped participants recall moments from their searches during the interview. They also used the visual format to express the emotions they felt and their sense of passing time. Issues that arose while conducting the activity included some participants' fears of "doing [the activity] wrong," as well

as limitations of the digital tool used to lead the interviews.

Conclusion – Qualitative research in library science can benefit from the use of visual methods like timelines, especially for research on procedural aspects of working in academic librarianship. While practical matters such as extra time and material needs may hamper a researcher's desire to use them, visual data can supplement oral interview transcripts.

Introduction

In-depth interviews provide valuable insight into people's experiences during and after life events. However, there are times when it is difficult for interviewees to verbalize concepts like time clearly. When it comes to understanding a sequence of events, interviews may be muddled or difficult to imagine and understand. There is also the issue of the power balance between researcher and subject. Qualitative research can implement numerous methods for data collection. This includes surveys, interviews, focus groups, and observation. Common among these methods is the control investigators hold in the direction and interpretation of the data collected. Participants are restricted to the questions asked in a survey, the flow of the in-depth interview, and the amount of speaking time in a focus group.

Time is an abstract concept, where describing the past, present, and future is difficult for anyone, let alone for an interviewee. Process can also be considered abstract, but it relies on specific steps and time periods. Visual tools can help deal with these issues in an attractive way. If applied, a timeline tool may help participants discuss their experiences of a process in more detail. Data collection tools that incorporate visual creation can provide ways to expand on participants' understanding of abstract concepts. Such methods include photovoice and mind mapping. Visual methods can also act as memory aids, where they help participants focus on and recall significant events related to the research question (Kolar et al., 2015). They can lead to reflection on important moments in interviewees' histories (Chen, 2018; Thygesen et al., 2011). While fields such as public health and anthropology have used such tools for the past few decades, library science research has started to catch up and incorporate them into projects.

This article will cover the use of a visual timeline, in combination with interviews, in a qualitative research project and argue the benefits of implementing timelines as a data collection tool for investigations of processes. This work is part of a larger project exploring the academic librarian job search experience from the perspective of former library staff[1] who have worked in academic libraries based in the United States. Here, I explain the way timelines were implemented and analyzed, notable data, and recommendations from this methodology.

Literature Review

Visual Tools in Qualitative Methods

Literature discussing the use of visual data collection tools explores a wide collection of their forms. This ranges from photos, videos, drawings, collages, and even Legos. Much of the rationale behind the use of

[1] In this article, the term "library staff" refers to workers in libraries not in librarian roles. These positions are commonly known as "library support staff," "library assistant," or "paraprofessional." However, these terms can be viewed as diminishing the expertise and value of these workers. See Schilperoort et al. (2021) for further discussion on the importance of word choice.

visual methods focuses on enhancing data collected through interviews (Adriansen, 2012; Bagnoli, 2009; Kolar et al., 2015; Pell et al., 2020). In addition to the content of interview data, forms and styles of visual data can be analyzed to derive possible meanings and thought processes. These methods can also help situate moments from interviews or explain participants' understanding of certain concepts and situations (Bagnoli, 2009). Interviewees tend to be more engaged in the interviews when completing visual exercises (Kolar et al., 2015). Visual tools can also aid in the practice of prompting, to encourage interviewees to expand on a comment or thought. Drawing attention to the photo, drawing, or collage and asking for an explanation of a feature can invite participants to go into more detail, adding to the interview data (Sheridan et al., 2011).

Additionally, incorporating visual methods—especially participatory methods—balances power dynamics between researcher and subject (Adriansen, 2012; Hicks, 2018; Mannay, 2010). Typically, the researcher controls the flow of interviews and the meaning derived from those transcripts. Previous research discusses control given to participants in completing these exercises, including determining their own forms and styles. In Kolar et al. (2015), participants created spiraling timelines that provided extensive details in drawings of abstract concepts. With visual methods, participants can guide the way their materials are interpreted, as opposed to ceding control to the researcher. The researcher's main role in those situations is to ask creators about meaning from participants' works (Sheridan et al., 2011). In certain instances, researchers have been prevented from seeing the products of visual data collection prior to analysis, such as in cases involving interviews over phone and other non-face-to-face formats (Pell et al., 2020).

The selection of the type of visual method depends on the research question. Most of the styles previously discussed are used to explain understandings and reflections. Timelines, however, represent a chronological order of significant events (Pell et al., 2020). Previous research has noted the advantage of timelines in their specific projects. The direct advantage found in almost all these projects was that it aided their subjects in remembering relevant events in their lives. Pell et al. (2020) pointed to their timelines in aiding their interviewees to answer questions quickly, clearly, and confidently. Others such as Kolar (2015) and Andresen (2012) point to the use of the timelines in helping address concerns of interviewing marginalized communities such as refugees.

The literature emphasizes that visual methods tools are not meant to be the sole source of data; they are meant to supplement interview data (Adriansen, 2012; Hartel, 2014; Kolar et al., 2015; Pell et al., 2020). The end results of visual methods are difficult to understand when divorced from context. They need the participants' interpretation to be understood. Each subject has their own way of communicating concepts visually. Visual methods also face the issue of validity (Hicks, 2018; Pollak, 2017), especially when considering the individual aspect of each visual entry. One must consider, though, that concerns of validity pertain to most qualitative research (Cox & Benson, 2017). As a bit of an outlier, Bagnoli (2009) argues that while they also do not think visual data should be used as the only data in research, they view it as, "significantly contributing to making sense at all different stages in the analytical process" (p. 567). On the value of visual data collection, all of these considerations may lead researchers to conclude:

> In terms of worthy topic or significant contribution, it seems less obvious that use of visual methods inherently affects this either way; except perhaps in terms of the potential for opening up new types of question in visual, non-textual communication and consumption of information. (Cox & Benson, 2017, Discussion and Conclusion section, para. 4)

Applications in Library Science Research

Library science has begun to incorporate visual methods into qualitative research, including studies of topics like the perception of information (Hartel, 2014) and a map of the internet (Scull et al., 1999). Pollack (2017) argues that library science has been slow in adopting visual methods due to the field's focus on more high-level and contextual topics. In the past decade or so, the field has critically examined using visual methods for research. On the one hand, there is consensus with discussion in other fields supporting use of visual methods, such as how these tools can help balance power dynamics, provide additional data supporting interviews, and allow various interpretations of data (Adriansen, 2012; Bagnoli, 2009; Barton, 2015; Kolar et al., 2015; Mannay, 2010; Sheridan et al., 2011). On the other hand, there are some concerns, including one brought up only by library science researchers. As previously discussed, there is the concern of using visual tools as the sole method of data collection (Bagnoli, 2009), though Hartel (2014) argues for their validity as their own data collection methodology. Another concern centres around the issue of copyright. Droog et al. (2023) argue that participants hold copyright of the images they create in these studies. That means participants have the right to decide whether their images are disseminated as part of the larger research output. However, the copyright issue is usually not considered nor mentioned in either the IRB protocol stage or in consent forms. Beyond copyright, there are also practical issues to consider, such as the need for additional materials, time, and availability, which have not been addressed in the literature.

Despite these issues, library science scholars have found value in using visual methods. These arguments centre the advantages of participatory methods, where the study subject is actively engaged. Hicks (2018) focuses on one of the most popular qualitative analytical approaches, grounded theory, and notes:

> The exclusion of participatory approaches to data collection such as visual methods presents issues because it restricts grounded theory analysis to outsider rather than to the harder-to-access emic or insider viewpoints that are revealed through the adoption of a participant-centred approach. (p. 194)

Librarian Job Searches as a Process

To get a librarian job in academia, especially in the United States, one must go through a strenuous hiring process. The traditional job search for non-academic positions tends to involve submitting a resume and brief cover letter and partaking in a short interview. However, applying for academic librarian positions carries more steps: submitting a curriculum vitae (CV) and a more detailed cover letter; waiting for an invitation for a first-round phone or Zoom interview; and, if selected to advance in the process, participating in a final all-day campus interview involving meetings throughout the day with subsets of stakeholders and a presentation.[2] There are general guides on how to succeed in the process (Duffus, 2019; Weak, 2014; Welsh et al., 2023), including an entire book (Meggan Press's [2020] *Get the Job: Academic Library Hiring for the New Librarian*), but there isn't a detailed explanation of how long the process may take, especially if the institution does not follow the standard process. This can lead to anxiety for applicants, as well as possible frustration for hiring institutions. For applicants, the entire process, especially for failed applications, can stay in their mind for years due to the amount of time and energy required. In the literature about librarian hiring, there has been a lot of focus on both new and early career librarians (Burns & Fargo, 2019; Holt & Strock, 2005; Iglesias et al., 2023, 2024), which reflect

[2] This process may not be universal outside the United States. See Cohen et al. (2025) for a comparison of the application process in Australia vs. the US.

general experiences among applicants. While useful, there is a need to look at specific populations, such as former library staff. This group has experience with the job application process at libraries, which is useful for comparing with the academic librarian process.

Research relating to library and hiring practices have been conducted through surveys (Eckard et al., 2014; Iglesias et al., 2023), interviews (Reed et al., 2015), and a combination of both (Burns & Fargo, 2019). These methods rely on participants' memories of the steps taken and their emotional states during that time. However, they do not explore in detail the variance in experiences of the participants' searches. Since job searches are processes with an end goal, involving intensity, content, and temporality (Wanberg et al., 2020), they are able to be explored with a visual method like the timeline.

Aims

This study is part of a larger project[3] focused on the experience of applying for academic jobs from the perspective of former library staff, including examining the unique barriers this group faced in the search process. Research objectives associated with this project include assessing measures taken to prepare for the job search and ways the process could be improved for former library staff.

For the aspect of the study reported here, the researcher considered the following questions when implementing the visual timeline activity:

- How did timelines assist, if at all, in data collection?
- What are the advantages and disadvantages of using this activity for this project?
- How did participants respond to the activity?

Methodology

Using the Zoom whiteboard feature, the researcher created a timeline worksheet that would provide a starting point for interviewees, with few restrictions in how they completed it. The visual construction of the worksheet consisted of two vertical stripes, representing starting and ending posts, connected by a long horizontal line (Figure 1). This horizontal line was a representation of the distance between the two posts measured in time. It also provided space for participants to enter what they considered important moments during their job searches. The left vertical post was labeled "start of job search" and the right post was labeled "start of new job." Establishing these points provided a framework in which interviewees could add their experiences. However, they were free to establish their own definitions of beginnings and endings, which led to a variety of ways in which participants completed this exercise. Although the researcher explored other timeline models, this style was developed and selected for this project. It was pilot tested with a volunteer not participating in the study to ensure suitability and determine any needed changes.

[3] The manuscript for the overall project is currently under review for publication.

Figure 1
Timeline template used for data collection.

In the summer of 2023, the researcher put out a call for interview participants (CFP) through both the Association of College and Research Libraries (ACRL) and American Library Association (ALA) Connect electronic mailing lists. Respondents completed a screener survey, included in the CFP, to ensure they met the qualifications for interviews. The researcher conducted a series of semi-structured interviews, including open-ended questions, with 22 participants about their job search experiences. Participants were current librarians who held library staff positions before becoming librarians. For this project, library staff are defined as workers who work in all levels of library operation. Examples of these positions include circulation assistant and technical processing assistant. ALA notes the difference between library staff and librarian is the holding of an MLIS, yet the Association acknowledges that staff can also hold an MLIS but not be in a librarian position. Each semi-structured interview focused on the participant's previous work experiences, what led them to start searching for librarian positions, and their memories of the whole experience. Halfway through each interview, the researcher introduced the timeline worksheet. The researcher asked participants questions during this activity, such as what emotions they remembered experiencing at highlighted points. Near the end of the interview, and once the participant declared they had finished the activity, the worksheet was closed. All interviews were recorded and, along with the worksheets, saved locally.

The protocol for this research project was reviewed and approved by the Institutional Review Board at the University at Buffalo (STUDY00007141). All participants who qualified were sent written consent forms and a copy of the interview questions before their interviews. The researcher also confirmed participants' consent at the start of their interviews. Interviewees were able to stop the interview and withdraw from the study at any time.

Data analysis for the timelines followed the same method used for the interviews. The researcher followed the practise of inductive thematic analysis, in which codes and themes are developed when looking through the data without a predetermined codebook. The researcher identified codes during data analysis using the tips proposed by Ryan and Bernard (2003) (Guest et al., 2012). As compared with the interview transcripts, when analyzing the timelines, there was more focus on form, visual representations, selected representation of chronological order, and other modes participants selected to complete their worksheets. If, for example, participants drew a frowning face or used a frowning face emoji (🙁), that image would fall under the "Emotions" code.

Limitations

The interview questions were sent to participants 24 hours in advance to ensure that they were aware of the potential flow of the interviews. A resulting trend the researcher noticed during interviews was that many of the participants came prepared with notes. They tended to refer to their notes while completing their timelines. This may have had an impact on information given during the worksheet activity: They were able to refer to their notes, instead of relying on memory recall. This may affect one purpose of these types of activities: to aid in memory recall. It then becomes difficult to understand which helped more: the timelines, or the participant's notes. Future research should consider ways to limit participant use of notes, weighing issues surrounding equity and potential participant withdrawal from the study, or utilize a different method to run the timeline exercise.

Although there were attempts to ensure accommodations for as many participants as possible, the researcher failed to account for the accessibility of the digital whiteboard tools. The whiteboard feature on Zoom is difficult to connect with screen readers. Visually impaired users were likely not willing to volunteer for a project that did not accommodate their needs. For future projects, the researcher plans to mitigate this with alternative tools and possible collaboration with accessibility experts.

Resulting timelines should not be considered a general representation of this population due to the number of subjects involved. In order to enroll a sufficient number of people meeting the criteria for the study, the call for participants went through ACRL and ALA Connect. This resulted in a sizable number of people to interview, but with an oversaturation of participants: 21 out of 22 identified as White and all but 5 identified as cisgendered women, a result of the profession being predominantly White women. This study had a U.S. focus, as the researcher is based in the US and the electronic mailing list used in the CFP has a majority U.S. subscriber base, though Canadian universities are modestly represented on the list. While a few of the study participants had been previously employed in academic libraries outside the US, there were too few to represent workers with that experience, nor does this sample represent workers globally. The researcher should have considered reaching out to specific professional organizations like the Black Caucus of ALA (BCALA), REFORMA (the National Association to Promote Library and Information Services to Latinos and the Spanish Speaking), and Asian Pacific American Librarians Associations (APALA) to ensure a better representation of ideas and approaches.

Results and Analysis

A total of 39 people completed the screener survey, and all but one met the qualifications for interview participation; 35 of those volunteered to be interviewed and listed their contact information. Of those, 23 replied to the researcher's invitation for interviews and confirmed their willingness to be interviewed. One participant withdrew from the project before their interview. In total, 22 participants completed the interview and visual timeline.

Near the end of the interview, participants were asked to disclose any demographic information they felt may have had some effect on their job search. The question was presented in an open-answer format, as to not exclude any information they felt was important to their identity. This also allowed participants to have control over the amount of identifying information shared.

The demographic profile of the interviewees was predominantly White and cisgendered women; 21 (95%) of the participants identified as White and 1 (5%) as Native American (Table 1). Cisgendered women represented 16 (73%) of the participants, and there were 5 (23%) cisgendered men and 1 (5%)

nonbinary person. Five (23%) people identified as queer. There were 9 (41%) who held a second master's (MA) degree, in addition to a Master of Library and Information Science (MLIS) or its equivalent. Within the study participants, 2 (9%) identified as disabled, 2 (9%) were the first generation in their family to graduate college, and 1 (5%) was a military veteran.

Table 1
Open-Answer Demographics Given by Participants During Interviews

Demographic	**Number of Participants**	**Percent of Total (%)**
White	21	95
Native American	1	5
Cisgendered Woman	16	73
Cisgendered Man	5	23
Nonbinary	1	5
Queer	5	23
Disabled	2	9
First Generation	2	9
2nd MA Degree Holder	9	41
Military Veteran	1	5

From both the interview transcripts and the timeline data, the researcher created the following codes. The most commonly used code for the worksheets was "Job Search Process":

- Background
- Workplace Issues
- Information Sources
- Job Search Process
- Job Search Issues
- Emotions

The timelines were formatted in a linear format. This allowed participants to place events in chronological order, and it appeared that this format allowed participants to remember the order of events of their searches. Many participants were able to include clear months and dates, though some did not go into that specificity in their worksheets. Many of the participants began entering elements on their timelines using the moment they began considering and looking for academic positions as the first marker. From there, they gave a variety of information about their process: when they earned degrees, when they moved to different cities, when they informed colleagues about looking for jobs, and others. Most commonly, they pointed to interview invitations and job offers as significant markers.

Participants reported a range of years in which they began their job search. Among those reporting, 8 (36%) started their search between 2019 and 2023, 5 (23%) started between 2013 and 2018, and 7 (32%) started prior to 2013 (Table 2). The number of years participants were able to recall varied for all starting years prior to 2023. Participants were able to remember 1 to 37 years in their timeline, with the average

being 7 years. Most of the participants, especially those who began their job search 5–10 years ago, tied their starting points to when they earned their MLIS or when they became frustrated with their staff positions. Those who began their job search less than 5 years ago commented on how recent their experiences were, with mentions of the early years of the COVID-19 pandemic and "Zoom school." Participants recalling job searches more than 10 years ago were still able to give details of their search experiences, connecting them with either important moments in their personal lives (3 participants referenced the 2008 recession), or with parts of their job searches that are no longer in practice (the participant who recalled their search 37 years ago described their experience having to submit their CV in "this big room that had three-ring binders with all of the jobs"). As this was an open-ended question, and participants had the freedom to select their version of starting the job search, 2 interviewees did not give years. One could not recall the specific year; the other selected not to include a specific year.

Table 2
Number of Participants With Selected Job Search Start Dates for Timelines

Start Years	Number of Participants	Percent of Total (%)
2019–2023	8	36
2013–2018	5	23
Before 2013	7	32
Unknown	2	9

Many participants relied heavily on text in creating their timeline. This included listing when they submitted applications, when they were invited for interviews, and any emotions that they felt. At times, they also used text to explain moments or outside influences that affected their searches. A few participants used visual posts or sticky notes to enter chronological events. Others included visual representations of emotions, using emojis or freehand drawing.

Many of the timelines included information about the number of interviews participants had, order of interviews, and when participants received hiring decisions. Some participants noted and marked times in their searches that they found frustrating; these events were coded as "Job Search Issues." Such markers included search committees dismissing previous work experience during interviews, failed negotiations, and, as seen in Figure 2, events out of participants' control.

Figure 2
A former cataloging assistant noting an event affecting their search.

In connection with the interviews, various entries on the timelines prompted the researcher to investigate further. If participants entered a moment on their timeline that seemed interesting, the researcher was able to point to that and ask them to discuss more about the context behind the moment, as well as why they included it on their timeline. For example, during the interview with the creator of Figure 3, the researcher inquired about a sticky note near the end of the timeline that didn't yet have text in it:

> Researcher: I noticed that you have the little blue sticky and I was wondering what you were gonna put in it, was that gonna say in there … What were you gonna say?
>
> Participant: I probably said it out loud because it's hard, you know, typing and talking. But, yeah … oh, maybe I was gonna say started or are offered or?

The participant eventually remembered that they started their new position on a certain holiday. Others selected as relevant markers moments when they were rejected for other positions, strife at their previous positions that led to their desire to move on from their position, or when they earned their MLIS degree.

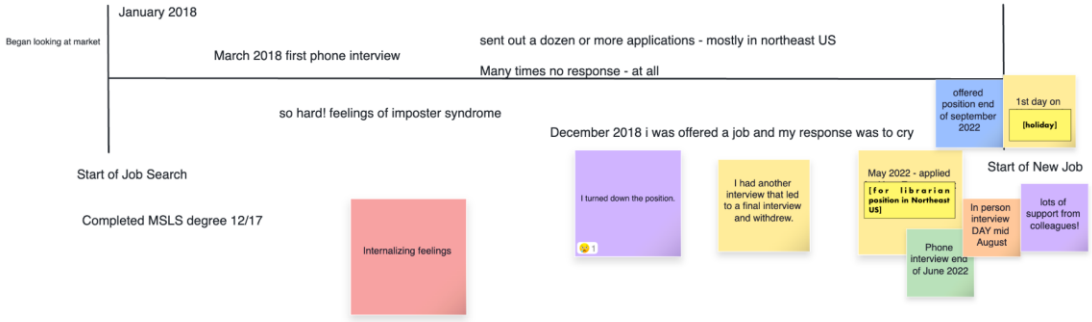

Figure 3
Timeline using multiple formats created by a former reference assistant.

Participants used the timeline to express their emotional state during their search in a variety of interesting ways. Some increased font sizes or used larger sticky notes to point to heightened stress or fear. In Figure 3, the creator used a combination of font and sticky note sizing, as well as emojis, to convey the mainly negative emotions they experienced during their job hunt. Readers can also see a sticky note marking the end of their timeline: The day they started their new academic librarian position.

As intended, participants used the visual timeline to convey the length of time between each point of their job search. Many highlighted the amount of time between submitting their applications and when they received an invitation for an initial interview. In Figure 4, the creator used purposeful spacing between dates to highlight the length of time elapsed from the start of their search up to when they began to hear from the institution that eventually hired them. This space reflected the amount of time spent on application materials ("I would tend to rewrite a full cover letter. … I would update my CV, if anything had changed, and I would throw it in and hope for the best," they said, "and that was time consuming") while dealing with multiple unsuccessful interviews.

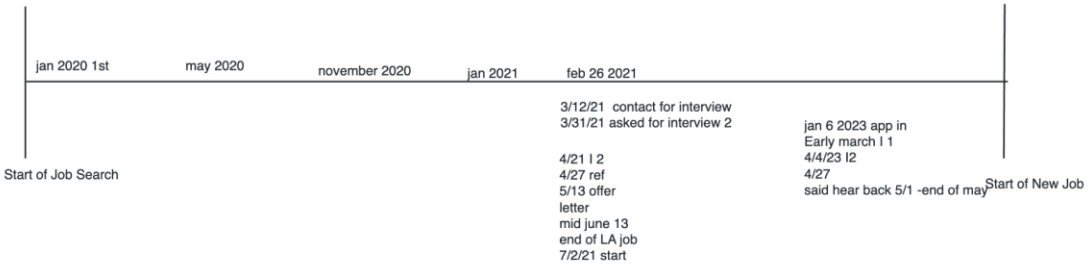

Figure 4
Timeline using text and space created by a former reference assistant.

Not all participants used the visual elements available to them to complete their timeline; many used predominantly text with linear markers and, in one instance, a bulleted list to go through the timeline of their process as they saw it, ignoring the template for the exercise. Those who used text used it to fully answer questions in the exercise as opposed to either summarizing or marking along the timeline, as seen in Figure 2. In many of these instances, participants said they had difficulty conversing with the interviewer while completing the worksheet. Others noted their unfamiliarity with the Zoom Whiteboard tool.

Discussion

The timelines created during this study demonstrated both the strengths and weaknesses of the format. The activity allowed an alternative way for participants to discuss their experiences. Many took the chance to use the visual elements to answer many of the interview questions. The sticky note feature offered in Zoom Whiteboard was very popular, acting as a stand-in for a large sheet of paper and physical sticky notes used in group collaboration. Those who came to the interview prepared with notes appeared to enjoy using the worksheet to translate their notes to visual form. Participants also used the tools available to talk about their feelings. Tools like emojis and pencils made it easy to relay common facial expressions (smiles or crying) and quickly express how they felt during various recalled moments. The ability to play with more subtle options, such as size and fonts, gave participants another way to convey how they felt and perceived their experiences.

As mentioned, the timeline played a role in helping participants remember moments in their job searches. During traditional in-depth interviews, a good interviewer can remember parts of the conversation and ask the participant to return to and expand on a specific moment, although the interviewer may forget to do this or distort the flow of the conversation. With the visual aid, though, it was easier for the researcher to revisit moments outlined on the timeline with participants without disrupting flow or losing train of thought. There were many opportunities for the researcher to select parts of timelines and ask participants why they decided to include those life moments. Even the participants who had notes created moments in their timeline that led to prompting opportunities.

One of the main limitations of the timeline activity was the platform used: Zoom Whiteboard. Many participants were unfamiliar with the platform and had hesitation in using the tool and completing the activity. The platform also has inherent limitations. For example, a limited number of tools were available for entries: the text box, the preset sticky notes, the pencil, and the emojis. This may have limited participant ability to express their job search process. Had this exercise been done in physical proximity,

with markers and paper, participants would have had more options and more freedom to complete their timeline.

Another limitation that came up during this study was the concern participants had about completing the activity incorrectly. While they were told that there was no wrong way to complete their worksheets, a few participants still expressed concerns of, as one put it, "doing it wrong." Participants may have experienced anxiety over not meeting a standard or what they imagined was expected of a good timeline. Participants may have also had anxiety over not providing enough quality information for the study. Some participants viewed the timeline activity as extra work and had hesitation in doing it. Many were not used to doing such an activity and may have considered participating in such an interview outside the norm. Others may have been hesitant about having the researcher watch them complete the activity. A few expressed little desire to engage with the activity.

Consideration should also be given to how time is perceived. Visual representation of important events on a timeline may be interpreted differently depending on a person's cultural background and personal experiences. Whereas there is a predominant perception of time as linear in many cultures, some cultures view time in a circular fashion. A participant's personal experiences may lead them to focus on life events that are not relevant to the discussion but, from the perspective of the participant, provide context. Future research should consider more freeform methods of visual representation so that participants may share concepts like order of events and their views of a process in a less restrictive framework.

Future research using visual methods should also address visual impairments. A recent Zoom update affected the accessibility of the whiteboard feature; the update created issues for users who are connecting screen readers with the whiteboard ("Zoom Accessibility," 2024). While some products, like Miro, advertise themselves as accessible, blind and visually impaired users consider them falling short (Marathe & Piper, 2025). There remains a need for accessible digital whiteboards. Researchers should collaborate with digital accessibility experts and visually impaired users to identify and assess alternative tools. Certain visual exercises may be more difficult to complete for participants with mobility issues, as pointed out by one participant in this study with mobility issues in their arms.

Another issue that future researchers must consider is the ability for participants to access the digital platform hosting the worksheets. Anything cloud based, like Google Workspace and Microsoft 365, may have access restrictions for individuals without accounts for those products. An early plan for this study to use a Google tool had to be changed to Zoom Whiteboard because some participants did not have a Google account and had a hard time accessing the worksheets.

A final consideration for participatory visual exercises is the issue of copyright. While factual data cannot be copyrighted (Cornell Data Services, n.d.), works that are considered creative expressions can be. This raises the question of whether creators of art-centred data own the copyright to their images. Guidance on the use of copyrighted materials, such as archival materials, is available (Qualitative Data Repository, n.d.; Social Science Research Council & Qualitative Data Repository, n.d.), but there is little on the question of expressive data. Droog et al. (2023) suggest including information of participants' copyright in consent forms. This suggestion is worth considering.

Research that incorporates visual methods provides an alternate modality of communication: Participants' drawings illuminate data differently. Visual methods meet the needs of participants who express their thoughts and ideas better visually, as opposed to verbally. Expanding visual methods to

media such as fiber arts, sculpting, and more can lead to developing a fuller outcome for qualitative research.

Conclusion

This study incorporated a visual timeline exercise into semi-structured interviews in order to investigate the job search experiences of former library staff. Using the timeline helped expand participants' memories of their searches and conveyed their sense of time. Incorporating timelines and other visual methods into library science research has several benefits: Visual data can supplement interview data, allow for artistic expression, and assist researchers in prompting during interviews. Timelines can also be incorporated into other forms of librarianship. For example, this visual method can be used with students to work out steps involved in finding and using information resources for class assignments. While practical and ethical issues remain to be resolved, such as the financial costs of certain tools and the treatment of images as objective, timelines can serve as a beneficial addition to qualitative data collection.

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