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# “We want to do more, but...”: New Jersey public library approaches to misinformation

Britt Paris<sup>\*</sup>, Kathleen Carmien, Michelle Marshall

Rutgers the State University of New Jersey, School of Communication and Information, Library and Information Science Department, 4 Huntington St, New Brunswick, NJ 08901, United States of America

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## ABSTRACT

External disciplinary fields and popular discourse have called upon libraries to explain and address the phenomena related to the prevalence of false and misleading information. The authors provide a critique of this call based in primary research on public libraries in the state of New Jersey during the COVID-19 pandemic. To compliment reviews of public library websites across the state of New Jersey for listed tactics to address misinformation, library staff were surveyed and interviewed on strategies they employ to stem the tide of misinformation and what they might need to work more effectively in the context. The findings reveal tactics employed by the libraries, ranging from active to passive interventions, and literacy-driven to topic-driven tactics, as well as what library staff articulated as impediments to their ability to address misinformation, including the lack of resources, the perception that the library should be a neutral arbiter in these discussions, and that they are “speaking to the choir” with their efforts. The findings can be useful in evaluating existing methods of addressing misinformation within public libraries and developing new tactics and partnerships that can be leveraged to achieve these goals.

## 1. Introduction

Misinformation, or false and misleading information spread with or without the intent to deceive (Jack, 2017) has been a growing concern across the globe. The authors collapse intentionality behind the spread of misinformation and disinformation in Jack’s (2017) definition to discuss approaches to false and misleading information under the umbrella of “misinformation”. In the wake of the COVID-19 pandemic, misinformation has proliferated and is linked to spikes in localized infection rates and deaths (Ball & Maxmen, 2020; CDC, 2020; Diseases, 2020; Seitz & Depuy, 2020). Although the problem of misinformation has become more pronounced with the pandemic, the proliferation of misinformation is not new (Paris & Donovan, 2019; Jack, 2017; Milner & Phillips, 2020).

Misinformation experts have harkened back to information institutions, their practices, and codes of professionalism as a way out of the post-truth crisis (Banks, 2017; Becker, 2016; Geiger, 2017). The traditional understanding of information institutions of journalism, education, science, and librarianship is that they work together to provide reliable information and extend that information to the larger public at little or no cost, equipping the public to participate in democracy and

make everyday decisions. However, some argue this traditional conceptualization of information institutions and their interpellation around misinformation represents a drive to recuperate a vision of civil society that has always left some behind while catering to the demands of those who already have power, under the banner of expertise (Alcoff, 2007; Bratich, 2020; Fricker, 2007; Schiller, 1995; Sullivan, 2019a).

This study investigates how public libraries in New Jersey fulfill their role as information institutions when it comes to addressing misinformation. The authors reviewed public library websites, conducted surveys and interviews with library staff to assess how they respond to false and misleading information to better understand the types of interventions they were using to stem the tide of misinformation and what they might need to do this work more effectively.

### 1.1. Problem statement

Misinformation, particularly public health misinformation, around the COVID-19 pandemic were palpable and concerning across the world. Many aspects of the novel coronavirus were uncharted, and as the pandemic wore on, several governmental and other institutional failures transpired. Trust in public health institutions declined, and people had

<sup>\*</sup> Corresponding author.

E-mail address: [britt.paris@rutgers.edu](mailto:britt.paris@rutgers.edu) (B. Paris).

trouble navigating the many aspects of the pandemic. The state of New Jersey with its proximity to New York City was particularly hard hit at the beginning and remained a bellwether for the rest of the country. Despite some of the most rigorous stay-at-home orders and mask mandates in the country, New Jersey also saw its share of anti-mask rallies and virus and vaccine misinformation (Associated Press, 2021).

As New Jersey residents, library and information science researchers, the authors (one being a New Jersey library staff member) became interested in how localized information institutions in New Jersey navigated the multifaceted problem of misinformation generally and around the pandemic, in particular. As these phenomena are far-reaching, this study investigated public libraries because they interface most often with the broadest swathes of the New Jersey residents.

Library and information science has been called to the task of explaining what misinformation is while providing solutions (Alvarez, 2016; Donovan et al., 2021; Geiger, 2017; Paris & Donovan, 2019; Walker, 2021). Recent studies have discussed the nuances surrounding different types of libraries' ability to address misinformation (Dar, 2021; LaPierre & Kitzie, 2019; Revez & Corujo, 2021; Sullivan, 2019a; Sullivan, 2019b; Young et al., 2020). Further, although there are investigations of libraries as sites of public health campaigns (Allen et al., 2020), and studies focusing on the difficulty of providing health information in libraries (Lenstra, Rubenstein, Smith, Flaherty, & Gibson, 2018; Rubenstein, 2018; Smith, 2011) few focus on how public libraries might remedy misinformation around public health issues. Of all these studies, only LaPierre and Kitzie (2019) investigate public library tactics across the U.S. that combat misinformation and does not engage public health misinformation or the COVID-19 pandemic. This study fills a gap as it offers a perspective into localized practices that are employed at New Jersey public libraries around misinformation during the pandemic.

This study also responds to discourse that often uncritically positions libraries as a solution for misinformation while taking a critical perspective on information literacy and individualized solutions. It also connects research findings with systemic issues and solutions. Thus, the goal is *not* to place the burden of responsibility on library patrons, or on already overworked and underfunded libraries, but to better understand how libraries engage with misinformation and, where applicable, to draw out what support they might need from other actors and engaged stakeholders in these endeavors.

## 2. Literature review: trust, tools, and tactics in libraries for combating misinformation

This study focuses on discourse and research that emphasizes how libraries, librarians, and library practices can shed new light on misinformation (Banks, 2017; Becker, 2016; Geiger, 2017). Some library and information science researchers have suggested that libraries can act as ideal combatants of the post-truth mentality through their credibility earned from personal and trustworthy relationships with their communities (Alvarez, 2016; Walker, 2021). In times of crisis, libraries and their staff are often seen as vectors of honest and transparent communication of crucial information, instilling confidence in patrons that libraries can appropriately identify and respond to information crises (Soehner, Godfrey, & Bigler, 2017).

### 2.1. Library literacy frameworks, tools, and tactics

Libraries engage in many strategies to combat misinformation, developing tools and tactics that follow reputable information and media literacy frameworks (Banks, 2017; De Paor & Heravi, 2020). Librarians, as educators, teach patrons blended media and information literacy skills for identifying authoritative, credible, and appropriate sources concerning information retrieval and evaluation; these include ("authority is constructed and contextual," "information creation as a process," "information has value," "research as inquiry," "scholarship as

conversation," and "searching as strategic exploration") (Faix & Fyn, 2020), and the Currency, Relevance, Authority, Accuracy, and Purpose (CRAAP) test (Dixon, McKeever, Holton, Clarke, & Eosco, 2015; Dixon, 2021).

Recent reviews of library tools beyond literacy frameworks to address false and misleading information include library guides (LibGuides), instructional programs, such as workshops featuring interpersonal communication, physical handouts, and in-library paraphernalia regarding information evaluation (Chan, Jones, Hall Jamieson, & Albarracín, 2017; Dar, 2021; LaPierre & Kitzie, 2019; Revez & Corujo, 2021; Young et al., 2020), as well as online library tools for combating false and misleading information (Revez & Corujo, 2021). Libraries often draw from and consult outside organizations such as the Trust Project and the International Federation of Library Association's checklist for help in their information literacy endeavors (Affelt, 2019; Banks, 2017). Alternately, other researchers have suggested that interpersonal communication may be the most effective strategy to address misinformation, emphasizing that librarians who demonstrate information literacy and research practices to their patrons, regardless of the question, foster transparency and trust with patrons (Chan et al., 2017; Dar, 2021).

### 2.2. Library barriers to effectively addressing misinformation

Information and media literacy interventions to counter misinformation have been soundly critiqued as misguided because truth is socially constructed and a matter of interpretation, and there are social, technical, and psychological reasons for adhering to false and misleading information (boyd, 2018; Lim, 2020; Milner & Phillips, 2020; Paris & Donovan, 2019).

In the context of libraries, Flaherty, Tayag, Lanier, and Minor (2014) provided observational evidence suggesting that the lack of authoritative health information available in public library collections is both a policy and strategy failure, calling into question the ability of libraries to provide quality health information to patrons. Other studies have suggested that even library professionals are "not sufficiently trained to engage misinformation across this constantly shifting terrain" (Young et al., 2020, pp. 7–8) and have trouble distinguishing between credible and non-credible websites, themselves.

More broadly, several studies have found that library methods, tools, and tactics for providing trustworthy information do not have a significant impact on correcting or changing activities and attitudes around false and misleading information (Blueumle, 2018; boyd, 2018; Bulger & Davison, 2018; Sullivan, 2019a ; Sullivan, 2019b). Information habits and practices happen largely outside of face-to-face communicative situations, such as classrooms and library programming (Dixon, 2021). Furthermore, in the real world, LibGuides or academic checklists are not as helpful in determining the validity of information (Lim, 2020; Young et al., 2020).

The often-unquestioned emphasis libraries place on media and information literacy and the use of authority-based source evaluation demonstrate epistemic shortcomings that affect the library's ability to address misinformation (Sullivan, 2019a; Sullivan, 2019b). People who are prone to adhering to false beliefs and acting on false and misleading information present a slightly different set of concerns and require different interventions than those who are simply uninformed (Revez & Corujo, 2021).

### 2.3. Library opportunities for addressing misinformation

At the core of this conundrum of misinformation and attendant library practices is Schiller's (1995) concept of "data deprivation, which suggests neoliberal policy leads to the deliberate defunding of information institutions that forces users into an impoverished information environment. In this vein of focusing on the political economy in information institutions, several works propose the need to update and

remove outdated strategies and methods for addressing false and misleading information. Such efforts warrant the recognition that libraries are sites of political contestation, despite traditional attitudes, training, and professional guidelines adhering to library neutrality” (Roberts & Noble, 2016). Such adherence to “neutrality” has caused non-dominant communities to mistrust libraries (Sullivan, 2019a).

Other studies suggest the need for better collaboration between information professionals, better public funding, and support for information evaluation initiatives and strategies within libraries; as well as the alteration of library values, and the reframing of information literacy beliefs (ALA, 2020; LaPierre & Kitzie, 2019; Sullivan, 2019a). Yet others have called for more research on the nexus of libraries, misinformation, and evaluation of library strategies to address false and misleading information, and empirical assessment from multiple perspectives what libraries might need to be more effective in their endeavors in this arena (LaPierre & Kitzie, 2019; Sullivan, 2019a; Young et al., 2020).

### 3. Methodology

#### 3.1. Research questions

The first research question below grounds the present situation in the literature to better understand the strategies and tactics around misinformation in New Jersey’s public libraries, if they are different or similar to those occurring in other studies (Affelt, 2019; Banks, 2017; Chan et al., 2017; Dar, 2021; G. N. Dixon et al., 2015; J. A. Dixon, 2021; Faix & Fyn, 2020; Revez & Corujo, 2021; Young et al., 2020), and to learn why library staff use certain tactics in their particular library. This study is interested in broadening the understanding of the types of and justifications for tactics in libraries in a particular context (New Jersey in the Covid pandemic) beyond data from a large-scale website survey, or questionnaire (LaPierre & Kitzie, 2019).

**RQ 1.** What are the tactics used to counter misinformation in NJ public libraries?

The second research question asks what librarian staff believe are their major impediments to addressing misinformation (LaPierre & Kitzie, 2019; Sullivan, 2019a; Young et al., 2020), and what they think would assist them in improving their approach. This question examines how library staff understand their role in the community, especially in regard to misinformation (Banks, 2017; Becker, 2016; Geiger, 2017; Soehner et al., 2017; Sullivan, 2019b), as well as how they understand their situation regarding the political economy of information (Roberts & Noble, 2016; Schiller, 1995) as provided through public libraries.

**RQ 2.** What do librarians think would be beneficial to improve their efforts in combating misinformation?

#### 3.2. Methods

The researchers iteratively collected data and performed an inductive analysis of the multiple data sources (websites, survey responses, and interview data) using a grounded theory-based approach (Alvesson, 2003; Clarke, 2003; Denzin & Lincoln, 2017; Kitchin & Tate, 2013). In grounded theory approaches, data collection and analysis constitute an overlapping, iterative process that takes place as data analysis generates new avenues of consideration, and thus new data collection. In the three steps described below, researchers iteratively triangulated the different data sources to ensure consistency in data analyses, as well as to provide a deep and nuanced study (Baxter & Eyles, 1997; Young et al., 2020).

##### 3.2.1. Data collection

###### Step 1. Website review

This qualitative research study first drew on a review of tools to address misinformation drawn from the websites of 295 libraries across the state, as identified on the New Jersey State Libraries website. Of the

295 libraries listed, only 290 had active websites. The authors used a shared Google Sheet to annotate whether the library: 1) had a website, 2) listed any tools to address misinformation, and 3) listed any misinformation or information literacy programming. Of the 290 libraries with active websites, only 103 (35%) listed any tools that might be used to address misinformation, leaving 187 (64%) that listed no such intervention.

###### Step 2. Surveys

To check the findings from the website review, a survey was sent via cold email invitations to representatives from 290 libraries with active websites and staff email addresses available. In addition to the survey invitations, the emails included information on the research project, institutional review board (IRB) approval, and consent mechanisms. Of the 290 emails sent, a total of 20 (7%) completed surveys were received. The survey questions were adapted from Bejarano and Yanovitzky’s (2018) work around town halls to address the opioid epidemic, then later updated in Paris & Costley-White work to incorporate COVID-19 contexts. The survey instrument was reworded so that library staff could answer questions on how they addressed misinformation. See Table 1.

###### Step 3. Interviews

In the survey, respondents were asked to be interviewed for the project in exchange for \$25. From the information contained in the 20 returned surveys, semi-structured interviews were scheduled and conducted with 13 New Jersey librarians over the phone. At the beginning of the phone conversation, participants were on-boarded with the study’s context and their verbal consent was received in accordance with the university’s institutional review board (IRB)-approved protocols. The interviews were conducted from June to July 2021.

The survey questions guided the interviews with librarians and allowed conversations to follow tangents before returning to the semi-structured format, allowing interviewers to gather nuance and further information not encapsulated in the survey responses. While interview research has been critiqued for limitations of self-reporting and likened to unscientific casual conversation (Denzin & Lincoln, 2017), when properly attuned to the power imbalances in the researcher-interviewee exchange, semi-structured interviews can allow for the development of a shared social construction of situated accounts as experienced by the interviewee (Alvesson, 2003). This approach fits the research context, given that librarians have an intimate knowledge of their library’s efforts to address false and misleading information while giving a perspective on patron experiences as well.

**Table 1**  
Survey instrument.

1. What is the name of the library you are representing?
2. What is your title?
3. How would you describe your library’s efforts to address misinformation?
4. If in Question 3 you noted that you provide access to links or printed literature to address misinformation of any type, please provide a few examples. How are these made accessible?
5. If in Question 3 you noted that you provide programming to address misinformation of any type, provide a few examples. How are these made accessible?
6. Do you run evaluations on these tactics to address misinformation?
7. If you answered “Yes” or “Maybe” to Question 6, please describe.
8. What types of feedback do you receive with regard to your activities geared toward addressing misinformation?
9. Are you satisfied with your library’s efforts to address misinformation?
10. What are some obstacles in addressing misinformation in your library?
11. Please comment on your answer to Question 10. What are your library’s issues with addressing misinformation?
12. What types of resources, partnerships, or tactics might be useful in broadening your library’s efforts to address misinformation?
13. Let us know anything else you’d like to tell us or suggest to us about your library’s approaches to misinformation.
14. Finally, we would like to talk with you about your responses here in a short phone conversation for which you would be compensated with a \$25 online gift card. If you are interested, please provide your email address here so we can contact you.

### 3.2.2. Data analysis

#### Step 1 Website review & step 2 survey analysis

In the website review, the researchers looked at each of the active library websites for evidence of library programming or links directed toward combatting misinformation and listed specifics, such as date, title, and URL to programming information, as well as summaries of these types of tactics. Libraries that did not indicate whether or not they had resources on misinformation were also noted on the spreadsheet.

The quadrant chart, Fig. 1, was developed as a guide to group each library's use of tactics. Note that each quadrant contained the total number of individual tactics listed on library websites. These counts do not solely represent individual libraries, as libraries could list more than one tactic. Quadrant analyses are commonly used to organize data visually (Hernon, Altman, & Dugan, 2015; Hernon & Calvert, 2005). The authors manually plotted the library interventions into one of four quadrants defined by two dimensions along the two axes. The horizontal axis reflects whether the interventions were active or passive, as judged by the authors, while the vertical axis indicates the extent to which authors determined that the particular interventions were focused on broad-based information, media, or scientific literacy, or topic driven interventions. This chart helped the authors see, check, and better understand the generalized groupings of tactics found at steps 1–2 of this study.

For step 2, the description of tactics offered by respondents in this step supported the general trends, as well as explained and gave nuance to the presence of certain types of tactics and/or the quadrant chart laid out in Step 1.

#### Step 2 Interview analysis

The authors derived the thematic results pertaining to the quadrant chart and observations of librarians and then developed transcripts of all interviews by using the auto-function on the app used to record the interviews. The authors then listened to all recordings, corrected, re-drafted the automatically generated transcripts, and added the transcripts to a Google folder. The predetermined conceptual domains (broadly, efforts taken by the library, their tools, and approach to information literacy) were used to develop an initial coding scheme, and each author reviewed each transcript to determine and refine codes and subcodes. The initial interview coding scheme contained six overarching codes: 1) Tactics, 2) Satisfaction with tactics, 3) Evaluation of tactics, 4) Public feedback on tactics, 5) Major obstacles, and 6) Overcoming obstacles.

Each transcribed excerpt could contain multiple codes. The second and third authors coded all transcripts. The authors discussed cases of coding discrepancies, which were 20% of all coded transcripts. The primary author then recoded these discrepancies, instances based on the authors' discussion of fit. When relevant, abbreviated quotations from the transcripts were pasted to the six initial codes to provide empirical examples of their interpretations for use in writing and reporting. Given the relatively low sample size, the assignment of multiple codes per quotation, the findings do not report quantitative frequencies by code

and instead offer a thematic interview analysis (Denzin & Lincoln, 2017). This approach resulted in the thematic findings presented in the next section.

## 4. Findings

Grounded theory was used to iteratively collect and analyze data around the research questions. The data for the codes used in the interview analysis suggested four themes reflected below in the subsection headers. The first two subsections focus on describing different types of tactics found in the website review and survey (active or passive, literacy or topic-driven), and draw from interview codes 1 and 2 to explain why and how these tactics manifest in library practice. The subsection "barriers to more robust tactics" draw from interview codes 3 through 5 featuring respondents' explanation of the context of the use of certain types of tactics and shortcomings they perceive in these tactics and/or context. The last subsection draws from interview code 6 and pertains to recommendations offered by library staff to improve the provision of programming around misinformation.

### 4.1. Tactics: literacy-focused and topic-focused

Based on the literature, the first consideration of tactics found in the website survey was whether a tactic was focused on broad concepts of literacy or around a single or discrete set of topics. Of the 290 New Jersey library websites surveyed, 103 (35%) had resources and events that could be used to fight misinformation, such as literacy promotion and misinformation sessions, as encapsulated in the filled-out quadrant chart that helped researchers visualize and understand data points from the website review in step 1. Libraries could have more than one tactic; the number tally of all tactics (regardless of library) to address misinformation is shown in Fig. 2.

However, passive tools like links and LibGuides were far more common than active tools, such as library information sessions and education programming. General media literacy education was most common, but topic-focused tools, including links about COVID-19, were also relatively prevalent. A website, such as the Media Bias Chart, that outlines how to spot biases in news articles, or a class on media literacy, would be categorized as a literacy intervention, discussing how to think about information, rather than a specific area of information, such as teaching epistemological attitudes that more easily fight off misinformation and disinformation. A topic-driven tactic would be something like a Q&A about the COVID-19 vaccine, as was held at Franklin Township public library, where the focus was on the vaccine, not on the construction and spread of false information. The high counts in the passive literacy quadrant of the website survey were affirmed and explained by respondents who noted that much of their literacy education was housed in collections of online resources that focused on evaluating electronic sources of information because these resources

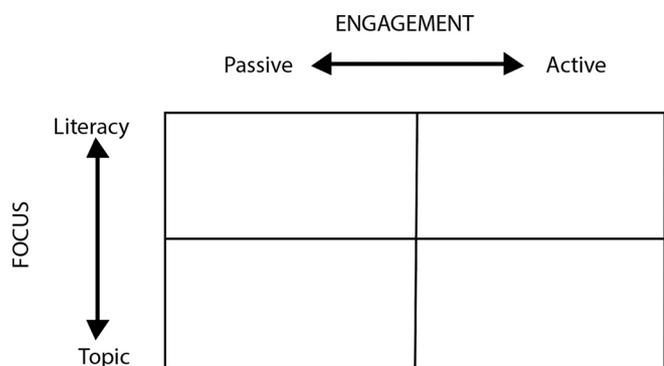


Fig. 1. Quadrant chart of website review (Step 1).

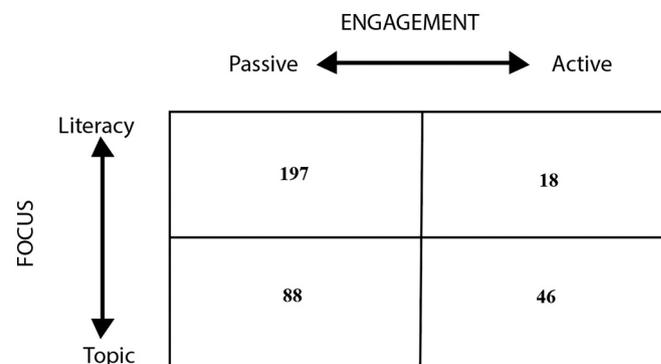


Fig. 2. Library tactics to combat misinformation: Quadrant chart to organize website analysis (Step 1).

took less time and funding to provide.

#### 4.2. Tactics: active and passive

In the website survey, the authors categorized the tools used to combat misinformation as “active” or “passive.” Active tools were those that were advertised to patrons and were interactive; they included some amount of in-person or real-time interaction during the pandemic, such as panels or classes. In these interactive face-to-face engagements, patrons could ask questions and engage in conversation. Passive tools included resource documents, library guides, database access, and links to fact checking and verification sites. These tools were deemed passive because they were static information objects, not advertised in the same way as an event, except during the pandemic. However, most libraries opted to send links for reputable information on coronavirus information to patrons. In offering these passive static tools, the library acted as a filter for information produced elsewhere but did not provide the information itself.

The active tools required ample resources and, as Fig. 2 shows, were less common. These active interventions were often events that involved guest speakers and partnerships with other organizations or businesses the library judged reliable and useful. Most events were topical, specifically focusing, in this case, on the pandemic. Some examples of programs titles include:

- Digital Citizen: Tips for a Safe and Responsible Life Online
- American Association for Retired People (AARP) Fraud Watch Network: Avoiding Coronavirus Scams
- Let’s Talk About Vaccines

The interviews also provided a view into how day-to-day library work, and how that work can combat misinformation, such as through collection development and interaction with patrons. Eight respondents reported steering patrons toward reliable resources, providing correct information, and curating their collections, both digital and physical, and to make sure they were as accurate as possible. One interviewee, for instance, said that they would insert notices in nonfiction books to explain where patrons could go to check for other information on the topic.

Much more common were *passive strategies*. Every functional library website that had an anti-misinformation tool used passive tactics. Each library hosted events that were supplemented with digital resources. Such collections included lists of databases, links to other websites, and resource guides sorted by subject that featured government, academic, journalistic, and non-profit sites and resources. While these require occasional updates and pruning for broken links, they were much easier for a library to make available. Most libraries had a dedicated section for coronavirus resources, whereas others also had wider thematic sections such as “health” comprised of many passive resources.

Other examples of these passive resources included:

- Credibility, Accuracy, Reasonability, Support (CARS) method for evaluating sources
- Resource guides pointing to reliable databases and websites
- Librarian-created handouts about assessing information

More passive strategies included COVID-19 links that were present on 88 websites. Library staff discussed how COVID-19 affected them and the nature of their work along with how they interacted with patrons. One librarian said:

The library currently serves as a valuable and well utilized community information hub. We have had many patrons share how much they have appreciated the library being open to serve the public, even when we were limited to table top pick up only due to the COVID-19 pandemic.

#### 4.3. Barriers to more robust tactics

The surveys and interviews suggested that respondents were uniformly dissatisfied with their library’s tactics to combat misinformation. They also provided key insights into the impediments their public libraries face in addressing misinformation, such as: the view that anti-misinformation work is “too political”, lack of staff and other resources, and an inability to measure the efficacy of programs.

Three library staff also said that their supervisors thought anti-misinformation work is “too political”, and therefore, not the library’s place to take a stance. Only one interview and survey respondent expressed that they themselves did not feel it was the library’s place to fight misinformation because the library is supposed to be a neutral arbiter of information.

I am not sure that the library is the place to be fighting misinformation because we have always been a neutral resource – the idea is to fairly present both sides. Same with material in the library. The emphasis is in providing an in-depth collection that provides all sides of an issue and then to make sure that the patron looks at all sides of an issue. But, we never give an opinion!

Lack of staff and inadequate training for staff to run anti-misinformation programs or create resources was the leading concern. One interview respondent noted:

I think that we don’t have the staff or the time, even if it should be a priority, to seek out the training and resources necessary to feel confident in our role in sharing this information. This should be a pillar of what we do in libraries, but there is a lack of confidence due to inadequate training.

The libraries where respondents worked had only a few, or in some cases, only one full-time librarian, who was often overburdened due to having only part-time staff. Interview respondents noted that while they appreciated their part-time staff, there was the implicit sense that part-time staff could not help as much as a full-time staff to get the programs running. The one respondent who expressed that they did not believe the library had any place performing anti-misinformation work because it was “too political,” also articulated frustration that such a program would be yet another responsibility that would need to be taken on by their already overworked staff and would not be a service to patrons with a variety of attitudes about misinformation.

The deliberate dissemination of misinformation is a societal problem and I think it is a tall order to expect public libraries to take this on while also being expected to continue to do everything else that we do to serve the public, all while dealing with budgets that have decreased or stagnated.

This ties in closely with respondents’ concerns about efficacy and program attendance. With resources and staff time at a premium, whether a program will be effective and whether anyone will show up are very important considerations. A majority of interview and survey respondents noted this limitation: regardless of whether they thought a program was socially important, if they did not think they could get patrons to attend, they were more likely to stop running it; or reject it outright. Further, all interviewees stated that they did not have the techniques to gauge efficacy of programs and workshops. Those who said they were able to obtain such an assessment indicated that all they did was count the numbers of attendees or how many hits a webpage received. Only two survey respondents reported getting public feedback of any kind, which was positive and provided in-person. Regardless of the ability to measure the impact of their programs, three worried that their programs, or potential programs, were not effective, even those that had high headcounts. In the same vein, one interviewee noted that nobody who had been subject to misinformation thought they had a problem; another said that despite a relatively good turnout to one of

their programs along with positive public feedback, it was not overly effective because they were only “preaching to the choir”.

We can educate our patrons, but we are just preaching to the choir. The people who are going to attend our seminars and read our literature are already aware of the problem and want to understand it better. There is “information” on the internet to either work along with how to support any point of view you may have. I am not sure how you can reach people who are spreading and believing misleading posts online.

#### 4.4. Suggestions for more robust tactics

Interview and survey respondents from small libraries with correspondingly small staff allude to the fact that it would be incredibly helpful to collaborate with other institutions. Some of this work has already begun with, one library staff member saying.

I am now working with the Health Department. to get an expert to do a program on public health misinformation around COVID-19. I have reached out to [a professor] at Montclair State to do such a program and we are working on the details.

Other library workers expressed they felt they would be wasting effort and resources on interventions that would not reach many people. These respondents said they would prefer to have a larger organization or consortium that could help with staff training and with programming in this area. One interviewee noted:

If there were vetted websites and webinars or even events hosted by like Rutgers or local governments we could promote, that would be helpful. We don't have the staffing or time to create our own.

On this topic, one library staffer mentioned in the survey that NJ Library Link was already doing work in this area.

## 5. Discussion

This study took place in New Jersey in spring and summer of 2021 during the COVID-19 pandemic when libraries, as with many other institutions and organizations, were overburdened to the point of breaking, even as vaccinations became available. Many interview conversations with library staff turned to issues around health and medical misinformation that have been and continue to be complicated, difficult to dismantle, and result in disastrous consequences to public health and safety. The website review and survey responses suggest that the pandemic interpellated the libraries' active and passive tactics to address misinformation, and how library staff understand their mission as an information institution as Soehner et al. (2017) suggested.

The librarians' articulation of their day-to-day work and their conversations about the tools available to combat misinformation showed care and concern for local communities, indicating how librarians themselves perceive community trust in the library as an information institution (Geiger, 2017). Some librarians added slips of paper into specific books that patrons were checking out for further reading on a topic. This signals the feelings of responsibility librarians have toward their patrons. Others expressed concern about the efficacy and low patron attendance of in-person programming regarding misinformation and to maximize resources, they provided programming that would have higher attendance. One respondent claimed they were concerned that even their highly attended in-person events were not particularly effective because they were “preaching to the choir”, which speaks to the awareness of an epistemological disconnect in traditional library approaches to misinformation, which has an impact on their effectiveness (Bluemle, 2018; Boyd, 2018; Bulger & Davison, 2018; Sullivan, 2019a; Sullivan, 2019b), and complicates the assertion that the most

effective interventions are in-person (Lim, 2020).

More starkly, those who perceived misinformation as a topic that was too political and not the library's business might also be understood as speaking to the concern of alienating patrons who might hold controversial views or succumb to misinformation, which may erode trust in the institution of librarianship. This sentiment supports the widespread, traditional conception of libraries as a neutral information institution (LaPierre & Kitzie, 2019; Roberts & Noble, 2016; Sullivan, 2019a; Sullivan, 2019b). Clinging to ideals of neutrality and leaning on expertise when it may not speak to patrons' experiences, combined with the fact that one of the most common passive sources were those from authoritative sources such as governmental websites, which are untrustworthy in the eyes of different groups, underscores the difficulties that libraries face as they attempt to address misinformation within their available resources.

It was found that libraries are forced to allocate their resources: money, space, and time. Future iterations of the study might obtain information about library funding and staffing levels to attempt to quantify the levels of burden placed on library staff. But for this study, staffers articulated perception of these resources and their observable outcomes paint a vivid picture.

Because of low budgets, lack of staff, and no time for even basic activities, passive tactics were far more common in websites, surveys, and interviews. In some sense, passive tools (links/resources) can be viewed as the libraries acting as a filter, collating trusted sources for patrons. The ubiquitous use of passive strategies, that most websites lacked any tactics, and the affirmation from every respondent that the libraries were doing the best they could with the meager funding they received, suggests an instance of data deprivation articulated by Schiller (1995). This dynamic indicates support for claims that libraries, as with so many other public institutions, are facing a long, slow economic crisis that undermines education and information institutions (in consistency, quality, ethics, staff, patron satisfaction, etc.), along lines of structural inequity caused by neoliberal defunding (Roberts & Noble, 2016; Schiller, 1995). Consistent with LaPierre and Kitzie (2019), respondents explicitly stated they were having to negotiate among flagging resources which limited their ability to create more active programming characterized by the pervading sentiment that “we want to do more, but ...”

### 5.1. Recommendations

As in LaPierre and Kitzie (2019) study, respondents directly articulated the desire and need for more collaborative relationships with other institutions, such as universities, library consortiums, and community groups, to share some of the burden of providing adequate resources and training.

In New Jersey, there are several institutions that might partner with libraries to provide and support some of these needs. Researchers of misinformation and health communication at Rutgers, the State University of New Jersey, a public, state-funded institution, might perform community-engaged outreach around misinformation with library sites in the vein of that done by Paris & Costley-White, (2022). Alternatively, public university researchers may run trainings for library staff in conjunction with NJ Library Link, a cooperative, non-profit hub for library development, improvement, and support in New Jersey, mentioned by one respondent. More broadly, however, this study has found that the issue is not necessarily one of availability of research, or training, or even library staff's lack of desire to engage in such work around misinformation; minimal funding, time, and other resources needed for libraries to invest in such interventions are the primary barrier.

### 5.2. Limitations

Beyond the shortcomings of this study already mentioned through the article, there exist other limitations. Those who responded to the

survey and interviews may have been a self-selecting group with strong opinions, acute needs, or may represent some other unknown bias in respondents. Alternatively, the majority who didn't respond to the survey may not see misinformation as a problem. While the researchers in this study spoke with librarians who were overburdened in their library work, there are likely many others who were far too busy to respond to surveys or talk with researchers, who nonetheless likely had insights that would problematize and add dimension to the findings. The contextual nuances of this research and the relatively low sample size of interview respondents compared to all library staff in the state of New Jersey, or even a representative sample from New Jersey public libraries, while not generalizable in the strictest sense, provide a snapshot of how libraries in a specific area hard hit by a public health crisis respond to misinformation.

Upon further reflection, the survey instrument from Bejarano and Yanovitzky's (2018) study used during a town hall event could have been further tweaked for this study. In a town hall event, definitions of misinformation are given, discussed, and debated; however, in this survey there was no question specifically asking respondents to define misinformation. While respondents did mention definitions and problems with defining misinformation, in subsequent work, this might be drawn out more clearly.

## 6. Conclusion

This study adds a small, qualitative snapshot of public library provision of misinformation related tactics in New Jersey public libraries during the COVID-19 pandemic to a corpus of library and information science studies reviewing the tools, tactics, and approaches libraries have for addressing misinformation, as well as pinpointing the obstacles that practitioners face in these endeavors. The complementary qualitative methods of website analysis, surveys, and informal interviews charted how these data are implicated in and support larger and more complex theoretical and practical considerations around public libraries; problems with the traditional understanding of libraries as neutral, apolitical information institutions, and how to serve patrons with little to no resources, all within the context of countering misinformation in the midst of the COVID-19 public health crisis. As growing political, economic, social, environmental, and technical tensions are poised to create further rolling crises, people are more likely to feel confused, isolated, and unsure where to turn to get information that will help them live their lives. This type of study can be instructive for organizing resources, and gleaned lessons within public librarianship, both to bolster this important information institution and to serve as an example for doing the same across other institutions.

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## References

- Affelt, A. (2019). Creating a playbook to combat fake news. *Online Searcher*, 43(4), 1–3.
- ALA. (2020, January 6). SRRT resolutions 2005: Resolution on disinformation, media manipulation & the destruction of public information. <https://www.ala.org/rt/srrt-resolutions-2005-resolution-disinformation-media-manipulation-destruction-public-information>.
- Alcoff, L. M. (2007). Epistemologies of ignorance: Three types. In S. S. N. Tuana (Ed.), *Race and epistemologies of ignorance*.
- Allen, S. G., Clark, L., Coleman, M., Connaway, L. S., Cyr, C., Morgan, K., & Procaccini, M. (2020, May 12). *Public libraries respond to the opioid crisis with their communities: Summary report*. OCLC. <https://www.oclc.org/research/publications/2019/oclcresearch-public-libraries-respond-to-opioid-crisis.html>.
- Alvarez, B. (2016, December). Public libraries in the age of fake news. *Public Libraries*, 55(6), 24–27.
- Alvesson, M. (2003). Beyond neopositivists, romantics, and localists: A reflexive approach to interviews in organizational research. *The Academy of Management Review*, 28(1), 13–33. <https://doi.org/10.2307/30040687>
- Associated Press. (2021, October 8). *Anti-vaccine chiropractors rising force of misinformation*. US News & World Report. [www.usnews.com/news/health-news/articles/2021-10-08/anti-vaccine-chiropractors-rising-force-of-misinformation](http://www.usnews.com/news/health-news/articles/2021-10-08/anti-vaccine-chiropractors-rising-force-of-misinformation).
- Ball, P., & Maxmen, A. (2020). The epic battle against coronavirus misinformation and conspiracy theories. *Nature*, 581, 371–374. <https://doi.org/10.1038/d41586-020-01452-z>
- Banks, M. (2017). Fighting fake news. *American Libraries*, 48(3–4), 18–21.
- Baxter, J., & Eyles, J. (1997). Evaluating qualitative research in social geography: Establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22, 505–525. <https://doi.org/10.1111/j.0020-2754.1997.00505.x>
- Becker, B. W. (2016). The librarian's information war. *Behavioral & Social Sciences Librarian*, 3, 188–191. <https://doi.org/10.1080/01639269.2016.1284525>
- Bejarano, W., & Yanovitzky, I. (2018). Can town hall meetings be an effective tool in the fight against the opioid epidemic?. In *11<sup>th</sup> annual conference on the science of dissemination and implementation*. , December 3 <https://academyhealth.confex.com/academyhealth/2018di/meetingapp.cgi/Paper/28127>.
- Bluemle, S. R. (2018). Post-facts: Information literacy and authority after the 2016 election. *Portal: Libraries and the Academy*, 18, 262–282. <https://doi.org/10.1353/pla.2018.0015>
- boyd, d. (2018, March 16). You think you want media literacy... do you? *Data & Society: Points*. <https://points.datasociety.net/you-think-you-want-media-literacy-do-you-7cad6af18ec2>.
- Bratich, J. (2020). Civil society must be defended: Misinformation, moral panics, and wars of restoration. *Communication, Culture and Critique*, 13, 311–332. <https://doi.org/10.1093/ccc/tcz041>
- Bulger, M., & Davison, P. (2018, February 21). *The promises, challenges, and futures of media literacy*. Data & Society: Data & Society Research Institute. <https://datasociety.net/library/the-promises-challenges-and-futures-of-media-literacy/>.
- CDC. (2020, February 11). *Coronavirus disease 2019 (COVID-19)*. Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.
- Chan, M.-P. S., Jones, C. R., Hall Jamieson, K., & Albarracín, D. (2017). Debunking: A meta-analysis of the psychological efficacy of messages countering misinformation. *Psychological Science*, 28, 1531–1546. <https://doi.org/10.1177/0956797617714579>
- Clarke, A. E. (2003). Situational analyses: Grounded theory mapping after the postmodern turn. *Symbolic Interaction*, 26, 553–576. <https://doi.org/10.1525/si.2003.26.4.553>
- Dar, M. (2021, March). To tell the truth: Public libraries in the fight against misinformation, disinformation. *Library Journal*. <https://www.libraryjournal.com/detailStory=To-Tell-the-Truth-Public-Libraries-in-the-Fight-Against-Misinformation-Disinformation>.
- De Paor, S., & Heravi, B. (2020). Information literacy and fake news: How the field of librarianship can help combat the epidemic of fake news. *The Journal of Academic Librarianship*, 46, Article 102218. <https://doi.org/10.1016/j.acalib.2020.102218>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2017). *The SAGE handbook of qualitative research* (5th ed.). SAGE Publications, Inc.
- Diseases, T. L. I. (2020). The COVID-19 infodemic. *The Lancet Infectious Diseases*, 20, 875. [https://doi.org/10.1016/S1473-3099\(20\)30565-X](https://doi.org/10.1016/S1473-3099(20)30565-X)
- Dixon, G. N., McKeever, B. W., Holton, A. E., Clarke, C., & Eosco, G. (2015). The power of a picture: Overcoming scientific misinformation by communicating weight-of-evidence information with visual exemplars. *Journal of Communication*, 65, 639–659. <https://doi.org/10.1111/jcom.12159>
- Dixon, J. A. (2021). In the classroom, in life: Academic librarians combat misinformation on campus and off. *Library Journal*. <https://www.libraryjournal.com/detailStory=In-the-Classroom-In-Life-Academic-Librarians-Combat-Misinformation-On-Campus-and-Off>.
- Donovan, J. M., Friedberg, B., Lim, G., Leaver, N., Nilsen, J., & Dreyfuss, E. (2021). *Mitigating medical misinformation: A whole-of-society approach to countering spam, scams, and hoaxes*. Harvard Kennedy School. <https://mediamanipulation.org/research/mitigating-medical-misinformation-whole-society-approach-countering-spam-scams-and-hoaxes>.
- Faix, A., & Fyn, A. (2020). *Framing fake news: Misinformation and the ACRL framework*. Library Faculty Publications. <https://digitalcommons.coastal.edu/lib-fac-pub/7>.
- Flaherty, M. G., Tayag, E. K., Lanier, M., & Minor, J. (2014). The Jenny McCarthy conundrum: Public libraries, popular culture, and health misinformation. *Proceedings of the American Society for Information Science and Technology*, 51(1), 1. <https://doi.org/10.1002/meet.2014.14505101102>
- Fricke, M. (2007). Epistemic injustice: Power and the ethics of knowing. In *Epistemic injustice*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198237907.001.0001/acprof-9780198237907>.
- Geiger, A. W. (2017, August 30). *Most Americans say libraries can help them find reliable, trustworthy information*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2017/08/30/most-americans-especially-millennials-say-libraries-can-help-them-find-reliable-trustworthy-information/>.
- Hernon, P., Altman, E., & Dugan, R. E. (2015). *Assessing service quality: Satisfying the expectations of library customers* (3<sup>rd</sup> ed.). American Library Association.
- Hernon, P., & Calvert, P. (2005). E-service quality in libraries: Exploring its features and dimensions. *Library & Information Science Research*, 27, 377–404. <https://doi.org/10.1016/j.lisr.2005.04.005>

- Jack, C. (2017). *Lexicon of lies: Terms for problematic information*. Data & Society Research Institute. <https://datasociety.net/output/lexicon-of-lies/>.
- Kitchin, R., & Tate, N. (2013). *Conducting research in human geography: Theory, methodology and practice*. Routledge. <https://doi.org/10.4324/9781315841458>
- LaPierre, S. S., & Kitzie, V. (2019). Lots of questions about 'fake news': How public libraries have addressed media literacy, 2016–2018. *Public Library Quarterly*, 38, 428–452. <https://doi.org/10.1080/01616846.2019.1600391>
- Lenstra, N., Rubenstein, E. L., Smith, C. A., Flaherty, M. G., & Gibson, A. N. (2018). How does health happen in public libraries? Ethical and emerging issues. *Proceedings of the Association for Information Science and Technology*, 55, 704–707. <https://doi.org/10.1002/pra2.2018.14505501087>
- Lim, S. (2020). Academic library guides for tackling fake news: A content analysis. *The Journal of Academic Librarianship*, 46, Article 102195. <https://doi.org/10.1016/j.acalib.2020.102195>
- Milner, R. M., & Phillips, W. (2020). 5. Cultivating ecological literacy. In *You are here*. <https://you-are-here.pubpub.org/pub/fc80dnhc/release/1>.
- Paris, B., & Costley-White. (2022). Localizing the fight against covid-19 misinformation: The efficacy of town hall events in New Jersey. *Journal of Communication*. forthcoming In press.
- Paris, B., & Donovan, J. (2019). *Deepfakes and cheap fakes*. Data & Society Research Institute. <https://datasociety.net/output/deepfakes-and-cheap-fakes/>.
- Revez, J., & Corujo, L. (2021). Librarians against fake news: A systematic literature review of library practices (Jan. 2018–Sept. 2020). *The Journal of Academic Librarianship*, 47, 102304. <https://doi.org/10.1016/j.acalib.2020.102304>
- Roberts, S. T., & Noble, S. U. (2016). Empowered to name, inspired to act: Social responsibility and diversity as calls to action in the LIS context. *Library Trends*, 64, 512–532. <https://doi.org/10.1353/lib.2016.0008>
- Rubenstein, E. L. (2018). "I want to provide patrons with good information": Public library staff as health information facilitators. *The Library Quarterly*, 88, 125–141. <https://doi.org/10.1086/696579>
- Schiller, H. (1995). *Information inequality*. Routledge. <https://www.routledge.com/Information-Inequality/Schiller/p/book/9780415907651>.
- Seitz, A., & Depuy, B. (2020, October). Misinformation spikes as Trump confirms COVID-19 diagnosis. Associated Press. <https://apnews.com/article/election-2020-virus-ou-tbreak-donald-trump-conspiracy-theories-melania-trump-50bfad6b0d2fef7ba65f54b7b8ea2a98>.
- Smith, C. A. (2011). "The easier-to-use version": Public librarian awareness of consumer health resources from the National Library of Medicine. *Journal of Consumer Health on the Internet*, 15, 149–163.
- Soehner, C., Godfrey, I., & Bigler, G. S. (2017). Crisis communication in libraries: Opportunity for new roles in public relations. *The Journal of Academic Librarianship*, 43, 268–273. <https://doi.org/10.1016/j.acalib.2017.03.003>
- Sullivan, M. (2019a). Libraries and fake news: What's the problem? What's the plan? *Communications in Information Literacy*, 13(1). <https://doi.org/10.15760/comminfolit.2019.13.1.7>
- Sullivan, M. C. (2019b). Leveraging library trust to combat misinformation on social media. *Library & Information Science Research*, 41, 2–10. <https://doi.org/10.1016/j.lisr.2019.02.004>
- Walker, P. (2021). The library's role in countering infodemics. *Journal of the Medical Library Association : JMLA*, 109, 133–136. <https://doi.org/10.5195/jmla.2021.1044>
- Young, J. C., Boyd, B., Yefimova, K., Wedlake, S., Coward, C., & Hapel, R. (2020). The role of libraries in misinformation programming: A research agenda. *Journal of Librarianship and Information Science*, 53, 539–550. <https://doi.org/10.1177/096100620966650>

**Britt Paris** is an assistant professor in Library and Information Science at Rutgers, the State University of New Jersey and an affiliate researcher at Data & Society Research Institute in New York City. She has a PhD in information studies from University of California, Los Angeles. Her research interests include the political economy of information, community-centered research, misinformation, and social epistemology. She has published in *Social Media + Society*, *Journal for the Association of Information Science and Technology*, *Science, Technology & Human Values*, *Information and Learning Sciences*, *Journalism and Mass Communication Quarterly*, and *Big Data + Society*, among others.

**Kathleen Carmien** is a circulation assistant at Franklin Township Public Library. She has an ML with a concentration in library science from Rutgers University.

**Michelle Marshall** earned her MEd at Earlham College. She is currently a student in the Master's of Information program at Rutgers University. Her research interests include misinformation and the alternative health movement.