Let's Move! Fitness Programming in Public Libraries

By: Noah Lenstra

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Abstract:

Public libraries increasingly offer fitness programming, which includes yoga, running groups, and story times that involve exercise. This article assesses this trend by 1) analyzing the social forces that have led this programming to increase and 2) reviewing the literature about this programming. Fitness programming is being designed for all ages and abilities, and has benefits both for individuals and for communities. The article also reports on ongoing efforts to map the current state of fitness programming in North American public libraries, as well as to develop tools to better assess and develop this programming.

Keywords: Assessment | health | programs | wellness

Article:

Introduction

Between Fall 2013 and Fall 2014, an estimated 22.7 percent of U.S. public libraries offered some sort of fitness class, such as Zumba, yoga, or tai chi (Bertot et al. 2015a, 62). How did fitness programming become such a big part of public librarianship? How can we understand, assess, and develop this trend? This article investigates these questions by performing the following actions:

- 1. Analyzing trends that led to the growth of fitness programing in public libraries;
- 2. Reviewing the literature about this type of programming; and
- 3. Discussing ongoing efforts to map and assess fitness programming in public libraries.

By *fitness programming*, this article refers to programs and services that explicitly encourage physical activity and physical fitness. Examples include fitness classes, running and walking clubs, fitness equipment that can be checked out, story times that involve physical activity, and walking trails connected to libraries.1 Fitness programming is related to, but distinct from, providing information about fitness and exercise. Past research (Gillaspy 2005; Linnan et al. 2004) shows that librarians are asked and often feel comfortable answering questions about, and providing information on, exercise and physical activity. The focus here, however, is less on information provision, and more on programs that contribute directly to physical fitness. These programs are those that, as Pyatetsky (2016) puts it, promote fitness literacy at the library.

Finally, although the focus in this article is on public libraries in the United States of America, discussions from abroad, and in from particular the United Kingdom and Canada, are also included in the review of the literature on this topic.

The findings from this ongoing study show that fitness programming in public libraries has been shaped by a variety of social and political trends. As a result of these trends, fitness programming is being offered in libraries for people of all ages, and all abilities. These findings suggest more research is needed on the impacts of fitness programming. Although this programming is increasingly common, we do not yet know how this programming impacts the public. Furthermore, since no systematic survey has investigated this area, we do not yet know why some libraries offer this type of programming, while others do not. The field has yet to develop the means to assess the importance of this emerging area. By contributing to our understanding of this trend, this article prepares librarians, researchers, and policy makers to build the tools needed to better assess and develop fitness programming in public libraries.

Background: Fitness programming and libraries as community centers

The presence of fitness programming in public libraries is often remarked upon in the media, which often frames fitness programming as part of the transformation of libraries into multipurpose community centers. In *The Atlantic*, Deborah Fowler (2016) notes that she has done yoga and tai chi in public libraries. Similarly, *Governing* tells its readers as follows:

The next time you visit your local public library, don't be surprised if you come upon a yoga or Pilates class under way. Libraries, so often stereotyped as quiet places filled with books for reading and research, are increasingly adding the role of community center to their services. (Mulholland 2011)

Local media also highlight how fitness programming symbolizes the transformation of libraries into community centers. The San Diego Union-Tribune notes that people can address their "New Year's resolutions to get fit . . . for free at local libraries" (Himchak 2014). The Southampton Press notes that "libraries have become community centers, catering to the wants, needs and desires of local residents. And at the top of that list . . . are fitness classes" (Trauring 2012). The Daily Herald similarly discusses how libraries in the Chicago suburbs have embraced their "new role as community centers" by offering "unique services such as Yoga and Zumba classes, in a communitywide initiative to fight obesity" (Rohr 2016). These articles illustrate how fitness programming in libraries fits within the popular perception of public libraries as multipurpose community centers that flexibly respond to the diverse needs of the communities they serve.

It is important, however, that to a certain extent public libraries have always been this way. Library historian Wayne A. Wiegand reminds us that some of the historical roles of public libraries involved physical fitness. He discusses the case of the Braddock (PA) Public Library, which when it opened in 1889 contained "two bowling alleys, eight billiard tables, a gymnasium and swimming pool, twenty-one bathtubs and twelve showers" (Wiegand 2015, 94). Although this type of library/fitness center hybrid is rare, Michael Dewe (2006) discusses the presence of libraries "co-located" with fitness centers in the United Kingdom. There, public libraries are sometimes located in buildings that also house gyms, swimming pools, and activity centers. Rubenstein discusses how U.S. libraries also respond to the needs of their communities by supporting "book groups, craft and exercise activities, makerspaces, coffee hours, and

storytimes" (Rubenstein 2016, 332, emphasis added). Fitness programming is one manifestation of the public library's role as a multi-purpose community space.

Analyzing the development of fitness programming in libraries

With this background in mind, and with the goal of better understanding the recent development of fitness programming in American public libraries, this study analyzed websites, policy documents, social media, and articles in the popular press related to this trend. Findings show that this development has been multicausal. Major forces include as follows:

- National initiatives to promote health and wellness in and through libraries, and
- Local initiatives by public librarians to bring fitness programming into public libraries.

National initiatives

During the last decade, policy makers have often considered how public libraries and related institutions could respond to issues of preventative health, obesity, and the general wellness of Americans. Prominent initiatives in this vein include as follows:

- The Urban Libraries Council's awards for health and wellness in public libraries
- The American Library Association's focus on wellness
- Michelle Obama's Let's Move! Initiative, and in particular the *Let's Move! Museums & Gardens* project managed by the Institute of Museum and Library Services (IMLS)
- Webjunction's *Health Happens in Libraries* initiative, also funded by the IMLS
- The focus of the Collaborative Summer Reading Program in 2016 on sports, fitness, and exercise.

Urban Libraries Council

In March 2011, Susan Benton, president and CEO of the Urban Libraries Council, attributed the growth of fitness programming in public libraries since 2005 to the fact that "there are some communities where childhood or adult obesity is a real issue" (qtd. in Mulholland 2011). Under her leadership, the Urban Libraries Council has awarded libraries that have developed fitness programming. Since 2010, the Council has recognized as follows²:

- The Public Library of Cincinnati and Hamilton County, OH, which in 2009 started a Healthy Kids Zone. Weekly programs included a 30-minute fitness activity. Nearly 4,000 children participated in the program. According to librarians, "parents also commented that their children were encouraging them to eat better at home and exercise more."
- Fresno [CA] County Public Library, which in 2010 purchased Wii gaming systems for six of its branches to "promote safe, indoor physical activity."
- The South Branch of Denton [TX] Public Library, which in 2011 organized its first annual bike parade after it identified a community need for programs that emphasize "participation in physical activities and exploration of the outdoors."
- Queens [NY] Library, which in 2011 developed Queens ConnectCare. The initiative led to exercise classes being offered throughout the library system.

- Kansas City [MO] Public Library, which in 2012 started "offering free cardio kickboxing
 and aerobics classes along with a 12-week weight loss challenge for all fitness levels and
 ages." The award notes that "Attendance at cardio and aerobics classes is averaging more
 than 40 each week. Participants range from those with excellent fitness to those confined
 to wheel chairs, the elderly, and families."
- San Antonio [TX] Public Library, which in 2012 installed five adult fitness stations, a playground, and two walking paths on its grounds in order to promote physical activity.
- Houston [TX] Public Library, which in 2013 started offering programs for families "focused on intergenerational learning—parents and children learning together through interactive, literacy and technology infused educational activities ranging from Zumba to cooking demonstrations."

These awards document some of the trends that led to the growth of this type of programming. All but one of the seven awardees developed their programs with external funding. Funders include foundations tied to insurance companies (Cincinnati, Fresno, Houston), regional medical centers (Kansas City and Queens), and the federal Center for Disease Control (San Antonio). The only initiative that developed without external funding was Denton Public Library's bike parade. This finding suggests that the availability of funding for preventative health and wellness is among the forces leading to increased fitness programming in public libraries.

ALA circle of wellness

Another force related to the growth of fitness programming in public libraries is the increased attention of policy makers to wellness. During the presidency of Loriene Roy in 2007–2008, the American Library Association focused on promoting wellness among librarians. Roy's focus on wellness reflects social and political trends that focus on supporting preventative and lifelong health. Drawing on the National Wellness Institute, Roy defines wellness as including seven aspects: physical, emotional, occupational, environmental, intellectual, spiritual, and social (Roy 2008). Through this and subsequent initiatives, such as the 2012 Workplace Wellness @ Your Library Symposium, Roy helped bring awareness of wellness and its importance into the discourse of librarianship.

Let's Move!

A third national initiative related to the growth of fitness programming in public libraries is Michelle Obama's *Let's Move!* initiative, launched in early 2010. The initiative aims to encourage healthy lifestyles among children. In partnership with the Institute of Museum and Library Services, in September 2011 Obama started *Let's Move! Museums & Gardens*. This initiative focuses on increasing physical activity and healthy eating habits through museums and gardens. Museums of all types have become involved in this initiative (Semmel 2012). The *Let's Move!* initiative illustrates how policy makers frame physical activity as part of lifelong learning and wellness. The initiative further illustrates how policy makers see institutions like museums, gardens (and possibly libraries as well) as important actors in this social process.

Health happens in Libraries

Another IMLS initiative that more directly focused on wellness in public libraries was Webjunction's Health Happens in Libraries initiative, launched in December 2013. The project initially focused on preparing public libraries to help patrons navigate the Affordable Care Act (Morgan 2013). Over time, however, its focus widened to promote, among other things, fitness programming. One product of the initiative was the Library Heroes Make Health Happen infographic, which highlights the fact that many public libraries offer fitness classes. The project also funded four experimental programs in public libraries. Among these was a program focused on incorporating Zumba classes into the Hampton (VA) Public Library. A post-project survey found that "participants expressed a desire for more exercise opportunities at the library, including Zumba and yoga instruction." The report also quotes a librarian involved in the initiative, who found as follows:

Health programming at the library is an opportunity for community members to have an experience together. Strictly informational programs, while useful, might attract a more self-selected audience. As we learned in providing our Zumba class, activities and events for all ages and skill levels truly excite and positively surprise patrons and partners, and pave the way for them to learn more about all the library has to offer. (Morris 2015)

This quote illustrates the evolution of the Health Happens in Libraries initiative, which initially focused on preparing public libraries to promote informational services, and evolved to focus on the library as a space where community members can have "an experience together" that positively impacts their health and wellness.

Collaborative Summer Reading Program (CSRP)

More recently, in 2016 the Collaborative Summer Reading Program (CSRP) focused its programming advice around the themes of sports, fitness, and exercise. This focus developed in response to problems of obesity among Americans, and in response to the 2016 Summer Olympics. This national initiative was mediated by state libraries, which provide public libraries with programming advice. For instance, in a presentation to Mississippi public libraries, the Library Development Director for the Mississippi Library Commission recommended asking "a local fitness (or Yoga) instructor to come in to discuss steps you can take to be more active. He or she can lead a 15-minute exercise class during the presentation." He also recommended starting "a running group with the library staff and invit[ing] patrons to join" and ending "the summer with a 5 k fun run/ walk" (Garretson 2016, n.p.). Similar advice came from state libraries throughout the country. The state library in Kentucky organized its Summer Programming & Outreach Conference on how to incorporate wellness, fitness, and sports into summer programming. Speakers discussed yoga at the library, library couch-to- 5 K running groups, pedometer challenges, human-sized board games, and other ways to encourage physical activity and fitness through summer library programming (Kentucky Department for Libraries and Archives 2016).

The conversations that emerged in response to the CSRP theme also illustrate some of the ambivalence and anxiety some librarians have in relation to the idea that the public library should promote physical fitness, exercise, and sports. Carol Anne Geary (2016) reported attending a workshop in New York focused on preparing public librarians to adopt the 2016 CSRP theme. She states that many in attendance at the workshop thought the "theme was too

sports-oriented and were not using it," suggesting that some resist this association. Resistance to fitness programming in public libraries also comes from patrons. Discussing the development of fitness programming in British public libraries, Goulding quotes a library director who said as follows:

When we began to provide [exercise classes] some of our residents did not approve of the noise and bustle they created . . . But at the end of the day people came round to these ideas and they accepted them. I think you do have to take a bit of risk. (Goulding 2009, 41-42)

There is evidence that throughout the United States public libraries decided to take this risk in Summer 2016, using the theme of the CSRP as a launching-pad for innovative fitness programming. For instance, in Summer 2016, Lawrence (KS) Public Library offered "Fitness Fridays on the Library Lawn." Participants of all ages and skill levels could come to the library to learn yoga, tai chi, piyo, bodyflow, pilates, POUND!, and even CrossFit. Examples abound of other public libraries that developed similar fitness programming during Summer 2016 in response to the CSRP theme.3 Some include as follows:

- Marion, OH, which also organized "Fitness Fridays" as part of its summer reading club
- Carrollton, TX, which held "Shape Up Saturdays" throughout the summer
- Lima, OH, which started its summer reading program with a kick-off walk and which also held "Shake It Saturdays" throughout the summer
- Austin, TX, which under the theme of My Library Inspires: Body, Food & Mind, offered a variety of fitness, nutrition, and reading programs
- Cranston, RI, whose summer reading program included Zumba Kids, a ping-pong smackdown, bike maintenance 101, and a quidditch tournament
- Portsmouth, VA, where the adult summer reading program included Zumba and beginning line dancing classes
- Lewistown, MT, which sponsored hikes, visits to parks, and walks on city trails
- Danville, KY, which also offered guided hikes in area parks for families, as well as a couch to 5 k program, and self-defense classes
- Newport, RI, which offered yoga, dance, tai chi, aerobics, and crossfit programs
- Nappanee, IN, whose summer newsletter featured images of weight lifting, running, biking, yoga, soccer, and dancing, and whose programs included yoga, dancing, running, geocaching, self-defense classes, an inflatable obstacle course, cardio drumming, a couch to 5 K program, ping pong, and "piloxing," a fusion of standing pilates, boxing and dance

Local efforts

These examples of how librarians throughout the country used the CSRP theme to develop innovative fitness programming in their libraries illustrates how local librarians contribute to this trend. This article now discusses in more detail how public librarians themselves have contributed to the development of this trend. This section first discusses the results from national surveys that illustrate the state of fitness programming in public libraries. It then discusses how and why librarians have developed programming. This discussion in turn leads to the next

section of this article, a review of the published literature on fitness programming in public libraries.

Although no systematic study of fitness programming in public libraries exists, three recent surveys on digital inclusion in libraries do shed light on this trend. Findings from these surveys indicate as follows:

- Americans of diverse backgrounds come to public libraries to learn about exercise and fitness. In most cases, being able to access information about exercise and fitness in libraries leads to changes in exercise habits (Becker et al. 2010, 10).
- Public libraries are innovative in their promotion of fitness, with programs and services
 including Zumba, yoga, dance, Qigong (tai chi), running clubs, walking clubs, storytimes that include exercise and yoga, fitness equipment that can be checked out, and
 games involving physical activity played in the library (Zickuhr 2013).
- Approximately one-fifth of American public libraries offer fitness or exercise classes (Bertot et al. 2015a).

This baseline data shows that fitness programming has become part of public libraries throughout the nation. One survey in particular illustrates trends in this area. Bertot et al. (2015a) found that fitness classes are not equally available in public libraries throughout the country. Between Fall 2013 and Fall 2014, 34 percent of suburban public libraries offered fitness classes, while only 13 percent of rural libraries did so (32% of city libraries, and 20% of town libraries, did as well).

In developing these fitness classes, librarians rely on external partners. In 29 percent of the libraries, the library staff, by themselves or with partners, ran the classes (Table 1). More common are classes ran by volunteers (35%) and/or partner organizations (60%). These trends vary by type of library. City and rural libraries were less likely to have library staff providing fitness classes, while town and suburban libraries were more likely. The reasons for this difference are unclear and deserve more investigation.

The survey also reported findings related to the prevalence of fitness classes among the states. Here again, unevenness across the country was found. For instance, while 66.7 percent of respondents in Delaware reported fitness classes during the last 12 months, only 6 percent of libraries in Hawaii had such classes (Table 2). One tentative conclusion that can be drawn from this data is that fitness classes are more common in public libraries in the eastern United States than they are in middle or western parts of the country. The reasons for this geographic trend are not currently known, but also deserve more investigation.

Table 1. Providers of fitness classes in libraries, by location of library. Source: Bertot et al. (2015a)

Library location	Library staff	Volunteers	Partner organization
Overall	28.7%	35.4%	59.7%
City	19.1%	40.5%	66.6%
Suburban	35.2%	31.9%	58.8%
Town	38.7%	40.2%	51.8%
Rural	17.9%	32.4%	61.1%

Table 2. Percentage of public library locations that offered fitness classes, b y state, Fall 2013-Fall 2014. Source: Bertot et al. (2015b) 134-136.

State	Percentage
Washington, D.C. $(n = 25)$	100.0%
Delaware ($n = 15$)	66.7%
Rhode Island ($n = 23$)	65.2%
Kentucky ($n = 67$)	41.8%
Florida ($n = 165$)	38.2%
Pennsylvania (n = 210)	34.3%
Connecticut ($n = 85$)	34.1%
New York ($n = 357$)	32.8%
Michigan ($n = 200$)	26.0%
South Carolina ($n = 82$)	25.6%
Ohio $(n = 242)$	24.0%
Utah ($n = 47$)	23.4%
New Hampshire ($n = 108$)	23.1%
Vermont ($n = 113$)	23.0%
National $(n = 2304)$	22.7%
Louisiana ($n = 237$)	21.9%
Virginia (n = 114)	21.9%
Wyoming $(n = 58)$	20.7%
New Mexico $(n = 63)$	20.6%
Nevada ($n = 78$)	19.2%
Colorado (n = 108)	16.7%
Kansas ($n = 169$)	15.4%
Alabama ($n = 120$)	15.0%
Alaska ($n = 58$)	13.8%
Arizona ($n = 116$)	13.8%
Nebraska ($n = 201$)	11.4%
North Dakota ($n = 30$)	10.0%
Oregon $(n = 97)$	9.3%
Washington ($n = 118$)	9.3%
Maryland ($n = 110$)	9.1%
Tennessee ($n = 109$)	8.3%
West Virginia (n = 120)	8.3%
Mississippi ($n = 131$)	7.6%
South Dakota ($n = 99$)	6.1%
Hawaii (n = 50)	6.0%
Idaho ($n = 50$)	6.0%

In any case, growing interest in fitness, exercise, and wellness among librarians has contributed to an increase in fitness programming within libraries. On Facebook there are now groups for "Librarians Who Run," and "Lifting Librarians," each with just under 400 members. Although the exact numbers are not known, there is also evidence that many public librarians actively practice yoga, and some even have gone through the lengthy process required to become certified yoga instructors (e.g., Barack 2015; Carson 2016; Durland 2008; Thornley 2016). Many of these yogi-librarians have brought their yoga practice into the libraries where they work, offering programs and classes for the public. In terms of spreading this practice, Jenn Carson, library director in Woodstock, New Brunswick, has been among the most vocal. In addition to blogging for the Programming Librarian on yoga and physical literacy programming in libraries, she also maintains the website Yoga in the Library, and is writing a book for the American Library Association on the topic. Others have been doing similar work. For instance, Syndey Solis has worked extensively with public librarians in Colorado and Florida over the last decade to develop what she calls Storytime Yoga (Durland 2008).

Other local initiatives focus on other types of physical activities. The public library in Montpelier, VT, worked with a local volunteer to develop StoryWalks, which involve decomposing a storybook and posting its pages throughout a walking area to encourage children and families to walk while reading a story. There are now StoryWalks throughout North America.4 These examples illustrate how the interests of librarians in fitness led to increased fitness programming within public libraries.

Literature review

These findings are augmented through a review of the published literature on fitness programming in public libraries. Based on extensive keyword searching in the major library literature databases, as well as through google scholar, and citation tracking, a bibliography of 16 articles on fitness programming in public libraries in the United States, Canada, and the United Kingdom was assembled (Table 3).

This literature has been written by a) public librarians (7 articles), b) health librarians who partnered with public libraries (3 articles), c) information scientists (2 articles), d) journalists (2 articles), and e) a network of cultural organizations that includes libraries (1 article). Who writes this literature is important to note, because it illustrates that health librarians are already and could, in the future, partner with public librarians to develop fitness programs.

This literature also shows that fitness programming has been developed for all ages. Audiences discussed include youth (3 articles), teenagers (2 articles), families—parents and children together (2 articles), adults in their 20s and 30s (1 article), the general adult population (3 articles), older adults (2 articles), and all ages (3 articles). Fitness programming is being offered for people at different stages of life, and is not restricted to one age group.

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Article	author	Fitness program(s)	Dates	Population	Location	Partners	techniques	Outcomes
Quatrella and Blosveren (1994)	Pub l ic librarian	Aerobics class	1993	Teenage women	Stratford CT	Governor's Office; Aerobics instructor; teacher	Participant interviews	Increased self-esteem, interest in fitness
Durland (2008)	Public librarian	Yoga story time	2007- unknown	Youth	Telluride CO	Yoga instructor	Tracking participation	Increased participation in story time programs
LaValley (2009)	Health librarian	General exercises	mid-2000s	Families	Delaware	State Medical Office; State Public Health Office	unspecified	unspecified
Woodson, Timm, and Jones (2011)	Health Iibrarian	Exercise-focused story time	2009-2010	Youth	Shreveport LA	Health Science Library, National Network of Libraries of Medicine	Tracking participation	271 youth participated
Richmond (2012)	Public librarian	Running and reading group; 5 K	2012-present	Adults	Rye NH	None	Unspecified	Inquiries about model from other libraries
Flaherty (2013)	Info. scientist	Fitness and walking programs	Unspecified	Older adults	New York State	Assisted living facilities	Unspecified	Unspecified
Zaker (2014)	Public librarian	Aerobics classes	2010-present	Adults: Aged 20 s and 30 s	SacramentoCA	alt+Friends (Friends group of initiative)	Tracking participation	Increased participation by this demographic
Maddigan and Bloos (2014)	Public librarian	StoryWalk; Geocaching	Unspecified	Families	Nova Scotia; CO	StoryWalk initiative	Unspecified	unspecified
Vincent (2014)	Cultural network	Health and Fitness Fair	ca. 2010	Older adults	Southend, Essex UK	Active Life (UK)	Tracking participation	Over 70 people aged 50 and older participated
Barack (2015)	Journa li st	Yoga	unspecified	Youth	Multiple states	Yoga instructors	Interviews with librarians	Reduced stress, increased mindfulness

Article	Lead author	Fitness program(s)	Dates	Population	Location	Partners	Assessment techniques	Outcomes
Cofell, Longair, and Weeks (2016); Weekes and Longair (2016)	Public librarian	Physical literacy kits; walking clubs; move and play programs	2013-present	All ages	Leth bridge, Alberta, Canada	Kineseology professor; Regional sports council; Royal Bank of Canada grant	Tracking participation, circulation and informal feedback	Positive feedback for programs and collections, increased participation
Engeszer et al. (2016)	Health Iibrarian	Yoga; beginning exercise; Zumba	2014-present	Adults	St. Louis MO	Washington University School of Medicine Library	Community needs survey distributed in library branches	"Exercise" most popular health topic in community
Flaherty and Miller (2016)	Info. scientist	Walking; 5 K	2014–2015	Adults	Farmville NC	Professor of Information & Library Science	Tracking participation and circulation, interviews	High participation rates; Library director named "Wellness Coordiantor"
Monaghan (2016)	Journa l ist	Running program; 5 K	2014-present	All ages	Crandon WI	County Health Department; Local non- profit	Tracking participation	Popularity leads to annual program
Thornley (2016)	Public Iibrarian	Yoga	2014-present	Teenagers	Cincinnati OH	Community Action Agency	An ecd otal feedback	Increased mindfulness

The literature also discusses a variety of programs, offered in a variety of locations, with multiple types of partners. Among the types of fitness programs discussed are aerobics classes, circuit training, yoga, pilates, running, walking, dancing, and play-based story programs. Partners discussed include local fitness and yoga instructors, high school teachers, friends of the libraries, state funding agencies, health libraries, assisted living facilities, regional aging groups, banks, park districts, kinesiology faculty members, information scientists, public health departments, and non-profits. The diverse partners involved in these initiatives illustrate that fitness programming develops based on the needs and capacities of particular communities. There is no one way to develop and offer fitness programming in public libraries.

In any case, when assessment of fitness programming takes place, it tends to rely primarily on the quantitative tracking of participation rates. The findings from participation rates show that fitness programming in libraries is popular: When fitness programming exists, people tend to utilize it, and to want more of it. Other articles that used other assessment techniques also found that participants in this programming report increased self-esteem, increased interest in fitness activities, increased mindfulness, and reduced stress. In general, however, the lack of assessment of fitness programming, beyond tracking participation, illustrates a gap in the literature.

A common theme in many of the articles is that fitness programming positively affects both bodies and minds. One of the earliest case studies in the literature reports on how the public library in Stratford, CT, developed and implemented a series of programs for teenage women that included forty-five minute aerobics classes. The program developed because the librarians believed that "the library is no longer just a place for doing homework assignments, [it is a] community center, where teens can come to socialize and grow in all aspects of life" (Quatrella and Blosveren 1994, 36). Over a decade later, a librarian working with teenagers in Cincinnati came to similar conclusions after starting yoga programs at her library (Thornley 2016). In Colorado, a yoga program for youth also found that fitness programming improves both the bodies and minds of participants. This particular program was found to be "wildly successful." Even though it was targeted at youth, it even attracted "the children's grandparents," who also participated in the yoga classes (Durland 2008, 7–8). A more recent survey of library programs that involve yoga further finds that "libraries embrace the practice to ease stress and promote literacy" (Barack 2015, 28).

A second theme in the literature centers on encouraging outdoor activities. Maddigan and Bloos (2014) profile two such examples. In Bridgetown, Nova Scotia, librarians used the StoryWalk model discussed above to encourage families to appreciate literature and the outdoors simultaneously. In Thornton, CO, librarians organized a geocaching program to encourage

families to learn about mapping through an immersive outdoors adventure. Outdoor-oriented programs frequently involve running and walking. At Rye (NH) Public Library, the library director organized a reading and running program in which members discussed sections of Chris McDougall's Born to Run before heading out on a group run together (Richmond 2012). The librarian received inquiries about the idea from other libraries in the region. The model has since been replicated at Rye, as well as spread to other places in the nation. In Crandon, WI, the public library launched a running program called Community Kickstart (Monaghan 2016). This program focused on training those new to running, and culminated in a 5 K. Successful in its first year, it has been repeated in 2015 and 2016. The library has also organized an annual 5 K with a local non-profit. In the rural town of Farmville, NC, the library partnered with an Information and Library Science professor to develop programs and services that would promote healthy lifestyles (Flaherty and Miller 2016). The library loaned pedometers and then interviewed those who participated in the program. Participants liked the program, although some struggled with the technology, and they asked for more health and wellness programs at the library. As a result, the library organized a 5 K road race and one-mile fun run in Spring 2015. As a result of the success of these programs, the library director was asked to become the "Wellness Coordinator" for his town.

A third theme in the literature is the role of partnerships in the development of fitness programming. In the late 2000s, health librarians in Delaware started working with public libraries throughout the state to increase health literacy (LaValley 2009). Partners developed "Wellness Wednesdays for Kids," an activity-based program offered during the Winter months. This program evolved into the initiative "Every Man Can: Raise Healthy Kids," which focused on engaging fathers and male caregivers around exercise and nutrition. A similar initiative took place in Shreveport, LA, where medical librarians partnered with the public library system to develop library story hour programs focused on promoting exercise among youth (Woodson, Timm, and Jones 2011). The project found that "health information could be presented in a more interesting manner through stories and games." Health librarians also worked with public librarians in St. Louis, MO. There, a community needs survey found that exercise was the topic the public most wanted to see more of in health services (Engeszer et al. 2016). In addition, 153 and 148 respondents said that they would be very interested in, respectively, demonstrations of "tai chi/balance exercises" and "yoga" in libraries. In response to the survey, the partners developed a series of programs on yoga, beginning exercise, and Zumba held throughout the St. Louis Public Library system. The assessment of this multi-year project states that the project evolved "from a focus on diseases and [medical] conditions to healthy living and wellness" (Engeszer et al. 2016, 65). In other words, the project shifted from providing access to information on medical issues to providing opportunities to live healthier lives, in part through fitness programs.

A fourth theme in the literature concerns how fitness programming reaches new audiences, and/or reaches established audiences in new ways. Zaker (2014) focused on a specific population identified as an underserved population by her library: adults in their 20s and 30s. Zaker and the library started an alternative library, or alt+library, initiative by forming a special friends of the library group composed of these younger adults. Zaker and this friends group then organized such unorthodox fitness activities in the library as punk rock aerobics, alternapilates, brutal yoga, holidaze yoga, zombie survival aerobics, and Riot Grrrl Plyo. The library has since seen more adults of this age using the library. Similarly, Flaherty (2013) found that older adults were targeted by a public librarian in New York State who collaborated with an assisted living

facility to provide programs on fitness, walking, and nutrition. Discussing library services in the United Kingdom, Vincent (2014) also documents fitness programming being targeted at older adults. He notes that one library developed a Health and Well-Being Festival in which more than 70 people aged 50 and older participated in programs like line dancing, exercise to music, circuit training, pilates, and yoga in the library.

Finally, a pair of articles from Canada (Cofell, Longair, and Weeks 2016; Weekes and Longair 2016) illustrate how circulating collections can fit within fitness programming in the library. At Lethbridge Public Library in Alberta in 2013, librarians developed "physical literacy kits" they check out to patrons. These kits include exercise equipment like basketballs, jump ropes, and volleyball equipment. Furthermore, library staff receive training in terms of how to integrate physical activities, using the new equipment, into their existing programming. The findings from this initiative show that the public greatly appreciates this new service. As a result, the library has since expanded the program, making fitness programming and collections a core part of the library's mission.

In summary, the literature on fitness programing in libraries finds these programs impact both participants' bodies and minds. They can also foster more outdoors activities. Partnerships, in particular with health librarians, can play important roles in the development of this type of programming. Fitness programming can also reach new audiences, and/or reach established audiences in new ways. Finally, this programming can lead to different sorts of circulating collections being made available in public libraries.

Mapping fitness programming in libraries: a call for participation

As a means of better documenting and understanding this emerging trend, the author has begun mapping public libraries throughout North America that provide fitness programming. This map is built on an iterative searching process, in which keywords like "yoga," "tai chi," "Zumba," "pilates," "CrossFit," "running," and "walking" are entered into search engines along with the keyword "public library" to map, and thus to better understand, how and why libraries offer these types of services.

The preliminary results of this mapping exercise can be seen at the project website, letsmovelibraries.org, and in Figure 1. As of mid-March, 2017, over 550 libraries and library systems are included in this map. Each entry includes a link that visitors can click to learn more about fitness programming at the library selected. It is envisioned that more results will be collected, and as a result, this map will be dynamically updated over time. In particular, the author requests that librarians contact him to add information about their programs and services to this website. It is hoped that over time this dynamic mapping will lead both to better understanding of this area, as well as broader national and international conversations about how public libraries can be leaders in their communities in relation to fitness, exercise, and wellness. The next steps in this project will involve surveying librarians across North America to better understand how and why (or why not) they have developed fitness programming in their libraries, and what effects this programming has had on the communities they serve.

Discussion: Future opportunities and assessment challenges

A major challenge moving forward with fitness programming is to develop and utilize assessment frameworks and tools. One framework advanced centers on what librarian Jenn

Carson (2016), calls "kinetic literacy" or "physical literacy." Similar to traditional literacy (reading and writing), physical literacy is the ability to move competently and confidently in a wide variety of physical activities in different environments in ways that contribute to the healthy development of the whole person. Frameworks to assess the attainment of physical literacy have been promulgated by groups such as the Society of Health and Physical Educators. Metrics such as the President's Challenge for Physical Activity could also be used to assess the physiological impacts of fitness programming.

Another framework that could be used to assess this area is the idea of wellness. To reiterate, wellness is conceived as an overall framework used to understand what it means to be well. As discussed by Loriene Roy, wellness has seven elements: physical, emotional, occupational, environmental, intellectual, spiritual, and social. A wellness-based framework would seek to understand how fitness programming impacts bodies, minds, and entire communities. For instance, past scholarship shows that fitness programming in public libraries increases self-esteem and mindfulness, and reduces stress, suggesting that this programming contributes to emotional and spiritual dimensions of wellness. Environmental dimensions of wellness may also be affected, in particular in programs that encourage outdoor activities. Intellectual dimensions could be affected by programs that combine literature, reading, and physical activities. Social dimensions may be affected by programs in which participants do things together, such as Zumba classes or running groups.

Another avenue of additional work could focus on making the work that libraries already do more visible to policy makers. When Michelle Obama was developing her Let's Move! Initiative, she focused primarily on museums and gardens, and not on public libraries, despite the fact that, as was shown above, many public libraries had already developed fitness programming by 2011. The fact that the work of libraries in this area was not immediately apparent to policy makers suggests librarians need to do more to make the work they already do visible locally, regionally, and nationally. Telling the story of fitness programming in public libraries contributes to this goal. Stories of particular individuals' experiences participating in these programs could augment the numerical tracking of participation rates in order to more vividly communicate to policy makers and other stakeholders about the impacts and importance of this work.

Finally, surveys suggest that a minority of public libraries in the United States currently offer fitness programming. This finding suggests that many libraries also need assistance developing this type of programming. This study found that this programming frequently develops through collaborations with external partners, and with funding from entities interested in health and wellness. Assessing potential partners, and then reaching out to them, may be the best strategy for public librarians interested in developing fitness programming in their libraries.

Notes

- 1. For additional examples, visit http://www.letsmovelibraries.org/, the website for this project.
- 2. More information on these awardees can be located on the Urban Libraries Council's website, http://www.urbanlibraries.org/top-innovators-publications-pages-197.php.
- 3. For more information on these and other examples cited in the text, visit http://www.letsmovelibraries.org
- 4. See http://www.kellogghubbard.org/storywalk.

Notes on contributor

Noah Lenstra is an assistant professor of library and information studies at the University of North Carolina at Greensboro. He received his PhD from the University of Illinois Graduate School of Library and Information Science. His research and teaching focus on community engagement and community informatics in libraries and archives.

ORCID

Noah Lenstra http://orcid.org/0000-0001-7613-066X

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