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# Geri-Fit® at the Library

Studying Small and Rural Public Libraries as Venues for Active Living Among Older Adults

BY Noah Lenstra & Fran Fisher

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www.letsmoveinlibraries.org

#### **About Let's Move in Libraries**

Let's Move in Libraries was founded in 2016. It is directed by Dr. Noah Lenstra, MLS, Assistant Professor of Library and Information Science at the University of North Carolina at Greensboro. This international initiative to get people moving through public library programs, spaces, and collections has over 5,000 public librarians and public library supporters engaged through social media and a monthly newsletter. Research from this initiative has also been published and presented in Library Quarterly, Evidence Based Library and Information Practice, Public Library Quarterly, the Journal of Library Administration, and the Active Living Conference, among other venues.

www.letsmoveinlibraries.org

## **About Geri-Fit Company**

Geri-Fit's team of advisors - past as well as present - have developed an array of products including exercise DVDs, accredited instructor training programs, and the Geri-Fit® licensed strength training fitness program for older adults. Over the years, this evolving team has consisted of a gerokinesiologist, a geriatrician, exercise physiologists, physical therapists, nurses, and other healthcare professionals which has led Geri-Fit to participate in studies conducted by the Cleveland Clinic Foundation and MetroHealth General Hospital in Cleveland; and the University of Texas, Arlington.

Additionally, in 2013, Geri-Fit received recognition by the National Council on Aging (NCOA) and the Administration on Aging (AoA) at meeting the highest criteria and Geri-Fit became a Tier III (highest level) evidence-based health promotion program.

www.geri-fit.com

## Introduction: How and Why Geri-Fit® Came to the Library

Public libraries increasingly join <u>faith-based institutions</u> as community-based venues for active living. According to <u>public health scholars at the University of Pennsylvania</u>, 66% of Pennsylvania libraries support patrons' interest in exercise. Public libraries are among the most <u>trusted institutions in U.S. society</u> and gerontologists recognize them as ideal locations for "<u>peer-based strategies to support physical activity for older adults.</u>"

# The public library is a safe, trusted space, where people increasingly look for learning opportunities inaccessible elsewhere in the community.

Photo of Geri-Fit® at the Library participants in Dubois, Indiana, population 488. Photo courtesy Anita Murphy, Branch Manager



"Geri-Fit® at the Library"

The Geri-Fit® at the Library Study represents the first-ever nation-wide study of a physical activity intervention in public libraries. Past case studies have examined the effects of training public librarians in Southwestern Ontario to lead a Move 2 Learn program, circulating pedometers in public libraries, and including rural libraries in the development of physical activity promotion coalitions. In addition, past studies have shown that public libraries are increasingly interested in working with partners to offer exercise opportunities for older adults, and that in fact about one quarter of U.S. public libraries now offer fitness classes.

The Geri-Fit® at the Library

Study adds to this evidence base by showing that public libraries, in small and rural communities in particular, have incredible value to physical activity promotion efforts, particularly among older adults. 535 older adults took part in a 12-week Geri-Fit®, video-led group, strength training program consisting of 24 classes conducted twice a week from January-March 2019. They then filled out a survey which asked questions regarding the impacts of the program. 49 small and rural public libraries participated in this study. Approximately half of the participating libraries completed a Geri-Fit® coach training program and continue to offer the program at their libraries. Other libraries have since joined them in offering free Geri-Fit® at the library programs.

"We are still going with classes. Our numbers have grown.

I found our original members are great at helping new members.

The best advertisement is word of mouth."

- Michell Klinker-Feld, Director, Bondurant, Iowa, Community Library

## Community assessment revealed need for adult programming focused on gaming and exercise.

West Point, Iowa, Library (population 966) started Geri-Fit® at the Library program in response to community requests.

DALLY GATE CITY AREA NEWS WERNESDAY, MANUARY 16, 2019 3 doi/voote com

## Geri-Fit begins at West Point library

#### Free exercise class offered Mondays and Thursdays

ROBIN DELANEY

WEST POINT – Last summer, West Point Library Director Dara Sanders was looking to increase and enhance the library's adult programming. To that end, she put out a survey throughout town.

"It was equally divided between those wanting games and those wanting some type of exercise program,' Sanders said.

gram, Sanders Said.
Soon after, The Kensington in Fort Madison
contacted Sanders about
holding a monthly program at the West Point

library.
"That took care of the game side," she said.
Answering her prayers on the exercise

side of things was the state library association that distributed material about Geri-Fit and a study the company is conducting. Sanders signed up

to offer the exercise program at the local library, and the first class was Monday afternoon. Fourteen of the 25 people that signed up the class attended this first session despite the cold and snow-covered streets.

In return for participating in the study, the library will receive a lifetime public showing

"That means we would no longer have to pay for the videos we show," Sanders said.

Geri-Fit is an evidence-based health promotion and disease prevention program for adults 65 and older. It is designed to rebuild strength, balance and flexibility lost through the aging process.

The Geri-Fit® program requires a set of light dumbbell weights, a sturdy chair, a stretch band, and water to drink during the workout. There's no dancing, choreography or floorwork and both men and women can enroll. Participants provide their own weights, stretch band and water. The library provides the chairs and the videos that take participants through the exercises. In fact, two of the

In fact, two of the participants in the local Geri-Fit class are men.

Classes are offered free and are 2-2:45 p.m. Mondays and Thursdays for the next three months.

Didn't make it to the first class? That's okay. Handouts are available for participants can do the workouts at home to catch up or if they have to miss a class. Just call the library at 319-837-6315 to sign up for the class.

"They say you will notice a difference after the fourth class," Sanders told the class Monday. "And you're to work at



ROBIN DELANEY/MISSISSIPPI VALLEY PUBLISHING

The first Geri-Fit class for adults 65 and older was held Monday afternoon at the West Point Public Library. The free class meets 2-2:45 p.m. Mondays and Thursdays.

your own pace. Some of you may exercise more than others now. That's

okay."
The workout is considered a "progressive resistance exercise program" meaning that

once the participants have built up enough strength and endurance using a set of 2 or 3-pound dumbbells, they can graduate to using heavier dumbbells weights in order to

become even stronger.
"It definitely meets
a need in the community and that way people
don't have to drive so
much, especially in this
snowy weather," Sanders said.

Source: Daily Gate City, January 16, 2019. Courtesy Dara Sanders, Library Director. "Geri-Fit® at the Library"

## Geri-Fit® at the Library Supports Healthy Aging Across Mind and Body

Nation-wide study of small and rural communities shows older adults consistently come to free strength training classes offered in public libraries.

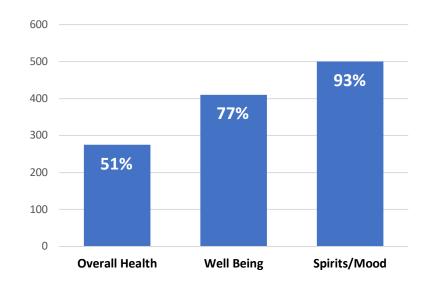
Sociologist Eric Klinenberg describes public libraries as social infrastructure, where people of all ages can come together and build community. One example he uses to illustrate this phenomenon is the Library Lanes Bowling League offered at the Brooklyn Public Library, where older adults gather together to bowl at the library using Xbox Connect. The idea of public libraries as spaces where people access each other is now an established part of the profession.

"It was a social time as well as physical exercise time. We all need each other as well as physical time for our bodies!" – Participant from Union, IA

The Geri-Fit® at the Library study also revealed that older adults gathering together at the library to exercise had health benefits that transcend

# Participant survey responses provided indicators that the Geri-Fit program improved mental and emotional health, as well as physical health.

% of survey respondents stating that their \_\_\_\_\_ improved over the course of the 12-week Geri-Fit program offered by their public library.



#### n=535 Source: Survey conducted March 2019. "Geri-Fit® at the Library"

the individual. A series of questions about participants' mood and well-being revealed:

- 93% of participants affirmed that Geri-Fit® at the Library helped lift their spirits or put them in a better mood.
- 77% of participants affirmed that their generalized well-being was better after the program.
- 51% of participants stated that since they started Geri-Fit® their overall health had gotten better.

These findings confirm that harnessing the power of public libraries for health can productively focus on group dynamics, building healthy aging across mind and body at the community level.

## 1. Overall Benefits: Strength, Well Being, More Active and Balanced

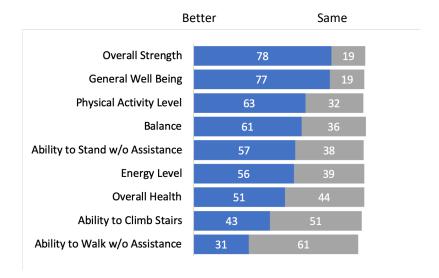
Unsurprisingly, given that the Geri-Fit® program focuses on strength training, the most frequently reported positive impact of the program was on overall strength. Fully 78% of the 535 participants reported that their "overall strength" had gotten better since they started Geri-Fit.

In addition to improved strength, participants reported many other facets of their health getting better since they started Geri-Fit® at the library:

- 77% reported their generalized wellbeing had gotten better.
- 63% reported their overall physical activity levels had gotten better.
- 61% reported their balance had gotten better.

Majority of participants indicated aspects of their health had either gotten better or stayed the same during the course of the Geri-Fit program.

% of survey respondents who said their \_\_\_\_\_ was better or the same.



n=535 Source: Survey conducted March 2019. "Geri-Fit® at the Library"

Furthermore, a majority of participants reported improvements to their ability to stand up without assistance, to their overall energy levels, and to their overall health. Less than 50% reported benefits to their ability to walk up and down stairs and to walk without assistance, but it is important to note that it is possible that many participants could already do these tasks with ease before beginning the program, and thus there may have been limited room for improvement.

"I feel better, have more energy, and stay motivated to exercise."

- Participant from Owensboro, KY

## 2. Benefits of Geri-Fit® in the Participants' Own Words

The survey ended with the question: "We'd like to know of any other positive results you have seen since taking Geri-Fit." Many (n=327) used this space to vividly convey in their own words the myriad benefits of this program.

"Geri-Fit is an excellent program for health and wellbeing. I am encouraged that I can do better and stop the downward spiral I've been in. Thanks to everyone who made this possible."

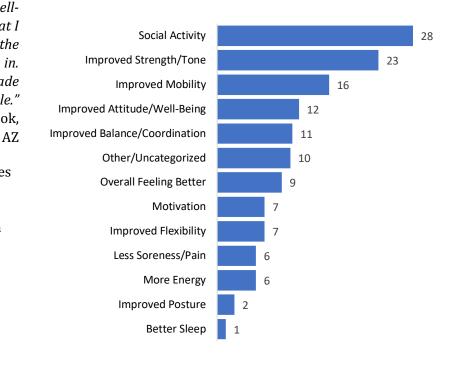
– Participant from Holbrook,

These open-ended responses were systematically coded, and confirmed and added texture to the findings from the rest of the survey. In open-ended responses:

- 28% said the social activity was a key benefit of the program.
- 23% reported improved strength.
- 16% reported improved mobility.
- 12% reported improved attitude or generalized well-being.

Participants responded to an open-ended question regarding additional benefits of the Geri-Fit program, wherein several indicated that social activity was a primary benefit of the program.

% of open-ended question respondents idicated that they considered \_\_\_\_\_\_ to be a beneficial aspect of the Geri-Fit program at their library.



n=327 Source: Survey conducted March 2019. "Geri-Fit® at the Library"

• 11% reported improved balance and coordination.

These findings confirm that the benefits of Geri-Fit® at the Library transcend the bodies of the individuals. This program benefitted minds, and contributed to a culture of healthy, active aging in the small and rural communities where the program took place.

## 3. Sustainability of Active Living Library Programming for Older Adults

A key challenge which active living interventions confront is sustainability: people may start a program but then drop out. The Geri-Fit® at the Library program proved to be very sustainable. Key factors that supported this sustainability include:

- Community building among participants.
- The public library as a safe and trusted space.
- The quality of the Geri-Fit® DVDs, which encouraged rather than discouraged participants.

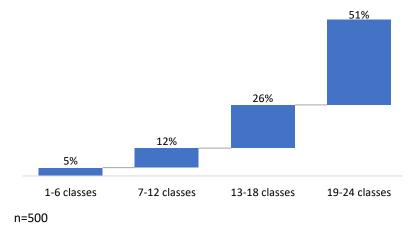
"The group is so light-hearted.
When the DVD says 'Put your
exercise band around the foot of
your choice,' One lady said to
her neighbor, 'I'll put it around
your foot.'"

Meg Polly, Director, Whiting
 Public Library

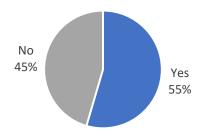
Despite some extremely bad weather – <u>January and February</u> 2019 had some of the coldest weather on record in parts of the Midwestern United States — a majority of participants attended nearly all of the classes:

# Participants demonstrated dedication and motivation for attending Geri-Fit programs.

% of participants who attended \_\_\_\_\_ of the 24 offered Geri-Fit classes at their library. **8%** of participants attended all 24 classes.



Participants were also asked if they exercised at home to make up any classes they missed at the library.



#### n=506

Source: Survey conducted March 2019.

"Geri-Fit® at the Library"

- 51% attended 19-24 classes between January-March 2019.
- 26% attended 13-18 classes.
- 12% attended 7-12 classes.
- 5% attended 1-6 classes.

In addition to strong attendance, a majority of participants also reported making up any missed classes at home, using handouts provided at the beginning of the program. 55% of those that did not attend all 24 classes reported that they did make up any classes missed, while 45% reported that they did not.

A final sign of the sustainability of the program comes from the response to the question "Would you recommend the Geri-Fit program to your family and friends?" Fully 97% of participants said that they would. Overall, a vast majority (85%) also reported planning on continuing with Geri-Fit® at the Library, if the libraries chose to continue offering the classes. Among the very few (n=37) who said they would not continue with the program, reasons offered included: too busy or a scheduling conflict (13), and seasonal (they prefer to be outside when it is warm) (12).

The results of this study demonstrate that public libraries have great potential as partners in efforts to increase healthy, active living among Americans. Additional research on active living interventions and partnerships involving public libraries is needed. America has over 16,000 public libraries, representing a vast infrastructure that needs to be better included in active living policy and practice.

#### 4. Portrait of Geri-Fit Program Survey Participants

Using U.S. Census data, the communities that participated were organized into four categories: Very Small (VS) – serves a population of less than 1,000 residents, Small (S) – serves a population between 1,000 and 5,000 residents, Medium (M) – serves a population between 5,000 and 10,000 residents, and Large (L) – serves a population of greater than 10,000 residents.

Most (64%) study participants were from communities with fewer than 5,000 residents. 127 participants were from very small communities, with less than 1,000 residents. 214 participants were from small communities, 86 participants were from medium sized communities (populations between 5,000 and 10,000), and 108 participants were from large communities.

92% of the public libraries that participated in this study serve communities with populations under 13,000.

Most participants identified as female (87%). 12% identified as male.

Most (73%) participants were between the ages of 65-80. Six individuals over the age of 90 completed the program, and all six of these individuals participated in this program at public libraries that served very small communities.

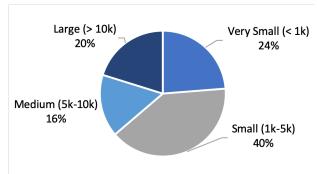
Due to a number of factors – including some very enthusiastic public librarians – the majority of the participants came from the U.S. state of Iowa. Most very small community participants came from Iowa. Nevertheless, participants represent all of the regions of the United States, with libraries participating in Wyoming, Arizona, Texas, New England, North Carolina, Kentucky, etc. Public libraries from 17 states participated in this study.

#### Participants were from small and rural communities across the United States.

49 libraries participated in the Geri-Fit study program. A breakdown of participants by the size of their city/town community showed that 40% of participants were from small communities that had between 1,000 and 5,000 residents.







#### Methodology

In Fall 2018, public librarians were invited to participate in this study through the networks of the Association for Rural & Small Libraries and Let's Move in Libraries. After completing an online training program, public librarians administered the 12-week, video-based program, either in the library's meeting room or in open space in the children's room. At the conclusion of the program, older adults filled out a three-page survey that asked about health and wellness outcomes.

#### **Timeline**

2017 – Dr. Lenstra met Fran Fischer through National Institute on Aging Go4Life network

2018 – Discussion of Geri-Fit Virtual Fitness in the Library Trial – focusing on small and rural

Summer 2018 – Public libraries invited to participate in study through Let's Move in Libraries and Association for Rural and Small Libraries Networks

Fall 2018 – Libraries go through training to offer classes

January-March 2019 – Geri-Fit in the Library Study

Summer 2019 – All paper surveys collected and sent to Dr. Noah Lenstra

Fall 2019 – Digitization of surveys and preliminary analysis

# Older adults continue to exercise at the public libraries where this study took place.

Photo of Geri-Fit® participants at the library in West Point, Iowa (top), and Dubois, Indiana (bottom). Photos courtesy Anita Murphy & Dara Sanders.



"Geri-Fit® at the Library"

## **Geri-Fit Study Participant Survey**

Geri-Fit study was conducted over a 12-week period between January and March, 2019. There were 535 participants across 49 public library sites.

Age	Participant Age	
	50 and under	1
	51-55	2
	56-60	9
	61-65	42
	66-70	142
	71-75	138
	76-80	111
	81-85	60
	86-90	21
	91 and over	6
	[n=535]	
Height	Participant Height (in inches)	
	Less than or equal to 54 inches	1
	55-60 inches	46
	61-66 inches	351
	67-72 inches	123
	73-78 inches	2
	[n=535]	
Weight	Participant Weight (in pounds)	
	100-120 lbs.	33
	121-140 lbs.	88
	141-160 lbs.	107
	161-180 lbs.	100
	181-200 lbs.	79
	201-220 lbs.	28
	221-240 lbs.	27
	241-260 lbs.	7
	261-280 lbs.	6
	281-300 lbs.	4
	[n=535]	
Gender	Participant Gender	
	Female	463
	Male	65
	N/A or No response	7
	[n=535]	
Q01	How many weeks have you taken Geri-Fit?	
	4 Weeks	17
	8 Weeks	49
	12 Weeks	431
	Other	12
	N/A *	26
	[n=535]	

Q02	Have you had hip or knee replace	cement surgery in the past 5 years?
	Yes	76
	No	458
	N/A *	1
	[n=535]	
Q03	Do you use a cane, walker, or wheelchair to get around?	
	Yes	38
	No	488
	N/A *	9
	[n=535]	
Q04	Since starting Geri-Fit my mobility	
	Improved	402
	Did not improve	108
	Stayed the same	4
	N/A *	21
	[n=535]	
Q05	Do you have heart disease?	
	Yes	87
	No	438
	N/A *	10
	[n=535]	
Q06	Do you have diabetes?	
	Yes	87
	No	441
	N/A *	7
	[n=535]	
Q07	Do you have arthritis?	
	Yes	312
	No	213
	N/A *	10
	[n=535]	
Q08		e questions above (heart disease, diabetes, arthritis), would
		have improved since starting Geri-Fit?
	Yes	286
	No	79
	N/A *	170
	[n=535]	
Q09	Did Geri-Fit help lift your spirits	
	Yes	500
	No	22
	N/A *	13
	[n=535]	
Q10	Did you lose any weight while e	l e e e e e e e e e e e e e e e e e e e
	Yes	103
	No	412
	N/A *	20
	[n=535]	
Q11	If yes, how much weight did you	ı lose?

	1 or fewer lbs.	4	
	2-6 lbs.	69	
	7-11 lbs.	23	
	12-16 lbs.	4	
	17-20 lbs.	2	
	More than 20 lbs.	1	
	[n=103]		
Q12	How many of the 24 classes did you attend at the library?		
	1-5 classes	15	
	6-9 classes	32	
	10-13 classes	42	
	14-17 classes	72	
	18-20 classes	130	
	21-24 classes	209	
	N/A *	35	
	All 24 classes	42	
	[n=535]		
Q13		the library, did you make them up by exercising	
¬	at home?		
	Yes	276	
	No	230	
	N/A *	29	
	[n=535]	25	
014			
Q14	If yes, how many classes did you make up a		
	1-4 classes	200	
	5-7 classes	37	
	8-10 classes	14	
	11-13 classes	4	
	14 or more classes	2	
	[n=276]		
Q15		andouts so that you'd remember how to do the	
	exercises and stretches?		
	Yes	277	
	No	130	
	N/A *	128	
	[n=535]		
Q16	Did you find the handouts were:		
	Useful	395	
	Not useful	14	
	N/A *	126	
	[n=535]		
Q17		petter than when you first started in the Geri-Fit	
	program?	,	
	Yes	420	
	No	100	
	N/A *	15	
	[n=535]		
Q18	Since you started Geri-Fit, how would you	rate your overall health?	
Υтο	Since you started deli-rit, now would you	rate your overall health:	

	Gotten better	275
	Stayed the same	238
	Gotten worse	1
	N/A *	21
	[n=535]	
Q19	How would you rate your overall strength?	
,	Gotten better	415
	Stayed the same	101
	Gotten worse	1
	N/A *	18
	[n=535]	
Q20	How would you rate your balance?	
	Gotten better	325
	Stayed the same	193
	Gotten worse	0
	N/A *	17
	[n=535]	
Q21	How would you rate your ability to stand up without assistance?	
,	Gotten better	306
	Stayed the same	205
	Gotten worse	0
	N/A *	24
	[n=535]	
Q22	How would you rate your ability to walk with	out assistance?
	Gotten better	167
	Stayed the same	328
	Gotten worse	1
	N/A *	39
	[n=535]	
Q23	How would you rate your ability to walk up a	nd down stairs?
Q23	Gotten better	230
	Stayed the same	275
	Gotten worse	4
	N/A *	26
	[n=535]	
Q24	In terms of generalized well being, how do yo	ou feel?
	Gotten better	410
	Stayed the same	103
	Gotten worse	0
	N/A *	22
	[n=535]	
Q25	How would you rate your energy level?	
	Gotten better	302
	Stayed the same	211
	Gotten worse	1
	N/A *	21
	[n=535]	
Q26	Would you say your physical activity level has	<u> </u>
حد	T VVO and you say your priysical activity icver has	

	Gotten better	337	
	Stayed the same	173	
	Gotten worse	1	
	N/A *	24	
	[n=535]		
Q27	Besides doing the exercises in this study, did	you do any other forms of evercise? If yes	
Q27	•	you do any other forms of exercise: if yes,	
	please explain what you did/do:		
	Yes	339	
	No	169	
	N/A *	27	
	[n=535]		
	a. If yes, please explain what you did/do:		
	Answers to this open-ended question were cated		
	fewer than four times fell into the "other" category.		
	Bike	22	
	Classes/Gym	15	
	Dancing	6	
	Exercise Video	11	
	Physical Therapy	21	
	Stairs/Elliptical	20	
	Strength/Weights	19	
	Stretches	16	
	Swimming	6	
	Tai Chi	5	
	Walk	214	
	Yard Work/Gardening	32	
	Yoga/Chair Yoga	41	
	Other	38	
	[n=339]		
Q28	Since you've started Geri-Fit, would you say	your fear of falling down has:	
	Lessened	227	
	Increased	4	
	Stayed the same	279	
	N/A *	25	
	[n=535]		
Q29	If offered, do you plan on continuing the Ger	i-Fit DVD fitness?	
	Yes	455	
	No	34	
	N/A *	46	
	[n=535]		
Q30	If no, why:		
QJU	Answers to this open-ended question were category	prized Responses that did not fit into one of the	
	categories were labeled as "other."	orized. Responses that did not fit into one of the	
	Busy/Schedule conflict	13	
	Did not enjoy or feel was helpful	7	
	Medical reasons	7	
	Not going to be offered	1	
	Pursuing different exercise program(s)	8	
	Seasonal (prefer to be outside when warm)	12	

	Uncertain	3
	Other	5
	[n=34]	
Q31	Would you recommend the Geri-Fit program to your friends and family members?	
	Yes	518
	No	2
	N/A *	15
	[n=535]	
Q32	We'd like to know of any other positive	results you have seen since taking Geri-Fit:
	Answers to this open-ended question were categorized. Similar responses that were repeated fewer	
	than four times fell into the "other" category.	
	Better sleep	4
	Improved attitude/well being	38
	Improved balance/coordination	35
	Improved flexibility	22
	Improved posture	8
	Improved strength/muscle tone	75
	Increased mobility	52
	Less soreness/pain	18
	More energy	18
	Motivation	22
	Overall feeling better	30
	Social activity/socialization	91
	Other	34
	[n=327]	