



Rec-Connect™: A Physical Activity Demonstration Playbook

Evaluation Report for Fiscal Years 2021 – 2024

Initiative Goals

SNAP-Ed addresses physical activity promotion to support SNAP-eligible participants with increasing physical activity levels, decreasing sedentary behaviors. Rec-Connect™: A Physical Activity Demonstration Playbook (Rec-Connect™) is a community-based direct education intervention designed to support SNAP-Ed eligible participants' access to and participation in physical activity, as well as their abilities to identify local physical activity-related places and resources to engage in physical activity behaviors more readily.

With its Community Connection Plan (CCP) process, Rec-Connect™ also prompts organizations delivering SNAP-Ed locally to assess community assets and gaps in physical activity opportunities. Based on CCP findings, organizations collaboratively develop a physical activity demonstration series consisting of physical activity sessions and customized local community resources to help participants continue physical activity at home and in their community. As part of completing the CCP and offering demonstrations, Rec-Connect™ implementors (i.e., local SNAP-Ed organizations) are prompted to engage community physical activity leaders and resources to identify gaps and opportunities for safe, enjoyable, and sustainable physical activity.

Evaluation Design

Rec-Connect™ evaluation includes:

- Monitoring of the overall extent of implementation of the intervention.
- Assessing participant intentions for and changes with physical activity and sedentary behaviors.
- Determining the extent to which the intervention is supporting organizations in developing community-based partnerships for Rec-Connect™ programming, as well as fostering the partnership groundwork needed to advance physical activity-related policy, systems, and environmental change (PSE) initiatives.

This evaluation report highlights the scope of FY 2021 – FY 2024 evaluation efforts. Specifically, this report reviews the results and findings of the Rec-Connect™ pilot year (Phase 1), key informant interviews and Partnership Survey (Phase 2), longitudinal youth (Phase 3a) and adult (Phase 3b) physical activity outcomes, and adults' perceived impact of Rec-Connect™ participation (Phase 4).



Phase 1 – FY 2021 Pilot Year

Abstract

Peer Review Status: Submitted to American Journal of Health Promotion on March 28, 2025. Awaiting reviewer assignment.

Purpose: To measure outcomes of a pilot physical activity (PA) intervention.

Design: Mixed-methods

Settings: Under-resourced community-based settings in Michigan.

Sample: Youth [aged 8 to 17 (n=147, pre; n=130, post; n=44, matched)]; adults [(n=20, pre; n=25, post)]; PA educators (n=15).

Intervention: *Rec-Connect™: A Physical Activity Demonstration Playbook*

Measures: PA knowledge and behavior change (youth pre-post); resource awareness (adult post); process indicators (e.g., subject experiences, modifications, implementation fidelity).

Analysis: Descriptives and non-parametric tests of survey data, paired with qualitative thematic content analysis, which assessed processes and outcomes.

Results: No statistically significant ($p < 0.05$) behavior changes occurred; however, some mean and median values showed potential for change. Youth mean changes (pre;post) including number of days PA for ≥ 60 minutes (4.02;4.02), hours spent watching TV (2.86;3.10), and hours using the computer (3.12;2.81) on average weekdays were mixed. For adults, median weekly time (minutes) was mixed spent in vigorous (105;135) or moderate (240;195) PA, walking (240;390), or sitting (240;120). Adults learned new PAs (78%) and PA sites (83%). Primary themes were: 1) Educators influenced participants' PA rates and intentions, 2) Positive feedback loops changed PA mindsets, and 3) Community partners increased effectiveness. Educators met fidelity on 5 of 7 implementation components.

Conclusions: Educators and community partners are key to PA participation and maintaining behaviors, particularly PA days and decreased youth sedentary behaviors.

Introduction

The Rec-Connect™ pilot program was developed in Michigan through a collaboration between SNAP-Ed and WIC to promote physical activity (PA) among eligible participants, recognizing the shared goal of supporting healthy lifestyles. While WIC traditionally focused on nutrition education (NE), SNAP-Ed expanded its efforts to include PA education. Rec-Connect™ was initially delivered in WIC clinic waiting rooms and later adapted for broader SNAP-Ed settings where WIC participants were present. The program has since evolved through input from educators, experts, and participants to better address local needs. This evaluation examines the program's impact on PA knowledge, behaviors, and resource awareness, with particular attention to the role of interpersonal support in fostering PA engagement.

Data Collection

A non-experimental pre/post design was used to evaluate the first-year pilot of the Rec-Connect™ intervention (Feb–Sept 2021), conducted during the COVID-19 pandemic. Physical Activity (PA) educators collected process and outcome data using facilitator logs (completed after each session) and participant surveys (administered before the first and after the final session).



Six Michigan-based organizations (urban and rural) implemented the program, including community recreation groups, nonprofits, a school district, and a university health center. Recruitment strategies varied.

- **Youth:** Ages 8–17; n=147 (pre), n=130 (post), with 44 matched pairs
- **Adults:** Ages 18+; n=14 (pre), n=18 (post), with 2 matched
- **Educators:** n=15 submitted online implementation logs

Surveys were completed on paper or online, depending on context. Youth surveys included pre/post self-reports on: 1) Days active ≥ 60 minutes (past week); 2) Weekday hours of TV watching; 3) Non-school computer/video game use. Post-only youth items assessed PA intentions, program engagement, and knowledge gains. Adult surveys included pre/post self-reported weekly minutes of vigorous/moderate PA, walking, and sitting. Post-only items addressed new PA knowledge, community resource awareness, and PA intentions.

The following data cleaning rules for the IPAQ short form were used to address outliers:

1. Total PA > 960 min/week were excluded (n=13)
2. Activities < 10 minutes were excluded (n=0)
3. Daily activity > 180 minutes was capped at 180 (n=7)

Implementation logs tracked session fidelity, modifications, and educator reflections on delivery.

Analysis

Descriptive statistics summarized survey and log data. Thematic content analysis identified qualitative themes from logs. Fidelity was met when $\geq 80\%$ of items were marked “yes” on checklists.

Due to non-normal distributions:

- **Youth:** Paired Wilcoxon signed-rank tests assessed pre/post differences
- **Adults:** Mann-Whitney U tests were used due to limited matched pairs
- Bonferroni corrections were applied to control for Type I error

Results

Youth Outcomes

Wilcoxon Signed-Rank Tests revealed **no significant differences** between pre- and post-program results (Table 1). This indicates that after completing Rec-Connect™, youth participants showed **no meaningful change** in:

- The number of days per week they were active for at least 60 minutes ($V = 212, p = 1$)
- Time spent watching TV ($V = 81, p = 1$)
- Weekday computer use ($V = 101, p = 0.708$)

Following the Rec-Connect™ activities, when asked about their physical activity intentions:

- **37%** reported planning to increase their activity levels (n=47)
- **83%** said they would participate in some or most of the activities again (n=104)
- **92%** shared that they had learned new information during the program (n=117)

Table 1. Average Physical Activity in Children (hours/weekday)

	n	Pre	Post
Days physically active for at least 60 minutes	42	4.02	4.02
Hours spent watching TV on an average weekday	36	2.86	3.10
Hours spent using a computer on an average weekday	34	3.12	2.81

Adult Outcomes

Mann-Whitney U Tests also found **no statistically significant changes** from pre- to post-program (see Supplemental Table 2). This suggests that adult participants showed **no notable differences** in:

- Time spent doing vigorous physical activity per week (U = 137, p = 1)
- Time spent doing moderate physical activity (U = 133, p = 1)
- Minutes spent walking (U = 164, p = 0.609)
- Amount of time spent sitting (U = 87, p = 0.609)

After engaging in Rec-Connect™:

- **88%** indicated an intention to become more active (n=15)
- **100%** planned to do some or most of the activities again (n=17)
- **100%** learned new methods for being active (n=17)
- **82%** discovered new places in their community for physical activity (n=14)

Table 2. Median Physical Activity in Adults (min/week)

	Pre (n = 14)	Post (n = 18)
Doing vigorous physical activities	105	135
Doing moderate physical activities	240	195
Walking	240	390
Sitting	240	120

Educator Logs

Following each activity demonstration, educators completed implementation logs documenting their experience and observations.

Fidelity Assessment

Fidelity was achieved on **5 out of 7 criteria** listed in the implementation checklist. The two areas that did **not meet fidelity standards** were:

- Providing participants with handouts that included local physical activity resources (completed 67% of the time)
- Engaging participants in goal-setting discussions (completed 70% of the time)



Content Analysis

Educator logs also captured adaptations or enhancements made to the activity delivery. A qualitative review of the logs revealed **three key themes**:

1. Educators played a role in shaping participants' physical activity levels and intentions
2. Positive feedback cycles helped shift participants' perspectives on physical activity
3. Collaboration with community organizations improved overall program success

Conclusions

This work offers several meaningful contributions to the existing literature. It showcases the effectiveness of a community-based physical activity (PA) program that aligns with multiple levels of the socio-ecological model. PA engagement is shaped not only by personal motivation and beliefs but also by the influence of educators and social support systems. These elements fostered positive feedback loops that encouraged continued participation in the program. Moreover, integrating local resources helped increase participants' awareness of accessible opportunities for physical activity, such as parks and recreation spaces.

Phase 2 – FY 2021 and FY 2023 Key Informant Interviews and Partnership Survey

Abstract

Peer Review Status: Submitted to American Journal of Health Promotion on April 3, 2025. Awaiting reviewer assignment.

Purpose: Assess how modifications from community partners changed usability and feasibility (U/F) of a pilot physical activity (PA) intervention.

Design: Mixed-Methods

Setting: Michigan communities that are under-resourced

Subjects: Partners from 13 community-based organizations (n = 8 key informant interviews (KII); n = 12 survey respondents)

Intervention: *Rec-Connect™: A Physical Activity Demonstration Playbook*, a community-based PA intervention.

Measures: KIIs (2021) and surveys (2023) assessed what ways and/or to what extent modifications to the PA pilot (e.g., guidance, materials, curriculum, partnerships, PA-based policy, systems, and environmental changes (PSE)) improved implementation.

Analysis: Content analysis was applied to KII; descriptive statistics were generated from surveys.

Results: Three primary themes were derived from KIIs which explained how modifications improved U/F: 1) effective communication across and within socio-ecologic spheres transformed U/F and illuminated best practices, 2) explicit community engagement guidance made implementation more responsive to PA needs, and 3) stronger and increased collaborations reduced deterrents to PA. Survey results supported themes and explicated modification benefits, which increased communications with entities (44%), identification of community champions (35%), new partnerships (43%), and new PSE changes to address (43%).



Conclusion: Incorporating partner modifications improved intervention U/F, enhanced facilitation, and engagement practices, and strengthened implementation with organizations and champions. Including partner input resulted in a more transformative PA intervention exemplified by increased partnerships and collaborations to address PSE changes.

Introduction

During Fiscal Year 2023, the strategies for evaluating and gathering data tied to SMART Objectives focused mainly on numerical analysis, expanding upon the integrated approaches used in earlier years. Data gathering in FY 2023 involved a questionnaire that featured both closed- and open-ended items, aimed at obtaining insights into how each organization engaged with community collaborators in relation to Rec-Connect™ activities. The survey content was informed by key informant discussions and conclusions drawn from FY 2021. Information was collected retrospectively, capturing a snapshot in time.

Outcome and Impact Measures

This report reviews results for the following SMART Objective and evaluation questions outlined in Table 1 below.

Table 1. FY 2023 Rec-Connect™ SMART Objective and Evaluation Questions

SMART Objective C	Evaluation Questions
<p>By September 30, 2023: <i>At least 70 percent of organizations/groups implementing Rec-Connect™ will report at least 1 new partnership established in their local community. (ST5, ST7, ST8, MT6)</i></p>	<p>A. To what extent are organizations working with new community partners to implement Rec-Connect™? How many organizations implementing the intervention have established at least one new community partnership?</p>
	<p>B. To what extent have organizations implemented the Rec-Connect™ Community Connections Plan process and elements advancing partnership development for physical activity-related policy, systems, and environmental change efforts?</p>
	<p>C. To what extent are organizations using the Rec-Connect™ intervention to cultivate community partnerships and the partnership groundwork to advance physical activity-related policy, systems, and environments efforts?</p>
	<p>D. What barriers or challenges, if any, have organizations and/or community partners experienced when developing community partnerships with Rec-Connect™?</p>

Data Collection

Back in 2021, the MFF evaluation team talked one-on-one with staff from local SNAP-Ed programs to get their thoughts on an updated version of the Rec-Connect™ program. They also asked about any new or stronger partnerships that had formed while using Rec-Connect™. Building on what was learned from those conversations, a similar method was used in 2023 through a new survey. This time, the goal was to better understand how working with Rec-Connect™ materials and activities helped local staff build or improve partnerships that promote physical activity in their communities.



In this project, “partners” meant anyone outside the core Rec-Connect™ team—like people from other groups or organizations—who worked together with SNAP-Ed staff to move the program forward. These working relationships could be official or casual, as long as they were helping support the program and encourage physical activity.

Thirteen local SNAP-Ed programs that had been using Rec-Connect™ for at least a year between 2021 and 2023 were asked to take the survey. Staff were asked to give information about each partner they worked with. They could report up to three new partners and one ongoing partner, to keep things simple. If they had more than that, they could say so without giving details for each one. The answers were collected in an online system, cleaned up, and analyzed using a software tool called R.

This study was reviewed and approved by the Institutional Review Board at Western Michigan University, making sure it followed ethical research guidelines.

Results

Sample Characteristics

Local Rec-Connect™ programming teams, consisting of SNAP-Ed program and PSE leads, Rec-Connect™ facilitators, and other Rec-Connect™ team members, completed the survey on behalf of their organization upon completion of the FY 2023 programming year. 92% of the 13 invited organizations implementing the intervention responded. One organization’s response was partially complete and thus only reflected when appropriate.

Survey results are organized by evaluation question below.

A. To what extent are organizations working with new community partners to implement Rec-Connect™? How many organizations implementing the Rec-Connect™ intervention have established at least one new community partnership?

75% of the responding organizations (9 of 12) indicated working with at least one new partner for Rec-Connect™ programming. Of the organizations reporting new partnerships, 55% (5 of 9) worked with more than three new partners and 44% (4 of 9) worked with one to three partners. The remaining 25% of organizations that did not work with any new partners (3 of 12) all indicated working with existing partners, with whom they had initiated work with prior to FY 2021. Eight of 9 organizations collectively reported a total of 23 new partners engaged; one organization indicated having at least one new partnership but did not report specific partners.

Table 2 outlines the number of organizations implementing Rec-Connect™ and partners initiated across the fiscal years of interest. Note the increase in new partnerships reported across the fiscal years. Of the 23 new partners reported, 96% were identified as organization-affiliated, except for one partner (4%) who was described as an individual champion or community member.



Table 2. Rec-Connect™ Implementation and Partnerships Across Fiscal Years¹

SNAP-Ed Fiscal Year	Organizations Implementing Rec-Connect™	New Partnerships Initiated	Percentage of New Partnerships
Before FY 2021 (October 2020)	Not Applicable ²	Not Applicable ²	0%
FY 2021 (October 2020-September 2021)	6	2	9%
FY 2022 (October 2021-September 2022)	11	7	30%
FY 2023 (October 2022-September 2023)	12	14	61%
Total (Unduplicated)	13	23	100%

¹This table reflects an underestimate of the total number partnerships SNAP-Ed organizations engaged in as the partnership survey asked organizations to report up to three new partnerships.

²Another iteration of the Rec-Connect™ intervention was used prior to FY 2021.

Table 3 below also reviews the number of years that organizations implemented Rec-Connect™ from FY 2021 to FY 2023 and the number of partnerships reported. Of the two organizations implementing one year of Rec-Connect™ programming, there were no new partnerships reported. Of the four organizations implementing two years of Rec-Connect™, they reported 9 new partnerships collectively. Of the six organizations implementing all three fiscal years, there were 14 new partnerships reported.

Table 3. Number of Years Organizations Implemented Rec-Connect (between FY 2021 – 2023) and Partnerships Reported

Years of Rec-Connect™ Implementation	Total SNAP-Ed Organizations	Collective Number of New Partnerships Reported
One Year	2	0
Two Years	4	9
Three Years	6	14

Eight organizations provided examples of new partners. New partners included organization-affiliated entities such as schools, summer camps and programs, social service and community-based organizations (serving populations with physical disabilities and/or mental health conditions, etc.), senior and community/recreation centers, public libraries, and housing sites.

57% of the new partnerships were reported as active, with local SNAP-Ed organizations and partners pursuing ongoing Rec-Connect™ work; 9% were focusing solely on other physical activity-related community change efforts; and 22% focused on both areas. 13% of partnerships were active in previous fiscal years but no longer ongoing in FY 2023.



Of the organizations citing no new Rec-Connect™ partnerships, existing partners they engaged included a zoo, local Boys and Girls Club affiliate, and farmers market.

B. To what extent have organizations implemented the Rec-Connect™ Community Connections Plan process and elements advancing physical activity-related policy, systems, and environmental change efforts?

Collectively, organizations indicated they had started to address, or completed, the following Rec-Connect™ and physical activity-related elements outlined in Table 4 below. Table 4 reflects a spectrum of elements including Rec-Connect™ implementation and the community partnership groundwork needed to advance PSE work. Elements A through C (CCP Parts A-C) are most likely to be addressed since they are the core components of Rec-Connect™ and required prior to any programming. Elements D through F represent activities or phases of partnership groundwork that support progress towards element G, adopting a physical activity-related PSE change.

As displayed in Table 4, 100% of organizations addressed two of three Community Connections Plan activities (n = 12); 83% addressed the third activity or element, developing an Action Plan. Of the three organizations reporting no new partnerships, two organizations had addressed elements A through C; the third organization completed A and B only, and was no longer implementing the intervention to address element C.

Table 4. Spectrum of Rec-Connect™, Partnership Development, and PSE Elements Addressed (n = 12 organizations)

Thinking about your organization’s internal Rec-Connect™ activities, please select all the following activities your organization has worked through since FY 21 (October 2020). These may be ongoing or completed activities.		Total Organizations	Percent
<i>Rec-Connect™ CCP Part A: Build Your Team</i>			
A	Gathered a group of individuals/a Rec-Connect™ team to discuss Rec-Connect™ plans	12	100%
<i>Rec-Connect™ CCP Part B: Assess the Community</i>			
B	Assessed community needs related to physical activity	12	100%
<i>Rec-Connect™ CCP Part C: Make an Action Plan</i>			
C	Developed a Rec-Connect™ action plan	10	83%
D	Created space for Rec-Connect™ team to identify and engage with local partners on potential community change work or projects related to physical activity	8	67%
E	Identified additional opportunities beyond Rec-Connect™ demonstrations to improve or adapt physical activity supports or policies, systems, and environments within your community	8	67%
F	Started working towards a physical activity-related PSE change	5	42%
G	Adopted a physical activity-related PSE change	4	33%



Table 5 below reviews the percentages of organizations addressing activities outlined in Table 4 based on the number of years organizations implemented Rec-Connect from FY 2021 through FY 2023. Among the four organizations implementing Rec-Connect for two years, they all addressed five or more elements. Of the 6 organizations implementing Rec-Connect during all three fiscal years of interest, there was a greater range of the number of elements addressed, with the majority addressing five (33%) or seven (33%) elements.

Table 5 reviews the total number of elements addressed by organizations based on the number of years of Rec-Connect™ implementation. Of the six organizations implementing Rec-Connect for three years, 33% addressed seven elements (all of Rec-Connect™’s CCP through adopting a physical activity-related PSE change) and 33% had addressed five elements. Among the four organizations implementing the intervention for two years, 25% had addressed all seven elements, 25% had addressed six, and 50% had addressed five.

While small sample sizes, this initial data indicates that the more years of Rec-Connect™ programming an organization implements, the more elements they can address, and thus, are better positioned within their community’s physical activity landscape to collaborate with partners and begin working towards, and adopting, physical-activity PSE changes.

Table 5. Total Elements Addressed based on Number of Implementation Years (FY 2021 – 2023)

Years of Rec-Connect™ Implementation	Number of Elements Addressed by Organizations							Total SNAP-Ed Organizations (n)
	1	2	3	4	5	6	7	
One Year	0%	50%	0%	50%	0%	0%	0%	2
Two Years	0%	0%	0%	0%	50%	25%	25%	4
Three Years	0%	17%	0%	17%	33%	0%	33%	6

Additional details and discussion on these results are included in the Conclusions Section.

C. To what extent are organizations using the Rec-Connect™ intervention to cultivate community partnerships and the partnership groundwork to advance physical activity-related policy, systems, and environments efforts?

Table 6 below outlines the breadth of activities (A through I) in which **new partners** were involved with. While activities A through G relate to Rec-Connect™ programming, activity H points towards the transition of work that organizations may take from implementing Rec-Connect™ as a direct education intervention to facilitating more partnership opportunities for broader community physical activity PSE engagement.

Only 30% of partnerships reported addressing activity H (marked in bolded blue text). Partners were mostly involved with helping to coordinate demonstrations or facilitating space for Rec-Connect™ demonstrations (91%), followed by supporting with resources (83%), as bolded below.



Table 6. Breadth of Partner Contributions towards Rec-Connect™ and Physical Activity-Related Community Change Efforts (n = 23 partnerships)

Has this partner been involved with any of the following Rec-Connect™ activities? These may be completed or ongoing activities.		Yes	No	Not Sure/NA
A	Contributed to your Rec-Connect™ team’s planning efforts.	70% (16)	22% (5)	9% (2)
B	Supported identification of community needs related to physical activity (e.g., a community needs assessment process).	57% (13)	30% (7)	13% (3)
C	Contributed to the development of a Rec-Connect™ action plan.	65% (15)	26% (6)	9% (2)
D	Supported coordination of Rec-Connect™ demonstrations (e.g., demonstration scheduling or hosting, recruiting participants, marketing and promoting demonstrations, identifying or connecting your organization with guest instructors, etc.).	91% (21)	0% (0)	9% (2)
E	Facilitated/instructed Rec-Connect™ demonstrations.	30% (7)	61% (14)	9% (2)
F	Supported Rec-Connect™ demonstrations with resources (e.g., offering space, lending equipment, etc.).	83% (19)	9% (2)	9% (2)
G	Helped facilitate access to physical activity spaces for Rec-Connect™ demonstrations.	91% (21)	4% (1)	4% (1)
H	Helped to identify additional opportunities beyond Rec-Connect™ demonstrations to improve physical activity policies, systems, and environments within your community (e.g., connecting your organization with other groups working on physical activity opportunities, identifying other avenues to connect participants with physical activity resources, etc.).	30% (7)	43% (10)	26% (6)
I	This partner contributed in another way.	13% (3)	26% (6)	61% (14)

Table 7 below summarizes the extent of **new collaboration** activities Rec-Connect™ supported. Rec-Connect™ materials supported nearly half (43%) of new partnerships (n = 23) by helping organizations *identify one or more additional organization-affiliated partners* to engage in Rec-Connect™ or other community engagement efforts. Similarly, materials helped local SNAP-Ed organizations and their partners (43% of partnerships) identify one or more physical activity-related strategy (e.g., a policy, plan, or program) to regularly convene around and collective advance. One organization described how Rec- Connect™ “opened the door to a full-time partnership,” but they had to adapt materials to offer more inclusive programming for their specific population of interest. Another also described how their Rec- Connect™ partnership efforts “paved the way for [their] StoryWalk PSE initiative.” They also reported identifying community members to integrate into community engagement efforts for both Rec- Connect™ and activities beyond Rec-Connect™ (i.e., PSE efforts; 35% respectively).

Below, percentages in bold purple reflect the extent of new ways of integrating partners within Rec-Connect™ activities; percentages in bold orange represent the extent to which organizations collaborated with partners in new ways to build physical activity-related partnerships and activities *beyond* Rec-Connect™ programming. Percentages in bold blue reflect efforts organizations took to advance collaborative PSE work.



Table 7. New Ways of Collaborating with Rec-Connect™ Partners (n = 23 partnerships)

Moving through the Rec-Connect™ process, did the Rec-Connect™ materials help you identify new ways of collaborating with this new partner?	Yes	No	Not sure/NA
Undertaking an assessment or other project to further identify community physical activity-related need(s).	22% (5)	52% (12)	26% (6)
Identifying one or more <i>community members</i> to incorporate into <i>Rec-Connect™</i> partnership/community engagement efforts.	35% (8)	43% (10)	22% (5)
Identifying one or more additional (<i>organization-affiliated</i>) partners to incorporate into <i>Rec-Connect™</i> partnership/community engagement efforts	43% (10)	35% (8)	22% (5)
Identifying one or more additional (<i>organization-affiliated</i>) partners to incorporate into physical activity partnership/community engagement efforts (<i>beyond Rec-Connect™ programming</i>).	30% (7)	48% (11)	22% (5)
Identifying one or more additional <i>community members</i> to incorporate into physical activity partnership/community engagement efforts (<i>beyond Rec Connect™ programming</i>).	35% (8)	35% (8)	30% (7)
Identifying one or more physical activity-related strategies (e.g., a policy, plan, or program) to regularly address and work towards together.	43% (10)	30% (7)	26% (6)

Seven organizations described the PSE-related activities/strategies being addressed (Table 8). The most common strategy addressed through partnerships was improving social supports that help people start, maintain, and/or increase physical activity, followed by making current places easier to access or providing new places for people to be physically active.

Organizations also described smaller steps taken (strategy K), working towards the larger strategies (strategies A-J) presented. In addition to the strategies outlined in Table 8, organizations also described working with partners (n = 12) on Rec-Connect™ implementation sustainability, facilitating intervention modifications to meet site and participant needs (such as adding mindfulness), providing behavior change support for participants, working towards intergenerational physical activity opportunities and resources, and holding discussions on ways their SNAP-Ed programming (including, but not limited to Rec-Connect™) could address partner and community needs related to physical activity and/or nutrition.



Table 8. PSE Strategies in Progress or Addressed by Rec-Connect™ Organizations and New Partners

Thinking about the additional opportunities working with this partner beyond Rec-Connect™ demonstrations to improve physical activity work and activities with policies, systems, and environments within your community, please select all the following strategies you and this new partner have engaged in, are working towards, and/or have completed.			Number of Partnerships Addressing Activity/Strategy	Percent ²
<i>PSE Activity/Strategy to Increase Access to Physical Activity¹:</i>				
A	Contributing to activity-friendly routes to everyday destinations (e.g., efforts that make routes such as sidewalks, walking and hiking trails, bicycle lanes, and public transit connect to places people travel daily such as parks, green spaces, stores, homes, schools, etc.)		1	4%
B	Promoting active travel to and from school or other everyday destinations		1	4%
C	Making current places easier to access or providing new places for people to be active		4	16%
D	Establishing shared-use agreements between two or more organizations to allow broader access to a physical activity facility		1	4%
E	Improving physical education curricula in schools that increase physical activity knowledge and skills		0	0%
F	Training teachers on how to develop and implement lesson plans that include activity		0	0%
G	Implementing strategies that increase student physical activity during recess and/or in classes		2	8%
H	Initiating or improving before- and after-school activities to include more physical activity		2	8%
I	Improving social supports that help people start, maintain, and/or increase physical activity (e.g., walking clubs, buddy systems, groups that support people with disabilities or chronic conditions, etc.)		5	20%
J	Installing prompts to encourage physical activity (e.g., posters, signs, or media to encourage people to take the stairs, StoryWalks®, wayfinding signage to make it easier to walk to destinations)		3	12%
K	Another strategy ³		5	20%
L	None of the above		1	4%

¹Centers for Disease Control (Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion; 2023, Jan 11). *State and Local Strategies*. <https://www.cdc.gov/physicalactivity/community-strategies/index.htm>

²The cumulative percentage might not total 100% as organizations could select more than one response.

³Strategy K responses from three organizations described Rec-Connect™ programming activities (60%) and activities advancing progress towards broader community change strategies (40%).

Among the partnerships that had not yet identified additional opportunities beyond Rec-Connect™ demonstrations to improve physical activity-related policies, systems, and environments (n = 16 partnerships), 88% indicated they planned to engage their partners further or more regularly to share more information or identify opportunities to advance PSE efforts (see Table 9 below).

Table 9. Intentions to Meet with New Partners to Assess, Plan, and/or Implement Physical Activity-related PSE Strategies (n = 16 partnerships)

Do you intend to meet with or more regularly engage this partner in the future to share information or further collaborate beyond Rec-Connect™ for assessing, planning, and/or implementing strategies to improve community-based physical activity policies, systems, and/or environments?	n	Percent
Yes	14	88%
No, there are no intentions to meet with or engage with this partner more to identify needs or ways to work together.	2	13%

Finally, local SNAP-Ed organizations were asked to determine whether their partnerships resulted in any of four anticipated, initial outcomes related to cultivating the partnership groundwork needed for physical activity-related community change efforts. While some partnerships may not be fully collaborating to advance PSE work, Table 10 outlines the four anticipated outcomes and the corresponding extent of experience.

Among local SNAP-Ed organizations, 50% experienced an increased level of interest in community-based physical activity and active living efforts because of their Rec-Connect™ partnership. 50% of the partners experienced increased levels of support for similar physical activity work. The greatest percentage for each group is bolded in Table 10.

Table 10. Initial Outcomes for New Partnerships (n = 23 partnerships)

In your opinion, has this Rec-Connect™ partnership with this new partner led to any of the following?	Yes, this occurred for my SNAP-Ed organization	Yes, this occurred for the Rec-Connect™ partner	This has not occurred for my organization and my partner
Increased communication around physical activity needs or active living efforts.	44% (14)	47% (15)	9% (3)
Increased the level of interest with community-based physical activity and active living efforts.	50% (17)	47% (16)	3% (1)
Increased the level of support for community-based physical activity and active living efforts.	38% (12)	50% (16)	13% (4)
Increased the level of involvement/engagement with community-based physical activity and active living efforts.	46% (13)	39% (11)	14% (4)
Something else	0% (0)	0% (0)	100% (20)



D. What barriers or challenges, if any, have organizations and/or community partners experienced when developing community partnerships with Rec-Connect™?

Local SNAP-Ed organizations also reported barriers they and their partners faced when attempting to:

- 1) initiate partnerships that did not come to fruition for Rec-Connect™ programming (n = 1 organization);
- 2) work more closely with partners and strengthen partnerships (n = 23 partnerships); and
- 3) advance physical activity-related PSE work collaboratively.

Barriers to initiate partnerships that did not come to fruition: One organization cited both its potential partner(s) and Rec-Connect™ team facing barriers when attempting to initiate new partnerships, which included few or no resources to support more partner collaboration and little or no staff capacity to support more partnership engagement related to Rec-Connect™ and community physical activity efforts. Organizations did not express the kinds of resource barriers they faced and due to limitations of the partnership survey, additional evaluation would address the kinds of resources organizations might need to further engage potential partners.

Both Table 11 and 10 summarize barriers impeding overall strengthening of partnerships and working further with partners to assess, plan for, or select PSE strategies to address. Bolded percentages indicate the most common responses.

Considering the **barriers preventing the overall strengthening of new partnerships**, Table 10 includes the breadth of barriers organizations and their new partners faced. New partners overwhelmingly faced little or no capacity to support more engagement with Rec-Connect™ and/or physical activity community change efforts (57% of partnerships), followed by few or no resources (36%). Local SNAP-Ed organizations cited few barriers overall; however, among those reported, the most common barriers included few or no resources which limited their ability to further strengthen partnerships (12%), as well as needing more technical assistance with Rec-Connect™ materials to engage partners further (9%). As previously mentioned, additional evaluation would further address the kinds of resources organizations need to further engage partners.



Table 11. Barriers to Further Strengthening Partnerships (n = 23 partnerships)

Mark which barriers, if any, prevented any further strengthening of this partnership.	This barrier applies to my SNAP-Ed program/organization	This barrier applies to the new partner	This barrier does not apply to either my organization or this partner
Little or no interest in supporting Rec-Connect™ programming.	0% (0)	0% (0)	100% (23)
Little or no interest in supporting physical activity community change efforts beyond Rec-Connect™.	0% (0)	9% (2)	91% (21)
Little or no staff capacity/bandwidth to support more partner engagement around Rec-Connect™ and/or physical activity-related community change efforts.	4% (1)	57% (13)	39% (9)
Few or no resources to support more partner collaborations.	12% (3)	36% (9)	52% (13)
Need additional technical assistance with Rec-Connect™ materials and process to engage each other further.	9% (2)	0% (0)	91% (21)
The Rec-Connect™ materials and process did not help us engage in a way that strengthened this partnership.	4% (1)	4% (1)	92% (22)
Something else	4% (1)	0% (0)	96% (22)

Finally, considering **barriers experienced when attempting PSE-related work with partners** (Table 12), local SNAP-Ed organizations primarily described their partners as facing barriers, with 61% of partners impacted by little or no staff capacity to support more community physical activity-related partner engagement. 28% of partners faced few or no resources to further support additional partner collaborations. While SNAP-Ed organizations reported fewer barriers, they faced a shortage of partner collaboration resources (12% of partnerships), as well as some indicating Rec-Connect™ did not support or facilitate opportunities to advance physical activity-related community changes (12%). In addition, 8% of partnerships indicated they would benefit from additional technical assistance to engage partners further. Percentages for the most common barriers are bolded below.



Table 12. Barriers to Further Advancing Physical Activity Community Change Efforts (n = 23 partnerships)

What barriers has your organization faced, if any, when attempting to work with this partner to assess, plan, and/or implement strategies to improve community-based physical activity policies, systems, and/or environments?	This barrier applies to my SNAP-Ed program/organization.	This barrier applies to the new partner.	This barrier does not apply to either my organization or this partner.
Little or no interest.	0% (0)	13% (3)	87% (20)
Little or no time.	0% (0)	35% (8)	65% (15)
Little or no staff capacity/bandwidth to support more partner engagement around community physical activity efforts.	0% (0)	61% (14)	39% (9)
Few or no resources to support more partner collaborations.	12% (3)	28% (7)	60% (15)
Need more technical assistance to engage each other further.	8% (2)	8% (2)	83% (20)
Rec-Connect™ did not support or facilitate opportunities to advance efforts for physical activity community changes.	12% (3)	12% (3)	77% (20)
Something else ¹	8% (2)	8% (2)	83% (20)

¹Organizations cited scheduling miscommunication, virtual implementation, and the absence of adaptive physical activity resources within Rec-Connect™ materials as other challenges.

Conclusions

The results show that Rec-Connect™ is helping local SNAP-Ed programs start and grow new partnerships focused on encouraging physical activity. Every group that took the survey said they had worked with at least one partner, and 75% had teamed up with someone new. The survey didn’t go into detail about why these new connections were made, but future evaluations could dig deeper into how partners are chosen. That could help tailor support, especially during the “Build Your Team” step of the program.

The rise in new partnerships over time also suggests that, with continued support and experience using Rec-Connect™, programs are in a better spot to work more closely with new partners. This allows them to expand their work to include broader physical activity improvements in the community.

All the programs finished the first two parts of the CCP, and 83% also completed the third part, which is the action plan. While the program encourages groups to finish this planning step before starting any activities, two programs skipped it—either because they adjusted the program or didn’t run it that year.

About two-thirds of the groups found more ways to work on physical activity improvements beyond the standard Rec-Connect™ activities. The longer a program had been using Rec-Connect™, the more likely it was to complete more of these steps.



More than a third of groups said Rec-Connect™ helped them find local community members (35%) and partner organizations (43%) to work with. It also helped 43% of groups come up with specific physical activity strategies to carry out with their partners. This shows that the CCP process can guide programs to find the right partners and take action to meet local physical activity needs beyond just teaching sessions.

Community partners took part in many Rec-Connect™ efforts. Over half helped run the program in some way. Most often, they helped secure access to places where people could be active (91%). Some (30%) also helped find new ways to support physical activity in the community beyond Rec-Connect™ events.

However, not everyone found the materials helpful in building new connections. While about a third of the groups said the resources helped them identify new partners, similar numbers said they did not. Half said the materials didn't help with doing needs assessments, though 43% said they were useful for coming up with new activity ideas to try with their partners.

These mixed results could be explored further with the local programs to better understand how the partnerships work and how the materials are being used. Over time, both evaluation and group support can track how Rec-Connect™ efforts grow, especially for programs that have been involved the longest.

Among programs doing more advanced work, two key goals stood out:

1. Helping people start or stick with being active through social support.
2. Improving access to places where people can be active or creating new ones.

Even though the type of work varied, many programs that hadn't yet moved beyond basic activities still said they planned to meet more often with partners to work on broader community changes.

Over the years, as more partnerships formed, groups said there was more communication, interest, and involvement between them and their community partners. This helped both sides stay connected and better prepared to work together on physical activity efforts. Building these relationships takes time, so it's a good sign that programs saw growth in trust and teamwork. Stronger evaluations in the future could also ask partners for their take on how well this is working.

Most SNAP-Ed programs said it was their *partners* who struggled the most—mainly because they didn't have enough staff to take part in Rec-Connect™ or help with broader community projects. These staffing gaps made it hard to grow or strengthen partnerships and slowed down collaborative planning or action.

For the SNAP-Ed programs themselves, the biggest challenges were not having enough resources to work with more partners and needing more help to manage partnerships and push PSE (policy, systems, and environmental) goals forward. Most of this feedback came from team leads, but it likely reflects what local facilitators—who do most of the partnership work—experience as well.

Looking into what kind of support and resources both the programs and their partners need could help improve teamwork and outcomes. For programs further along in their work, more research could show how Rec-Connect™ can be used more strategically to reach multiple SNAP-Ed and community



goals. It could also help figure out which kinds of partners are most helpful—and how to bring them in and keep them involved—to get the most impact from community activity efforts.

Phase 3a – FY 2022 – FY 2024 Youth Physical Activity Outcomes

Abstract

Peer Review Status: *Submitted to American Journal of Health Promotion on April 9, 2025. Awaiting reviewer assignment.*

Purpose: To assess changes in participant physical activity (PA) behavior across multiple years of implementation.

Design: Quantitative, Longitudinal Cross-Sectional

Setting: Under resourced community-based settings in Michigan.

Sample: Youth [aged 8 to 17 (n=261, matched)]

Intervention: *Rec-Connect™: A PA Demonstration Playbook*

Measures: PA knowledge and behavior change (youth pre/post); demonstration implementation; training.

Analysis: Descriptives and tests of survey data were conducted. This analysis examined the change Rec-Connect™ had on PA behaviors following the program. Paired Wilcoxon Signed-Rank Tests were conducted to assess whether there were statistically significant differences before and after participation in Rec-Connect. A Poisson regression model estimated the effect of key factors (pre-program exercise days, plans to do Rec-Connect™ activities again, enjoyment of activities, learning something new, plans to be more active, and year) on post-program exercise frequency.

Results: The analysis showed no statistically significant changes from pre to post. However, the model indicates statistical significance with post-program exercise frequency: Pre-program exercise days (IRR=1.15, $p<0.001$) and planning to do Rec-Connect™ activities again (IRR=1.50, $p<0.001$). Each additional pre-program exercise day was associated with a 15% increase in post-program exercise days while planning to repeat Rec-Connect™ activities was associated with a 50% increase. Other key factors were not significantly associated with post-program exercise frequency. Fidelity was met for 71% of sessions (n=251 sessions) and five of seven elements. Trainings reached (N=135, n=46 year 1; n=46 year 2; and n=43 year 3) participants.

Conclusion: Over four years of implementation, Rec-Connect™ engagement had a positive impact on post-program exercise frequency. Rec-Connect™ was implemented with fidelity.

Phase 3a Introduction

Physical activity (PA) is essential for healthy youth development, offering significant physical, mental, and social benefits, yet many children fail to meet daily PA recommendations due to various barriers, including limited access, social pressures, and increased sedentary behaviors. Guided by the



socioecological model (SEM), which emphasizes the importance of addressing individual, social, and environmental factors, community-based interventions have emerged as effective strategies to promote sustained PA in youth. Programs like Rec-Connect™: A Physical Activity Demonstration Playbook leverage local resources, peer support, and familiar settings to foster positive social norms and long-term engagement in PA. A critical component of such programs is implementation fidelity, as consistent delivery is essential for achieving intended outcomes. However, little is known about the long-term impact of these interventions when delivered by nutrition educators. This study aims to evaluate Rec-Connect™ by examining changes in participants' PA levels and exploring how factors such as enjoyment, goal setting, and social support contribute to sustained behavior change.

Data Collection

This study used a pre-post observational design to assess the impact of the Rec-Connect™ program on youth physical activity (PA) levels across three fiscal years (FY 2022–FY 2024). Participants completed matched pre- and post-surveys measuring days of PA per week, along with post-survey items on enjoyment, learning, intentions to stay active, and plans to continue Rec-Connect™ activities. Only matched responses ($n = 243$) were analyzed. Educators also completed implementation logs after each session to assess fidelity, with key components considered implemented if met in $\geq 80\%$ of sessions. The program was delivered by SNAP-Ed educators and community partners in diverse community settings across Michigan, including schools, parks, libraries, and housing sites. Rec-Connect™ consisted of 4–6 locally tailored PA demonstration sessions incorporating goal setting, community resource connections, and inclusive activities. Implementation fidelity data were collected and managed in Qualtrics and analyzed in R. To evaluate program effects, Paired Wilcoxon Signed-Rank Tests were conducted to assess whether there were statistically significant differences before and after participation in Rec-Connect. Poisson regression was used to model post-program PA frequency as a function of baseline activity, enjoyment, learning, intentions, and program year, with results reported as Incidence Rate Ratios (IRRs).

Results

The analysis showed no statistically significant changes from pre to post. This suggests that after participating in Rec-Connect, the number of days per week that youth participants were physically active for at least 60 minutes ($V = 6041$, $p = 1$), the number of hours that youth participants spent watching TV on an average weekday ($V = 4104.5$, $p = 1$), and the number of hours that youth participants spent using a computer on an average weekday ($V = 4249$, $p = 0.803$) remained about the same. Two factors were significantly associated with increased post-program physical activity. Participants who exercised more frequently before the program continued to be more active afterward (IRR = 1.15, $p < 0.001$), and those who planned to continue Rec-Connect™ activities reported significantly higher post-program activity levels (IRR = 1.50, $p < 0.001$). Other variables—such as enjoyment of activities, learning something new, plans to be more active, and program year—were not statistically significant predictors of post-program activity levels.

Table 1. Poisson Regression Analysis for Youth Physical Activity and Engagement Predictors

	Estimate (IRR)	95% Confidence Interval	statistic	p-value
(Intercept)	1.21	(0.87, 1.66)	1.18	0.236
Pre-program exercise days	1.15	(1.12, 1.18)	9.89	<0.001
Enjoyment of activities	1.16	(0.87, 1.57)	0.97	0.333
Learning something new	1.02	(0.86, 1.23)	0.25	0.799
Plans to be more active	1.10	(0.88, 1.39)	0.81	0.420
Plans to do R-C activities again	1.50	(1.21, 1.87)	3.61	<0.001
FY 2023	1.01	(0.87, 1.18)	0.18	0.860
FY 2024	1.10	(0.93, 1.30)	1.13	0.259

In terms of implementation fidelity, 495 PA demonstration sessions were evaluated across the three years. Five out of seven key components were consistently implemented at or above the 80% fidelity threshold. However, goal setting and distribution of handouts fell below fidelity standards, indicating areas for improvement in program delivery.

Table 2. Demonstration Session Component Implementation Fidelity by Year

Session Component	Year 1		Year 2		Year 3		All Years (Cumulative)	
	n = 118	Thresh old	n = 133	Thresh old	n = 244	Thresh old	n = 495	Thresh old
Introduction	100%	✓	99%	✓	99%	✓	99%	✓
Warm-Up	99%	✓	98%	✓	98%	✓	99%	✓
Modifications	94%	✓	94%	✓	96%	✓	95%	✓
Practice	100%	✓	100%	✓	99%	✓	99%	✓
Cool Down	97%	✓	99%	✓	89%	✓	94%	✓
Goal Setting	79%	✗	86%	✓	76%	✗	79%	✗
Distributed Handout	84%	✓	80%	✓	57%	✗	69%	✗

Key: Checkmark indicates implementation meeting or exceeding fidelity threshold; X indicates implementation falling below threshold.



Conclusions

The evaluation of Rec-Connect™ highlights the effectiveness of community-based programming in promoting sustained physical activity (PA) among youth. Key findings show that youth who were already active before the program, and those who planned to continue Rec-Connect™ activities afterward, were significantly more active post-program. This emphasizes the importance of intention and goal setting in driving lasting behavior change. Although enjoyment and learning new things were not statistically significant predictors, the broader role of community and educator support remains vital in shaping youth attitudes and promoting engagement. Consistent implementation fidelity across years—especially the delivery of five of seven core components—contributed to program success, while areas needing improvement included goal setting and handout distribution. The program's stable outcomes across fiscal years reflect strong training and implementation practices. However, limitations such as a low rate of matched pre- and post-survey data restricted deeper longitudinal analysis. Future efforts should focus on improving fidelity in all components and further exploring the role of enjoyment and learning in sustaining PA. Overall, Rec-Connect™ demonstrates that community-driven, socially supportive, and goal-oriented approaches are key to fostering long-term physical activity habits in youth.

Phase 3b – FY 2022 – FY 2024 Adult Physical Activity Outcomes

Abstract

Peer Review Status: *This abstract has not been submitted to a journal for peer-review. However, the abstract has been reviewed across multiple Michigan Fitness Foundation departments.*

Purpose: To assess changes in adult participant physical activity (PA) behavior across multiple years of implementation.

Design: Quantitative, Longitudinal Cross-Sectional

Setting: Under resourced community-based settings in Michigan.

Sample: Adults [aged 18+ (n=268, matched)]

Intervention: *Rec-Connect™: A PA Demonstration Playbook*

Measures: PA knowledge and behavior change (adult pre/post); demonstration implementation; training.

Analysis: Descriptives and tests of survey data were conducted. This analysis examined the change Rec-Connect™ had on PA behaviors following the program. Paired Wilcoxon Signed-Rank Tests were conducted to assess whether there were statistically significant differences in several variables related to time spent active and in sedentary behavior before and after participation in Rec-Connect.

Results: Participants indicated that they planned to be more active (89.4%) and engage in most or all of the Rec-Connect activities again (75.5%). Wilcoxon Signed-Rank tests indicated that after participating in Rec-Connect, the number of minutes per week that adult participants spent doing moderate physical activity was significantly higher ($V = 2075, p =$



0.046) and the number of minutes per week that adults spent sitting was significantly lower ($V = 5736$, $p = 0.047$). The number of minutes spent doing vigorous exercise ($V = 833$, $p = 0.101$) and walking ($V = 2252$, $p = 0.36$) remained about the same.

Conclusion: Over four years of implementation, Rec-Connect™ engagement had a positive impact on intention to be physical active. There was also a significant impact on moderate exercise minutes and time spent sitting.

Phase 3b Introduction

Regular physical activity is essential for maintaining and improving adult health, with strong evidence linking it to reduced risk of chronic diseases such as heart disease, diabetes, obesity, and certain cancers. National guidelines recommend that adults engage in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic physical activity per week, along with muscle-strengthening activities on two or more days. Despite these well-established benefits, many adults fall short of meeting recommended activity levels, and sedentary behavior—especially prolonged sitting—has become increasingly prevalent. Excessive sedentary time is independently associated with poor health outcomes, even among individuals who engage in regular physical activity. Addressing both low activity levels and high sedentary time is therefore critical for improving population health and reducing healthcare burdens. Programs like Rec-Connect™: A Physical Activity Demonstration Playbook utilize local resources, community support, and familiar environments to encourage positive social norms and long-term participation in physical activity. Ensuring consistent implementation, or fidelity, is essential to achieving the desired outcomes of such interventions. Despite their potential, there is limited research on the long-term effects of these programs when led by nutrition educators. This study seeks to assess the impact of Rec-Connect™ by analyzing changes in participants' physical activity levels.

Data Collection

This study used a pre-post observational design to assess the impact of the Rec-Connect™ program on adult physical activity (PA) levels across three fiscal years (FY 2022–FY 2024). Participants completed matched pre- and post-surveys measuring days of PA per week. Only matched responses ($n = 221$) were analyzed. The program was delivered by SNAP-Education educators and community partners in diverse community settings across Michigan, including schools, parks, libraries, and housing sites. Rec-Connect™ consisted of 4–6 locally tailored PA demonstration sessions incorporating goal setting, community resource connections, and inclusive activities. To evaluate program effects, Paired Wilcoxon Signed-Rank Tests were conducted to assess whether there were statistically significant differences before and after participation in Rec-Connect.

Results

Between FY 2022 and FY 2024, when asked if participants planned to be more active following Rec-Connect participation, 89.4% said “Yes”. When asked if participants planned to complete the Rec-Connect activities again, 75.5% said they planned to do “Most or all of Them”. Paired Wilcoxon Signed-Rank Tests were conducted to assess whether there were statistically significant differences before and after participation in Rec-Connect. The paired Wilcoxon Signed-Rank Test is a non-parametric test that is appropriate for skewed data and is designed to compare two dependent groups, where each participant is compared to themselves to control for individual variability. To



address the increased risk of Type I errors when conducting multiple statistical comparisons, a Bonferroni adjustment was applied to the p-values. Since multiple statistical tests were run on the same samples the Bonferroni adjustment ensures the overall probability of making a Type 1 error is minimized while ensuring findings are more robust.

Wilcoxon Signed-Rank Tests indicated that after participating in Rec-Connect, the number of minutes per week that adult participants spent doing moderate physical activity was significantly higher ($V = 2075, p = 0.046$) and the number of minutes per week that adults spent sitting was significantly lower ($V = 5736, p = 0.047$).

The number of minutes spent doing vigorous exercise ($V = 833, p = 0.101$) and walking ($V = 2252, p = 0.36$) remained about the same.

Minutes per week spent doing vigorous physical activity		
n	Pre	Post
92	176.3913	248.1522

Minutes per week spent doing moderate physical activity		
n	Pre	Post
134	385.7761	470.056

Minutes per week spent walking		
n	Pre	Post
130	400.1231	456.5892

Minutes per week spent sitting		
n	Pre	Post
174	4,929.368	4,091.621

Wilcoxon Signed-Rank Tests indicated that after participating in Rec-Connect, the number of minutes per week that adult participants spent doing moderate physical activity was significantly higher ($V = 2075, p = 0.046$) and the number of minutes per week that adults spent sitting was significantly lower ($V = 5736, p = 0.047$).

The number of minutes spent doing vigorous exercise ($V = 833, p = 0.101$) and walking ($V = 2252, p = 0.36$) remained about the same.

Conclusions

The Rec-Connect™ program was associated with a significant increase in moderate physical activity and a reduction in sedentary time among adult participants, suggesting a positive impact on overall



activity patterns. While no significant changes were observed in vigorous activity or walking, these findings highlight the program's potential to promote meaningful improvements in adult health through accessible, community-based physical activity interventions.

Phase 4 – FY 2024 Adult Qualitative Outcomes

Abstract

Peer-Review Status: *Abstract submitted to American Journal of Health Promotion on April 11, 2025. Awaiting reviewer selection.*

Purpose: Describe perceived impact of a six-week community-based physical activity (PA) intervention on adult participants' PA knowledge and behaviors.

Design: Qualitative Case Study

Setting: Under-resourced Michigan communities

Participants: Adults (n=26) aged 18-85 years represented urban (n=11), suburban (n=7), and rural (n=6) environments, and diverse identities by race (n=3 did not respond) White (46%, n=11), African American (38%, n=9), American Indian/Native American (4%, n=1) and by intellectual or developmental disability (n=7).

Intervention: *Rec-Connect™: A Physical Activity Demonstration Playbook*

Method: Semi-structured focus groups (n=3, n=26 participants). Surveys measured knowledge and behavioral outcomes.

Data Collection: Focus groups were conducted in person (n=2) or over telephone (n=1). Surveys were disseminated pre-post completion of at least six lessons of the intervention series; pre-post participant surveys were matched with focus group participants (n=12).

Analysis: Hybrid analysis was used to generate themes from transcripts. Descriptive statistics were summarized from surveys.

Results: Analysts generated three primary themes which demonstrated Rec-Connect's impact on PA behavior changes on PA behavior: 1) leveraged connections promoted PA outside of class, 2) educators are key to attitudes on PA and time spent in PA, and 3) multi-level (i.e., socio-emotional-physical) behavior change impacts were achieved.

Conclusion: This community-based PA intervention had multi-level impacts on adult participants. The socio-emotional connections made during Rec-Connect between educators and peers positively influenced time in and attitudes towards PA.

Phase 4 Introduction

Rec-Connect evaluation aims to assess participant intentions related to and changes with physical activity knowledge, engagement, and related behaviors. This evaluation report highlights the scope of core FY 2024 evaluation efforts, reviewing results and findings of Rec-Connect to understand intervention outcomes.



Needs and Outcome Measures

The following questions were asked of focus group participants which aligned with SNAP-Ed Indicators:

- To what extent has Rec-Connect™ impacted participants' knowledge of and engagement with local physical activity resources (ST5)?
- To what extent has Rec-Connect impacted participants' attitudes, beliefs, and intentions related to physical activity engagement (ST5)?
- To what extent has Rec-Connect impacted participants' physical activity-related behaviors (ST3)?

Data Collection

In the 2024 fiscal year, the main work of reviewing and gathering information for Rec-Connect used a mix of methods. For the numbers-based part, surveys were given to adults, and teachers kept records. For the more open-ended part, group discussions were held with adult participants. This summary shares what was found from the group talks.

Focus Groups

To get more detailed feedback, MFF and SNAP-Ed teams ran three focus groups with adults who took part in Rec-Connect. Discussions explored how the program influenced participants' activity levels, knowledge of local fitness resources, and plans to stay active. Groups were held both in person and virtually. Participants got a small stipend and answered open-ended questions about their experience.

Analyzing the Conversations

The focus groups were recorded, typed up, and reviewed using a mix of structured coding and open-ended analysis in Atlas.ti. MFF looked for common themes based on health behavior models and evaluation goals.

Results

Qualitative Focus Group Results and Findings

The following section summarizes results from the Rec-Connect Focus Group Participant Demographic survey and findings from the focus groups (n=3). There was a total of (n=24) participants representing the urban (n=11), suburban (n=7), and rural (n=6) environments.

Characteristics of the Sample

Local SNAP-Ed organizations delivering Rec-Connect recruited adult participants upon completion of programming. Three local SNAP-Ed organizations self-selected to participate in recruiting participants for the focus groups. They each recruited adults who participated in their Rec-Connect demonstration series from their respective rural, suburban, and urban communities. Each focus group represented varying participant demographics, including mothers of young children in a suburban area, adults diagnosed with intellectual disabilities from rural communities, and older adults in an urban setting.



Adults in the focus group sample who participated Rec-Connect demonstration series were asked to take a survey at the end of the series to self-report the number of sessions they participated in (Table 1). Tables 1-3 show overall self-reported participant demographics for all three focus groups.

The focus group respondents were mostly female and could not recall (28%) the number of sessions attended while (22%) recalled they attended six or more sessions. Most male participants attended four sessions. One individual did not want to share their gender and could not recall their attendance. Overall, most participants (25%) did not recall the total number of sessions they participated in; others reported attending four (17%) or six or more sessions (17%).

Table 1. Percentage of Focus Groups Participants by Demonstrations Attended and Gender

Gender and Sessions	1 session	2 sessions	3 sessions	4 sessions	5 sessions	6 or more sessions	I don't recall	Total
Female	17% (3)	11% (2)	6% (1)	6% (1)	11% (2)	22% (4)	28% (5)	100% (18)
Male	0% (0)	0% (0)	20% (1)	60% (3)	20% (1)	0% (0)	0% (0)	100% (5)
Prefer not to answer	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (1)	100% (1)
Total	13% (3)	8% (2)	8% (2)	17% (4)	13% (3)	17% (4)	25% (6)	100% (24)

The youngest focus group participant was **18** years of age, and the oldest participant was **85** years. Table 2 summarizes overall participant ages and gender. Over half (54%) of participants were between 50 and 69 years of age; with 25% being between 70 and 89 years of age, followed by those 18-29 years of age (13%).

Table 2. Percentage of Focus Group Participants by Age and Gender

Age and Gender	18-29 years	30-49 years	50-69 years	70-89 years	Total
Female	0% (0)	11% (2)	56% (10)	33% (6)	100% (18)
Male	40% (2)	0% (0)	60% (3)	0% (0)	100% (5)
Prefer not to answer	100% (1)	0% (0)	0% (0)	0% (0)	100% (1)
Total	13% (3)	8% (2)	54% (13)	25% (6)	100% (24)



Participants also shared race and ethnicity data, displayed in Tables 3 and 4. Most participants in the overall sample were White, followed by African American, and a smaller proportion identifying as American Indian/Native American, preferring to not respond about their race, or noting their race was not listed (one participant identifying as Arab American).

Table 3. Percentage of Focus Group Participants by Race and Gender

Participant Race and Gender	American Indian/Na-tive American or Alaska Native	Black or African American	White	Prefer not to respond	Not listed	Total
Female	0% (0)	47% (8)	41% (7)	6% (1)	6% (1)	100% (17)
Male	17% (1)	17% (1)	67% (4)	0% (0)	0% (0)	100% (6)
Prefer not to answer	0% (0)	0% (0)	0% (0)	100% (1)	0% (0)	100% (1)
Total	4% (1)	38% (9)	46% (11)	8% (2)	4% (1)	100% (24)

A minority of participants (11%) reported being Hispanic/Latino as displayed in Table 4 below, with the majority identifying as non-Hispanic/Latino (79%).

Table 4. Percentage of Focus Group Participants by Ethnicity and Gender

Participant Ethnicity and Gender	Hispanic/Latino	Non-Hispanic/Non-Latino	Prefer not to answer	Total
Female	0% (0)	92% (12)	8% (1)	100% (13)
Male	20% (1)	60% (3)	20% (1)	100% (5)
Prefer not to answer	100% (1)	0% (0)	0% (0)	100% (1)
Total	11% (2)	79% (15)	11% (2)	100% (19)

1. How did Rec-Connect™ shape participants' views, motivations, and intentions around being physically active?

Theme: Relationships Drive Personal Growth

The social connections formed during Rec-Connect positively shaped participants’ views on being active. Program facilitators played a pivotal role in building trust and boosting participants’



motivation and sense of possibility. Welcoming community hosts and engaged educators created a safe, enjoyable environment that encouraged participation and personal discovery.

Participants linked their positive experiences to several key factors: enjoyment of the sessions, bonds formed with peers and educators, and exposure to accessible fitness opportunities. Deliberate efforts to foster inclusion and support helped participants feel a sense of community, which deepened their connection to movement.

Rec-Connect's structure encouraged both internal reflection and external connection. Through engaging in activities, participants discovered new confidence and self-awareness, contributing to more favorable attitudes and stronger intentions to remain active.

Shifting Perspectives on Physical Activity

Most focus group participants described improved attitudes toward physical activity. Enthusiasm, gratitude, and commitment emerged as dominant emotional shifts. Enthusiasm was often tied to the playful, joyful atmosphere, which challenged old ideas about what "counts" as exercise. Participants shared how laughter, group support, and simplified approaches to movement helped reframe their understanding of physical activity.

Gratitude was expressed in relation to the physical and emotional benefits of movement—better joint health, energy levels, and mood. Many recognized the value of accessible, sustainable activities that fit into daily life and were reinforced by a sense of belonging and shared accountability.

A sense of commitment also developed, often extending beyond the self to include peers and family. Some participants influenced loved ones to join in activities at home or in local parks, while others faced challenges in encouraging family engagement, despite their own personal progress.

Facilitation Sparked Belief and Intention

Educators were key to cultivating positive beliefs and future intentions. Their encouragement and knowledge helped participants envision sustainable activity routines. By introducing new activities, highlighting low- or no-cost options, and demonstrating how movement can be approachable and effective, educators increased participants' confidence and readiness to continue being active. Their presence reinforced community, built trust, and supported long-term behavior change.

Navigating Challenges, Elevating Benefits

Participants acknowledged a mix of barriers and benefits tied to physical activity. Health limitations, inconsistent access to programs, and self-doubt were commonly cited obstacles. Still, many described how Rec-Connect helped them overcome these barriers through supportive environments, peer accountability, and empathetic instruction.

For many, the benefits extended beyond physical gains. They developed a clearer sense of purpose, emotional well-being, and pride. These positive shifts were supported by educator guidance and opportunities to learn new movements, ultimately helping participants better understand and embrace their own potential.



2. How did Rec-Connect™ increase participants' knowledge and use of local physical activity resources?

Theme: Educators as Connectors and Catalysts

SNAP-Ed educators were central to expanding participants' awareness of and engagement with nearby fitness resources. By teaching adaptable activities and modeling inclusive practices, they helped participants recognize the value of local options and feel more confident navigating them.

Educators built strong relationships that encouraged group learning and exploration. Participants in urban settings noted that collective sharing and educator knowledge led to group engagement in community classes and use of public spaces such as parks and community centers. In suburban areas, mothers credited the program with highlighting school-based resources that benefited the whole family. In rural areas, adults with disabilities appreciated being connected to a gym within their community center and expressed interest in encouraging peers to join.

Spreading Impact Through Trusted Relationships

Participants' growing familiarity with local physical activity spaces was driven by the relationships educators fostered. As trust grew, participants increasingly used these resources independently and with others. Some even began organizing their own informal group walks or park visits outside of the formal program structure, extending the program's reach beyond its scheduled sessions.

The impact of trusted educator-participant relationships was clear: they not only built knowledge but created lasting habits and community bonds that continued beyond Rec-Connect.

3. To what extent has Rec-Connect impacted participants' physical activity-related behaviors?

Theme: Rec-Connect's Multilayered Influence on Behavior Modification

Participation in Rec-Connect led to marked shifts in individuals' physical activity routines. These changes were fostered by social bonds, exposure to local opportunities, the adaptability of the sessions, guidance from program leaders, and a sense of self-efficacy. The program's variety and simplicity offered participants multiple practical entry points into active living, supporting both the onset and continuation of new health-oriented behaviors.

Ongoing Engagement: The Roles of Community, Accessibility, and Personal Empowerment

The program's structure encouraged lasting engagement in physical activity. Sustained involvement was closely tied to a supportive social environment and newly acquired knowledge that helped participants feel more competent and capable. By reducing barriers and emphasizing manageable, inclusive activity formats, Rec-Connect enhanced participants' willingness and ability to maintain active lifestyles beyond the program's duration.



Program Design's Role in Behavioral Outcomes

Participants frequently attributed their behavioral improvements to the comprehensive nature of the series and the high level of program satisfaction. Rec-Connect's design — emphasizing diverse and approachable physical activity options — supported continued involvement. Encouragement and behavioral modeling by instructors enhanced this effect. Personal goal setting and an increased awareness of one's own capabilities also contributed to forming and maintaining healthy activity habits. Improvements in physical and emotional wellness were often mentioned alongside behavioral gains.

Increased Activity Duration and Everyday Integration

While fewer participants specifically increased the intensity of their activities, many reported spending more time being active. This was achieved through the adoption of manageable daily routines, such as walking more often or engaging in standing tasks. These behaviors were often facilitated by the flexible, inclusive nature of Rec-Connect's programming. The influence of these changes extended into family life, with some reporting that household sedentary time decreased as a result of collective participation.

Participants were generally more inclined to modify their current routines — integrating more movement into everyday tasks — rather than take up completely new forms of exercise. The community-based structure of the program encouraged this shift, as it created continuity, motivation, and accountability. A lack of similar organized local offerings outside Rec-Connect was seen as a barrier to continued behavior change.

Facilitators of Change: Social and Environmental Resources

Physical activity behavior changes were strongly associated with interpersonal connections and awareness of nearby amenities. Most individuals maintained active habits due to the presence of peers or family support and the discovery of accessible venues. While broader structural or policy factors were not often cited, the influence of organizational support — such as health insurance programs — was noted in a few cases. Evaluators observed that when Rec-Connect was tailored to the local context, its potential to drive behavior change was enhanced.

For many, the visibility of accessible spaces and activities — especially those discovered through the program — sparked continued exploration and use. Some participants experienced significant personal achievements, such as completing physical events they had never attempted before, often alongside peers. The integration of these efforts into social routines — including walking with neighbors or encouraging family participation — further anchored these behaviors in daily life.

Program Experience and Participant Feedback

The quality of instruction and peer engagement were central to participants' positive experiences with Rec-Connect. Most valued the instructor's supportive and engaging demeanor, which fostered motivation and reduced isolation. The adaptability of exercises contributed to improvements in mental, emotional, and social well-being.



Suggestions for enhancement included expanding the program’s reach through more frequent sessions, greater geographic coverage, and the provision of childcare. These adjustments were seen as ways to make the program more accessible and effective for a broader audience.

Recruitment Insights and Outreach Recommendations

Participants were drawn to Rec-Connect through multiple outreach methods — notably, digital platforms, personal referrals, printed materials, and faith-based communications. However, they noted that successful recruitment varied based on the audience. For instance, mothers and older adults may require different strategies or timing.

Future outreach should consider language preferences and culturally resonant venues, such as community centers and places of worship. Maintaining engagement was most effective when communication was personal — peer-to-peer reminders and recognition from instructors were particularly impactful.

Conclusions

This evaluation explored the effectiveness of Rec-Connect’s direct education initiative, using participant surveys and narratives from adults across three communities to illustrate its outcomes. Rec-Connect is designed to enhance access to physical activity, boost participation rates, and foster engagement with local activity resources.

Both youth and adult participants acknowledged that Rec-Connect had a moderate to strong influence on their enjoyment of and commitment to physical activity. Adults observed that young children showed growing interest and enthusiasm for being active, often initiating conversations and actions related to movement. Most children expressed enjoyment of the activities presented, while adults overwhelmingly reported a positive experience. More than half of the youth expressed plans to increase activity levels, and the majority of adults indicated similar intentions.

Rec-Connect also facilitated learning across age groups. Youth shared they gained new knowledge, and most adults reported discovering new methods and venues for being active, reinforcing the program’s educational value.

Enjoyment, intention, and knowledge gains laid a foundation for shifts in physical activity routines. While the program had a clear influence on adult behavior, its effect on youth could be further enhanced. Among youth participants, approximately one-third reported increased physical activity days, and about a quarter reduced screen time. Adult participants showed modest gains, with nearly half reducing sedentary time, a quarter increasing walking, and others reporting slight changes in moderate and vigorous activity levels. These quantitative shifts were mirrored in narrative accounts, reinforcing the program’s reach.

Adults from rural, suburban, and urban settings described unintended benefits beyond physical health. Participation helped reduce feelings of isolation and led to the formation of meaningful social ties that supported health goals. These connections extended beyond peer-to-peer relationships to include familial bonds, self-awareness, and stronger ties to local resources.



Integrating wellness elements into Rec-Connect, such as short reflective or community-linked activities, could deepen its impact on adult health and emotional well-being.

Adults credited the program with transforming their perspectives on physical activity. These mindset changes translated into stronger behavioral intentions and actions, often inspiring others — including family and fellow participants — to stay active. Many traced their ongoing engagement back to the relationships and concepts introduced during the sessions.

Educators were instrumental in shaping the program’s success. They influenced participants’ attitudes, beliefs, and actions through their delivery style, guidance, and encouragement. For maximum impact, educators should be equipped to adapt activities, practice cultural responsiveness, and use motivational strategies that resonate with participants. Their ability to connect individuals to affordable community-based wellness resources was also seen as essential. Satisfaction with Rec-Connect was strongly linked to the presence of an engaged, relatable instructor.