Final Report to the

Office on Disability of the United States Department of Health and Human Services

and the

Division of Nutrition Research Coordination National Institute of Child and Human Development National Institutes of Health

on the Evaluation of the *I Can Do It, You Can Do It* Health Promotion Intervention

American Association on Health and Disability

Center for Development and Disability, University of New Mexico

September 26, 2007

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This project, including project design, protocols and instruments used, was reviewed by the Human Research Review Committee (HRRC) of the Health Sciences Center of the University of New Mexico. The HRRC determined that the research project provides adequate safeguards for protecting the rights and welfare of subjects involved in the study and is in compliance with HHS regulations 45 CFR 46 and FDA regulations 21 CFR 50, 56. The HRRC Approval number is 06-001. A copy of the HRRC approval letter is in Attachment A of this report.

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Funding for this study was provided by the National Institutes of Health, National Institute of Child and Human Development, Division of Nutrition Research Coordination through the United States Department of Health and Human Services Office on Disability.

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Introduction

Project Background

I Can Do it, You Can Do It is a health promotion intervention targeted at youth with a wide range of physical and cognitive disabilities. The program uses a one-on-one mentoring approach that has been well-documented in the research literature as efficacious in changing the attitudes, knowledge and health behaviors of individuals with and without disabilities.[1] The six-week program, in which participants meet with their mentors on a weekly basis, has three primary goals – to:

- Increase the awareness and knowledge among participants about the value of physical activity and good nutrition;
- Increase the knowledge of participating youth about types of physical activities available to them and how to make better nutritional choices; and
- Increase participants' physical activity and healthy eating choices.

The program was initially developed by the Office on Disability (OD) of the United States Department of Health and Disability. Under the direction of the Director, the Honorable Margaret J. Giannini, M.D., F.A.A.P., multiple committees consisting of representatives of Federal agencies, service providers and the non-profit sector were formed to assist in the development of various aspects of the new program, including content, project goals and objectives, and evaluation.

[1] N. Wilson, S. Dasho, A. C. Martin, N. Wallerstein, C. C. Wang, and M. Minkler **Engaging Young Adolescents in Social Action Through Photovoice: The Youth Empowerment Strategies (YES!) Project** The Journal of Early Adolescence, May 1, 2007; 27(2): 241 - 261; Dubois, D. and Karcher, M., editors. Handbook of Youth Mentoring. Thousand Oaks, California: Sage Publications, 2005; Catalano, r., Berglund, M., Ryan, J., Lonczak, H., and Hawkins, J. Positive Youth Development in the United States: Research Findings on Evaluations of Positive Youth Development Program. The ANNALS of the American Academy of Political and Social Science, Vol. 591, No. 1, 98-124 (2004) Beier, S. R., Rosenfeld, W. D., Spitalny, K. C., Zansky, S. M., & Bontempo, A.N. (2000). The potential role of an adult mentor in influencing high-risk behaviors in adolescents. Archive of Pediatric and Adolescent Medicine, 154, 327-331; McLearn, K. T., Colasanto, D., Schoen, C., & Shapiro, M. Y. (1999). Mentoring matters: A national survey of adults mentoring young people. In J. B. Grossman (Ed.), Contemporary issues in mentoring. Retrieved from http://www.ppv.org/ppv/publications/assets/37_publication.pdf; Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents" academic adjustment. Child Development, 71, 1662-1671; Sipe, C. L. (1999). Mentoring adolescents: What have we learned? In J. B. Grossman (Ed.), Contemporary issues in mentoring. Retrieved April 8, 2002, from http://www.ppv.org/ppv/publications/assets/37_publication.pdf

2005-2006 Pilot Study

Partners for Youth with Disabilities (PYD) in Boston conducted a needs assessment leading to the creation of the initial version of the intervention. In 2005, the Office on Disability entered into a cooperative agreement with the American Association on Health and Disability (AAHD) in Rockville, Maryland to conduct a pilot evaluation of the program. AAHD in turn developed a cooperative agreement with the Division of Disability and Health Policy at the University of New Mexico School of Medicine's Center for Development and Disability to conduct the study.

The AAHD-UNM pilot study, which occurred in late 2005 and early 2006, used program materials and evaluation instruments from the initial version of the program. The study was conducted at four research sites: the University of Wisconsin, the Lighthouse in Connecticut, PYD in Boston and AAHD in the Washington, DC, metropolitan area. Twenty nine youth with disabilities completed pre- and post-tests in this non-control group study. The pilot study revealed several significant issues, including unacceptably high non-response rates (an average of 27.7% for combined pre- and post-tests, with some sections of the instruments having non-response rates ranging from 41.9% to 65.5% for post-test nutrition items) and counter-intuitive findings.

In order to investigate these issues further, the Office on Disability asked project staff to conduct an intensive process evaluation with agency coordinators and mentors involving multiple one-on-one interviews. The evaluation revealed several reasons for the difficulties encountered in the pilot study. Together, these factors were significant threats to the internal validity of the study - factors or intervening variables other than the intervention itself that might contribute to differences in key indicators used in pre- and post-tests.[2]

An intensive process evaluation of the second pilot study revealed several factors that were significant threats to the internal validity of the study.

- **Complexity:** The instruments used in the pilot were overly complex. One example given frequently were the items on the pre- and post-tests designed to assess physical activity, which required respondents to recognize and differentiate among multiple sub-domains including level of physical activity (vigorous, moderate and mild physical activity), location of physical activity (at home or in another location); and multiple types of specific physical activities including individual and organized sports in one matrix.

- **Length:** The overall length of the pre-and post-test instruments, which exceeded 80 primary items, many containing sub-items and matrices, was a barrier to successful administration of the instruments.

- **Recall Issues:** Sections of the instruments required respondents to recall specific behaviors several weeks after the fact, including exact portion servings of numerous types of foods that they consumed.

[2] Campbell, D.T. (1969). Reforms as experiments. *American Psychologist,* **24,** 409-429; Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research.* Chicago: Rand McNally.

- **Challenges in Coordination and Technical Assistance:** agency coordinators reported that the complexity of the program, which involves coordination of multiple mentors and participants over the six week program, as well as the number and complexity of instruments used in the pilot, required more coordination and technical assistance than was available. This included program administration materials and assistance in several specific areas: guides to assist both agency coordinators and mentors in starting and implementing the program, suggestions for activities that mentors could use with participants, and the longitudinal evaluation process.

- **Variability of Administration:** Due largely to insufficient coordination and guidance, agency coordinators from research sites reported that they had made modifications to elements of the program in order to bring it to fruition at their sites. While positive from the point of view of completing the program, these modifications had the net result of introducing variation in the administration of the intervention being evaluated. Some sites reported administering a second health promotion intervention alongside the *I Can Do It* program with the same population, providing a significant threat to validity of findings based on this confounding factor.

- **Goal Selection:** the original version of the program encouraged participants to select physical activity goals that were targeted at the general population, including 30 minutes of "vigorous" physical activity six times each week. Further, suggestions for physical activities included activities that were inappropriate for numerous types of disabilities, including running, jogging, weightlifting and others.

- **Potentially Inappropriate Item Selection:** Some items used in the pilot pre- and post-tests may have been subject to misinterpretation by respondents. For example, indicators of social-emotional health taken from the Behavioral Risk Factor Surveillance System (BRFSS) (days respondents felt "active and full of energy" and "worn out and tired" in the last thirty days) were used as indicators of levels of physical activity. These may have been inappropriate indicators of this construct.

Program Redesign and Randomized Control Group Study

Based on these findings, the Office on Disability asked project staff to make revisions to both the program structure, as well as the evaluation instruments and process. They also requested that a randomized control group study be undertaken using the revised processes and materials. Revisions to the program included the following:

Based on the findings of the pilot study process evaluation, multiple revisions were made to the protocol for the randomized control group study designed to eliminate threats to the internal validity of findings.

- Program manuals for agency coordinators and mentors were designed, piloted and revised. These manuals contain guidance and instructions on every phase of the program, including recruiting participants, suggestions for activities, and guidance on conducting the evaluation.

- Recruiting materials for agencies, agency coordinators, mentors and participants were developed.

- A project web site was developed and placed on-line. The web site contained descriptive information about the program and the control group study, resources for agency coordinators and mentors, and a log-in section that gave agency coordinators, mentors and participants access to program materials as well as program registration forms and pre-and post-test surveys.

- Based on a review of normed, validated instruments targeted at the domains of interest, pre- and post-test instruments were significantly revised. Some overly complex items were removed or shortened. Items subject to misinterpretation by respondents were replaced by items from existing instruments including the BRFSS and the National Health Interview Survey.

- Suggestions for participant activities were redesigned to focus on activities appropriate for individuals with physical and cognitive disabilities.

These revisions had two purposes. In addition to eliminating potential threats to internal validity, they were designed to be the framework of a "turn-key" system for program administration for any potential future offerings. More information about these revisions can be found in the next section of this report.

Implementing the Randomized Control Group Study

Design of the Control Group Study

Based on the revisions discussed in the last section of this report, a four-phase study was implemented.

Pre-Program Tasks: These tasks included recruiting and selection of agencies; recruitment of mentors; training for both agency coordinators and mentors and recruitment of participants.

Study Implementation: Tasks included random assignment of participants to the treatment (participating in the program) or control (not participating) groups based on sociodemographic characteristics and initiation of the program for those in the treatment group.

Impact Evaluation: Key tasks included completion of the survey designed to measure the impact of the program at three points in time (before the program began, at the completion of the program and six to eight weeks after completion of the program); on-going technical assistance to agency coordinators and mentors; and on-going communication with participants and the distribution of incentives to participants at key milestones.

Process Evaluation: key tasks included interviews and focus groups with agency coordinators and mentors at all sites.

Pre-Study Tasks: Recruitment, Training and Resources

Initial Recruiting and Program Requirements

A project manager at the University of New Mexico was identified to coordinate the preparation and dissemination of recruiting, training and other resource materials. This individual was designated as the on-going contact person with agency coordinators, available to provide technical assistance and resources throughout the program.

During the recruitment process, agencies were informed of both study requirements as well as the training, technical assistance and resources that would be available to them during the course of the study.

The redesigned program and process for the control group study was designed to eliminate potential threats to internal validity. Initial steps included the preparation and dissemination of recruiting materials targeted at organizations with programs involving youth with disabilities (copies of these recruitment materials are in Attachment B). Twenty two organizations expressed initial interest. Follow-up discussions by telephone with these organizations focused on the nature of the study and what it would entail for the organization, resources available to assist them in initiating the program and the control group study, and requirements for agencies, mentors and study participants.

Figure One
Overview of the Randomized Control Group Study

Pre-Program Tasks	Study Implementation	Impact Evaluation	Process Evaluation
• Agency Recruitment and Selection	• Participant Sociodemographic Information Collected (registration form)	• Pre-test administered Before Intervention to Treatment and Control Groups	• Interviews and Focus Groups with Agency Coordinators
• Agency Coordinator Selection	• Assignment of Participants to Treatment and Control Groups	• First Post-test	• Interviews and Focus Groups with Mentors
• Mentor Recruitment and selection	• Program Initiation	• Second Post-test	
• Agency Coordinator Training	• Incentives for Participants at Key Milestones (completion of registration / sociodemographic form, completion of pre-test, first post-test and second post-test)	• Data entry, cleaning and analysis	
• Mentor Training	• Group and Individual Technical Assistance to Agency Coordinators and Mentors		
• Participant Recruitment	• Communication with Participants and Incentives at Key Milestones		

For agencies, these requirements included:

- The identification of an agency coordinator who would agree to work with project staff in recruiting mentors and participants;

- Working with project staff after participants had been randomly selected for the treatment or control groups based on responses to an initial registration form that contained demographic items (see Attachment C for a copy of the form and the following section for a description of the randomization process used to divide participants into treatment and control groups);

- Providing technical assistance to mentors throughout the program;

- Agreement to adhere to study protocols, including not making modifications to the structure of the program as presented by project staff;

- Agreement that participating youth from their agencies would not be enrolled in any other health promotion intervention during the course of the study in order to avoid this threat to validity of study results; and

- Ensuring that required forms and surveys for both mentors and participants were completed on schedule.

Agencies that agreed to participate were offered honoraria of between $500 and $1000, depending on the number of participants; customized recruiting materials for mentors and youth, extensive training and other resources and on-going technical assistance from project staff.

For mentors, these requirements included the ability to meet with a youth with a disability once each week, preferably in person but with supplemental telephone or electronic communication; agreement to adhere to study protocols; completion of a registration form, volunteer agreement, code of conduct form and a release form; and the ability to pass a criminal background check that would identify any past criminal activity involving minors (see Attachment D for copies of the initial mentor forms).

For participants, requirements included a sixth grade comprehension level (the comprehension level of the forms and instruments was at the 5.6 grade level)[3]; agreement to be a member of the control or treatment group as determined by project staff; agreement to complete required forms and instruments; and agreement to provide a release to participate from their primary care provider or other appropriate health care provider. During the course of follow-up discussions with potential research sites, sixteen of the original twenty two organizations that expressed initial interest declined to participate in the study for a variety of reasons. These included:

[3] An earlier version of the program had targeted participants six years-of-age and older. However, program materials, resources and materials as developed were not suitable for those with a comprehension level of mid-fifth grade. The Office on Disability accepted the recommendation of project staff that the target population be limited to this older cohort for the control group study, since revision of the materials for use by younger participants would require resources beyond those available for the project.

- ✓ requests for a higher honorarium than had been budgeted for each organization (in one case the request was $15,000);
- ✓ agencies that could not provide participants for the control group, requesting instead that all participants from that agency be in the treatment group;
- ✓ agencies that could not commit to the project timeline; and
- ✓ agencies that had their own health promotion interventions. Agencies in this category either requested to run their own distinct health promotion interventions under the rubric of "I Can" or wanted to run both simultaneously.

Six organizations agreed to participate in the study. Five of the six had multiple research sites, while one used only a single research site (see Table One below).

Recruiting Mentors and Study Participants

Recruiting materials for both mentors and study participants were developed, customized for each organization or site, and sent to agency coordinators for dissemination to potential mentors and participants (see Attachment E for a copy of the recruiting flyer for mentors and Attachment F for a copy of the initial recruitment flyer for study participants). Recruiting forms for participants included information on incentives that would be given to them as they completed each phase of the study. These included:

- Participant received a slim-line calculator when the registration form was completed and returned.
- Participants who completed the pre-test were sent a key chain flashlight.
- Participants who completed the first post-test were sent a 35 mm disposable camera.
- Participants who completed the second post-test were sent a Carabineer FM Radio with ear buds.
- Participants who completed all three surveys were entered into a drawing for one of three Apple I-Pod Nanos

In addition, letters were sent to all participants on a regular basis with small incentives such as customized "awareness bracelets" engraved with the name of the intervention or foot-shaped post-it pads.

Table One
Participating Organizations and Research Sites

Sponsoring Agency and Sub-Organizations If Applicable	Research Site(s)
Amputee Coalition of America	Center Point, IA
	Garland, TX
	Jacksonville, AL
	Spokane WA
	Jacksonville, FL
	Stanford, CT
	Santa Fe, NM
	Northampton, MA
	Forney Texas
Albuquerque Public Schools	Sandia High School, Albuquerque, NM Cibola High School, Albuquerque, NM Eldorado High School Albuquerque, NM LBJ Middle School Albuquerque, NM
Arc of New Mexico	Anthony, NM
	Sunland Park, NM
	Chamberino, NM
	La Mesa, NM
	Santa Teresa, NM
	Chaparral, NM
Disabled Sports USA	
Wintergreen Adaptive Ski	Cary, NC
	McLean, VA
	Short Hills, NJ
	Charlottesville, VA
	Glen Allen, NC
	Jamestown, VA
	Forest, VA
	Sweet Briar, VA
	Roseland, VA
	Afton, VA
Common Ground	North Logan, UT
	Smithfield, UT
	Richmond, UT
	Lewiston, UT
	Benson, UT
	Hyde Park, UT
	Newton, UT
Challenge New Mexico	Santa Fe, NM
	Glorieta, NM

Table One, Continued

Shake-a-Leg Miami	Southridge Senior High, Miami, FL
	Homestead High School, Miami, FL
	Tropical Middle School, Miami, FL
University of Montana	Missoula Public Schools, Missoula, MT

Agency Coordinator and Mentor Program Manuals and Training

Program manuals were developed for both agency coordinators and mentors (see Attachments G and H, respectively). These manuals, available in both electronic form on the study website as well as in hard copy, reviewed the program and expectations, contained tips for recruiting mentors and participants (agency coordinator version only), provided tips on selecting appropriate physical activities for participants in the treatment group and provided resources for information and activities that mentors could use with participants in the treatment group.

Program manuals for both agency coordinators and mentors were available on the project web site and were reviewed during multiple on-line training sessions held before participants began the study.

In addition, web-based training sessions were held with both agency coordinators (see Attachments I and J for the Power Point slides used in training sessions for agency coordinators and mentors, respectively). These training sessions have multiple purposes: they provided useful information to agency coordinators and mentors on the successful administration of the program; encouraged uniformity in the administration of the program across research sites; and provided an opportunity for both groups to share ideas and questions with others.

■ Study Implementation

Assigning Participants to Treatment and Control Groups

A total of 264 participants registered for the study. Each participant was sent a study registration form that included several types of information (see Attachment C for a copy of the registration form).

- A one-page overview of the study presented basic information on what participants would have to do.

- A one-page "Consent to Participate in Research" fulfilled requirements of informed consent for participants. A waiver of the requirement to obtain a signed consent form from each participant was granted by the Human Research Review Committee. Thus, completion and the submission of the registration form was considered to be acceptable consent.

- Basic contact information was collected from each participant, including contact information for parents or guardians.

- Sociodemographic information was collected for each participant that would be used as part of the impact analysis. This information included:

  - ✓ Gender
  - ✓ Ethnicity, using U.S. Census definitions;
  - ✓ Size and age distribution of household;
  - ✓ Primary language spoken at home;
  - ✓ Highest level of education completed by either parent;
  - ✓ Household income; and
  - ✓ Type or disability and use of assistive equipment.

After registration forms were received, the 264 participants were randomly assigned to either the treatment or control group, and agency coordinators were notified which participants at their sites were to go through the program. The selection of participants for the treatment and control groups was done using the pool of participants as a whole, not at individual sites. Thus, sites varied in the number of participants actually going through the program.

To ensure anonymity of participants, each participant was provided with a user name that was not linked to his or her real name. Agency coordinators maintained lists of individuals linked to user names, while project staff had access only to the user name.

Due to differences in scheduling requirements across the research sites, participants began the program in four "waves" (see Table Two below).

Table Two
Timeline For Implementation Waves

Wave	Pre-Test	First Post-Test	Second Post-Test
1	3/7/2007	4/13/2007	5/25/2007
2	3/19/2007	4/27/2007	6/8/2007
3	4/2/2007	5/4/2007	6/15/2007
4	4/16/2007	5/25/2007	7/16/2007

Implementing the Intervention For the Treatment Group

To encourage participants to set appropriate physical activity goals, mentors were offered the option of using a "goal setting worksheet" that participants could complete before they began the program (see Figure Two below).

Figure Two

Goal Setting Worksheet

Mentee's Name: _____ User ID:_____

Mentee's Goal: **In the next six-weeks, my main goal is to:** *(check all that apply)*

- ☐ Lose weight (# of lbs:_____)
- ☐ Exercise more often
- ☐ Make better eating choices
- ☐ Be more physically active
- ☐ Get more strength
- ☐ Get more energy
- ☐ Achieve the PALA*
- ☐ Other (describe) _____

*(PALA) requires participation in physical activity 1 hour per day, 5 days per week for 6 weeks

CHOOSING A PHYSICAL ACTIVITY GOAL

At the top of the second page of this worksheet is a box in which you'll write down your physical activity goal(s) for the next six weeks. When you choose your goals, keep these things in mind.

- You don't necessarily need to spend lots of money on exercise equipment or memberships in gyms - lots of physical activity can be done by yourself with things you already have handy.
- You can choose an organized sport (e.g., join a team), but you can also do activities associated with a sport by yourself.
- You should work with your mentor to choose the most appropriate physical activities for you.

Some examples of activities you can do either on your own or with others include:

Bicycling using either legs or an arm cycle
Chair Aerobics
Baseball or Softball
Water Exercise
Arm dancing
Walking or Jogging
Dancing
Weightlifting (weights or canned goods, bricks)
Gardening
Soccer
Golfing
Swimming
Yoga
Wheeling
Basketball
Bowling

2. In the box below, write down specific physical activity goals you would like to

achieve in the next six weeks.

3. Which days each week would I like to do my physical activity? (check days) (PALA requires 5 days per week)

- ☐ Sunday
- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday
- ☐ Saturday

4. How much time will I spend working on my goal(s) on the days I selected? (check one) (PALA requires 60 minutes per day for 5 days)

- ☐ 20 minutes
- ☐ 30 minutes
- ☐ 40 minutes
- ☐ 50 minutes
- ☐ 60 minutes
- ☐ Other: _____

Participants were encouraged to set goals that were achievable and focused on increasing physical activity.

A second optional tool for mentors was the "weekly check-in worksheet," which participants could use to help them review progress over the course of the six-week intervention (see Figure Three). Finally, each participant was required to have his/her primary health care provider complete a "consent to participate" form that gave the participant clearance to undertake the physical activities he or she had chosen (see Attachment K).

Technical Assistance to Agency Coordinators

Two types of on-going technical assistance were provided to agency coordinators by project staff via e-mail or telephone call. At periodic intervals, the project manager would conduct group technical assistance sessions on topics specified in advance, including use of the project web site; developing and maintaining lists of participants' personal information and user names; and the evaluation process. In addition, individualized technical assistance was provided to agency coordinators throughout the study period when needed. Over the course of the project, nearly 1200 individualized technical assistance encounters occurred (see Table Three).

In addition to periodic group technical assistance, individualized technical assistance was provided to participating agencies. Nearly 1200 individualized technical assistance encounters occurred over the life of the project.

Table Three
Individualized Technical Assistance Encounters

Site	Individualized Technical Assistance
Albuquerque Public Schools	321
Amputee Coalition of American	165
Arc New Mexico	156
Disabled Sports USA	217
Shake-A-Leg Miami	173
University of Montana	149
TOTAL:	**1181**

Finally, as discussed above, periodic written contact was made with participants using agency coordinators as intermediaries to preserve the anonymity of study participants. These contacts included letters from the Director of the Office on Disability, the AAHD principal investigator and the project manager (see Attachment L for sample letters). The purpose of this additional communication was to keep the interest of participants and increase response rates.

Figure Three

Weekly Check-In Worksheet

PARTICIPANT USER ID _____

DATE _____

1. Review the goal you set on the Goal Setting Worksheet - both the physical activity you wanted to do and the amount of time you wanted to do it.

2. How much progress would you say you made toward meeting your goal? ❒ A lot ❒ Some ❒ A Little ❒ None

2A. About how many minutes did you do the physical activity over the course of the week? _____

3. Did you do any other types of physical activities during the week not listed on your goal-setting worksheet? ❒ Yes ❒ No

3A. If you checked "yes" what were they?

_____

3B. For about how many minutes did you do this physical activity over the course of the week? _____

Please turn in a copy of this worksheet to your mentor.

Impact of the *I Can Do It* Program

A Profile of Respondents

A total of 167 participants completed the study registration form, pre-test and first post-test, while 112 participants completed these and the second post-test. In the group that completed only the first post-test, 80 were in the treatment group and 87 were in the control group. For the 112 who completed the second post-test as well, 56 each were in the treatment and control groups.

Random assignment produced treatment and control groups that were well-matched on key sociodemographic characteristics, substantially eliminating threats to the validity of findings based on differences in key sociodemographic characteristics. These characteristics included gender, ethnicity, parents' education and household income. For respondents who completed the pre-test and first post-test, both the control and treatment groups had roughly equivalent numbers of males and females (Table Four). Respondents reporting that they were "White/Caucasian" comprised 55.6% of the control group and 45.6% of the treatment group, while those reporting that they were "Black/African American" comprised 22.2% of the control group and 22.8% of the treatment group (Table Five). 46% of both the control and treatment groups reported that they were Hispanic or Latino (Table Six).

Random assignment produced treatment and control groups that were well-matched on key sociodemographic characteristics, substantially eliminating threats to the validity of findings based on differences in these characteristics.

The distribution for highest educational level of either parent or guardian in the household was slightly skewed, with the control group reporting somewhat higher levels of household education than the treatment group (Table Seven). The control group also reported a slightly higher level of total household income than did the treatment group (Table Eight).

For the 112 respondents who completed the pre-test and first and second post-tests, the control and treatment groups were well-matched on gender (Table Nine), race (Table Ten), and Hispanic identity (Table Eleven). The distribution for reported educational level is slightly skewed in the opposite direction for those who completed only the pre- and post-tests, with the treatment group reporting a slightly higher level of education than the control group (Table Twelve). Reported total household income was also slightly skewed, with the control group reporting slightly higher household income than did the treatment group (Table Thirteen).

Table Four
Breakdown of Study Participants by Group and Gender For Those Completing the Pre-Test and First Post-Test
(N=167)

		Gender		Total
		Male	Female	
Control Group	Frequency	42	38	80
	Percentage	52.5%	47.5%	100.0%
Treatment Group	Frequency	49	38	87
	Percentage	56.3%	43.7%	100.0%
Total	Frequency	91	76	167
	Percentage	54.5%	45.5%	100.0%

Table Five
Breakdown of Study Participants by Group and Reported Racial Status For Those Completing the Pre-Test and First Post-Test
(N=111)

		Which best describes your race?				Total
		American Indian/Alaska Native	Black/African-American	White/ Caucasian	Other:	
Control Group	Frequency	1	12	30	11	54
	Percentage	0.9%	22.2%	55.6%	20.4%	100.0%
Treatment Group	Frequency	0	13	26	18	57
	Percentage	.0%	22.8%	45.6%	31.6%	100.0%
Total	Frequency	1	25	56	29	111
	Percentage	0.9%	22.5%	50.5%	26.1%	100.0%

Table Six
Breakdown of Study Participants by Group and Hispanic Identity For Those Completing the Pre-Test and First Post-Test
(N=146)

		Are you Hispanic or Latino?		Total
		Yes	No	Yes
Control Group	Frequency	31	40	71
	Percentage	43.7%	56.3%	100.0%
Treatment Group	Frequency	38	37	75
	Percentage	50.7%	49.3%	100.0%
Total	Frequency	69	77	146
	Percentage	47.3%	52.7%	100.0%

Table Seven
Breakdown of Study Participants by Group and Parents'/Guardians' Educational Level for Those Completing the Pre-Test and First Post-Test
(N=88)

		What is the highest grade or year of school either of your parents (or guardians) completed? Please check one.					Total
		Grades 1 through 8 (Elementary)	Grades 9 through 11 (Some high school)	Grade 12 or GED (High school graduate)	College 1 year to 3 years (Some college or technical...	College 4 years or more (College graduate)	
Control Group	Frequency	3	0	13	6	23	45
	Percentage	6.7%	.0%	28.9%	13.3%	51.1%	100.0%
Treatment Group	Frequency	3	7	9	11	13	43
	Percentage	7.0%	16.3%	20.9%	25.6%	30.2%	100.0%
Total	Frequency	6	7	22	17	36	88
	Percentage	6.8%	8.0%	25.0%	19.3%	40.9%	100.0%

Table Eight
Breakdown of Study Participants by Group and Total Household Income for Those Completing the Pre-Test and First Post-Test
(N=84)

		What is the total annual income earned by everyone in your household?								Total
		Under $10,000	Between $10,000 and $14,999	Between $15,000 and $19,999	Between $20,000 and $24,999	Between $25,000 and $34,999	Between $35,000 and $49,999	Between $50,000 and $74,999	$75,000 or more	
Control Group	Frequency	5	5	2	5	1	7	8	9	42
	Percentage	11.9%	11.9%	4.8%	11.9%	2.4%	16.7%	19.0%	21.4%	100.0 %
Treatment Group	Frequency	7	5	3	7	5	5	2	8	42
	Percentage	16.7%	11.9%	7.1%	16.7%	11.9%	11.9%	4.8%	19.0%	100.0 %
Total	Frequency	12	10	5	12	6	12	10	17	84
	Percentage	14.3%	11.9%	6.0%	14.3%	7.1%	14.3%	11.9%	20.2%	100.0 %

Table Nine
Breakdown of Study Participants by Group and Gender for Those Completing the Pre-Test, First Post-Test and Second Post-Test
(N=112)

		Are you:		Total
		Male	Female	
Control Group	Frequency	31	25	56
	Percentage	55.4%	44.6%	100.0%
Treatment Group	Frequency	31	25	56
	Percentage	55.4%	44.6%	100.0%
Total	Frequency	62	50	112
	Percentage	55.4%	44.6%	100.0%

Table Ten
Breakdown of Study Participants by Group and Reported Racial Status
For Those Completing the Pre-Test, First Post-Test and Second Post-Test
(N=100)

		Which best describes your race?			Total
		American Indian/Alaska Native	Black/African-American	White/Caucasian	
Control Group	Frequency	16	8	25	49
	Percentage	32.7%	16.3%	51.0%	100.0%
Treatment Group	Frequency	21	9	21	51
	Percentage	41.2%	17.6%	41.2%	100.0%
Total	Frequency	37	17	46	100
	Percentage	37.0%	17.0%	46.0%	100.0%

Table Eleven
Breakdown of Study Participants by Group and Hispanic Identity
For Those Completing the Pre-Test, First Post-Test and Second Post-Test
(N=100)

		Are you Hispanic or Latino?		Total
		Yes	No	
Control Group	Frequency	23	27	50
	Percentage	46.0%	54.0%	100.0%
Treatment Group	Frequency	23	27	50
	Percentage	46.0%	54.0%	100.0%
Total	Frequency	46	54	100
	Percentage	46.0%	54.0%	100.0%

Table Twelve
Breakdown of Study Participants by Group and Parents/Guardians Educational Level For Those Completing the Pre-Test, First Post-Test and Second Post-Test (N=74)

		What is the highest grade or year of school either of your parents (or guardians)completed? Please check one.					Total
		Grades 1 through 8 (Elementary)	Grades 9 through 11 (Some high school)	Grade 12 or GED (High school graduate)	College 1 year to 3 years (Some college or technical...	College 4 years or more (College graduate)	
Control Group	Frequency	2	0	11	5	20	38
	Percentage	5.3%	.0%	28.9%	13.2%	52.6%	100.0%
Treatment Group	Frequency	4	4	9	9	10	36
	Percentage	11/1%	11.1%	25.0%	25.0%	27.8%	100.0%
Total	Frequency	6	4	20	14	30	74
	Percentage	8.1%	5.4%	27.0%	18.9%	40.5%	100.0%

Table Thirteen
Breakdown of Study Participants by Group and Total Household Income For Those Completing the Pre-Test, First Post-Test and Second Post-Test (N=70)

		What is the total annual income earned by everyone in your household?								Total
		Under $10,000	Between $10,000 and $14,999	Between $15,000 and $19,999	Between $20,000 and $24,999	Between $25,000 and $34,999	Between $35,000 and $49,999	Between $50,000 and $74,999	$75,000 or more	
Control Group	Frequency	3	3	2	5	1	6	8	7	35
	Percentage	8.6%	8.6%	5.7%	14.3%	2.9%	17.1%	22.9%	20.0%	100%
Treat-ment Group	Frequency	7	5	2	6	4	4	2	5	35
	Percentage	20.0%	14.3%	5.7%	17.1%	11.4%	11.4%	5.7%	14.3%	100%
Total	Frequency	10	8	4	11	5	10	10	12	70
	Percentage	14.3%	11.4%	5.7%	15.7%	7.1%	14.3%	14.3%	17.1%	100%

Impact Indicators

The pre- and post-tests contained thirty three core items divided into five categories (see Attachment M for a copy of the instrument).

- **General:** three items asked respondents why they joined the program and if they had assistance in completing the instruments.
- **Physical Activity:** eight core items asked respondents about their levels of physical activity, sedentary activities such as watching television, involvement in sports and attitudes towards physical activity.
- **Nutritional and Eating Habits:** ten core items asked respondents about their nutritional habits across multiple types of foods and their attitudes about their weight.
- **Health Care and General Physical Health, Including Independence and Secondary Conditions:** eight core items asked respondents about frequency of visits to a primary health care provider and reasons for those visits, weight and height, and attitudes about their general health status. Two core items asked respondents about their level of independence in daily functional tasks and the extent to which twelve secondary conditions were impediments to independence. Two items asked about their tobacco-smoking habits.
- **Social Health:** four core items asked respondents about their general socio-emotional health status.

Analysis and Findings

Analytic Methods

Paired-sample, one-tailed t-tests were conducted to determine whether changes in variables in the control and treatment groups were statistically significant. Statistical significance in this case means the probability of an observed difference not being due to chance - in effect, whether it is a "real" difference or not. It speaks to the level of certainty that a difference exists. A one-tailed test of significance means that the analysis assumed the hypothesis that the treatment group would demonstrate greater changes in impact variables (intended outcomes of the intervention) than would the control group, which had not gone through the program. Variables in which differences in changes between the control and treatment groups are statistically significant, then, are those in which we can be certain at a presumed level of confidence - usually 95% or 90% - that the difference is "real" and not due to chance.[4]

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[4] In the social sciences, a level of certainty of 95% (alpha level = .05) is generally considered acceptable. Although in exploratory studies a level of certainty of 90% (alpha = .10) is also used. What is considered acceptable as a level of certainty varies considerably based on the context. In some cases, such as medical research being used to support release of a new drug, a more stringent level of certainty might be used. On the other hand, as Bennet (1995) pointed out, "medical legal certainty" of a disability claim uses a less stringent definition of "reasonable probability," which is defined as

Two sets of tests were conducted - one between the pre-test and first post-test and a second between the pre-test and second post-test, which occurred six to eight weeks after the conclusion of the intervention for the treatment group. The pre-test - first-post-test analysis was conducted at both the 95% and 90% confidence intervals. These levels simply mean that we are either 95% or 90% confident that the interval contains the true difference between the two population means.

Summary of Findings

Statistically significant findings are presented in Tables Fourteen (physical activity), Fifteen (general health) and Sixteen (nutrition). In general, the program appears to have had a modest impact in two areas - general health, including secondary conditions and nutrition. The program appears to have made no difference in levels of physical activity. Both groups reported statistically significant positive changes in some physical activity items. One counter-intuitive finding was that the control group reported enjoying physical activity more at the end of the six week intervention period.

The treatment group reported more positive changes in general health than did the control group, although the number of statistically significant findings was a relatively small proportion of the total number of indicators in the pre- and post-tests. A note of caution must be introduced here, in that significant differences in three items are due not to changes in the treatment group but rather to negative changes on the part of the control group. The treatment group also reported a statistically significant change in their eating habits, reporting less consumption of *all* food groups asked about including soda, fruit, fruit juices and potatoes.

In sum, there is some evidence that the intervention has a weak to moderate positive impact on a select number of indicators within two areas of change. These findings, however, must be interpreted with some caution. The greatest number of statistically significant findings is in the 90% confidence interval. While an acceptable threshold for the purposes of this study, it does not provide definitive evidence of efficacy. A number of the items showed positive change for both the treatment and control groups. Finally, the number of statistically significant findings is a relatively small proportion of the total items tested by the survey instrument.

Physical Activity

There was no discernable difference between those who went through the program and those who did not relative to the impact of the program on physical activity. While there were statistically significant changes in a number of physical activity items, these changes occurred within both the treatment and control groups. Differences in physical activity items were more pronounced within both groups when comparing pre-tests to second post-tests. "Items" in the bullets below refer to Table Fourteen.

- Both the treatment and control groups reported a statistically significant increase in the amount of time they reported doing sedentary activities such as playing video and computer

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51% or greater certainty. Robert M. Bennet, 1995. "To the Editor," *The Journal of Rheumatology* Vol. 22, No. 2, pp. 273-274.

games from the pre-test to the first post-test. However, the opposite is true when comparing both treatment and control group pre-tests to second post-tests, where both groups reported statistically significant declines in time spent doing sedentary activities(item one).

- There was no statistically significant difference between the treatment and control groups relative to the number of days in the previous seven that they had been physically active for at least 60 minutes per day. However, both groups reported a statistically significant increase in the number of days they had been active from the pre-test to the second post-test (item 2).

- Both the treatment and control groups reported statistically significant increases in the amount of time they felt worn out and tired between the pre-test and post-tests, although the relationship was statistically stronger for the control group. However, the opposite was true when comparing pre-test to second post-tests where both groups reported decreases in the amount of time they felt worn out and tired. For the treatment group, this decrease was statistically significant (item three).

- In a counter-intuitive finding, the control group reported enjoying physical activity more at the end of the six week intervention period (item four).

- While both groups reported watching less television, the control group reported a sharper decline that was statistically significant (item five).

General Health

In general, study participants who completed the intervention reported more positive impacts on their general health than did the control group. The control group reported declines on four general health indicators, while participants who completed the intervention reported improvements on three general health indicators. "Items" in the bullets below refer to Table Fifteen.

- The control group reported feeling statistically significant less happy about their weight after the first post-test (item six).

- The treatment group reported a statistically significant decline in visits to their primary care provider between the pre-test and the first post-test (item seven).

- The control group reported a statistically significant increase in the degree of limitation on their activity and independence from two secondary conditions: injuries due to loss of sensation (item eight) and sleep problems between the pre-test and first post-test as well as between the pre-test and the second post-test (item nine) while the treatment group reported a statistically significant decline in limitation due to muscle and joint pain (item ten).

- The control group reported a statistically significant decline in their ability to take care of activities of daily living such as washing, dressing, taking medications, etc. (item eleven).

- The treatment group reported a statistically significant decrease in the number who currently smokes cigarettes between the pre-test and second post-test (item twelve).

Nutrition

Study participants who completed the intervention reported that they were eating less of *all* types of food and beverages listed in the pre- and post-tests, while the control group reported eating less of only a limited number of items listed. "Items" in the bullets below refer to Table Sixteen.

- The treatment group reported a statistically significant decrease in the amount of the following foods they consumed from the pre-test to the first post-test: fruit juices (item thirteen), fruit (item fourteen) and potatoes (item sixteen).

- The treatment group reported a statistically significant decline in the amount of soda consumed from the pre-test to the second post-test (item eighteen).

- Both the treatment and control group reported a statistically significant decline in the amount of green salad and milk they consumed from the pre-test to the first post-test (items fifteen and seventeen).

Table Fourteen
Statistically Significant Physical Activity Indicators For the *I Can Do It* Study

*Note: Statistically significant probabilities are bolded in green. Items with a single * are significant at the 95% confidence level, while those with a ** are significant at the 90% confidence level.*

Item One:

On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Nintendo, Game Boy, PlayStation, Xbox, computer games, and the Internet). Where 1= none; 2= < 0.5 hrs; 3= 1; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	81	3.27	4.06	0.79	**0.002***	55	3.31	2.96	-0.35	**.068****
Control	79	3.15	3.48	0.33	**0.075****	51	3.53	2.90	-0.63	**.010***

Item Two:

During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time). Where 1=0 days; 2=1 day; 3=2 days; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment						18	3.39	4.17	0.78	**0.063****
Control						23	2.78	3.91	1.13	**0.0025***

Item Three:

During the past 30 days, how often have you felt worn out and tired? Where 1= most of the time; 2= about half of the time; 3= some of the time; 4= a little of the time; 5= none of the time

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	80	3.20	2.95	-0.25	**0.068****	54	3.33	3.65	0.32	**0.045***
Control	75	3.39	3.13	-0.26	**0.028***	53	3.30	3.45	0.15	0.157

Table Fourteen, Continued

Item Four:

How much do you enjoy physical activity? Where 1=love it; 2=like it; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	81	2.12	2.07	-0.05	0.354					
Control	78	2.23	1.9	-0.33	**0.01***					

Item Five:

On an average school day, how many hours do you watch TV? Where 1= none; 2= < 0.5 hrs; 3= 1; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment						54	4.39	4.09	-0.3	0.114
Control						51	4.41	3.57	-0.84	**0.001***

Table Fifteen
Statistically Significant General Health Indicators For the *I Can Do It* Study

*Note: Statistically significant probabilities are bolded in green. Items with a single * are significant at the 95% confidence level, while those with a ** are significant at the 90% confidence level.*

Item Six:

Are you happy with your weight? Where 1=yes and 2=no

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	79	1.34	1.38	.04	0.296					
Control	79	1.29	1.41	.12	**0.065****					

Item Seven:

In the last thirty days, how many times did you visit a primary health care provider (e.g., your regular doctor's office or other regular health care provider)?

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	81	2.02	1.81	-0.21	**0.06****					
Control	78	1.92	1.78	-0.14	0.185					

Item Eight:

How much have injuries due to loss of sensation limited your activity and independence in the last thirty days? Where 1=rarely or never; 2=1-3 hours per week, etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	74	1.08	1.08	0.00	0.5					
Control	71	1.01	1.07	0.06	**0.052****					

Table Fifteen, Continued

Item Nine:

How much have sleep problems limited your activity and independence in the last thirty days? Where 1=rarely or never; 2=1-3 hours per week, etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	74	1.33	1.33	0.00	0.5	52	1.42	1.42	0.00	0.5
Control	74	1.26	1.44	0.18	**0.002***	50	1.28	1.38	0.10	**0.0254***

Item Ten:

How much have joint and muscle pain limited your activity and independence in the last thirty days? Where 1=rarely or never; 2=1-3 hours per week, etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	72	1.24	1.14	-0.10	**0.09****					
Control	69	1.42	1.38	-0.04	.291					

Item Eleven:

Can you take care of all your basic needs such as washing, dressing, taking care of medications and toileting? Where 1=yes; 2=no

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	79	1.30	1.27	-0.03	.235					
Control	75	1.31	1.44	0.13	**0.012***					

Table Fifteen, Continued

Item Twelve

Do you now smoke cigarettes? Where 1=yes and 2=no

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment						48	1.88	1.94	0.06	**0.042***
Control						46	1.98	2.00	0.02	0.162

Table Sixteen
Statistically Significant Nutrition Indicators For the *I Can Do It* Study

*Note: Statistically significant probabilities are bolded in green. Items with a single * are significant at the 95% confidence level, while those with a ** are significant at the 90% confidence level.*

Item Thirteen:

During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks). Where 1=none; 2=1-3 times; 3=4-6 times; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	81	3.00	2.51	-.049	**0.009***					
Control	78	2.73	2.91	0.18	0.171					

Item Fourteen:

During the past 7 days, how many times did you eat fruit? (Do not count fruit juice). Where 1=none; 2=1-3 times; 3=4-6 times; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	82	3.16	2.77	-0.39	**0.034***	18	3.39	4.17	0.78	**0.063****
Control	78	3.05	3.18	0.13	0.222	23	2.78	3.91	1.13	**0.025***

Item Fifteen:

During the past 7 days, how many times did you eat green salad? Where 1=none; 2=1-3 times; 3=4-6 times; etc.

Group	**N - Pre-1st Post**	**Pre Mean**	**1st Post Mean**	**Change Pre - Post**	**Sig (1-tailed)**	**N - Pre-2st Post**	**Pre-Mean**	**Second Post Mean**	**Change Pre - 2nd Post**	**Sig (1 tailed)**
Treatment	81	2.54	2.30	-0.24	**0.086****					
Control	78	2.35	2.32	0.38	**0.013***					

Table Sixteen, Continued

Item Sixteen:

During the past 7 days, how many times did you eat potatoes? (Do not count French Fries, fried potatoes or potato chips). Where 1=none; 2=1-3 times; 3=4-6 times; etc.

Group	N - Pre-1st Post	Pre Mean	1st Post Mean	Change Pre - Post	Sig (1-tailed)	N - Pre-2st Post	Pre-Mean	Second Post Mean	Change Pre - 2nd Post	Sig (1 tailed)
Treatment	79	2.54	2.30	-0.24	**0.062****					
Control	78	2.35	2.32	-0.03	0.431					

Item Seventeen:

During the past 7 days, how many glasses of milk did you drink? Include the milk you drank in a glass or a cup, from a carton or with cereal. Count the half pint of milk served at school as equal to one glass.

Group	N - Pre-1st Post	Pre Mean	1st Post Mean	Change Pre - Post	Sig (1-tailed)	N - Pre-2st Post	Pre-Mean	Second Post Mean	Change Pre - 2nd Post	Sig (1 tailed)
Treatment	83	3.51	3.14	-0.37	**0.057****					
Control	78	3.51	3.10	0.41	**0.012***					

Item Seventeen:

During the past 7 days, how many times did you drink a can, bottle or glass of soda or pop such as Coke, Pepsi or Sprite? Do not include diet soda or diet pop. Where 1=none; 2=1-3 times; 3=4-6 times; etc.

Group	N - Pre-1st Post	Pre Mean	1st Post Mean	Change Pre - Post	Sig (1-tailed)	N - Pre-2st Post	Pre-Mean	Second Post Mean	Change Pre - 2nd Post	Sig (1 tailed)
Treatment						55	3.07	2.20	-0.87	**0.000***
Control						52	2.03	2.71	-0.31	0.126

Results of the Process Evaluation: Recommendations and Strategies for Program Design, Implementation and Evaluation

Introduction

At the conclusion of the study, agency coordinators and mentors were interviewed either individually or in groups via teleconference (see Attachments O and P for copies of the agency coordinator and mentor interview instruments, respectively). The observations and recommendations made by agency coordinators and mentors fell into three broad categories:

- the structure of the program and needed changes to that structure;
- the process of recruiting agencies, mentors and coordinators and assisting them through the program; and
- the evaluation process.

Program Structure

In general, both agency coordinators and mentors were impressed with the program and felt it was a useful tool to educate participants about the positive benefits of physical activity and good nutritional habits. Mentors engaged in a variety of activities with the individuals they were mentoring, including weight lifting, walking dogs, using an exercise machine, swimming, sailing, bowling, playing with a frisbee, yoga, horseback riding and others. The majority of mentors used the goal setting worksheet and weekly check-in sheets as tools to focus the attention of participants on setting goals.

Both agency coordinators and mentors believed the program structure, including program manuals, training and technical assistance prepared them for their roles. Based on both the observations of coordinators and mentors as well as the experiences of project staff throughout the program, a number of revisions to the program structure would be beneficial in any future offerings.

I wish I would have had support from the parents. The parents did not understand that the Program was to increase physical activity and nutrition…[and] they did not encourage him.

-Mentor comment on parental involvement

More resources for mentors to use with participants: mentors expressed a need for more resources to use with participants in the areas of physical activity and nutrition. These resources should be based on existing models of behavior change theory in the areas of motivation, role modeling and group dynamics. In sum, a more robust set of activities, information and resources that link to program goals could potentially result in greater positive impacts.

Incorporating parent Involvement: both agency coordinators and mentors were clear that not having a role for parents in the program was a significant impediment to educating and motivating participants. While the level of parent involvement would of course vary, having materials for parents about the program, a section in both the agency coordinator and mentor manuals concerning the importance of parental involvement as well as tips and techniques for involving parents as supports would significantly improve the program.

Possible Group Meetings: a number of mentors suggested that incorporating one of more group meetings at which participants came together, perhaps with their mentors and/or family members, would be a motivating factor.

Length of program: some agency coordinators and mentors suggested that the program would benefit from additional time. While recognizing that expanding the program beyond six weeks would place an additional burden on agency coordinators, mentors and participants, the extra time could be used to reinforce key program messages and potentially produce more positive results. Depending on what resources are added to the program as described above, additional time might not be necessary, but it should remain a possibility.

Recruiting and Program Maintenance

Agency coordinators were positive in their assessments of the assistance and resources offered to them before and throughout the program. Every agency coordinator and mentor agreed that a central source of information, technical assistance and resources was an essential ingredient of the program. *I Can Do It*, as with other organized health promotion interventions, requires attention to numerous details and program protocols. As discussed earlier in this report, program staff developed a comprehensive system of information, material, training, technical assistance and other resources such as incentives to engage agency coordinators, mentors and participants. To ensure consistency across implementation sites as well as high program completion rates, this infrastructure should be maintained.

Evaluation

Consideration should be given to another assessment of the evaluation instruments used to measure the impact of the program. While instruments used in the study now ending were significantly revised at the beginning of the study, agency coordinators and mentors expressed concern about the length of the instruments and the relevance of some items. For example, one of the secondary conditions listed, anemia, is a diagnosed condition that participants would not be able to self-identify. In the same vain, "access", another secondary condition listed, is not something that is likely to be affected by the intervention.