Award Number: W81XWH-10-1-0329

TITLE: Motivational Interviewing to Increase Physical Activity in Breast Cancer Survivors

PRINCIPAL INVESTIGATOR: Yasmin Asvat

CONTRACTING ORGANIZATION: University of South Florida
Tampa, FL 33620

REPORT DATE: May 2011

TYPE OF REPORT: Annual Summary

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release; distribution unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.
**Title and Subtitle:**
Motivational Interviewing to Increase Physical Activity in Breast Cancer Survivors

**Authors:**
Yasmin Asvat

**Performing Organization:**
University of South Florida
Tampa, FL 33620

**Sponsoring Agency:**
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

**DISTRIBUTION / AVAILABILITY STATEMENT:**
Approved for Public Release; Distribution Unlimited

**ABSTRACT:**
Abstract on next page.
Since the study is still on-going, there are no significant research findings to report. The research component of this training grant has met with successes and challenges. The study protocol has been finalized, Institutional Review Board approval to conduct this research was obtained, the pilot study has been completed, and the randomized controlled trial is ongoing. However, recruitment of eligible breast cancer survivors into the study has progressed at a slower pace than anticipated. The PI is committed to continuing recruitment efforts for this study. The training component of this training grant is proceeding successfully and as planned. The PI has gained additional expertise in Behavioral Oncology and in breast cancer research specifically through a combination of formal and informal didactic activities at Moffitt Cancer Center and through attendance at scientific meetings. The PI has also increased her statistical expertise through coursework completion and her mastery of Motivational Interviewing clinical skills through workshop completion.

16. SUBJECT TERMS
Breast Cancer, Survivorship, Lifestyle Interventions
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Body</td>
<td>5</td>
</tr>
<tr>
<td>Key Research Accomplishments</td>
<td>7</td>
</tr>
<tr>
<td>Reportable Outcomes</td>
<td>7</td>
</tr>
<tr>
<td>Conclusion</td>
<td>7</td>
</tr>
<tr>
<td>References</td>
<td>8</td>
</tr>
<tr>
<td>Appendices</td>
<td>9</td>
</tr>
</tbody>
</table>
INTRODUCTION

The purpose of this training grant is to allow the PI (Yasmin Asvat, M.A.) to further develop her skills and knowledge to serve as a foundation for a career in breast cancer research. This purpose will be met through a training program and a research component. The training program consists of both formal and informal didactics, including: attendance at seminars presented at Moffitt Cancer Center (i.e., grand rounds), completion of coursework (i.e., foundations of behavioral oncology and advanced statistical analysis), attendance at journal club meetings at Moffitt Cancer Center, attendance at research meetings in the Health Outcomes & Behavior department at the Moffitt Cancer Center, attendance at scientific conferences, and the mentorship provided by Dr. Paul Jacobsen. The research component consists of the development and implementation of a randomized clinical trial evaluating the efficacy of a brief Motivational Interviewing-based intervention versus nutritional counseling (control condition) to increase physical activity among early stage breast cancer survivors who are sedentary, yet are contemplating increasing their level of activity. The efficacy of the intervention will be evaluated at 3-month and 6-month time points in order to assess short- vs. long-term maintenance of physical activity. Additionally, the study will assess the impact of physical activity on depressive symptoms, fatigue, and aerobic fitness over time.
TRAINING ACCOMPLISHMENTS
The SOW outlined 5 tasks relevant to the training plan; relevant accomplishments are reviewed below:

Task 1 involves maintaining regular meetings with the research mentor, Dr. Paul Jacobsen, to discuss the research project. Individual meetings between Dr. Jacobsen and the PI have been and will continue to be scheduled weekly. Additionally, the PI continues to meet weekly with Dr. Jacobsen and the entire Health Outcomes & Behavior research team at Moffitt Cancer Center to discuss this and other research projects.

Task 2 involves formal and informal training opportunities in Behavioral Oncology, with a focus on breast cancer research. To this purpose, the PI continues to attend the Grand Rounds seminars offered at Moffitt Cancer Center on a weekly basis. Please note that the original SOW indicated that the PI would attend Grand Rounds in Population Science; however, starting in 2011 Moffitt Cancer Center consolidated all of its seminar series into a single Moffitt Cancer Center Grand Rounds. Additionally, the PI continues to attend a monthly Journal Club that takes place in the context of the Health Outcomes & Behavior research team meetings. The lead Journal Club presenters rotate monthly and the PI had the opportunity to be the lead presenter in April 2011. The PI also has obtained informal training in breast cancer research through her engagement with the research study. For instance, she conducted an exhaustive literature review on the following topics: Motivational Interviewing interventions to promote physical activity in patient populations, physical activity interventions with breast cancer survivors, and the mental and physical outcomes associated with physical activity in breast cancer survivors.

Task 3 involves formal coursework in Behavioral Oncology, methodology, and ethical conduct. The PI has completed the Foundations in Behavioral Oncology and the Ethics in Research courses offered at Moffitt Cancer Center. The PI has also completed a course in advanced statistical analysis (i.e., Meta-analysis) at the University of South Florida in the Fall semester 2010. The PI plans to complete one additional advanced statistics course in the Spring semester 2012.

Task 4 involves attending scientific conferences. The PI attended and presented her prior research work at the Society of Behavioral Medicine Annual Meeting in Washington, D.C. in May 2011. The PI has also submitted an abstract to the International Psychosocial Oncology Society (IPOS) meeting that will take place in October 2011. This submission is currently under review. Please note that the original SOW indicated that the PI would attend the American Psychosocial Oncology Society (APOS) meeting. However, the scheduled date for the APOS meeting conflicted with other commitments; hence, the PI submitted her abstract to APOS's international partner, IPOS. The meetings focus on the same content area and only differ in their national vs. international scope. Finally, the PI plans to attend and present the preliminary results of this research project at the Era of Hope meeting, which will take place in August 2011.

Task 5 involved completing two certified training seminars in Motivational Interviewing. The PI completed an introductory training in Motivational Interviewing, which took place from 9/10/2010-9/13/2010 in Charlotte, SC and was led by Cathy Cole, LCSW, a member of the Motivational Interviewing Network of Trainers. The PI also attended an advanced training in Motivational Interviewing, which took place from 9/29/2010-10/01/2010 in San Francisco, CA and was led by Steven Malcolm Berg-Smith, MS, a member of the Motivational Interviewing Network of Trainers.
RESEARCH ACCOMPLISHMENTS
The SOW outlined 4 tasks relevant to the research component; relevant accomplishments are reviewed below:

Task 1 involves finalizing the details of the study protocol. The PI has consulted with Dr. Dr. Mariann Suarez (member of the Motivational Interviewing Network of Trainers) and has finalized the semi-structured script for the Motivational Interviewing intervention (see Appendix A). The PI has also consulted with Kathy Allen (licensed nutritionist and dietician) to compile educational materials for the control intervention. All of the questionnaire packets for baseline and follow-up assessments have been prepared (See Appendix B) and a research database using Microsoft Access has been established. The study protocol was submitted to the Institutional Review Board (IRB) at the University of South Florida (USF) and the Scientific Review Committee (SRC) at Moffitt Cancer Center for approval on 06/16/2010. Milestone #1 was attained on 07/29/2010 when the both the USF IRB and the Moffitt Cancer Center SRC approved the study protocol.

Task 2 involves participant recruitment, randomization, and delivery of the intervention. This process is currently on-going. The PI has screened 256 patients from the Moffitt Cancer Center breast cancer registry for preliminary eligibility. Of these, 36 were ineligible after screening. Of the remaining 220, 50 were unable to be reached by phone and 41 are in process of being contacted. Of the remaining 129 reached by phone, 58 refused to participate, 45 were found to be ineligible for the study, and 26 verbally agreed to participate. Of the 26 who verbally agreed to participate, 3 were recruited to the pilot study. Of the remaining 23, 2 opted out of the study before signing consent due to time constraints. Of the 21 who were scheduled to participate, 17 have completed the baseline assessment and Session 1 of the intervention, 15 have completed Session 2, and 14 have completed Session 3. Currently study enrollment for the randomized control trial is at 21 participants. Despite the PI’s best efforts, the pace of recruitment has been slower than anticipated. Milestone #2, which involves recruiting 120 participants, was expected to be completed by month 14; however, this is unlikely. Several unexpected challenges in recruitment have interfered with progress, including: the refusal rate is higher than expected; potential participants that live a distance away from Moffitt Cancer Center are either unable or unwilling to travel for study visits; many more potential participants than was expected are already adequately physically active, which is an exclusionary criteria for this study; and several potential participants are retired individuals who split their time between Florida and another state, which represents a barrier to participation. The PI has attempted to address some of these challenges (when feasible). Specifically, the PI is now focusing her efforts on recruiting potential participants within a 40 mile radius of Moffitt Cancer Center; however, the pool of patients living in this area is much smaller compared to the pool of total breast cancer patients treated at Moffitt Cancer Center. The PI will continue to recruit participants as efficiently as possible through May 2012.

Task 3 involves conducting the 3-month and 6-month follow-up assessments. These assessments have been completed for the 3 participants enrolled in the pilot study. For those enrolled in the randomized controlled trial, 4 3-month follow-ups have been completed, 2 have been scheduled, and the remainders are pending. The 6-month follow-up assessments are pending.

Task 4 involves data analysis and manuscript preparation. Since study recruitment is till on-going, task 4 is pending.
KEY RESEARCH ACCOMPLISHMENTS

- Developed a 3-session Motivational Interviewing-based intervention protocol to promote physical activity in breast cancer survivors (see Appendix A)
- Compiled a baseline, 3-month follow-up, and 6-month follow-up questionnaire packet for this study (see Appendix B)
- Obtained USF IRB and Moffitt Cancer Center SRC approval to conduct this research study
- Obtained access to the Moffitt Cancer Center Breast Cancer Registry to aid in participant screening and recruitment
- Completed the pilot study with 3 participants and made minor modifications to the intervention protocol based on their feedback
- On-going screening and recruitment of study participants
- Submitted an abstract pertaining to this research study to the 2011 Era of Hope meeting (see Appendix C)

REPORTABLE OUTCOMES

An abstract pertaining to the research being conducted as part of this training grant was submitted and accepted by the 2011 Era of Hope meeting. This abstract is included in Appendix III.

CONCLUSION

Overall, the training component of this training grant is proceeding successfully and as planned. The PI has gained additional expertise in Behavioral Oncology and in breast cancer research specifically through a combination of formal and informal didactic activities at Moffitt Cancer Center and through attendance at scientific meetings. The PI has also increased her statistical expertise through coursework completion and her mastery of Motivational Interviewing clinical skills through workshop completion.

The research component of this training grant has met with successes and challenges. The study protocol has been finalized (including intervention protocol, study questionnaires, and research databases), USF IRB and Moffitt SRC approval to conduct this research was obtained, the pilot study has been completed, and the randomized controlled trial is on-going. However, recruitment of eligible breast cancer survivors into the study has progressed at a slower pace than anticipated. In hindsight, the timeframe of 14 months to recruit 120 eligible breast cancer survivors may have been too ambitious. The PI is committed to continuing recruitment efforts for this study through May 2012 (end date for the training grant) and is hopeful that modifications to the recruitment strategy will result in higher participant accrual rates.
REFERENCES

None
## APPENDIX A

### MI PROTOCOL – SESSION 1

<table>
<thead>
<tr>
<th>BEFORE SESSION: 30 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Questionnaire Packet</td>
</tr>
<tr>
<td>II. Height and Weight Assessment</td>
</tr>
<tr>
<td>III. 6 Minute Walk Test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BASELINE SESSION: 60-75 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Greeting and Overview</td>
</tr>
<tr>
<td>II. Review Typical Day</td>
</tr>
<tr>
<td>III. Importance of PA for BCS – use Elicit-Provide-Elicit</td>
</tr>
<tr>
<td>IV. Elicit Change Talk</td>
</tr>
<tr>
<td>1. Importance Ruler</td>
</tr>
<tr>
<td>2. Confidence Ruler</td>
</tr>
<tr>
<td>3. Good Things vs. Not so Good Things</td>
</tr>
<tr>
<td>4. Values Clarification</td>
</tr>
<tr>
<td>5. Looking Forward and Backward</td>
</tr>
<tr>
<td>IV. Overall Summary</td>
</tr>
<tr>
<td>V. Set Goals and Personal Plan</td>
</tr>
<tr>
<td>1. Goal Setting Worksheet</td>
</tr>
<tr>
<td>2. Implementation Intentions</td>
</tr>
</tbody>
</table>

| VI. Wrap-Up                     |
| 1. Global Summary               |
| 2. Set next appointment         |
I. GREETING AND OVERVIEW

Thank you for coming in today and for completing all of the study assessments. If it’s okay with you, I was hoping to provide you with a brief overview of today’s meeting. Does that sound okay?

One of the main things that this program offers is help with improving your overall health by incorporating more physical activity into your life. Our discussion will be collaborative and will focus on your unique needs and challenges. Does that sound okay?

II. REVIEW TYPICAL DAY

If it’s okay with you, I’d like to spend the next 5-10 minutes going over your typical day – say yesterday – from beginning to end. Let’s start at the beginning...when did you get up? (As needed, probe with “what happened?” or “how did you feel?”)

Create a rough outline of client’s day/schedule in the space below. Summarize in a reflective way.

It seems that you have quite a busy day. Currently, how does physical activity fit or not fit into your daily schedule? (Make notes on barriers to PA)

Use reflective listening and paraphrase.
III. IMPORTANCE OF PA FOR BCS – USE ELICIT-PROVIDE-ELICIT

- If it's okay with you, I'd like to find out a little bit more about what you know about the importance of physical activity for the overall health of a breast cancer survivor, such as yourself.

- Tell me what you know about the recommended weekly amount of physical activity for breast cancer survivors.
Use reflective listening and paraphrase.

Discuss additional reasons why exercise is important and clarify guidelines:
- If it's okay with you, I'd like to discuss some (additional) reasons why physical activity is important for breast cancer survivors.
AND/OR
- If it's okay with you, I'd like to clarify what the most up-to-date recommended physical activity guidelines for breast cancer survivors indicate.

- I wonder, what are your thoughts on this information? What do you make of all this?

Use reflective listening and paraphrase. Clarify as needed.

IV. ELICIT CHANGE TALK

- We've had a discussion about why it's important for breast cancer survivors to engage in physical activity. If it's ok with you, I'd like to switch gears and talk about how important it is for you, specifically, to engage in physical activity.

1. IMPORTANCE RULER

- On a scale from 0-10, where 0 is not at all important and 10 is extremely important, how important would you say it is for you to exercise?

- So you feel it is at least a little important (1-3)/somewhat important (4-7)/very important (8-10). Why are you at (stated #) and not a (lower # -- avoid zero, be flexible)?
Reflect and paraphrase. Focus on “reasons for change” that client expresses.
IF the stated important level is less than 8...

© What would it take to get your importance level up to a (add 3-5 points to stated #)?

Reflect and paraphrase.

2. CONFIDENCE RULER

© Many people find that although regular physical activity is at least somewhat important to them, they may or may not be confident in their ability to engage in activity. If it’s okay with you, I’d like to get a sense for your confidence in your ability to engage in physical activity.

© On a scale from 0 to 10, where 0 is not confident at all and 10 is extremely confident, how confident would you say you are that if you decided to engage in regular physical activity, you could do it?

© So you feel it at least a little bit confident (1-3)/somewhat confident (4-7)/very confident (8-10). Why are you at (stated #) and not (lower # -- avoid zero, be flexible)?

Reflect and paraphrase. Focus on “strengths” that client expresses.

IF the stated confidence level is less than 8...

© What would it take to get your confidence level up to a (add 3-5 points to stated #)?

Use reflective listening and summarizing and reinforce the participant’s efforts.

3. GOOD THINGS vs. NOT SO GOOD THINGS about PA

© Let’s talk a little about the good things and the not so good things about physical activity. First, tell me about the not-so good side of engaging in regular physical activity. What are the downsides? What don’t you like about it?

Use reflective listening and paraphrase or summarize.

© Now, what are some of the good things about regular physical activity? (If necessary, probe further) When you have been regularly active in the past, what have you liked about it? Even if you haven’t been regularly active in the past, what do you imagine you might like about it?

Summarize the not so good things and the good things in “you” language; be succinct.
4. VALUES CLARIFICATION

Now I’d like to talk to you a little about some of the things that you value most in life. For this part, I would like to look at this Values Clarification Card, which is yours to keep. I would like you to just take a moment to think about the things in your life that are most important to you.

<table>
<thead>
<tr>
<th>LIST OF VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
</tr>
<tr>
<td>Safe</td>
</tr>
<tr>
<td>Comfortable (pain free)</td>
</tr>
<tr>
<td>Financially Independent</td>
</tr>
<tr>
<td>Good parent</td>
</tr>
<tr>
<td>Good spouse/partner</td>
</tr>
<tr>
<td>Good community member</td>
</tr>
<tr>
<td>Strong</td>
</tr>
<tr>
<td>On top of things</td>
</tr>
<tr>
<td>Competent</td>
</tr>
<tr>
<td>Spiritual</td>
</tr>
<tr>
<td>Passionate</td>
</tr>
<tr>
<td>Faithful, Religious</td>
</tr>
<tr>
<td>Successful</td>
</tr>
<tr>
<td>Popular</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

The list in front of you shows a few traits/values/characteristics that are important to some people. Pick the 2 or 3 characteristics that are most important to you. Please feel free to add to this list if there are any other values that are important to you.

Tell me, why are these traits/values that you have chosen important to you?

How, if at all, is regular physical activity related to these values?

Use OARS (open-ended questions, affirmations, reflective listening, summarizing) as needed/appropriate.
IF PARTICIPANT DOES NOT MAKE THE CONNECTION BETWEEN HEALTH AND CORE VALUES: Use one or more of these prompts.

⊙ Think about the things in your life that are important to you. How, if it at all, would regular physical activity affect the things that are important to you? Proceed to ask the other questions in relation to what they have said here. Use OARS as needed.

⊙ I'm curious (name of participant), what connection, if any, do you see between regular physical activity and your ability to live out (name specific values or goals endorsed)? Use OARS as needed.

5. LOOKING FORWARD AND BACKWARD

⊙ Suppose you continue as you have been, without changing, without engaging in regular physical activity. What do you imagine would happen to your ability to live out (name specific values or goals endorsed)? Use OARS as needed.

⊙ If you were successful in engaging in regular physical activity, how would things be different? What would be the impact on your ability to live out (name specific values or goals endorsed)? Use OARS as needed.

IV. PROVIDE OVERALL SUMMARY OF DISCUSSION

⊙ So on the one hand, you have mentioned several reasons why engaging in regular physical activity has been a challenge and may not be the best thing right now (state the reasons)

⊙ On the other hand, you have mentioned several reasons why it would be important to change (state the reasons)

Summarize the most important not so good things about engaging in regular physical activity, and then follow with a summary of the good things/positive reasons for engaging in regular physical activity and the core values/goals associated with regular physical activity.

⊙ Does that sound about right? Any additional thoughts?
V. SET GOALS AND PERSONAL PLAN

© I am wondering, given what we’ve talked about, where you would like to go from here. What do you think our next step should be?
Use reflective listening and paraphrase

© Would you be interested in working together on a plan, or perhaps setting some goals related to increasing your level of activity today, or perhaps at our next meeting? It is entirely up to you.

IF NOT READY TO SET GOALS ⇒ Empathize with the challenges of initiating behavior change, then move on to WRAP-UP

IF READY TO SET GOALS ⇒ Move on to GOAL SETTING WORKSHEET

1. GOAL SETTING WORKSHEET

Give participant worksheet to review/complete

© Remember that you are the best judge of what will be best for you. If it’s okay, I’d like for you to think of a goal you could set for yourself for the next week concerning your level of physical activity? Remember the goal should be clear, realistic, not too much or too little. Think of something that suits you and your lifestyle best. What are you thoughts about a goal?
Reinforce appropriate goals

IF clients are having trouble coming up with goals, ASK:

© Some women with breast cancer have benefited from these types of activities. Present menu of physical activity options.

© Which, if any, o these activities might be of interest to you?
Use OARS as needed.

© What are some of the things you will need to do to achieve this goal? Think of specific steps or actions and specific times when you might do them. Use OARS as needed.

<table>
<thead>
<tr>
<th>Specific Action</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
</tbody>
</table>
2. IMPLEMENTATION INTENTIONS

© Think about the next 7 days. When would be a good time for you to (specific action)? Be as specific as possible. Where would you do (specific action)? With whom would you do (specific action)?

Follow the same line of questioning for each of the specific actions listed above.

Summarize Implementation Intentions.

VI. WRAP-UP

1. GLOBAL SUMMARY

© Before we end, I'd like to take a moment to hear what, if anything, you got out of today's session. Allow participant to summarize.

© Good, I'm glad you found that helpful.

2. SET NEXT APPOINTMENT

© Thank you very much ________ (name) for all your time and effort today. The next session takes place next week, in-person, here at Moffitt. This next session will be shorter, lasting 30-45 minutes. If it's okay with you, let's schedule our next visit for ________.

Give participant appointment card.

© Thank you again for your time today and I look forward to seeing you soon! Have a good evening/day/morning!
## MI PROTOCOL – SESSION 2

### WEEK 2 SESSION: 30-45 minutes

<table>
<thead>
<tr>
<th>IF GOALS NOT SET LAST SESSION</th>
<th>IF GOALS SET LAST SESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I-A. Greeting and Overview</strong></td>
<td><strong>I-B. Greeting and Overview</strong></td>
</tr>
<tr>
<td><strong>II-A. Review of Last Session</strong></td>
<td><strong>II-B. Review of Last Session</strong></td>
</tr>
<tr>
<td><strong>III-A. Set Goals and Personal Plan</strong></td>
<td><strong>III-B. Review Adherence to Goals</strong></td>
</tr>
<tr>
<td>1. Goal Setting Worksheet</td>
<td>1. If at least some adherence</td>
</tr>
<tr>
<td>2. Implementation Intentions</td>
<td>2. If no adherence</td>
</tr>
<tr>
<td><strong>IV-A. Explore Barriers</strong></td>
<td><strong>IV-B. Evaluate Need for Goal Adjustment</strong></td>
</tr>
<tr>
<td><strong>V-A. Wrap-Up</strong></td>
<td><strong>V-B. Wrap-up</strong></td>
</tr>
<tr>
<td>1. Global Summary</td>
<td>1. Global Summary</td>
</tr>
<tr>
<td>2. Set next appointment</td>
<td>2. Set next appointment</td>
</tr>
</tbody>
</table>

**Note:** This script has two tracks to follow, depending on whether participant did or did not set goals the previous week. Make note of this and choose appropriate track. Sections I. (Greeting and Overview) and V. (Wrap-up) are the same regardless of which track participants fall into.
I-A & B. GREETING AND OVERVIEW

© Thank you for coming in today, it’s nice to see you again. If it’s okay with you, I was hoping to start our discussion today by briefly reviewing our discussion during our last meeting. Does that sound okay?

© As you know, this program offers help with improving your overall health by means of incorporating more physical activity into your life. In our discussion last week we went over your typical day, we reviewed the pros and cons of incorporating physical activity to your daily life, and we discussed how increasing your level of activity relates to your core values and goals in life.

II-A. REVIEW LAST SESSION

© Tell me a little bit about what you specifically recall about your discussion last week. Use OARS as needed as participant recollects the discussion from last week. Focus on eliciting and reinforcing participant-initiated “change talk”

© That’s very much what I remember from our discussion. Would it be okay if I reviewed a few additional details that I recall from our meeting?

During our discussion, you mentioned several reasons why engaging in regular physical activity has been a challenge and may not be the best thing right now (state the reasons). However, also mentioned several reasons why it would be important to change (state the reasons).

© Last week, you mentioned that the next step for you would be to (insert participant’s stated next step from last week). What are your thoughts, today, about your next step? Use reflective listening and paraphrase.

IF PARTICIPANT IS READY TO SET GOALS ⇒ GO TO NEXT SECTION

IF PARTICIPANT IS AMBIVALENT ⇒ use OARS to continue to explore/discuss this ambivalence. Focus on “change talk” and relating physical activity to core values/goals.
II-B. REVIEW LAST SESSION

Tell me a little bit about what you specifically recall about your discussion last week. Use OARS as needed as participant recollects the discussion from last week.

That’s very much what I remember from our discussion. Would it be okay if I reviewed a few additional details that I recall from our meeting?

During our discussion, you mentioned several reasons why engaging in regular physical activity has been a challenge and may not be the best thing right now (state the reasons). However, also mentioned several reasons why it would be important to change (state the reasons). We also worked together on some goals for yourself.

III-A. SET GOALS AND PERSONAL PLAN

Okay, since you are interested in moving forward by exploring ways to increase your level of activity, would it be okay if we work together on setting some goals for yourself?

1. GOAL SETTING WORKSHEET

Give participant worksheet to review/complete

Remember that you are the best judge of what will be best for you. If it’s okay, I’d like for you to think of a goal you could set for yourself for the next week concerning your level of physical activity? Remember the goal should be clear, realistic, not too much or too little. Think of something that suits you and your lifestyle best. What are you thoughts about a goal? Reinforce appropriate goals

IF clients are having trouble coming up with goals, ASK:

Some women with breast cancer have benefited from these types of activities. Present menu of physical activity options.

Which, if any, of these activities might be of interest to you? Use OARS as needed.

What are some of the things you will need to do to achieve this goal? Think of specific steps or actions and specific times when you might do them. Use OARS as needed.
Table of Specific Action and When:

<table>
<thead>
<tr>
<th>Specific Action</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. IMPLEMENTATION INTENTIONS

Think about the next 7 days. When would be a good time for you to (specific action)? Be as specific as possible. Where would you do (specific action)? With whom would you do (specific action)?

Follow the same line of questioning for each of the specific actions listed above.

Summarize Implementation Intentions.

III-B. REVIEW ADHERENCE TO GOALS

I have a copy of your Goal Worksheet right here. If it’s okay with you, I would like to get a sense for your experience with the goals you set for yourself.

1. IF AT LEAST SOME ADHERENCE TO GOALS:
   To praise and encourage adherence to goals, and reinforce their importance for the participant, consider using any combination of the following prompts:
   That’s great! It sounds like you’ve had a positive experience with (some or all) of your goals.
   What motivated you to take the steps necessary to meet these goals?
   Tell me a little bit about your activity routine. What have you enjoyed the most about it?
   What has been the most difficult thing about sticking to your goals?
   How do you overcome these potential obstacles to achieving your activity goals?
   Use reflective listening and paraphrase.

2. IF NO ADHERENCE TO GOALS:
   It sounds like you are having difficulty meeting these physical activity goals has been challenging. I wonder, what are your thoughts on this?
   Use reflective listening and paraphrase.
To further explore difficulty adhering to goals consider using any combination of the following prompts:

⊕ During our initial meeting, you identified the following as important values (list out values). How, if at all, might increasing your level of physical activity impact your ability to live up to these values (name specific values)?

⊕ Over the past 3 weeks, what types of thoughts did you have, if any, about making steps towards your physical activity goals?

⊕ What kinds of obstacles make it difficult for you to achieve your activity goals?

⊕ I wonder, what kind of strategies do you think might help you overcome these obstacles to achieving your physical activity goals? With permission, suggest strategies as needed.

⊕ Are there other strategies that you can think of that can help you overcome the obstacles you just described (refer to obstacles mentioned by participant)?

Use reflective listening and paraphrase.

IV-A. EXPLORE BARRIERS

⊕ If it’s okay with you, I’d like us to take a closer look at the Goals Worksheet. Ask yourself—are there any barriers I can think of that would get in the way of my ability to meet these goals? Use OARS as needed.

⊕ Let me see if I understand correctly. You think that (mention barrier) might get in the way of (mention goals). Also...REPEAT AS MANY TIMES AS NEEDED. Does that sound about right?

⊕ You know yourself best and what would best help you tackle these barriers. What might you do to prevent (mention barrier) from getting in the way with (mention goal)? REPEAT AS MANY TIMES AS NEEDED.

Use reflective listening and paraphrase.

IF participant was able to generate ways to address barriers:

⊕ Those are some excellent ideas!

Provide additional affirmation as needed.
IF participant was NOT able to generate ways to address barriers:

© With your permission, I have some suggestions for way to address the barriers you mention. Would it be okay if I offered some suggestions? LIST OPTIONS. Do any of those suggestions sound applicable to your situation and needs?

© I'm glad you found some of those suggestions helpful. Can you think of any other strategies you can use to prevent (mention barriers) from getting in the way of (mention goal)?

Summarize the discussion.

<table>
<thead>
<tr>
<th>IV-B. EVALUATE NEED FOR GOAL ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>© Given what we've talked about, on a scale from 1 to 10, with 1 being not at all and 10 being extremely, how satisfied are you with your list of physical activity goals?</td>
</tr>
</tbody>
</table>

© So you feel at least a little satisfied (1-3)/somewhat satisfied (4-7)/very satisfied (8-10) with your physical activity goals. Why are you at (stated #) and not (lower # -- avoid zero, be flexible)? Reflect and paraphrase

© What would it take to get your satisfaction level up to a (add 3-5 points to stated level)? Reflect and paraphrase

© What, if any, adjustments would you like to make to your physical activity goals?

If NO ADJUSTMENTS: Move on to Wrap-Up

If YES TO ADJUSTMENTS:

© (Summarize adjustments described). What, if any, ideas do you have that may help you accomplish your revised set of goals?

© If some ideas: As you think about your ideas/plans, is there anything you are particularly worried or concerned about? Tell me about it. Use reflective listening and paraphrase. Problem-solve as needed.

© If no: There are a number of strategies or tips that some people find helpful. If it's okay with you, we could discuss some of these together. With permission, offer suggestions.
V-A & B. WRAP-UP

1. GLOBAL SUMMARY
   © Before we end, I’d like to take a moment to hear what, if anything, you got out of today’s session. Allow participant to summarize.

   © Good, I’m glad you found that helpful.

2. SET NEXT APPOINTMENT
   © Thank you very much _______ (name) for all your time and effort today. The next session takes place in two weeks, over the phone. This next session will be shorter, lasting 15-20 minutes. During the week of (insert week), when would it be a good time to chat over the phone?

   © Let’s schedule our phone session for ______.

Give participant appointment card.

© Thank you again for your time today and I look forward to talking with you soon! Have a good evening/day/morning!
TELEPHONE SESSION: 15-20 minutes
I. Greeting and Evaluate if Good Time to Talk
II. Evaluate Adherence to Goals
   1. If at least SOME adherence to goals
   2. If NO adherence to goals
III. Evaluate Satisfaction with Goals
IV. Evaluate Need for Adjustment to Goals
V. Wrap-Up
   1. Brief Encouragement/Validation
   2. Set next appointment
I. GREETING and EVALUATE IF GOOD TIME TO TALK

○ Hello Mrs. ____. This is ____ calling from Moffitt Cancer Center to follow-up on the health promotion program you are participating in. How are you? (Exchange pleasantries). During our initial meeting you indicated that today, at this time, would be a good time to talk for about 20 minutes. Is this still a good time?

IF GOOD TIME TO TALK:

○ Great! I’d like to remind you that, with your permission, this phone-call will be recorded for quality purposes.

Continue with the rest of the interview

IF BAD TIME TO TALK:

○ Perhaps we can arrange for a more convenient time for us to speak. What would be good time for you within the next 2-3 days? (Set up a time for a follow-up call).
○ Okay, so we’re all set to resume this phone-call on (date) at (time). I look forward to speaking with you then. Have a nice day!

End call.

II. EVALUATE ADHERENCE TO GOALS

○ If it’s okay with you, I’d like to spend a few minutes reviewing what we talked about in our meeting 2 weeks ago. If you recall, we talked about (Review topics discussed and the participant’s exercise goals). If it’s okay with you, I would like to get a sense for your experience with the goals you set for yourself.

IF AT LEAST SOME ADHERENCE TO GOALS:

To praise and encourage adherence to goals, and reinforce their importance for the participant, consider using any combination of the following prompts:

○ That’s great! It sounds like you’ve had a positive experience with (some or all) of your physical activity goals.
© What motivated you to take the steps necessary to meet these goals?
© Tell me a little bit about your activity routine. What have you enjoyed the most about it?
© What has been the most difficult thing about sticking to your physical activity goals?
© How do you overcome these potential obstacles to achieving your physical activity goals?

Use reflective listening. Provide extensive affirmations to support behavior change.

IF NO ADHERENCE TO GOALS:
© It sounds like you are having difficulty meeting the physical activity goals you set for yourself. I wonder, what are your thoughts on this? Use reflective listening and paraphrase.

To further explore difficulty adhering to goals consider using any combination of the following prompts:
© During our initial meeting, you identified the following as important values (list out values). How, if it at all, might physical activity impact your ability to live up to these values?
© Over the past 3 weeks, what types of thoughts did you have, if any, about making steps towards your physical activity goals?
© What kinds of obstacles make it difficult for you to achieve your physical activity goals?
© I wonder, what kind of strategies do you think might help you overcome these obstacles to achieving your physical activity goals? With permission, suggest strategies as needed.
© Are there other strategies that you can think of can help you overcome the obstacles you just described (refer to obstacles mentioned by participant). Use reflective listening and paraphrase.

III. EVALUATE SATISFACTION WITH GOALS
© Given what we’ve talked about, on a scale from 1 to 10, with 1 being not at all and 10 being extremely, how satisfied are you with your list of physical activity goals?

© So you feel at least a little satisfied (1-3)/somewhat satisfied (4-7)/very satisfied (8-10) with your physical activity goals. Tell me what account for your satisfaction? Why are you at (stated number) and not 0? Reflect and paraphrase.

© What would it take to get your satisfaction level up to a (add 3-5 points to stated level)? Reflect and paraphrase.
IV. EVALUATE NEED FOR ADJUSTMENT TO GOALS

○ What, if any, adjustments would you like to make to your physical activity goals?

If NO ADJUSTMENTS: Move on to Wrap-Up

If YES TO ADJUSTMENTS:

○ (Summarize adjustments described). What, if any, ideas do you have that may help you accomplish your revised set of goals?

○ If some ideas: As you think about your ideas/plans, is there anything you are particularly worried or concerned about? Tell me about it. Use reflective listening and paraphrase. Problem-solve as needed.

○ If no: There are a number of strategies or tips that some people find helpful. If it's okay with you, we could discuss some of these together. With permission, offer suggestions.

V. WRAP-UP

IF AT LEAST SOME ADHERENCE TO GOALS:

○ I’m glad that you have been able to meet the goals you set for yourself and I encourage you to keep up the good work. I understand how much effort and commitment it takes on your part to meet your goals, and I admire your success.

IF NO ADHERENCE TO GOALS:

○ I’m glad we had this opportunity to discuss your goals and come up with some strategies to help you meet them. I understand how much effort and commitment it takes on your part to meet these goals, and I admire your determination to move forward.

○ Thank you very much ______ (participant name) for your time today. If it's okay with you, let's schedule our next in-person meeting for ______. I will be giving you an appointment reminder call a couple of days before the scheduled meeting. I look forward to seeing you then! Have a good evening/day/morning!
APPENDIX B

6MWT

Make sure you have: stopwatch, lap counter, bottle of water

Participant ID: ____________________________

Height: ______ Total inches (e.g., 65 ¾ or 65.25)  Translates to: _____ ft _____ in

Weight: ______ lbs

Stopped or paused before 6 minutes?

___ 1 No

___ 2 Yes: ___ 1 Chest Pain    ___ 2 Intolerable Dyspnea    ___ 3 Leg Cramps

    ___ 4 Staggering    ___ 5 Diaphoresis    ___ 6 Pale/Ashen Appearance

Other symptoms at end of 6 minutes?

___ 1 No

___ 2 Yes: ___ 1 Angina     ___ 2 Dizziness     ___ 3 Hip, Leg, or Calf Pain

Number of laps: ______ (x 76 feet) + Final Partial Lap: ______ feet = ______

Total distance walked in 6 minutes: ______ feet

Comments: ______________________________________________________

_________________________________________________________________

_________________________________________________________________
GENERAL BACKGROUND INFORMATION

1. Today's date: _____/_____/_____ (month/day/year)
2. Birth date: _____/_____/_____ (month/day/year)
3. Age: ______
4. Please identify your ethnic group (check one)
   ___ 1 Hispanic or Latino
   ___ 2 Not Hispanic or Latino

5. Please identify your race (check one)
   _____ 1 White
   _____ 2 Asian
   _____ 3 Black or African American
   _____ 4 American Indian or Alaska Native
   _____ 5 Native Hawaiian or Pacific Islander
   _____ 6 More than one race

6. Marital status (check one):
   _____ 1 Never Married
   _____ 2 Currently Married
   _____ 3 Separated
   _____ 4 Divorced
   _____ 5 Widowed

7. Level of school completed (check one):
   _____ 1 Less than 7th grade
   _____ 2 Junior High School (7th, 8th, & 9th grade)
   _____ 3 Partial High School (10th or 11th grade)
   _____ 4 High School Graduate (12th grade)
   _____ 5 Partial college of specialized training
   _____ 6 College or University graduate
   _____ 7 Graduate or professional degree

8. Current employment situation (check all that apply):
   _____ 1 Full time at job
   _____ 2 Part time at job
   _____ 3 On leave with pay
   _____ 4 On leave without pay
   _____ 5 Disabled
   _____ 6 Seeking work
   _____ 7 Retired
   _____ 8 Homemaker
   _____ 9 Student
9. Which category best describes your usual occupation? If not currently employed, which category best describes your LAST job? (check one):

   _____ 1 Professional (e.g., teachers, nurses, lawyers, physicians, & engineers)
   _____ 2 Manager/Administrator (e.g., sales managers)
   _____ 3 Clerical (e.g., secretaries, clerks or mail carriers)
   _____ 4 Sales (e.g., sales persons, agents & brokers)
   _____ 5 Service (e.g., police, cooks, waitress, or hairdressers)
   _____ 6 Skilled Crafts, Repairer (e.g., carpenters)
   _____ 7 Equipment or Vehicle Operator (e.g., truck drivers)
   _____ 8 Laborer (e.g., maintenance factory workers)
   _____ 9 Farmer (e.g., owners, managers, operators or tenants)
   _____10 Member of the military
   _____11 Homemaker (with no job outside the home)
   _____12 Other (describe) ________________________

10. Approximate annual gross income for your household: (check one number) (Remember, your information will remain completely confidential)

   _____ 1 Less than $10,000
   _____ 2 $10,000 - $19,999
   _____ 3 $20,000 - $39,999
   _____ 4 $40,000 - $59,999
   _____ 5 $60,000 - $100,000
   _____ 6 Greater than $100,000

11. Are you currently on hormonal therapy? _____ 1 NO  _____ 2 YES

12. If YES, what do you take?

   _____ 1 Tamoxifen
   _____ 2 Aromatase Inhibitors (Arimidex, Femara, Aromasin)
   _____ 3 Other: Specify __________________________

13. Have you ever had a hysterectomy (i.e., removal of the womb)?

   _____ 1 No
   _____ 2 Yes
   _____ 3 Don’t know
14. Have you had one or both of your ovaries removed?
   _____1 No, neither of my ovaries have been removed
   _____2 Yes, one ovary removed
   _____3 Yes, both ovaries removed
   _____4 Don’t know

15. Have you received any hormone replacement therapy within the past week (i.e., estrogen)?
   _____1 No
   _____2 Yes
   _____3 Don’t know

16. Have you ever received any hormone replacement therapy (i.e., estrogen)?
   _____1 No
   _____2 Yes
   _____3 Don’t know

17. Have you had a menstrual period within the past 3 months?
   _____1 No
   _____2 Yes
   _____3 Don’t know

18. Have you had a menstrual period within the past 12 months?
   _____1 No
   _____2 Yes
   _____3 Don’t know

19. Compared with 12 months ago, are your menstrual periods in the past 3 months, less regular, about the same, or more regular?
   _____1 I have not had a menstrual period within the past 3 months
   _____2 Less regular
   _____3 About the same
   _____4 More regular
   _____5 Don’t know
DIRECTIONS:
Please report the frequency and average duration of any exercise over the past week in the spaces below.

As an example: If you exercised four times last week at a moderate intensity you would put “4” in the frequency column following moderate exercise. We would like you to also give an average of the time spent exercising. In our example, if two of those “4” exercise sessions were 30 minutes and the other two were 20 minutes you would put 25 minutes in the average duration column following moderate exercise.

When answering these questions, please remember to:
- Only count exercise that was done in your free time (i.e., not occupational or housework).
- Note that the differences between the three categories are in the intensity of the exercise.
- If you did not engage in a type of exercise, write "0" in the frequency column.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. STRENUOUS EXERCISE</strong>&lt;br&gt;(HEART BEATS RAPIDLY, SWEATING)&lt;br&gt;Examples: running, jogging, vigorous swimming, vigorous long distance bicycling, vigorous aerobic classes, roller skating, judo, basketball, football, soccer, squash</td>
<td></td>
</tr>
<tr>
<td><strong>B. MODERATE EXERCISE</strong>&lt;br&gt;(NOT EXHAUSTING, LIGHT PERSPIRATION)&lt;br&gt;Examples: fast walking, tennis, easy bicycling, easy swimming, popular and folk dancing, volleyball, badminton</td>
<td></td>
</tr>
<tr>
<td><strong>C. MILD EXERCISE</strong>&lt;br&gt;(MINIMAL EFFORT, NO PERSPIRATION)&lt;br&gt;Examples: easy walking, yoga, bowling, shuffleboard, horseshoes, golf, fishing from riverbank</td>
<td></td>
</tr>
</tbody>
</table>
Fruits and Vegetables

DIRECTIONS: Think about what you usually ate last month. Please think about all the fruits and vegetables that you ate last month. Include those that were:

- raw and cooked,
- eaten as snacks and at meals,
- eaten at home and away from home (restaurants, friends, take-out), and
- eaten alone and mixed with other foods.

Report how many times per month, week, or day you ate each food, and if you ate it, how much you usually had. If you mark "Never" for a question, follow the "Go to" instruction. Choose the best answer for each question. Mark only one response for each question.

1. **Over the last month**, how many times per month, week, or day did you drink 100% juice such as orange, apple, grape, or grapefruit juice? **Do not count** fruit drinks like Kool-Aid, lemonade, Hi-C, cranberry juice drink, Tang, and Twister. Include juice you drank at all mealtimes and between meals.

   (Go to Question 2)

   - Never
   - 1-3 times per month
   - 1-2 times per week
   - 3-4 times per week
   - 5-6 times per week
   - 1 time per day
   - 2 times per day
   - 3 times per day
   - 4 times per day
   - 5 or more times per day

2a. Each time you drank 100% juice, how much did you usually drink?

   - Less than ¾ cup (less than 6 ounces)
   - ¼ to 1 ¾ cup (6 to 10 ounces)
   - 1 ¼ to 2 cups (10 to 16 ounces)
   - More than 2 cups (more than 16 ounces)

2. **Over the last month**, how many times per month, week, or day did you eat fruit? Count any kind of fruit (fresh, canned, and frozen). Do not count juices. Include fruit you ate at all mealtimes and as snacks.

   (Go to Question 3)

   - Never
   - 1-3 times per month
   - 1-2 times per week
   - 3-4 times per week
   - 5-6 times per week
   - 1 time per day
   - 2 times per day
   - 3 times per day
   - 4 times per day
   - 5 or more times per day

2a. Each time you ate fruit, how much did you usually eat?

   - Less than 1 medium fruit
   - 1 medium fruit
   - 2 medium fruits
   - More than 2 medium fruits

   OR

   - Less than ½ cup
   - About ½ cup
   - About 1 cup
   - More than 1 cup

3. **Over the last month**, how often did you eat lettuce salad (with or without other vegetables)?

   (Go to Question 4)

   - Never
   - 1-3 times per month
   - 1-2 times per week
   - 3-4 times per week
   - 5-6 times per week
   - 1 time per day
   - 2 times per day
   - 3 times per day
   - 4 times per day
   - 5 or more times per day
3a. Each time you ate **lettuce salad**, how much did you usually eat?

- [ ] About ½ cup
- [ ] About 1 cup
- [ ] About 2 cups
- [ ] More than 2 cups

4. Over the last month, how often did you eat French fries or fried potatoes?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-3</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>1 time</th>
<th>2 times</th>
<th>3 times</th>
<th>4 times</th>
<th>5 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>times</td>
<td>per month</td>
<td>per week</td>
<td>per week</td>
<td>per week</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td></td>
</tr>
</tbody>
</table>

4a. Each time you ate French fries or fried potatoes, how much did you usually eat?

- [ ] Small order or less (About 1 cup or less)
- [ ] Medium order (About 1½ cups)
- [ ] Large order (About 2 cups)
- [ ] Super Size order or more (About 3 cups or more)

5. Over the last month, how often did you eat other white potatoes? Count baked, boiled, and mashed potatoes, potato salad, and white potatoes that were not fried.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-3</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>1 time</th>
<th>2 times</th>
<th>3 times</th>
<th>4 times</th>
<th>5 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>times</td>
<td>per month</td>
<td>per week</td>
<td>per week</td>
<td>per week</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td></td>
</tr>
</tbody>
</table>

5a. Each time you ate these potatoes, how much did you usually eat?

- [ ] Small order or less (About 1 cup or less)
- [ ] Medium order (About 1½ cups)
- [ ] Large order (About 2 cups)
- [ ] Super Size order or more (About 3 cups or more)

6. Over the last month, how often did you eat cooked dried beans? Count baked beans, bean soup, refried beans, pork and beans and other bean dishes.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-3</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>1 time</th>
<th>2 times</th>
<th>3 times</th>
<th>4 times</th>
<th>5 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>times</td>
<td>per month</td>
<td>per week</td>
<td>per week</td>
<td>per week</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td>per day</td>
<td></td>
</tr>
</tbody>
</table>

6a. Each time you ate these beans, how much did you usually eat?

- [ ] Less than ½ cup
- [ ] ½ to 1 cup
- [ ] 1 to 1½ cups
- [ ] More than 1½ cups
7. Over the last month, how often did you eat other vegetables?

**DO NOT COUNT:** Lettuce salads
White potatoes
Cooked dried beans
Vegetables in mixtures, such as sandwiches, omelets, casseroles, Mexican dishes, stews, stir-fry, soups, etc.
Rice

**COUNT:** All other vegetables: raw, cooked, canned, and frozen

<table>
<thead>
<tr>
<th>Never</th>
<th>1-3 times</th>
<th>1-2 times</th>
<th>3-4 times</th>
<th>5-6 times</th>
<th>1 time per day</th>
<th>2 times per day</th>
<th>3 times per day</th>
<th>4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
</table>

(Go to Question 8)

7a. Each of these times that you ate other vegetables, how much did you usually eat?

<table>
<thead>
<tr>
<th>Less than ½ cup</th>
<th>½ to 1 cup</th>
<th>1 to 2 cups</th>
<th>More than 2 cups</th>
</tr>
</thead>
</table>

8. Over the last month, how often did you eat tomato sauce? Include tomato sauce on pasta or macaroni, pizza and other dishes.

<table>
<thead>
<tr>
<th>Never</th>
<th>1-3 times</th>
<th>1-2 times</th>
<th>3-4 times</th>
<th>5-6 times</th>
<th>1 time per day</th>
<th>2 times per day</th>
<th>3 times per day</th>
<th>4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
</table>

(Go on to Question 9)

8a. Each of these times that you ate tomato sauce, how much did you usually eat?

<table>
<thead>
<tr>
<th>Less than ½ cup</th>
<th>About ½ cup</th>
<th>About 1 cup</th>
<th>More than 1 cup</th>
</tr>
</thead>
</table>

9. Over the last month, how often did you eat vegetable soups? Include tomato soup, gazpacho, beef with vegetable soup, minestrone soup, and other soups made with vegetables.

<table>
<thead>
<tr>
<th>Never</th>
<th>1-3 times</th>
<th>1-2 times</th>
<th>3-4 times</th>
<th>5-6 times</th>
<th>1 time per day</th>
<th>2 times per day</th>
<th>3 times per day</th>
<th>4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
</table>

(Go to Question 10)

9a. Each of these times that you ate vegetable soup, how much did you usually eat?

<table>
<thead>
<tr>
<th>Less than 1 cup</th>
<th>1 to 2 cups</th>
<th>2 to 3 cups</th>
<th>More than 3 cups</th>
</tr>
</thead>
</table>

10. Over the last month, how often did you eat mixtures that included vegetables? Count such foods as sandwiches, casseroles, stews, stir-fry, omelets, and tacos.

<table>
<thead>
<tr>
<th>Never</th>
<th>1-3 times</th>
<th>1-2 times</th>
<th>3-4 times</th>
<th>5-6 times</th>
<th>1 time per day</th>
<th>2 times per day</th>
<th>3 times per day</th>
<th>4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>times per month</th>
<th>times per week</th>
<th>times per week</th>
<th>times per week</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>times per day</th>
<th>times per day</th>
<th>times per day</th>
<th>times per day</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>times per day</th>
<th>times per day</th>
<th>times per day</th>
<th>times per day</th>
</tr>
</thead>
</table>
**CES-D**

For each statement below, please mark an “X” in the box which best describes how often you felt or behaved this way— **DURING THE PAST WEEK, INCLUDING TODAY.**

<table>
<thead>
<tr>
<th>#</th>
<th>During the past week:</th>
<th>None of the time</th>
<th>A little of time</th>
<th>A moderate amount of the time</th>
<th>Most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I was bothered by things that usually don’t bother me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2.</td>
<td>I did not feel like eating; my appetite was poor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3.</td>
<td>I felt that I could not shake off the blues even with help from my family or friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4.</td>
<td>I felt that I was just as good as other people</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5.</td>
<td>I had trouble keeping my mind on what I was doing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6.</td>
<td>I felt depressed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7.</td>
<td>I felt that everything I did was an effort</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8.</td>
<td>I felt hopeful about the future</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9.</td>
<td>I thought my life had been a failure</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10.</td>
<td>I felt fearful</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11.</td>
<td>My sleep was restless</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12.</td>
<td>I was happy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13.</td>
<td>I talked less than usual</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14.</td>
<td>I felt lonely</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15.</td>
<td>People were unfriendly</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16.</td>
<td>I enjoyed life</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17.</td>
<td>I had crying spells</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>18.</td>
<td>I felt sad</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>19.</td>
<td>I felt that people disliked me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>20.</td>
<td>I could not “get going”</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
FSI
For each question, check one box next to the number that best indicates how the item applies to you.

1. Rate your level of fatigue on the day you felt most fatigued during the past week:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - Not at all fatigued
   - As fatigued as I could be

2. Rate your level of fatigue on the day you felt least fatigued during the past week:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - Not at all fatigued
   - As fatigued as I could be

3. Rate your level of fatigue on the average during the past week:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - Not at all fatigued
   - As fatigued as I could be

4. Rate your level of fatigue right now:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - Not at all fatigued
   - As fatigued as I could be

5. Rate how much, in the past week, fatigue interfered with your general level of activity:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - No interference
   - Extreme interference

6. Rate how much, in the past week, fatigue interfered with your ability to bathe and dress yourself:
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - No interference
   - Extreme interference

7. Rate how much, in the past week, fatigue interfered with your normal work activity (includes both work outside the home and housework):
   - [ ] 0 1 2 3 4 5 6 7 8 9 10
   - No interference
   - Extreme interference
8. Rate how much, in the past week, fatigue interfered with your ability to concentrate:

No interference

Extreme interference

9. Rate how much, in the past week, fatigue interfered with your relations with other people:

No interference

Extreme interference

10. Rate how much, in the past week, fatigue interfered with your enjoyment of life:

No interference

Extreme interference

11. Rate how much, in the past week, fatigue interfered with your mood:

No interference

Extreme interference

12. Indicate how many days, in the past week, you felt fatigued for any part of the day:

Days

13. Rate how much of the day, on average, you felt fatigued in the past week:

None of the day

The entire day

14. Indicate which of the following best describes the daily pattern of your fatigue in the past week:

Not at all fatigued

Worse in the morning

Worse in the afternoon

Worse in the evening

No consistent pattern of daily fatigue
ICQ

Please answer the following questions:

15. How effective do you think the program you received as part of this study will be in improving your level of physical activity?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

0 1 2 3 4 5 6
Not at all effective Extremely effective

16. How effective do you think the program you received as part of this study will be in improving the quality of your diet?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

0 1 2 3 4 5 6
Not at all effective Extremely effective

17. How skillful and knowledgeable do you consider the person who explained the program to you?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

0 1 2 3 4 5 6
Not at all skillful Extremely skillful

18. How important do you think it is that we made this program available to other breast cancer survivors?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

0 1 2 3 4 5 6
Not at all important Extremely important
APPENDIX C

2011 Era of Hope Abstract

Authors

Presenter          Yasmin Asvat
Institution        University of South Florida

Principal contact for editorial correspondence

Awardee           Yasmin Asvat
Institution        University of South Florida

Co-Author          Paul Jacobsen
Institution        H. Lee Moffitt Cancer Center & Research Institute at University of South Florida

Title and Abstract

Abstract Title     Motivational Interviewing Intervention to Increase Physical Activity in Breast Cancer Survivors

Abstract

Background: Positive changes in health behaviors, such as increasing physical activity, may help breast cancer survivors (BCS) optimize their health outcomes. Physical activity is associated with improved quality of life among BCS; however, the majority of survivors are not meeting recommended levels of physical activity. Existing interventions to promote physical activity in BCS may have limited potential for dissemination and long-term behavior change because they are often time- and resource-intensive, do not address intrinsic motivation for change, and tend to impose specific physical activity regimens. An alternate model, derived from Self-determination Theory, holds that behavior change occurs when one fosters intrinsic motivation, offers supportive guidance, and emphasizes individual choice. Motivational Interviewing (MI), a client-centered, directive, counseling style, may be ideally suited to promoting physical activity in BCS. MI helps individuals explore and resolve ambivalence toward change, enhance their own intrinsic motivations for change, and ultimately choose to commit to change. Research suggests MI interventions help increase physical activity in other chronically ill populations; however, MI interventions have not been adequately evaluated in BCS.

Objectives: (1) The study will evaluate the efficacy of a MI intervention to promote physical activity among early-stage BCS who are sedentary but are contemplating increasing their physical activity. It is hypothesized that the MI group, but not the control group, will report a significant increase in physical activity from baseline to the 3-month follow-up, which will be maintained at 6-month follow-up. (2) The study will examine the impact of the MI intervention on depressive symptoms, fatigue, and aerobic fitness. It is hypothesized that the MI group, but not the control group, will report decreases in depressive symptoms and fatigue and increases in aerobic fitness. (3) The study will also explore whether the degree of change in physical activity mediates the expected beneficial effects of the MI intervention.
Methods: The study is a longitudinal, randomized-controlled trial. BCS are recruited using the Moffitt Cancer Center Breast Cancer Registry. Eligibility criteria include: English-speaking, diagnosis of Stage 0–II disease, currently disease free, completed treatment in the past 2 years, physically able to exercise, and currently sedentary but contemplating increasing physical activity. One-hundred twenty BCS will be randomized to the intervention or the control group. The MI group receives 1 in-person and 2 phone-based MI sessions. The control group receives a healthy lifestyle intervention that controls for time and attention. All participants complete a battery of assessments at baseline, 3-month, and 6-month follow-up, which includes measures of physical activity, fatigue, and depressive symptoms.

Results: Since this study is in its early stages, preliminary results will be presented.

Conclusions: Preliminary conclusions will be presented. It is expected that a MI intervention will offer health care professionals with an efficient, alternative model for the promotion of long-term health behavior change among BCS. By increasing physical activity, this MI intervention stands to positively impact the quality of life of BCS.