



**Institute of
Psychiatry**

at The Maudsley

KING'S
College
LONDON

Cognitive behavioural interventions to enhance SDM

Rona Moss-Morris

**Professor of Psychology as Applied
to Medicine**

Outline

What is CBT

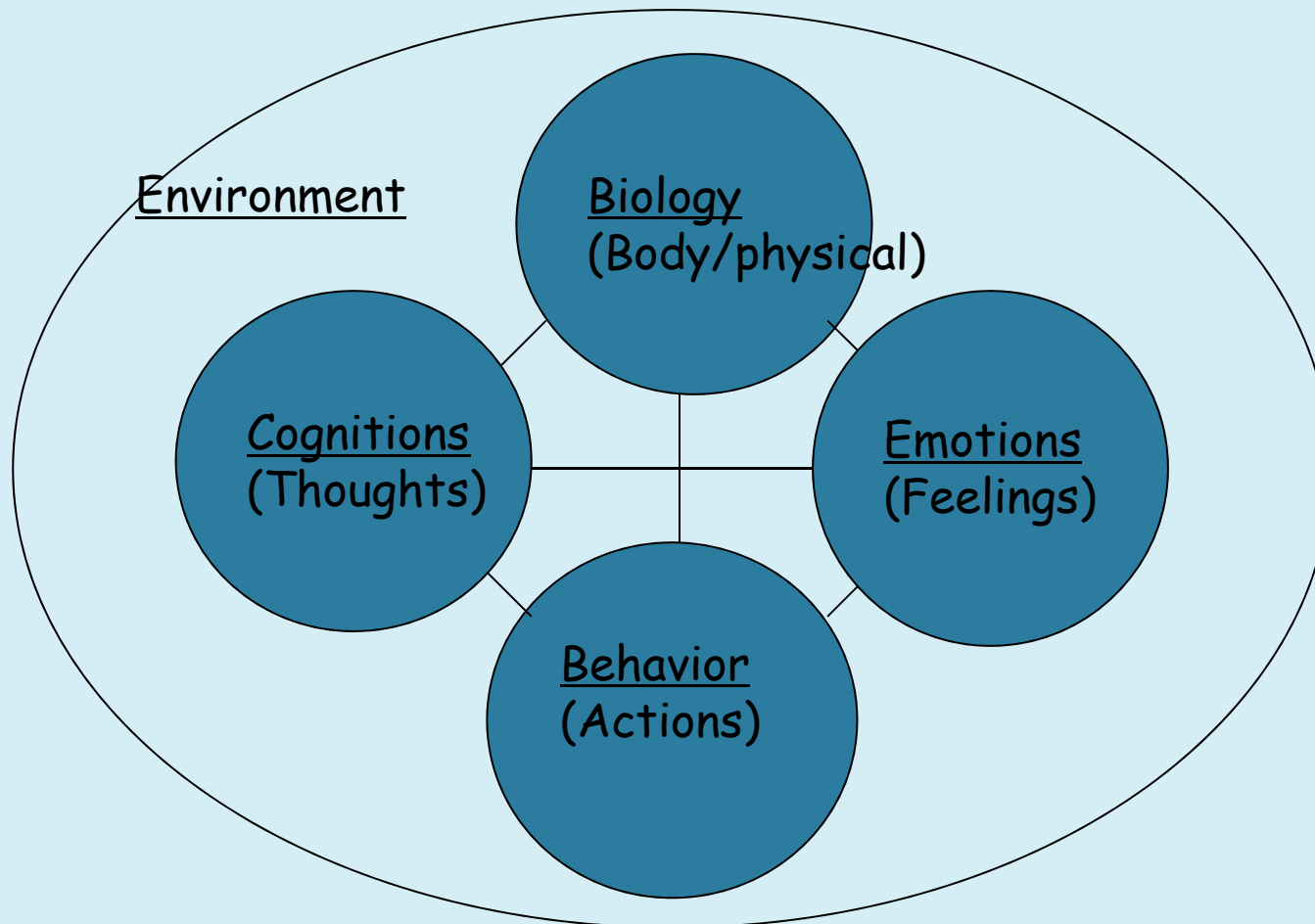
MS Fatigue

- CB Model of MS fatigue
- Therapist driven CBT for MS fatigue
- CCBT for MS fatigue

Adjustment to MS

- CB model of adjustment to MS
- Nurse-led CBT for MS

The five part CBT Model

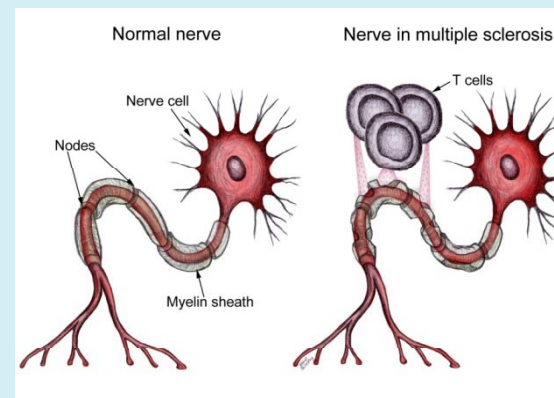


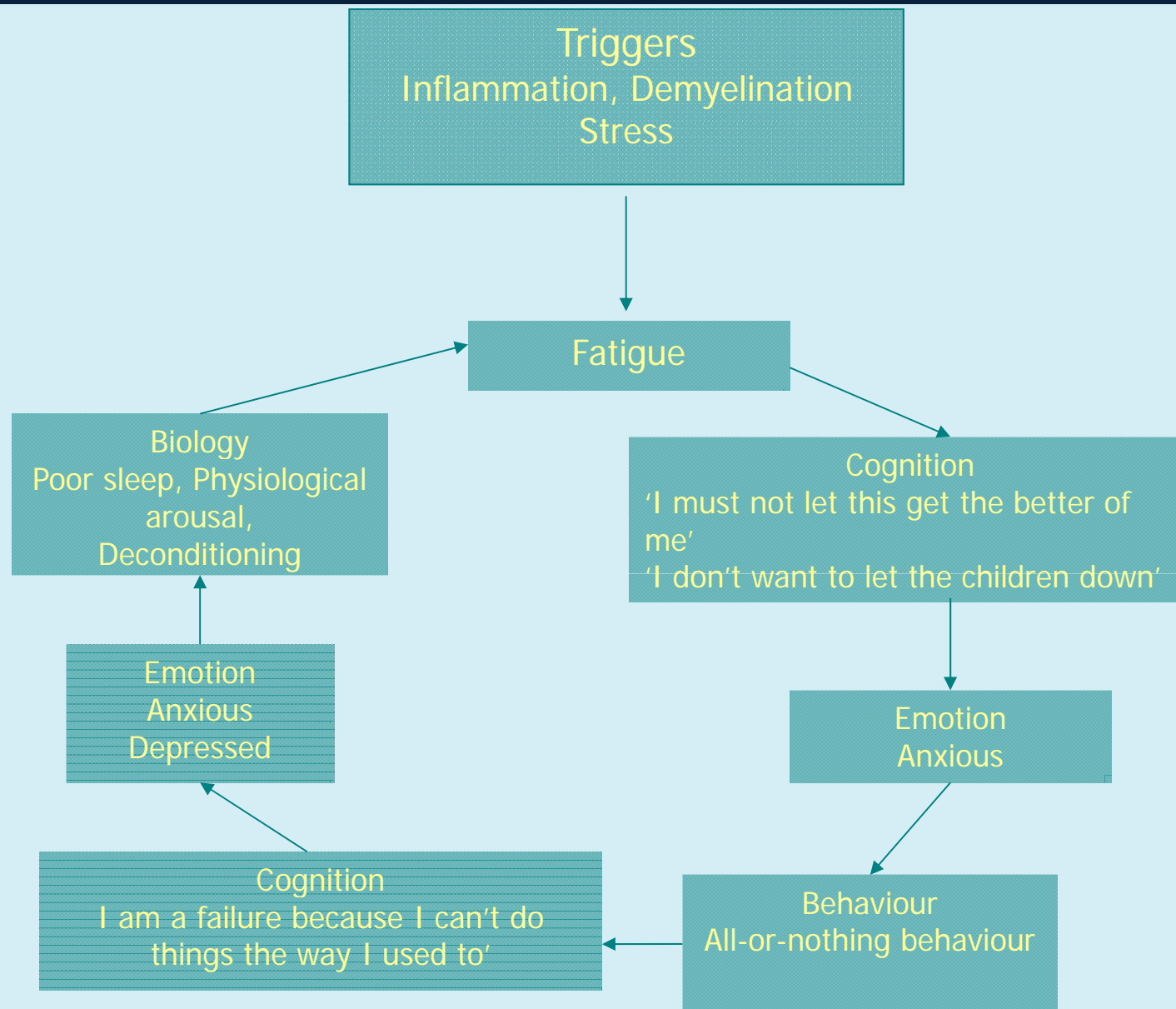
Core Therapeutic processes

- **Formulation**
- **Collaborative approach**
- **Guided discovery**
- **Behavioural change e.g. reduce avoidance**
- **Identifying unhelpful thoughts**
- **Alternate thoughts**

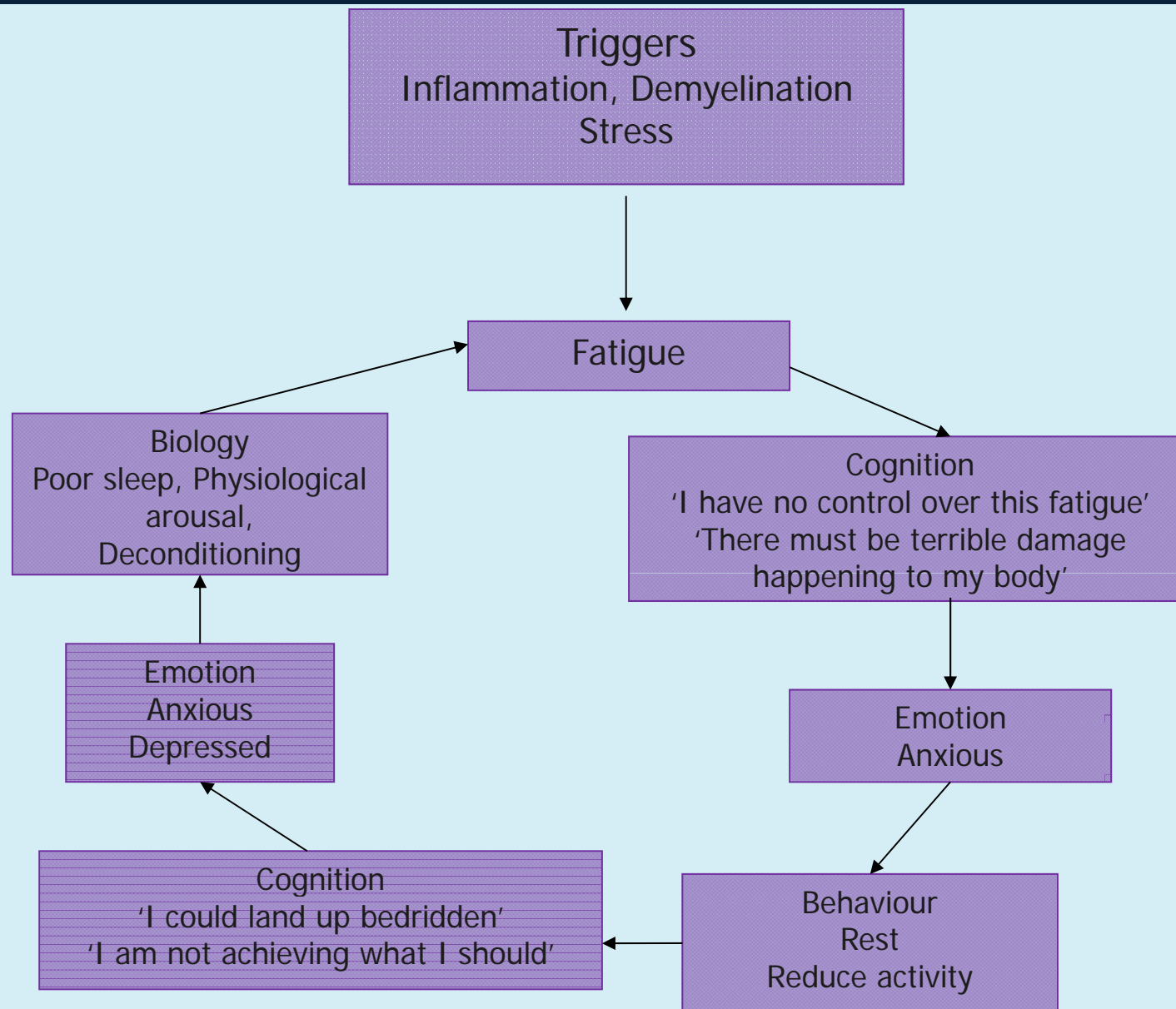
Fatigue in MS

- Fatigue is among the most common, and least understood, symptoms of MS.
- 76% to 97% of MS patients report fatigue.
- Fatigue has a substantial impact on daily activities.





Van Kessel, & Moss-Morris. (2006) Understanding multiple sclerosis fatigue: A synthesis of biological and psychological factors, JPR



Van Kessel, & Moss-Morris. (2006) Understanding multiple sclerosis fatigue: A synthesis of biological and psychological factors, JPR

Can CBT reduce fatigue in MS?

Cognitive behaviour therapy compared to relaxation training for multiple sclerosis fatigue: A randomized controlled trial.

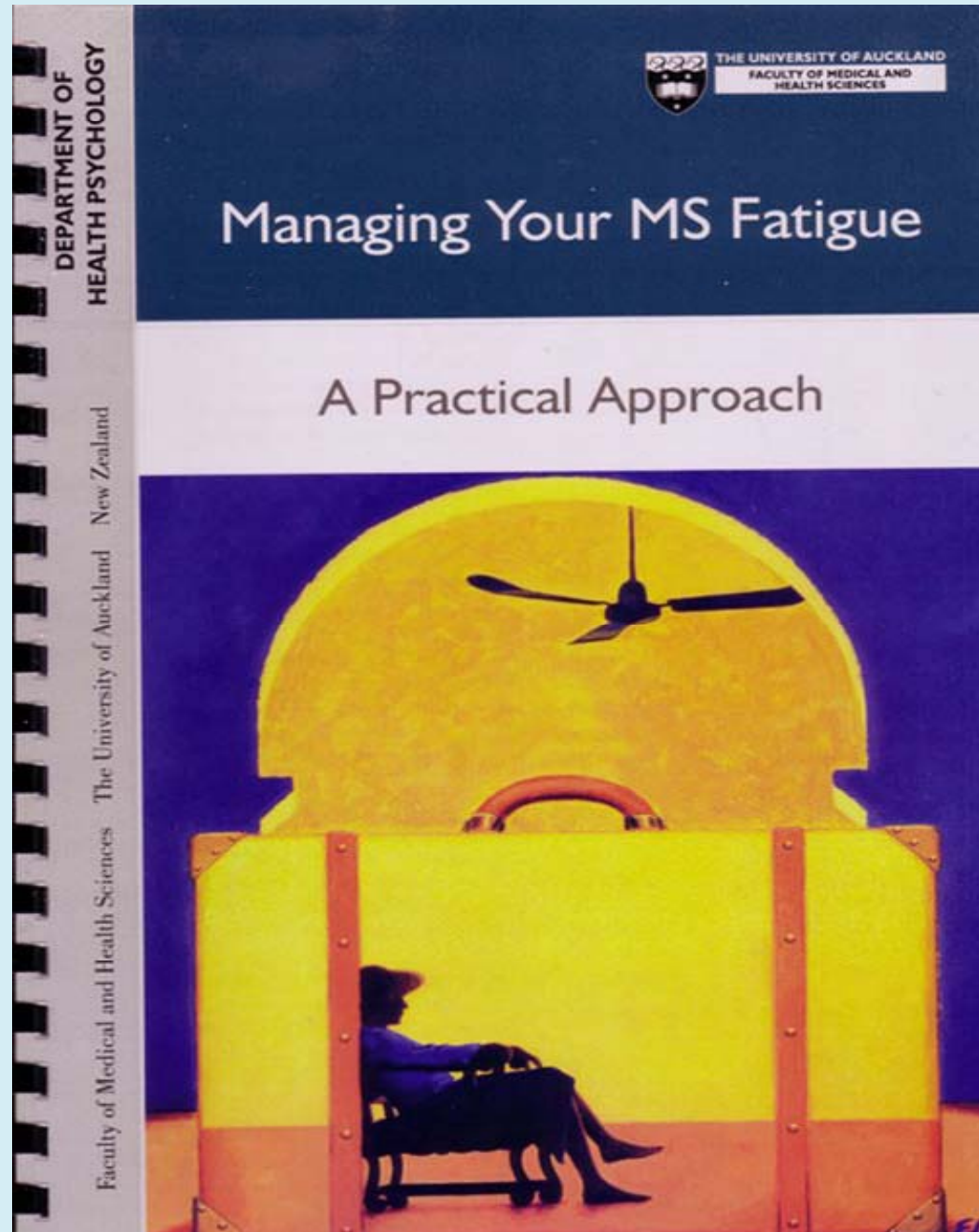


van Kessel, K., Moss-Morris, R, Willoughby, E, Chalder, T. Johnson, M.H., Robinson, E. (2008). *Psychosomatic Medicine*, 70, 205-213.

8 weekly
manualised
sessions

Combination of
face-to-face
and telephone
sessions.

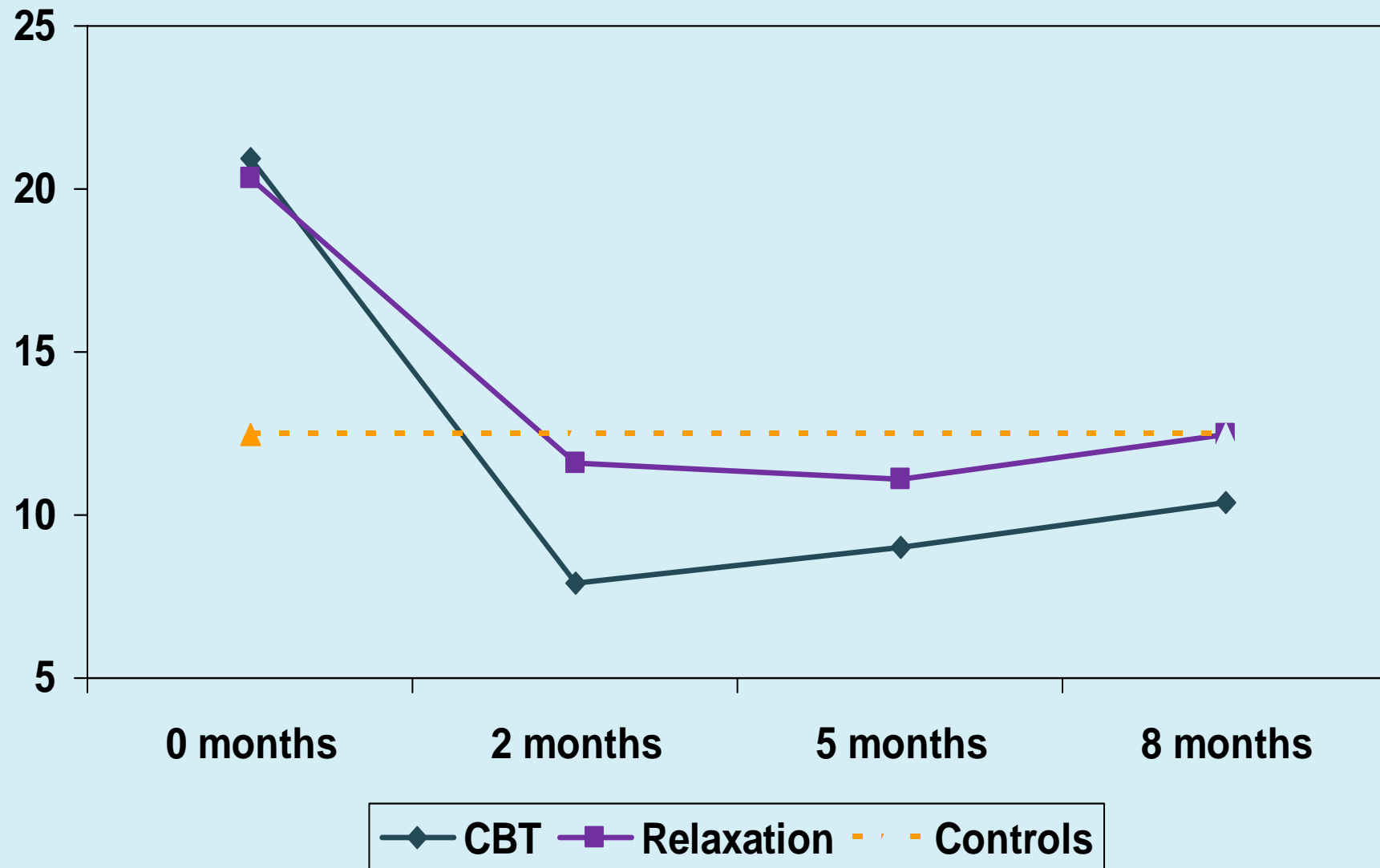
n=72



The programme

- ❖ **Develop personal model of fatigue**
- ❖ **Changing activity patterns**
- ❖ **Challenging unhelpful thoughts**
- ❖ **Stress and sleep management**
- ❖ **Managing difficult emotions**

Fatigue across groups



Which cognitions and behaviours mediate the positive effect of cognitive behavioural therapy on fatigue in patients with multiple sclerosis?

H. Knoop¹, K. van Kessel² and R. Moss-Morris^{3*}

¹ *Expert Centre for Chronic Fatigue, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands*

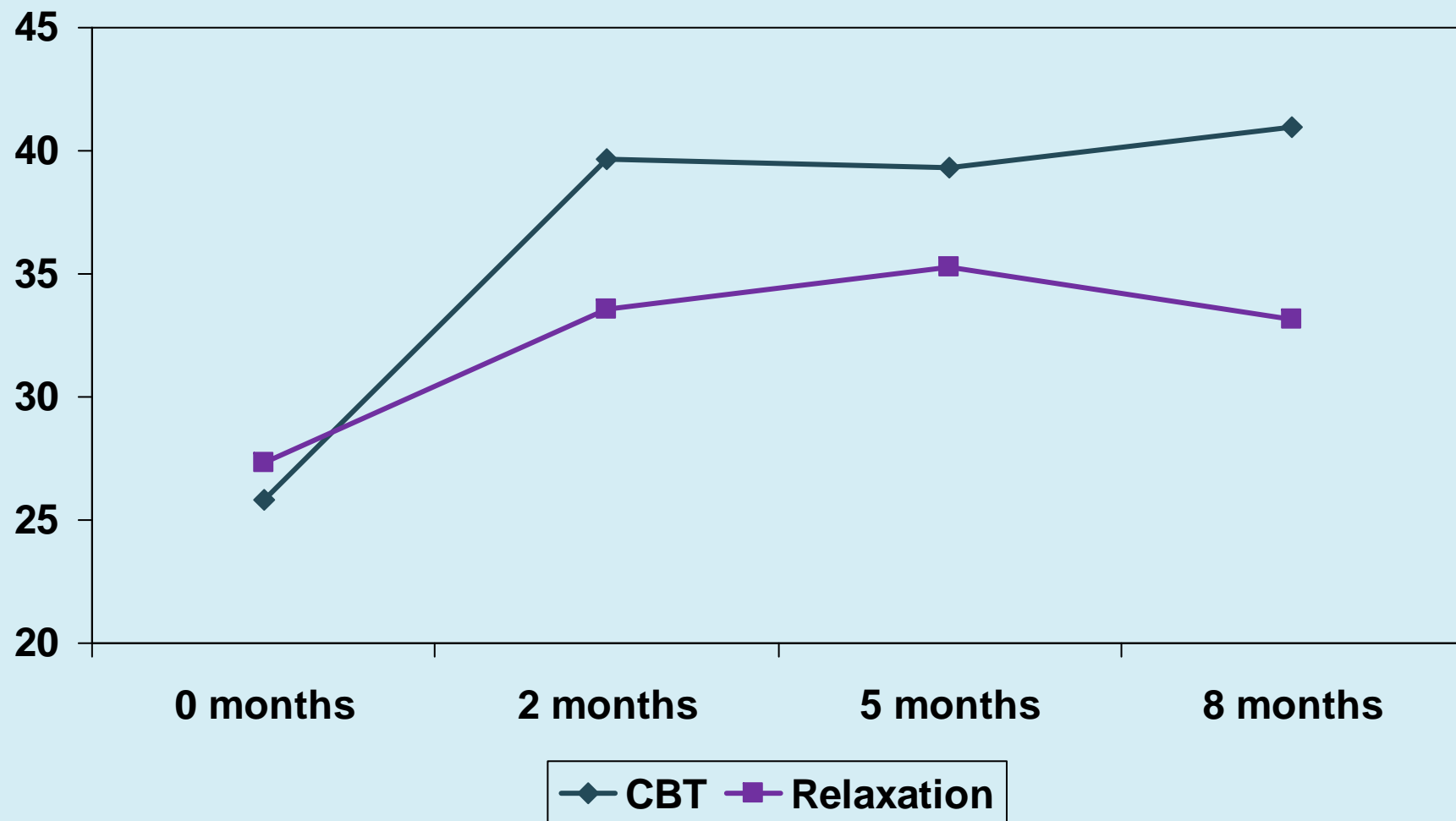
² *Department of Psychology, University of Auckland, Auckland, New Zealand*

³ *School of Psychology, University of Southampton, Highfield, Southampton, UK*

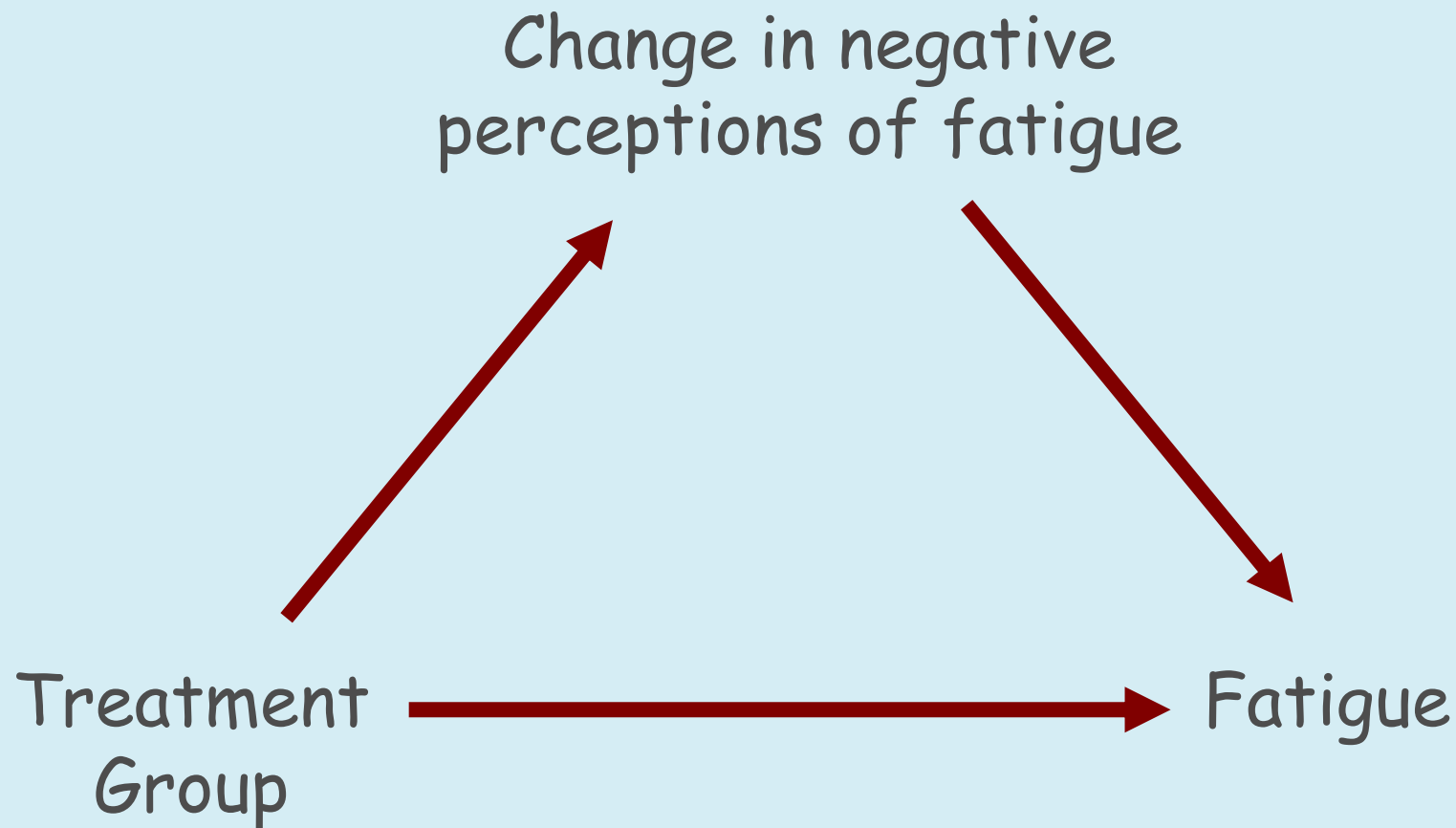
Background. Chronic fatigue is a common symptom of multiple sclerosis (MS). A randomized controlled trial (RCT) showed that cognitive behavioural therapy (CBT) was more effective in reducing MS fatigue than relaxation training (RT). The aim of the current study was to analyse additional data from this trial to determine whether (1) CBT compared to RT leads to significantly greater changes in cognitions and behaviours hypothesized to perpetuate MS fatigue; (2) changes in these variables mediate the effect of CBT on MS fatigue; and (3) these mediation effects are independent of changes in mood.

Method. Seventy patients (CBT, $n=35$; RT, $n=35$) completed the Cognitive and Behavioural Responses to Symptoms Questionnaire (CBSQ), the Brief Illness Perception Questionnaire (B-IPQ) modified to measure negative representations of fatigue, the Hospital Anxiety and Depression Scale (HADS), and the Chalder Fatigue Questionnaire (CFQ), pre- and post-therapy. Multiple mediation analysis was used to determine which variables mediated the change in fatigue.

Total Positive Perceptions of fatigue



Why does CBT work?





Contents lists available at SciVerse ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Shorter communication

A pilot randomised controlled trial of an Internet-based cognitive behavioural therapy self-management programme (MS Invigor8) for multiple sclerosis fatigue

Rona Moss-Morris^{a,*}, Paul McCrone^b, Lucy Yardley^c, Kirsten van Kessel^c, Gary Wills^d, Laura Dennison^e^a Psychology Dept., Institute of Psychiatry, KCL, 5th Floor Bermondsey Wing Guy's Hospital Campus, London Bridge, London SE1 9RT, UK^b Centre for the Economics of Mental Health, Institute of Psychiatry, King's College London, London, UK^c Department of Psychology, University of Auckland, Auckland, New Zealand^d School of Electronics and Computer Science, University of Southampton, Southampton, UK^e School of Psychology, University of Southampton, Southampton, UK

ARTICLE INFO

Article history:

Received 17 August 2011

Received in revised form

10 January 2012

Accepted 5 March 2012

Keywords:

Multiple sclerosis

Fatigue

Cognitive behavioural therapy (CBT)

Internet-based

Self-management

ABSTRACT

The majority of people affected by Multiple Sclerosis (paMS) experience severe and disabling fatigue. A recent randomised controlled trial (RCT) showed that cognitive behaviour therapy with a clinical psychologist was an effective treatment for MS fatigue. An Internet-based version of this intervention, MS Invigor8, was developed for the current study using agile design and input from paMS. MS Invigor8 includes eight tailored, interactive sessions. The aim was to test the feasibility and potential efficacy and cost-effectiveness of the programme in a pilot RCT. 40 patients were randomised to MS Invigor8 ($n = 23$) or standard care ($n = 17$). The MS Invigor8 group accessed sessions over 8–10 weeks and received up to three 30–60 min telephone support sessions. Participants completed online standardised questionnaires assessing fatigue, mood, quality of life and service use at baseline and 10 weeks follow-up. Large between group treatment effects were found for the primary outcomes of fatigue severity ($d = 1.19$) and impact ($d = 1.02$). The MS Invigor8 group also reported significantly greater improvements in anxiety, depression and quality-adjusted life years. These data suggest that Internet-based CBT may be a clinically and cost-effective treatment for MS fatigue. A larger RCT with longer term follow-up is warranted.

© 2012 Elsevier Ltd. All rights reserved.



MSInvigor8 Design team





Search

MSInvigor8

Breaking the cycle of fatigue



[SEE HOME PAGE](#)



[MEET OUR TEAM](#)



[CONTACT US](#)



[REGISTER / LOGIN
TO WEBSITE](#)



Most people with multiple sclerosis (MS) experience fatigue. For many this is a worrying and disabling symptom. MS Invigorate is an 8 session programme designed to treat MS fatigue.

The UK trial is now full!

The New Zealand trial is now full!

There are no other trials currently running.

MSInvigor8 is based on Cognitive Behaviour Therapy (CBT). In a study published in 2008, we showed that 8 sessions of CBT greatly reduced fatigue in MS. This is the Internet version of this programme

WELCOME

[WHAT IS CBT?](#)

[HOW CAN CBT HELP MS?](#)

[WHO CAN TAKE PART?](#)

[WHAT ABOUT SECURITY?](#)

https://octopussy.ecs.soton.ac.uk/MSInvigor8/sections/programme/shell.php - Microsoft Internet Explorer provided by University

Back

Search

Favorites

File

Edit

View

Favorites

Address

https://octopussy.ecs.soton.ac.uk/MSInvigor8/sections

Go

Links

Convert

Select

MS

SESSION 1

2. Behaviour

Only click on any behaviours that are true for you recently.

I nap during the day to manage my fatigue

☐

Often

☐

Sometimes

☐

Rarely

I tend to overdo things when I have energy

☐

Often

☐

Sometimes

☐

Rarely

I regularly sleep more than 8 - 9 hours a night

☐

Often

☐

Sometimes

☐

Rarely

I find myself rushing to get things done before I crash

☐

Often

☐

Sometimes

☐

Rarely

PROGRESS

TAKE A BREAK

PRINT

BACK

FORWARD

start

Inbox - Micr...

RE: TSC ch...

2 Microsof...

Document7 ...

session 8 1...

Document9 ...

Microsoft A...

https://octo...

14:27

www.kcl.ac.uk



SESSION 1

2. Behaviour

Only click on any behaviours that are true for you recently.

I tend to avoid exercise when I'm fatigued

☐

Often

☐

Sometimes

☐

Rarely

I tend to avoid social arrangements or other activities because of fatigue (eg housework, work engagements, etc)

☐

Often

☐

Sometimes

☐

Rarely

I ignore my fatigue and/or other symptoms and keep pushing myself regardless

☐

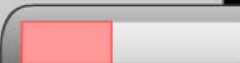
Often

☐

Sometimes

☐

Rarely



PROGRESS



TAKE A BREAK



PRINT



BACK FORWARD

Back

Search

Favorites

File

Edit

View

Favorites

Address

https://octopussy.ecs.soton.ac.uk/MSInvigor8/sections

Links

Convert

Select

MS

SESSION 1 3. Behaviour

Behaviour

Do you have any other behaviours which may contribute to your fatigue and other symptoms?

If so, please use the box below to write down the ones that you feel are most important and we will include them in your personal model.

Type answer in textbox

PROGRESS

TAKE A BREAK

PRINT

BACK

FORWARD

start

Inbox - Microsoft ...

RE: TSC charter f...

Pisa 2009 round t...

Document7 - Micr...

session 8 110909 ...

https://octopussy....

Trusted sites



SESSION 1 2. Behaviour

Rona's Behaviour Bubble

Thanks for answering these questions. Below is a picture of your Behaviour Bubble. These are behavioural factors which contribute to your fatigue.

Behaviour

Nap during the day
Sleep more than 8 - 9 hours a night
Avoid exercise when fatigued
Avoid social arrangements/other activities

In sessions 2, 3 and 4 we will talk about the impact of behaviour patterns on fatigue and how these can be changed. Next we will explain how thoughts may contribute to fatigue.



PROGRESS



TAKE A BREAK



PRINT



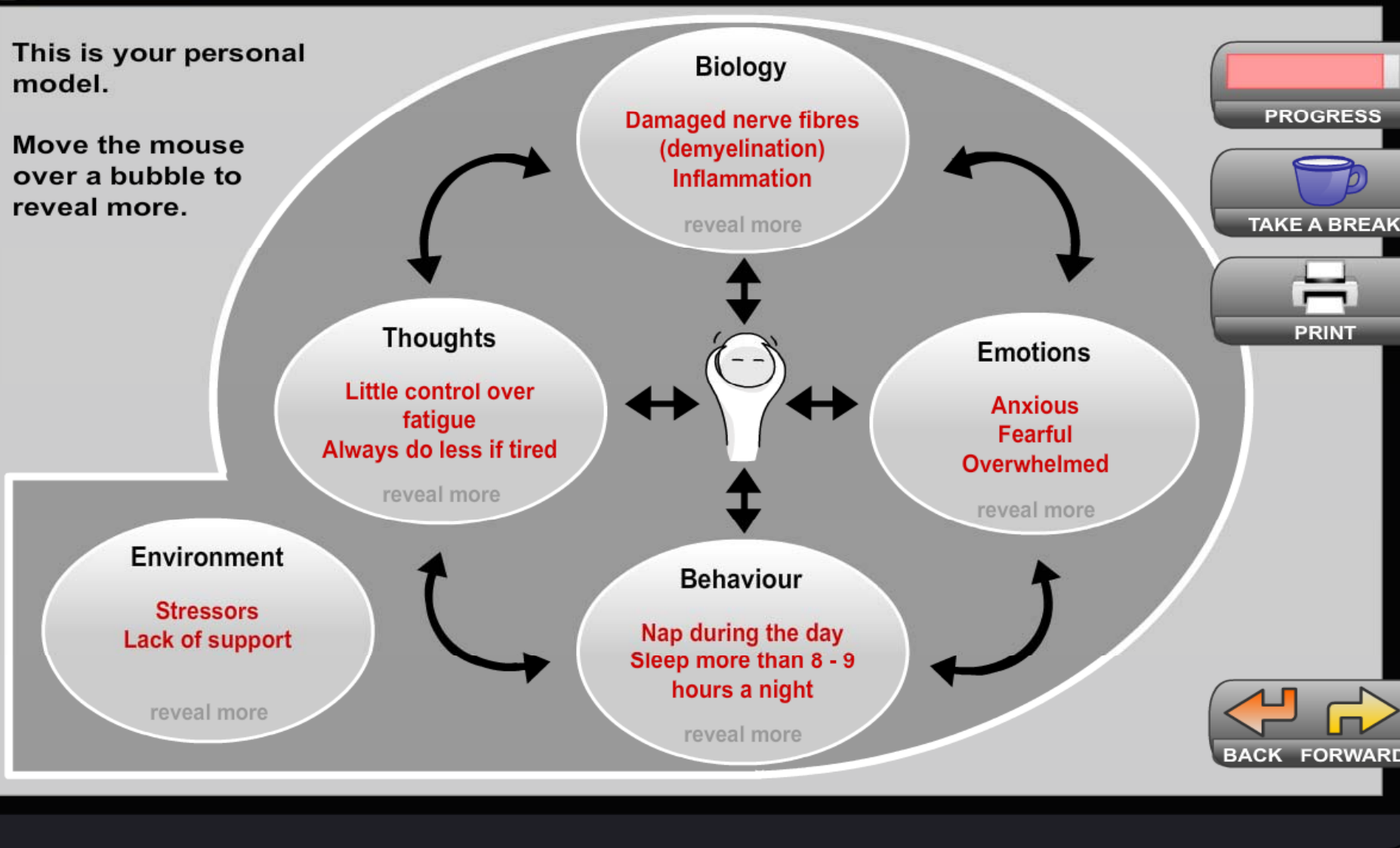
BACK FORWARD



SESSION 1 3. Your Personal Model

This is your personal model.

Move the mouse over a bubble to reveal more.



PROGRESS

TAKE A BREAK

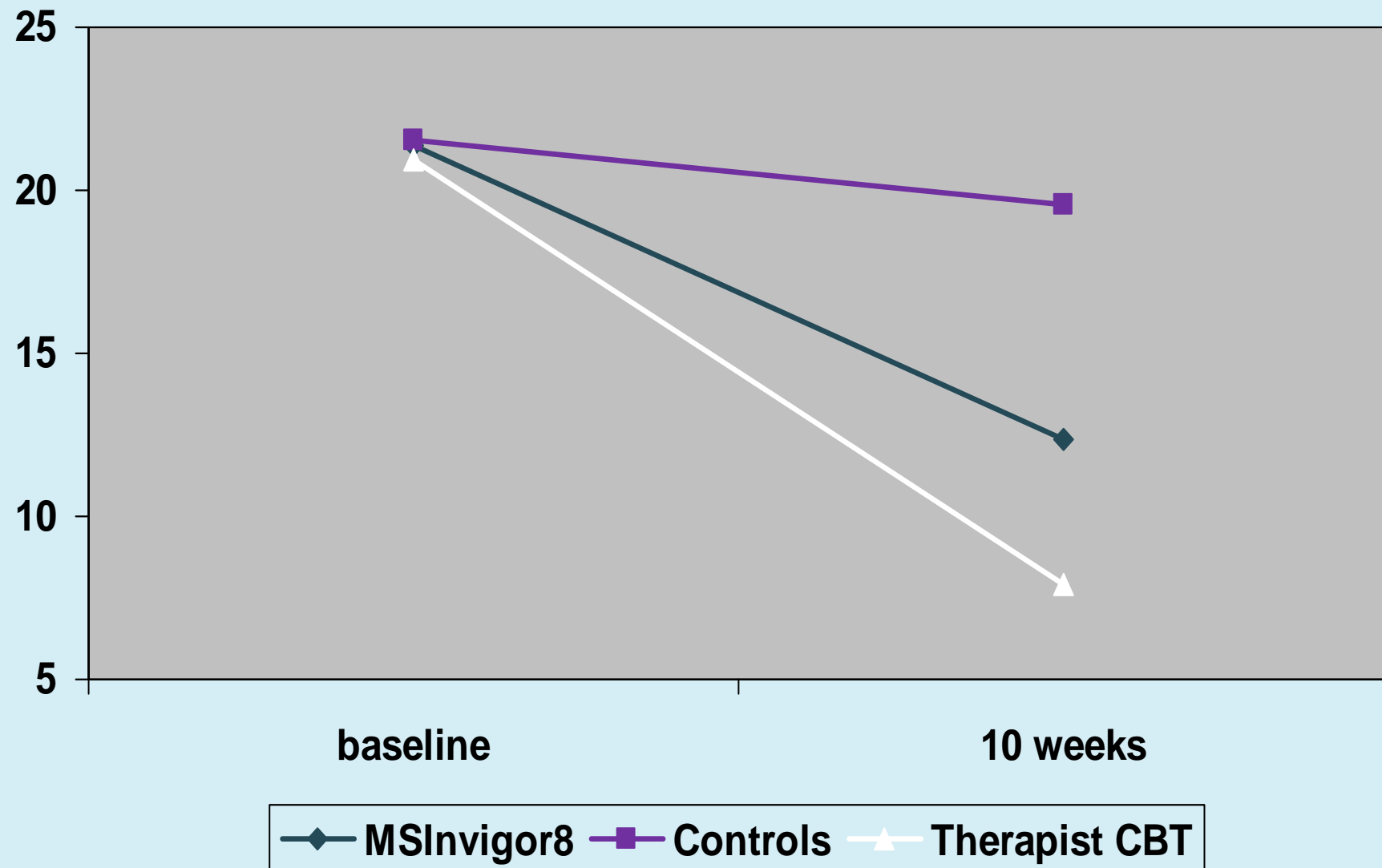
PRINT

BACK FORWARD

MSI Pilot trial

	MSInvigor8 (n=23)	Control group (n=17)
Age: M (SD)	40 (17.8)	42 (11.43)
Gender: % female	73%	94%
Time since diagnosis	21 (9.05)	16 (7.9)

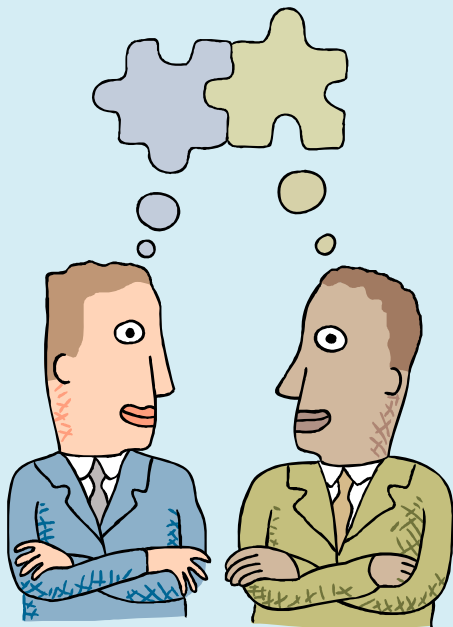
Fatigue Severity Across Groups



$(F(3,36)= 16.59, p<.001)$

Within group Effect Sizes for CBT

- MSInvigor8 study = 1.49 and 1.40
- Therapist driven CBT = 3.03



Summary of economic data

- **MSInvigor8**
 - produced more QALYs
 - did not have an impact on non-intervention service costs.
- **To achieve NICE recommended cost per QALY of £20,000**
 - intervention costs need to be no more than £300 per person
- **If 300 people use the intervention then this would cover a £90,000 development cost which is above the actual costs that were accrued.**



**Supportive adjustment for
Multiple Sclerosis**

UNIVERSITY OF
Southampton
School of Psychology

ACADEMIC TEAM

Rona Moss-Morris

Laura Dennison

Sabine Landau

Trudie Chalder

Eli Silber

Lucy Yardley

Southampton **NHS**
University Hospitals NHS Trust

Institute of Psychiatry
at the Maudsley

CLINICAL TEAM

Sarah Morton

Sally Baines

Suzanne Roche

KING'S
College
LONDON
University of London

Modelling phase

Systematic review of the empirical literature on adjustment to MS (n=72)

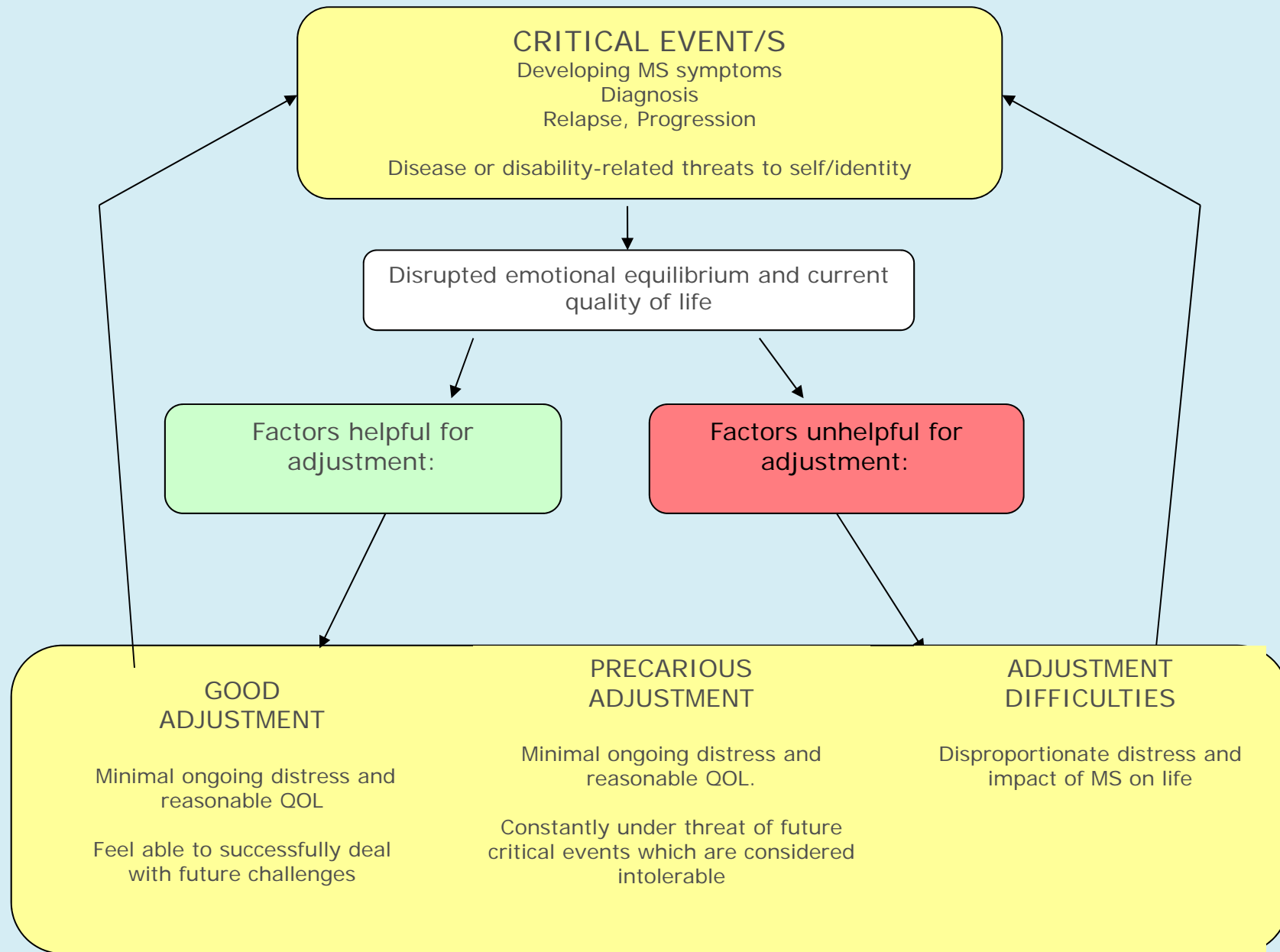
Dennison et al., (2009). Clinical Psychology Review. 29, (2), 141-153.



In-depth interviews with pwMS (n=30) and partners of pwMS (n=15)

Bogosian et al., (2009). Multiple Sclerosis. 15 (7), 876-884.

Dennison et al. (2010) Journal of Health Psychology, 16(3) 478–488.





Multiple Sclerosis Society

First Edition
December 2010

Supportive Adjustment for Multiple Sclerosis (saMS)

An eight-week
CBT programme
manual

Written by
Professor Rona Moss-Morris,
Laura Dennison and
Professor Trudie Chalder

This information is the result of
MS Society-funded research at

UNIVERSITY OF
Southampton

and

KING'S
College
LONDON

www.kcl.ac.uk

Supportive Adjustment for Multiple Sclerosis (saMS)

Contents

	page
INTRODUCTION:	2
This manual and your treatment sessions	
CHAPTER ONE:	8
An introduction to adjusting to multiple sclerosis	
CHAPTER TWO:	18
Adapting to living with MS	
CHAPTER THREE:	30
Setting goals and problem solving	
CHAPTER FOUR:	42
Symptom management	
CHAPTER FIVE:	58
How to tackle negative or unhelpful thoughts	
CHAPTER SIX:	76
Improving the quality of your sleep	
CHAPTER SEVEN:	88
Managing stress	
CHAPTER EIGHT:	104
Managing social relationships	
CHAPTER NINE:	120
Preparing for the future	

Coping when somebody close to you has MS

A booklet for partners,
relatives or friends

Written by
Professor Rona Moss-Morris,
Laura Dennison and
Professor Trudie Chalder

This information is the result of
MS Society-funded research at:

KING'S
College
LONDON and **UNIVERSITY OF**
Southampton

**Institute of
Psychiatry**

at The Maudsley

KING'S
College
LONDON

Dealing with feeling helpless

A diagnosis of MS, and the realisation of what this means, often generates feelings of helplessness in partners and those close to people with MS. Jenny provides a good example of these feelings:

"I feel a bit lost at times, because you can't help someone suffering with this disease, it's impossible, it's out of your hands and you feel sort of... like... I don't know, helpless, frustrated, and very angry."

Men in particular seemed to struggle with feeling out of control, as Gary describes:

"As the actual man, I am supposed to protect, to lay down my life, and do whatever it takes to protect my partner, my wife. But in this situation there is nothing you can do. It's very difficult to describe, you feel like you're just powerless to actually do anything. It is like the control has been taken from you. So it's emasculating really, it's difficult to describe more than that..."

It's not surprising that MS provokes such strong feelings of helplessness – it is unpredictable and currently incurable and it is distressing to see somebody you care about having to deal with this. There is no magic wand available for you to put things back to how they were before. But there are ways to manage symptoms, limitations and emotional responses related to MS. Your partner or friend will look at these in his/ her sessions with the nurse. Also, from what the people with MS we interviewed told us, there is a whole range of important ways in which support people help, including:

- just being there!
- listening and talking
- finding out information
- taking an interest and taking part in managing MS (for example, going to doctors' appointments, MS society meetings)
- making adaptations to lifestyle, activities, roles, expectations
- providing different types of support – sometimes emotional rather than practical

How to best support somebody with MS

Most people don't want to see their partner or friend upset and struggling and want to help and support them in some way. However, it is difficult to know what to do in a situation where you can't get rid of the main problem. We found that often there is a mismatch between the amount and type of support that is given and what the person with MS wants and needs. Mike and Sandra are a typical example:

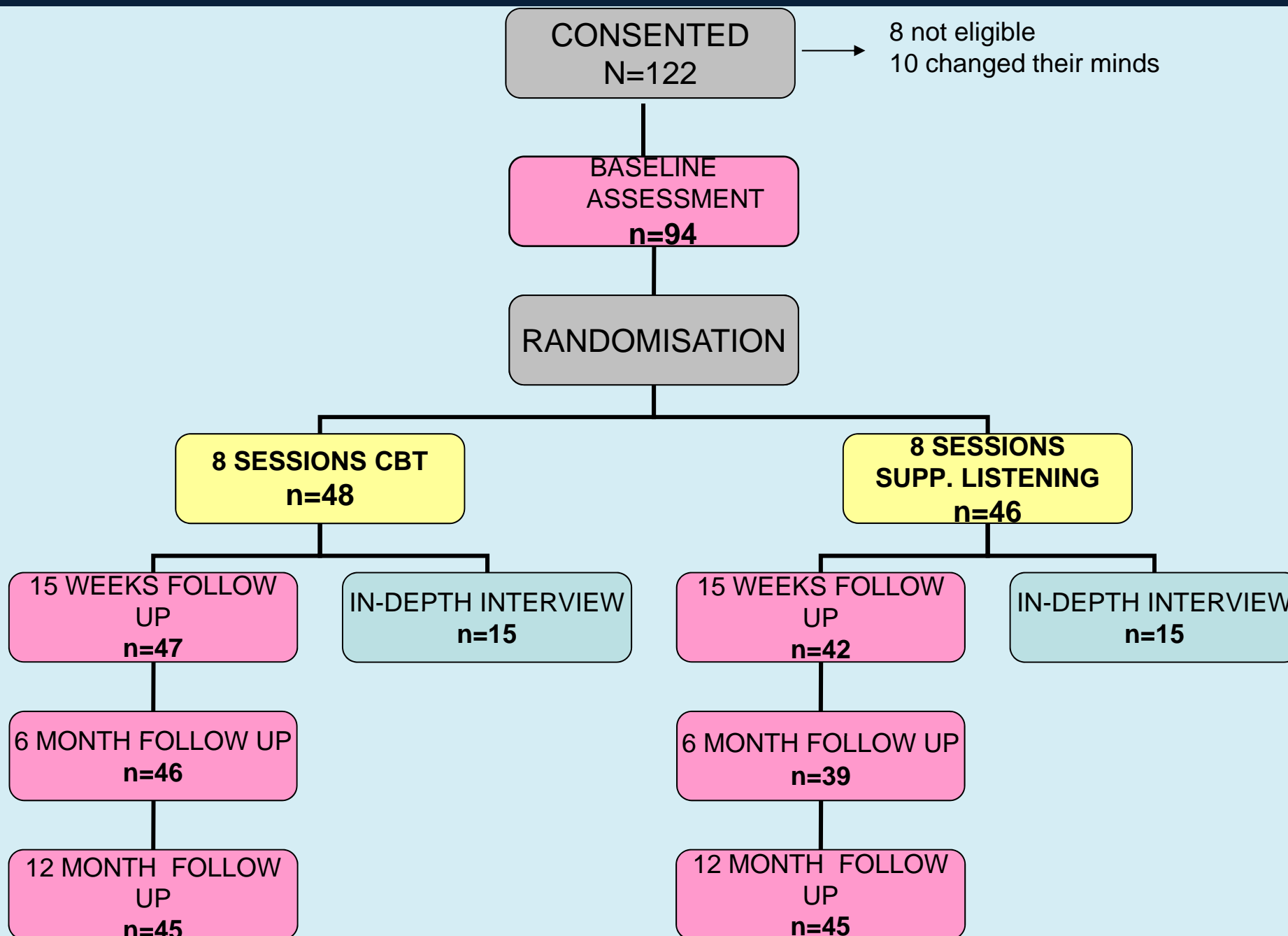
Mike (husband) reported how, when Sandra was diagnosed with MS, he didn't know what to do to help the situation. He was shocked and upset and also wanted to ease her distress. He thought that maybe in the future her mobility would get worse and she might need to use a wheelchair. So he focussed all his energy into making changes to the house and garden and building wheelchair ramps.

Sandra (wife with MS) talked about how, when she was first diagnosed, what she really wanted was for Mike to give her a hug! At that time she wasn't ready to make plans for how she would cope with potential disability in the future. She just wanted emotional support and someone to talk to.

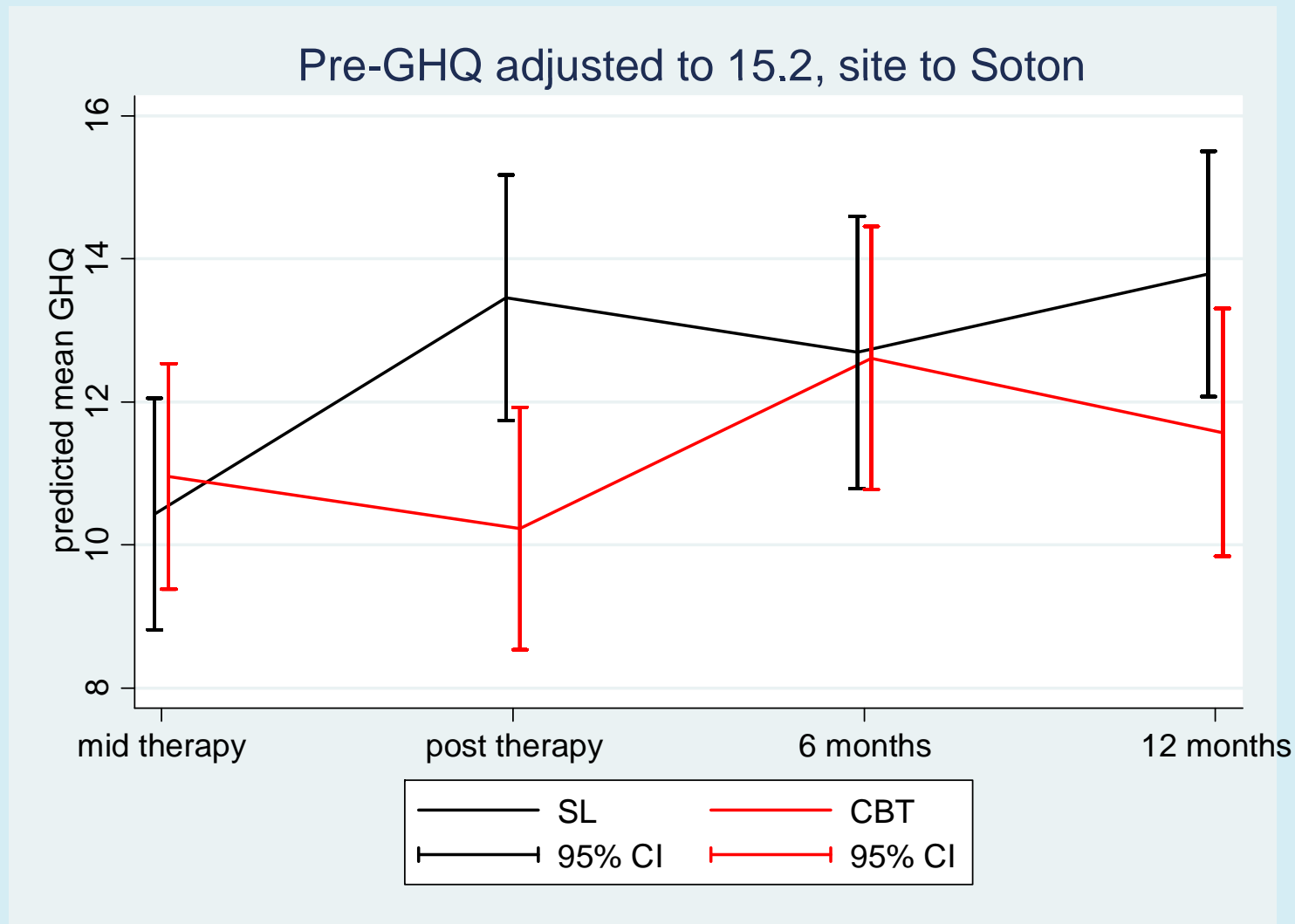
CBT versus Supportive Listening

- Moss-Morris et al. (2009). Protocol for the saMS trial. BMC Neurology, 2009, 9:45
- Delivered by 2 general nurses
- Trained specifically for this project
 - MS
 - CBT
 - Supportive Listening

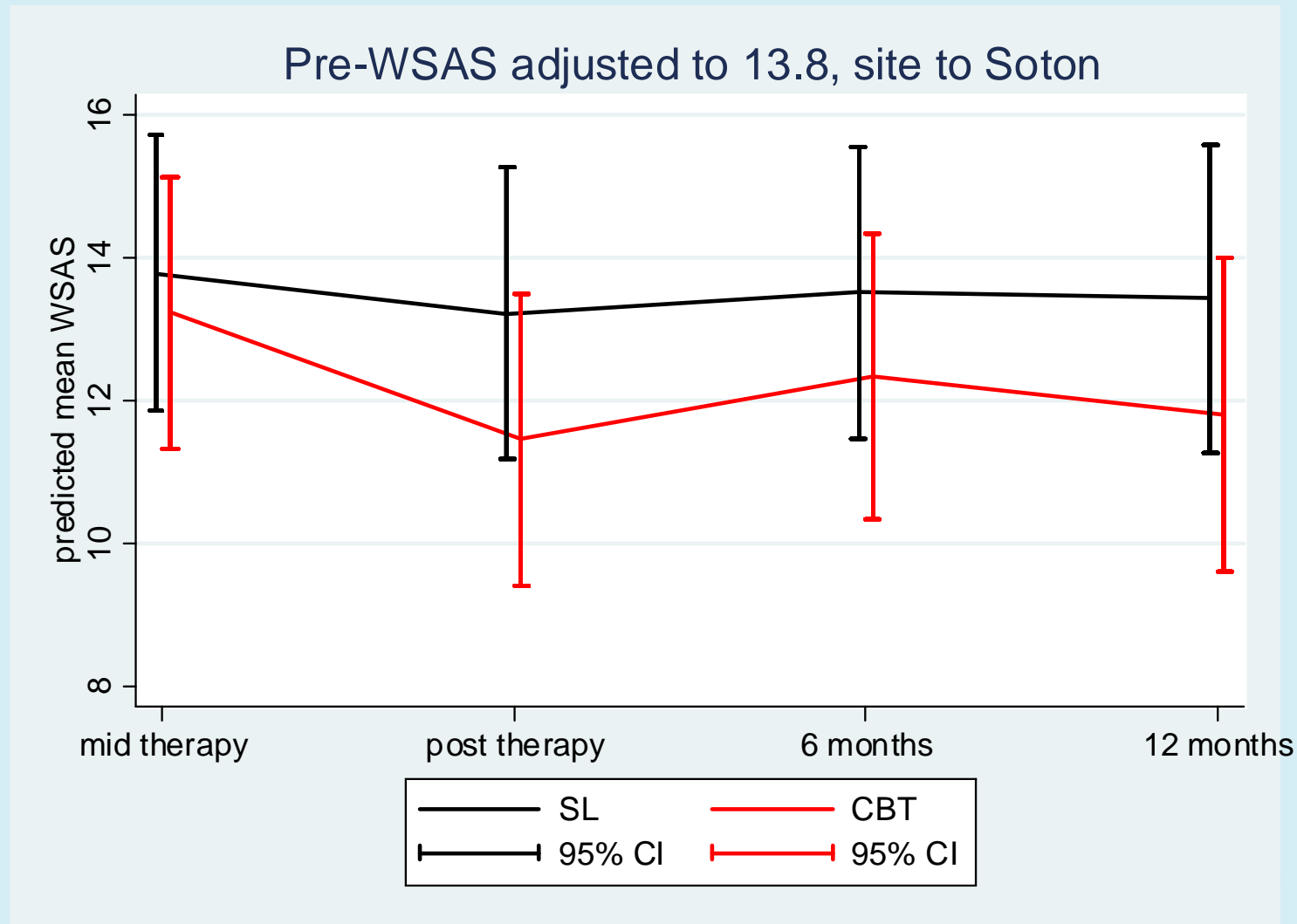




Distress (GHQ)



Functional Impairment (WSAS)



Global improvement

	CBT	SL
Improved	67.4%	31%
Not improved or worse	32.6%	69%

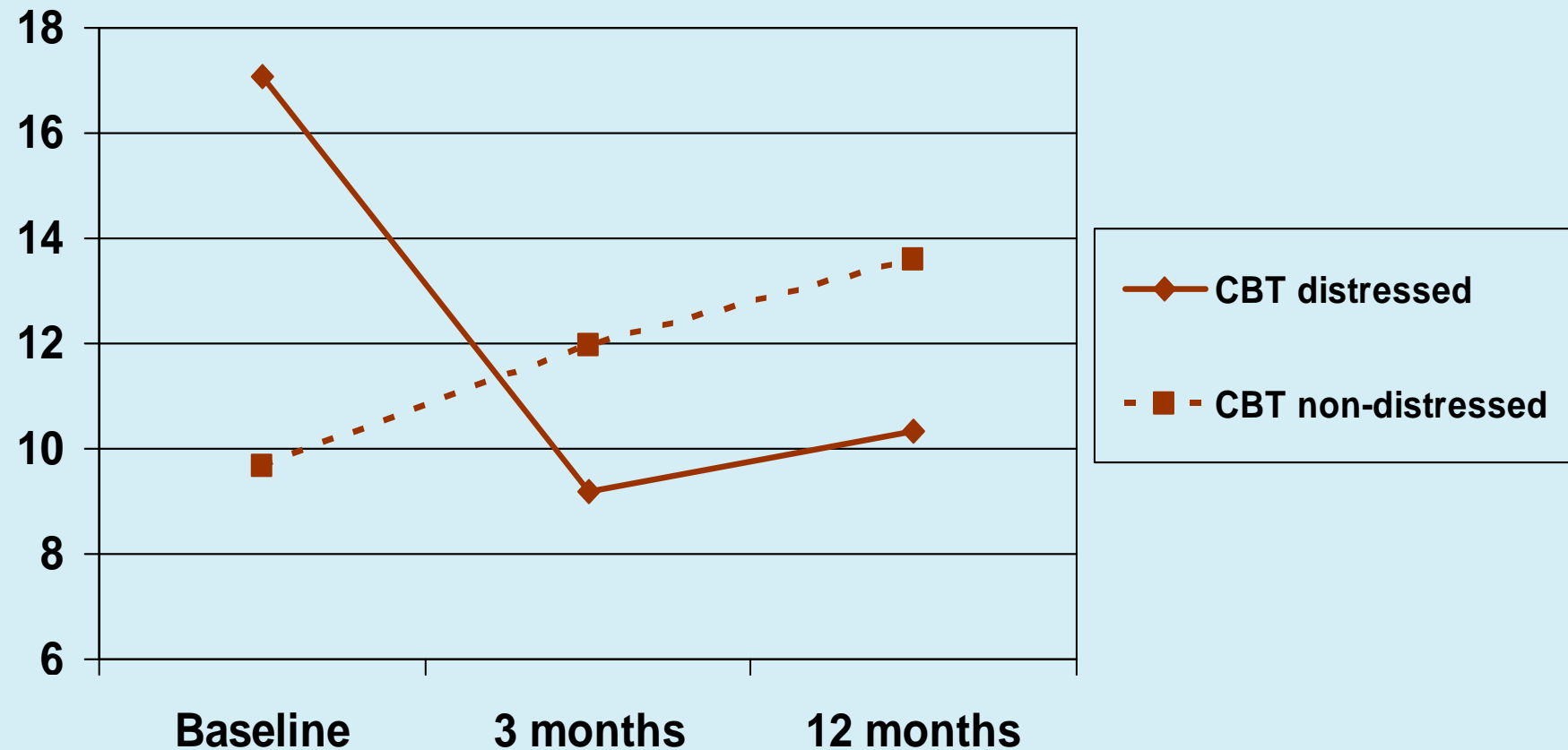
Therapy Satisfaction

Satisfied	84.8%	57.1%
Neutral or dissatisfied	15.2%	42.9%

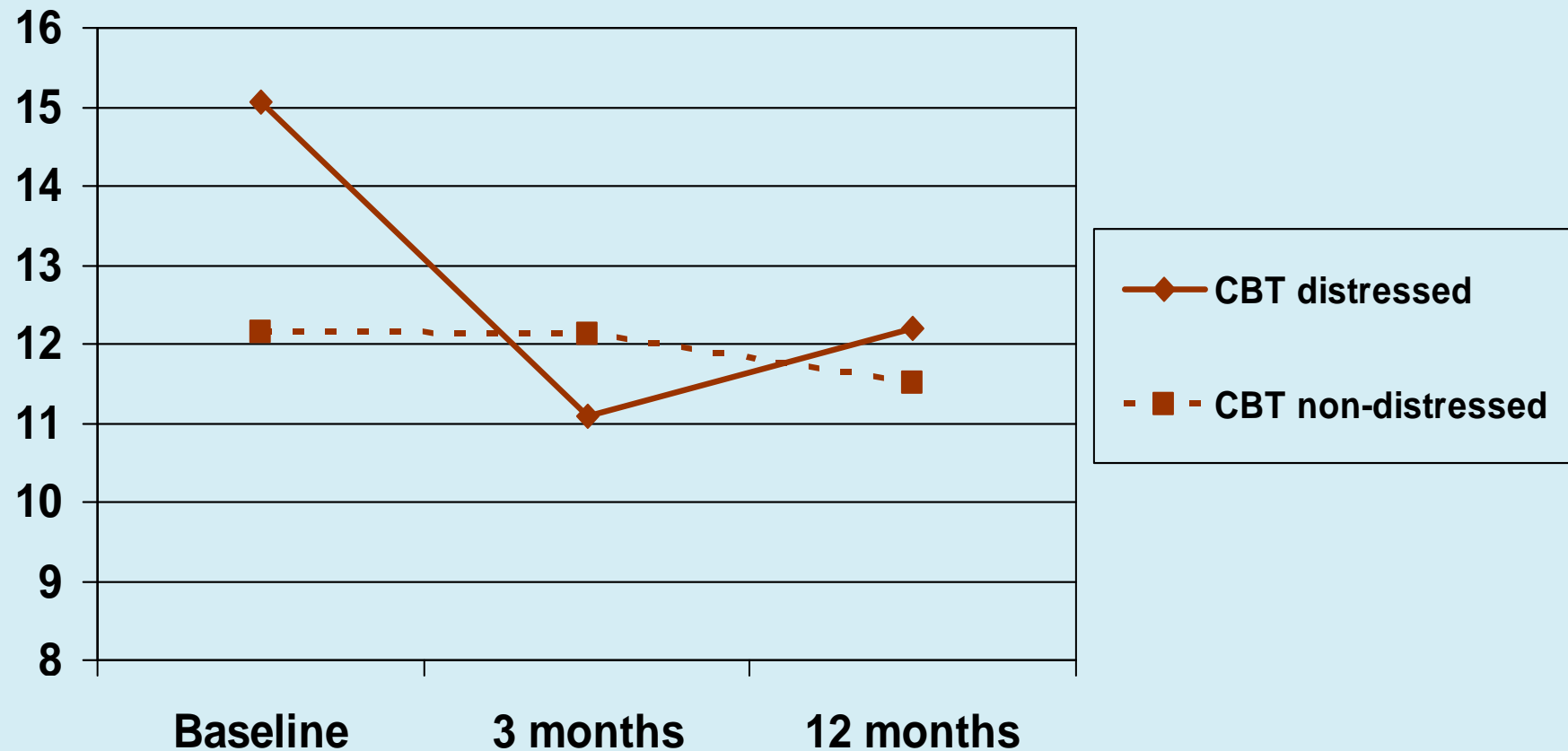
Moderation analyses

- **GHQ caseness (score of 3 or greater)**
 - 60.6% of sample clinically distressed
- **Social Support Satisfaction - Significant Others Scale *Power & Champion (1988)***
 - 72% dissatisfied

Change in GHQ moderated by Clinical Distress



Change in WSAS moderated by Clinical Distress



Summary of saMS

- CBT for adjustment to MS is more effective at reducing distress than SL up to one year post initiation of treatment.
- There were no significant differences between SL and CBT on WSAS.
- Patients who are 'clinically' distressed and/ or dissatisfied with their social support benefit more from CBT both in terms of reduced distress and reduced impact of MS on life roles.

CBT for MS

- **Appears to be an effective therapy for reducing MS related distress and managing symptoms like fatigue**
- **Challenge for services**
 - How do provide these treatments (cost issues)
 - Training staff in these approaches – ongoing supervision
 - CCBT