Optimal Training Methods Manual

Presented By

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For

Personal Trainers and Physiotherapists

baroona physio

CreatePT WEALTH

Contents

How to Use Optimal Training Methods Educational Package

1. Watch the DVD, start to finish (1 hour)

2. Read the introduction, theory, aims and objectives of this manual; pages 4-10 (30 minutes).

3. Read the theory on each exercise at a time, then physically practice each exercise at a time with each of its regressions and/or progressions with a volunteer/mock-client (e.g. another PT) by following steps 4, 5 & 6 below. (Total 6 hours).

4. Go to each exercise on the DVD and follow the tabulated guide supplied in this document.

5. Physically apply the described methods, exercises, progressions and regressions to your mock-client.

6. Print this document (pages 13-43) in order to record your results within the document as you go. Record the results of each item practiced with your mock-client by ticking the appropriate boxes in tables provided. If a progression is not appropriate for your client, (i.e. too difficult for good control) then state this detail in the space provided with each exercise table and on the Practical Assessment Sheet.

7. Tally up your results (numbers of ticks) in the 'total' at the bottom of each table and record these in the tables on the Practical Assessment Sheet on the last page (as an official record of your application of the techniques described).

8. Move on to the next exercise and repeat until all exercise methods have been completed.

9. Complete the theory exam form.

10. Send in the Practical Assessment Sheet and Theory exam forms to Michael or Brad for processing, in order to receive your CEC's.

11. Congratulate yourself for learning new skills that will impress clients and allow you to more easily work with Physiotherapists!

Note: if you do not have the equipment shown in the DVD to perform each exercise this is no problem. Simply perform a style of exercise that is close to the one to apply the principles described. E.g. Cable exercises can be replaced with Theraband resistance.

Note: practically applying the exercises and recording your results on the assessment sheet and filling out the exam form are requirements for obtaining the CECs with this program. The details written on the Practical Assessment Sheet are not right or wrong answers; these are proof of your demonstration, application and results of your mock-client with use of the new techniques. However, the theory exam does require the minimum right answers to pass.

Welcome to Optimal Training Methods Manual

Introduction

The closer Physiotherapists and Personal Trainers can get to having an understanding of each other's methods and practices, the better the end results will be for our clients.

Through our many years of experience, we have shown through effective networking that the Personal Trainer and Physiotherapist combination has brought each of our service standards to another level.

Over the last 6 years, Peak Physique Personal Trainers have been enlightened to discover the underlying cause to much of the pain, discomfort or injury that many of our clients may have encountered. It is only through this connection between a great Physiotherapist and Personal Trainer that we are able to achieve this.

So Who are We?

Brad Sheppard

Queensland Fitness Professional of the year title holder, Brad Sheppard, has run Peak Physique www.peak-physique.com.au in Brisbane for 17 years, building that business into a team of 13 PTs and 200hrs of PT / week. Brad is well recognised as one of Australia's best and highest paid Personal Trainers, commanding $440 / session.

Brad is the co-founder of Create PT Wealth, Australia's largest Business Coaching and Mentoring program for Personal Trainers. Brad has taught thousands of Personal Trainers Internationally the methods on how to become Multi Six-Figure Personal Trainers.

Brad is the co-author of the best-selling book "A Personal Trainer's Guide to Wealth Creation" and has delivered over 100 live presentations at events including Filex, Network, PT Pro and the Create PT Wealth Summit to name a few.

Brad is a highly sought after business and motivational speaker and is passionate about creating a more professional fitness industry by volunteering his time on the REPS council of Fitness Australia.

Michael Ridgway

Michael Ridgway is the Principal of Baroona Physio, also in Brisbane and has been practicing Physiotherapy for thirteen years.

Michael has achieved a second Physiotherapy degree; a Musculoskeletal Masters Specialist degree; only ~2% of practicing Physiotherapists have this advanced qualification.

After many years of working with clients under Personal Trainer care and seeing the great results the two disciplines can achieve together he has developed methods to optimize training for improved performance and Injury prevention.

Michael thrives on solving **complex spinal related conditions**, including many clients that have been to multiple practitioners and had been told there was no solution to their problem. It is Michael's forte to solve these tricky and not-so-obvious types of conditions.

About Optimal Training Methods

The exercises in this series demonstrate a combination of the above principles to achieve some important aims and objectives for your business:

Aims:

- To stand above the rest in the fitness industry with an understanding of advanced exercise methods.
- To gain confidence with achieving impressive results with your clients, and
- To increase the value of your business by applying advanced methods of training to your clients.

Objectives:

- Learn practical methods to apply whole-body stability, strength and power exercises.
- Gain knowledge of methods for minimizing risk of pain and injury for your clients.
- Acquire knowledge and skills to assist networking with Physiotherapists.
- Gain the skills necessary to perform the technique of advanced exercises.
- Gain the skills necessary for identifying when a client is appropriate for advanced exercises (i.e. when to progress and when not to progress).

These aims and objectives will be achieved by assimilating the information in the theory section of this package (below) and applying it to your clients and business. The next step to achieving these aims and objectives is to perform the practical aspect of this package (starting on page 10). Once you feel well practiced at the technique-points and methods you can integrate these into your training with clients.

Theory of Injury Risk Minimisation

Background:
Below is a summary of musculoskeletal pain and injury in our community, plus what Personal Trainers in combination with Physiotherapists should aim to prevent:

Approximately 10% of the community experiences chronic pain (lasting longer than 3 months). A random population survey estimated that 25% of the Australian adult population presently experience significant low back pain. The research also found that in the 6 months prior to the survey, 42% of the surveyed population experienced low-intensity back pain and low level disability from this pain. The survey predicted 10.5% of the Australian adult population experience high-intensity back pain and perceived high disability from this pain (Walker, 2004). Basically, a lot of people suffer musculoskeletal pain and the importance of this cannot be underestimated by our professions.

Solving the causes of pain in individuals is the Physiotherapist's role; the Personal Trainer's role is to prevent re-injury of their clients during training.

Literally millions of people can benefit from a combination of physiotherapy and personal training. When the principles of Optimal Training are applied to non-injured people the effect is injury prevention. The target market for this is nearly 100% of the population.

Information on Deep Stability Muscles/Tonic Muscles – as They Relate to Injury and Training

Deep stability/tonic* muscles function well to hold a joint in its neutral position, and maintain evenly distributed forces. When these muscles don't function well the result is inefficient performance and eventually injury and pain.

There are many possible reasons for, or contributing factors**, for deep stability/tonic muscle dysfunction. These are common in the normal population; hence the high rate of pain and injury is experienced by our clients and potential clients.

Note: Clients may ask why they have poor deep stability/tonic muscle control, or why it is common in our population. The main factors can be summarized by - poor habits, poor sustained positions (posture), misuse of the body with repetitive activities and a history of injury.

Some clients don't have effective messages getting through to their deep stability/tonic muscles and this causes them to function incorrectly for the reasons mentioned above. It is the role of the Physiotherapist to solve and 'fix' the cause and stimulate retraining of these muscles.

Optimal stability control, and prevention of pain/injury, is achieved through a combination of good Deep Stability/Tonic muscle function and good Superficial/Phasic muscle strength and power.

Tips for achieving this optimal stability control are provided with advanced dynamic exercises in this package.

* ** *See examples in footnote*.

Working in with a Physiotherapist

A good Physiotherapist can solve the specific contributing factors that are limiting the function of deep stability muscles for each individual. The Physiotherapist can then perform hands-on techniques to change the contributing factors to 'fix' the problem and allow the stability muscles to activate well.

This then allows the Personal Trainer to include optimal stability control throughout all routines – minimizing injury and maximizing results for the client.

Boost in Business

The major benefit of the Brad and Michael working together has been the dramatic boost in business for us both. We have been able to increase out turnover by literally thousands of dollars every year by some of the following strategies;

- We are never fearful that we will lose a client; rather we feel that we are contributing to each client's long term health by our cross referral system.
- We are always learning from each other. This includes control drills and simple advice from Michael (Physiotherapist). From Brad (Personal Trainer) it involves advanced lifting exercises and techniques and liaising with clients and Physiotherapists in the intervention phase.
- We gain confidence from clients while becoming the expert in our disciplines.
- We improve our own credibility by having an expert to refer to and liaise with.

Discussion on Exercises in this Package
Appropriateness of These Exercises and Progression Principles

The exercises in this series focus on Stability, Strength and Power.

This means each exercise is a challenge to muscles performing good stability, strength and power. While each of these aspects is important for success, stability control is the key throughout. Exercises can only be performed or progressed if the stability muscles continue to function well i.e. the commonly overactive/compensating muscles (e.g. low back and upper traps) remain relatively relaxed, neutral joint positions are maintained and there are no wobbles indicating loss of control.

Regressions are options for clients that aren't able to optimally stabilize with the standard starting exercise.

Note: there is a risk of injury to clients if they lack optimal stability control with these, or any other, exercises. Contact us if you have any questions.

Introduction to Michael's Method of Monitoring Stability Muscle Control

Optimal performance and injury prevention is achieved with an optimal balance of the deep stability/tonic and superficial stability/Phasic muscle control.

If the deep stability/tonic muscles activate well, there is appropriate level of activation by the superficial stability/Phasic muscles. If the deep stability/tonic muscles do not function well then the superficial/Phasic muscles become over-active to compensate.

This over-activation is visible and palpable as 'rock hard' Phasic muscle and an indication of abnormally excessive forces in the area of the body. Best results are achieved with your client by avoiding these abnormally excessive forces. Read on to find out how.

How to monitor this in clients with palpation:

One effective method is to press with fingertips into the key superficial stability/Phasic muscles (detailed throughout the DVD) feeling for ideal relaxation (like raw steak). Or, when activating appropriately against resistance key muscles are firm but 'give' when pressed into (like well-done cooked steak). Incorrect over activity is mostly felt as 'rock hard', 'barring up' or non-malleable nature of the superficial stability/Phasic muscles (like metal bars).

E.g. A focus may be on upper trapezius muscles (Phasic) being relatively relaxed and low trapezius muscles (Tonic) activating well – to provide optimal deep stabilization/tonic control of the scapula during upper body exercise.

It is recommended that Personal Trainers and Physiotherapists network to develop relationships to allow identification of when a client is performing optimally, i.e. when their Phasic and tonic muscles are functioning in balance, and when your clients are not performing optimally and need specific therapeutic guidance for correcting this. An injury prevention focus like this is valuable for the client and good for both the Personal Trainer and Physiotherapist's businesses.

An example of good and poor muscle control:

This 'straight back' is achieved with over-active erector spinae 'barring-up'. Palpation of the erector spinae will feel like iron bars either side of the spine. This indicates excessive pressure through the spinal joints and muscles. Training with this control is a high risk of pain and injury.

Neutral curves are achieved using the deep stability/tonic hip flexors to anteriorly tilt the pelvis. This allows for relaxed erector spinae and optimal control. There are no excessive forces through the joints or muscles with this method. Training with the spine controlled in this way minimises the risk of injury.

The dramatic winging demonstrated here is an example of poor control of the deep stability/tonic serratus anterior and low trapezius. Superficial stability/Phasic fibers of levator scapulae are over active and like 'rocks'. Upper trapezius is hanging on tight in a lengthened position. Training with this control is a high risk of injury.

With the deep stability/tonic muscles activating well there is no winging, the levator scapulae muscles and upper trapezius are relaxed or activating with appropriate minimal, soft contraction - noted when palpated. Training a client with this control is injury risk minimization.

What This Package Does Not Give You

This package does not give you the ability to 'fix' pain and injuries in your clients. The information provided in this package is of benefit to un-injured, healthy, pain-free clients. Some clients that have pain or injury will benefit from the stability muscle control details provided only if they are under the care of a Physiotherapist and received the OK to apply these principles from the Physiotherapist.

For reference material providing the background for the stability muscle ideas provided in this package see the following Physiotherapist's articles and books (e.g. via Google search):
Dr. Carolyn Richardson, Dr. Gwendolyn Jull, Dr. Julie Hides, Dr. Paul Hodges.

Footnote:
* Examples of Deep Stability/Tonic Muscles
Transverse Abdominis, Multifidus, Pelvic Floor, Diaphragm, Psoas, Rotoris, Iliacus, Gluteus, Some fibres of Gluteus Maximus, Medius & Minimis, Deep hip rotators (gemeli and obturators), Quadratus Femoris, Vastus Medialis Obliquis, Popliteus, Soleus, Deep foot muscles, Rotator Cuff (Supra/Infra/Sub Scapularis, Teres Minor), Serratus Anterior, Lower Trapesius, Deep Neck Flexors/Extensors, Deep Forearm muscles (e.g. some fibres of Brachioradialis), deep intrinsic hand muscles (e.g. Interossiei)

Examples of superficial Stability/Phasic Muscles
Superficial Erector Spinae, Quadratus Lumborum, Obliques, Rectus abdominis, hamstrings, most of the quadriceps, gastrocnemius, Latisimus dorsi, most Rhombiods fibres, upper trapezieus, levator scapulae, deltoids, pectoralis major, biceps brachii, triceps brachii, teres major, sternocliedomastoid, scalenes.

** Examples of some common contributing factors for some injuries and pain. It is the role of a good Physiotherapist to problem solve the factors that are relevant to each individual's pain or injury:

Any nerve, muscle, joint dysfunction or irritation in the body part or a related body part (remember everything is connected – these number in the hundreds of possibilities), history of pain/trauma, presence of pain, presence of swelling, poor postural habits, nerve irritation, accumulation of or sudden joint strain/ligament sprain (these may be sub-clinical i.e. not felt by the client as pain), poor motor control strategies (poor coordination, timing and combination) and decreased endurance of the deep stability/tonic muscles. It is rare that the incident when a sudden pain was felt (during normal training and daily activities) was the actual 'cause' of the condition that results in pain. The 'cause' is usually one, or a combination of, the above listed factors. Solving this is 'cause' is what a good Physiotherapist can do.

Optimal Training Methods

Now let's move onto the exercises and methods that offer the practical application of the theory that has been explained so far.

- Get your DVD ready.
- Read the explanation about each exercise.
- Then follow the instructions for the practical session, listed on page 12, for how to perform and record the results of you practicing these methods.

Exercises in Action

1) Swiss Ball Dumbbell Press

Benefits

- Great exercise to teach co-contraction of the core/hip/shoulder girdle musculature, to push while stabilizing in the transverse plane of motion.
- Integrated movement for functional and practical pushing strength.

Pre-Requisites

- Core stabilization.
- Functional flexibility and strength of the shoulder girdle.
- Hold position with glutes and deep abs.
- Relatively relaxed and soft low back and hami muscles.
- Good upwardly rotated shoulder blades with relaxed, soft upper traps.

Mid Range Position (2 Arm)

Start Position (single Arm)

Narrow Stance Variation

Alternating Arm Press

Variations:

- Traditional 2 Arm Press
- Single Arm Press
- Alternating Arm Press (2 Arm)
- Narrow Stance
- Power (speed) added
- Single Leg

Practical Session – Swiss Ball Dumb Bell Press

This session requires you to:

1. Get a volunteer (another PT is ideal)
2. Go to exercise 1 (via scene selection) of the DVD (also shown as chapter 4).
3. Watch each point of instruction on the DVD (also listed in the table below). Each technique point has a time allocated to it on the left of this table to help guide your viewing.
4. Pause the DVD after each point and apply this to your mock-client.
5. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box. This table is to record whether your mock-client achieved this or required (or will require) more than one attempt to get good at the techniques described. *Note: this table is a method to record your application of the techniques and demonstration of your participation*. Each technique point has available boxes on the right of the table for you to tick. Tick the appropriate box, either yours (as the Personal Trainer) or your mock-client's technique was correctly achieved first time or it will take multiple times to practice to achieve the technique as described on the DVD, or regression required.
6. Then total the number of ticks you have in each column and record in this document and copy in the 'Total' table on the **Practical Assessment sheet** (at the end of this document)

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to activate the muscles as instructed.

There is no disadvantage to you receiving all your CECs if you are unable to perform all the exercises with your mock-client. Carefully try what you can and record reasons for stopping in the space provided after the table and in the Practical Assessment sheet.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Technique Achievable 1st time**	**Required/ will require more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required/ will require more than one attempt for improved muscle control**
2:45	Position of client and guide of exercise movement stable set-up position held well				
3:35	Place dumbbells in Client's hands and apply spotting technique				
4:19	Check client is maintaining position and breathing correctly				
5:57	Check with fingertip palpation which muscles are being utilized to hold hips up at knee height – on their stomach on the floor with lifting one leg towards the ceiling				
7:58	Check with fingertip palpation which muscles are being utilized to hold hips up at knee height – in position on the swiss ball				
9:50	Check with fingertip palpation which muscles are being utilized to hold the scapula in position on hands-and-knees				
11:17	Check with fingertip palpation which muscles are being utilized to hold the scapula in position on the swiss ball				
12:50	Apply progression of single arm DB Press				

	Check with fingertip palpation if the good hips and shoulder muscle control is maintained during this progression				
13:50	Apply progression of Narrow feet position				
	Check with fingertip palpation if the good hips and shoulder muscle control is maintained during this progression				
14:40	Apply progression of Speed				
	Check with fingertip palpation if the good hips and shoulder muscle control is maintained during this progression				
Total		/6	/6	/7	/7

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

2) Single Arm Dumbbell Clean/Press & Snatch

Benefits

- This classic movement is a must for ANY athlete that needs to generate POWER in an upright position - Football, hockey, basketball, track and field, baseball, rugby, cricket etc.

Pre-Requisites

- The client must exhibit good CORE strength, and good Inner / Outer unit integration (especially the posterior oblique sub-system).
- If a "Lower Crossed" type of posture is noted (i.e. excessive lordosis), a proper stretching protocol (i.e. Psoas, Rectus Femoris, Superficial Erector Spinae) must precede "loading" this exercise to ensure ideal lumbar spine lordosis, and ideal stability through the Lumbo Pelvic Hip Complex.
- Ensure that the client is proficient at a 'deadlift' and 'barbell snatch' before prescribing this exercise.

Preparation

- Maintain good posture with shoulder blades retracted and depressed and good stability through the abdominal complex.
- Initiate a thorough dynamic warm up prior to starting this exercise, (this engages the nervous system).
- Glutes initiate and perform the drive while neutral spinal curves are maintained.
- No 'barring up' of the low back.
- Full upward rotation of the scapula is required with no winging.

Start Position of Clean

Mid-way Position of Clean

Dumbbell Cleaned & ready to press

Dumbbell Press

Variations

- Break into 2 Movements initially (Dumbbell Clean & Dumbbell Press).
- Progression into Full Snatch.

Practical Session – Single Arm Dumbbell Clean/Press & Snatch

This session requires you to:

1. Go to exercise 2 (via scene selection) of the DVD (also shown as chapter 5).

2. Watch each point instructed on the DVD (also listed in the table below).

3. Pause the DVD after each point and apply this to your mock-client.

4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.

5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
15:38	Position of client and guide of exercise movement check positions are held well - squat				
16:34	Position of client and guide of exercise movement check positions are held well – up to shoulder				
17:06	Position of client and guide of exercise movement check positions are held well – press over-head				
17:55	Position of client and guide of exercise movement check positions are held well – straight snatch				
18:22	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – mini squat				

19:18	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – full squat				
19:31	Check with fingertip palpation which muscles are being utilized to hold the scapula in standing position – active low traps, soft upper traps				
20:10	Check with fingertip palpation which muscles are being utilized to hold the scapula during lift over head – active low traps, soft upper traps				
Total		/4	/4	/4	/4

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

3) Dumbbell Press / Lunge Combo

Benefits :

- This exercise is an excellent progression to develop dynamic, full body strength and stability. Any individual who needs upper body strength in a dynamic environment will want to progress to this movement pattern.

Pre-Requisites

- Perform Trendelenburg test to ensure proper frontal plane stability at the pelvis.
- Client must have dynamic joint stabilization, a fair amount of eccentric neuromuscular control without compensation throughout the kinetic chain.
- Ensure that the client is proficient at 'multi-planar lunges' and a 'standing DB shoulder press' before prescribing this exercise.
- TRAINERS: A fair amount of dynamic stability must be present to properly ensure safety in this movement pattern. If you notice a continual loss of balance, excessive arching of the lumbar spine, 'barring up' of low back, drop of the pelvis on one side, or excessive elevation and protraction of the scapula – THE WEIGHT IS TOO HEAVY and needs to be lowered.

Start Position

Finish Position

45 degree press to front

45 degree press to side

Variations

- Break into 2 movements: Dumbbell Lunge / Dumbbell Press.
- Use 2 arms (2 dumbbells), bi-lateral movement.
- Alternating Leg Lunge each rep with Alternating arms uni-lateral movement.
- Dumbbell Lunge / Press combo (as pictured).
- Dumbbell Lunge & Hold at bottom, whilst pressing (isometric stance).
- Dumbbell multi-planar press (to the 45 degree front & side) (as pictured).

Practical Session – Dumbbell Press with Lunge Combo

This session requires you to:

1. Go to exercise 3 (via scene selection) of the DVD (also shown as chapter 6).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.

5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
20:24	Position of client and guide of exercise movement check positions are held well – knee, torso, head				
21:24	Position of client and guide of exercise movement check positions are held well – with uneven weight				
22:00	Position of client and guide of exercise movement check positions are held well – press over-head				
22:24	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – plus pelvis position control				
23:30	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – lateral pelvis control				
	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – plus pelvis control during the following progressions				
24:20	Apply progression of Pressing during lunge				
25:08	Apply progression of Press held during lunge				

25:35	Apply progression of Press held at an angle				
Total		/6	/6	/5	/5

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

4) Swiss Ball Prone Jackknife

Benefits

- Great exercise to teach co-contraction of the core / hip / shoulder girdle musculature, to "push" while stabilizing the body in multi planes.
- Integrated movement for "functional" and "practical" pushing strength.

Pre-Requisites

- Clients must demonstrate adequate functional flexibility throughout the ANTERIOR shoulder girdle musculature with no winging of the scapulae.
- To ensure "neutrality" at the Lumbo Pelvic Hip Complex (LPHC) and proper stabilization of core/glute musculature during movement, the client must first demonstrate adequate passive and active hip extension (0 – 20).

Start position

Finish Position

Single Leg Progression

Practical Session – Swiss Ball Prone Jackknife

This session requires you to:

1. Go to exercise 4 (via scene selection) of the DVD (also shown as chapter 7).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document)

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**

26:20	Position of client and guide of exercise movement check positions are held well – shin on ball, deep abdominals, knees to chest				
27:16	Position of client and guide of exercise movement check positions are held well – on feet				
27:38	Check with fingertip palpation that the low traps are activated, upper traps soft				
27:58	Check pelvis neutral				
28:06	Check with fingertip palpation which muscles are being utilized to hold the pelvis in position – deep and superficial abs, relaxed low back				
28:32	Position of client and guide of exercise movement check positions are held well – pike with straight legs				
29:12	Position of client and guide of exercise movement check positions are held well – single leg				
Total		/4	/4	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

5) Cability Push Up

Benefits

- Great exercise to teach co-contraction of the core/hip/shoulder girdle musculature, to push while stabilizing in the transverse plane of motion.
- Integrated movement for functional and practical pushing strength.

Pre-Requisites

- Core stabilization.
- Functional flexibility and strength of the shoulder girdle.
- Hold position through deep and superficial abs, hip flexors and glutes muscles.
- Maintain neutral spinal curves; do not allow sagging of the low back.
- No winging of the shoulder blades with relaxed, soft upper traps.

Start Position (on Feet)

Mid Way Point (on Feet)

Variations

- Knees Only
- On Toes (Feet)
- On Toes (Feet) Single Leg
- On Swiss Ball
- On Swiss Ball with Single Leg

Practical Session – Cability Push Up

This session requires you to:

1. Go to exercise 5 (via scene selection) of the DVD (also shown as chapter 8).

2. Watch each point instructed on the DVD (also listed in the table below).

3. Pause the DVD after each point and apply this to your mock-client.

4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.

5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document)

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	Result of yours and client's positioning plus instructions – Described by Brad		Result of muscle control – Described by Michael	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
29:52	Position of client and guide of exercise movement check positions are held well on knees				
30:54	Position of client and guide of exercise movement check positions are held well – on toes (feet)				
22:00	Position of client and guide of exercise movement check positions are held well – spot around trunk				
31:06	Position of client and guide of exercise movement check positions are held well – on one leg				
31:34	Check trunk muscles with fingertip palpation– draw in deep abs and activate superficial abs				
31:56	Check with fingertip palpation that the glutes are most activated and relaxed erector spinae – neutral pelvis control				
32:03	Check with fingertip palpation that the low traps maintain a neutral scapula (flat on ribs) – relaxed upper traps				
32:25	Apply progression of Swiss ball – assist beginning position				
32:45	Apply progression of Swiss ball – spot the ball during the exercise				
Total		/6	/6	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

6) Cable Press / Pull Combo

Benefits

- Integrated total body training with an emphasis on chest and core conditioning for strength and improved function with secondary shoulder and triceps involvement.
- Integrated total body training with an emphasis on mid to upper back and core conditioning for strength and improved function with secondary shoulder and biceps involvement.

Preparation

- Start by standing in a squat or straddle stance.
- One elbow out to the side in line with shoulders with opposite hand resting at the side or on hip.
- Using a neutral grip, align the wrist and elbow on the pressing arm.
- Stand in a stable staggered stance position.
- Assume slight lunge position, maintaining good posture with arm outstretched.
- Ensure pelvis neutral is maintained both forward/back and side to side.
- Glutes and deep abs control to hold.
- Low back and hamis are relatively relaxed.
- No scapulae winging and soft upper traps .

Start Position (Pull / Press)

Finish Position (Pull / Press)

Variations

- Single Arm Cable Press (only)
- Single Arm cable Pull (only)
- Cable Press / Pull Combo (as pictured)

Practical Session – Swiss Ball Prone Jackknife

This session requires you to:

1. Go to exercise 6 (via scene selection) of the DVD (also shown as chapter 9).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
33:23	Position of client and guide of exercise movement check positions are held well – lunge position, single arm press, slight forward trunk lean				
34:22	Position of client and guide of exercise movement check positions are held well – start position, guide exercise technique				
34:58	Position of client and guide of exercise movement check positions are held well – stage 2, single arm pull				
35:29	Position of client and guide of exercise movement check positions are held well – stage 3, press/pull combo with spotting position				

36:45	Check with fingertip palpation which muscles are being utilized to hold the pelvis in position – neutral pelvis, glutes activated, relaxed low back				
38:10	Check with fingertip palpation that the low traps are activated, flat scapula on ribs, upper traps soft, neck/head neutral				
38:30	Check the above is maintained during repetitions				
Total		/4	/4	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

7) Single Arm Cable Pull

Benefits

- Integrated total body training with an emphasis on mid to upper back and core conditioning for strength and improved function with secondary shoulder and biceps involvement.

Preparation

- Adjust cable arm as shown.
- Stand in a stable bent hip, knee & ankle stance position.
- Assume slight lunge position, maintaining good posture with arm outstretched.
- Ensure pelvis neutral is maintained both forward/back and side to side.
- Glutes and deep abs control to hold.
- Low back and hamis are relatively relaxed.
- No scapulae winging and soft upper traps.

Start Position

Finish Position with Fencers Stance

Variations

- Single Arm Pull with Fixed (Lunge) Stance
- Add Power (speed)

Practical Session – Single Arm Cable Pull (into the fencer stance)

This session requires you to:

1. Go to exercise 7 (via scene selection) of the DVD (also shown as chapter 10).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	Result of yours and client's positioning plus instructions – Described by Brad		Result of muscle control – Described by Michael	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
38:58	Position of client and guide of exercise movement check positions are held well – lunge, teach the movement				
40:22	Position of client and guide of exercise movement check positions are held well – advanced version, athletic stance, PT hands and feet positions, instructing the 'fencer stance', shuffle step				
42:01	Position of client and guide of exercise movement check positions are held well – under higher load				
42:35	Check stability muscles with fingertip palpation– glutes initiate, low back relatively relaxed, low traps control before elbow bends				
43:34	Check with fingertip palpation throughout range – glutes initiate, low back relaxed, low traps initiate, upper traps relaxed				
44:05	Check pelvis remains neutral throughout the exercise				
Total		/3	/3	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

8) Woodchopper

Benefits :

- Integrated total body rotational (transverse plane), strength and stability.
- This exercise when progressed to properly has a HIGH LEVEL of "functional carry-over" to the real world as virtually all muscles are working in all contraction modes and planes of motion.

Pre-Requisites :

- The client must be "micro" progressed from performing the two primary movements (squat & loaded spinal rotation), individually prior to integrating the movement.
- Neutral pelvis and spine needs to be maintained as a 'block'.
- Note no/minimal twisting through the spine only through hips and scapulae.
- Monitor to ensure no 'barring up' of low back or upper traps.

Start Position

Mid-way Position

Finish Position

Variations

- Woodchopper from Low Pulley Cable (reverse Woodchopper).
- Woodchopper from High Pulley cable.
- Woodchopper with Theraband / Strength Band.
- Woodchopper with Plate or dumbbell.

Practical Session – Woodchopper

This session requires you to:

1. Go to exercise 8 (via scene selection) of the DVD (also shown as chapter 11).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
44:26	Start Position of client and guide of exercise movement check positions are held well – squat with rotation, slight bend in elbows				
45:45	Start Position of client and guide of exercise movement check positions are held well – slight bend in elbows				
46:02	Position of client and guide of exercise movement check positions are held well – torso rotation with head follow				

46:25	Check trunk control to ensure this exercise is not too challenging – low back is a solid block with neutral pelvis				
47:06	Check trunk control to ensure this exercise is not too challenging – rotation through the hips, thoracic spine and the scapulae				
47:14	Check with fingertip palpation that the initiation of the drive is through the glutes				
47:29	Check with fingertip palpation that the scapula stabilizes the upper body				
47:42	Check trunk control to ensure the pelvis rotates with the rib cage				
48:00	Palpate glutes through range and relatively relaxed low back				
Total		/3	/3	/6	/6

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

9) Towel Pull / Push Up Combo

Benefits

- Great exercise to teach co-contraction of the core/hip/shoulder girdle musculature, to push while stabilizing in the transverse plane of motion.
- Integrated movement for functional and practical pushing strength.

Pre-Requisites

- Core stabilization.
- Functional flexibility and strength of the shoulder girdle.
- Hold position through deep and superficial abs, hip flexors and glutes muscles.
- Maintain neutral spinal curves; do not allow sagging of the low back.
- No winging of the shoulder blades with relaxed, soft upper traps.

Start Position

Finish Position

Variations

- Push Up position with opposite hand clap.
- Push up position with static towel hold.
- Push Up position with forward dumbbell push in transverse plane.
- Push Up position with towel pull (as pictured).

Practical Session – Towel Pull / Push Up Combo

This session requires you to:

1. Go to exercise 9 (via scene selection) of the DVD (also shown as chapter 12).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	Result of yours and client's positioning plus instructions – Described by Brad		Result of muscle control – Described by Michael	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
48:30	Position of client and guide of exercise movement check positions are held well – push up, hold abs, flat shoulder blades on ribs				
49:45	Position of client and guide of exercise movement – with one arm towel pull				
50:35	Position of client and guide of exercise movement check positions are held well – stable pelvis, scapula and head during the exercise				
51:10	Progress with increased resistance - check positions are held well				
51:46	Check trunk – ensuring neutral spine				
52:20	Check scapula – flat on ribs, active low traps and relaxed upper traps				
52:40	Check the above remains with good control during the exercise - horizontal pelvis and neutral				
52:49	Check the above remains with good control during the exercise - both scapula are controlled				
Total		/4	/4	/4	/4

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Exercise

10) Inverted Pull (with dumbbell Press)

Benefits

- Integrated total body training with an emphasis on back and core – for strength and improved function in the pulling motion.
- Great exercise to teach the co-contraction of the core/hip/posterior shoulder girdle musculature to "pull" while stabilizing in the sagittal plane.

Pre-Requisites

- If an "UPPER CROSSED" type of posture in noted (i.e. rounded shoulders with a forward head lean), a proper stretching protocol (i.e. pec major/minor, lats, upper traps, levator scapulae), must precede "loading" this exercise to ensure ideal scapular retraction and depression.
- Hold position with glutes and deep abs.
- Relatively relaxed and soft low back and hami muscles.
- Upwardly rotated shoulder blades with relaxed, soft upper traps.

Start Position (Single Arm / Press)

Finish Position (Single Arm / Press)

Variations

- Body Row (also called 2 Arm Inverted Pull).
- Single Arm Inverted Pull.
- Single Arm Inverted Pull with Power (Speed).
- Single Arm Inverted Pull (with dumbbell Press).

Practical Session – Inverted Pull

This session requires you to:

1. Go to exercise 10 (via scene selection) of the DVD (also shown as chapter 13).
2. Watch each point instructed on the DVD (also listed in the table below).
3. Pause the DVD after each point and apply this to your mock-client.
4. After applying each of the technique points to your mock-client then fill in the table below with a tick in the appropriate box.
5. Then total the number of ticks you have in each column and record this on the **Practical Assessment sheet** (at the end of this document).

Note: It is important for the safety of your client to ensure the techniques described are followed correctly. Allowing someone to perform these exercises without optimal control puts them at risk of injury**. If lack of control is identified then stop the exercise and do not try the progressions.** 'Lack of control' is poor holding of position (shaking, wobbles and unable to maintain position) and unable to active the muscles as instructed.

	Instruction	**Result of yours and client's positioning plus instructions – Described by Brad**		**Result of muscle control – Described by Michael**	
Time on DVD		**Achievable 1st time**	**Required more than one attempt to guide client as instructed**	**Good control as described after first time explained**	**Required more than one attempt to change towards improved muscle control**
53:10	Position of client and guide of exercise movement check positions are held well – hips up, feet hip width and chest up to the bar				
54:10	Position of client and guide of exercise movement check positions are held well – shoulder girdle adducts				
54:31	Apply progression of Single arm – spot the trunk during the exercise				
55:16	Apply progression of Single arm with increasing speed and power– check stable pelvis, obliques activation and scapula control				

56:00	Apply progression of Single arm with the dumbbell - note PT body position				
56:45	Check trunk muscles with fingertip palpation– accurate sequence with glutes and scapula muscles simultaneously initiating – elbow bends next				
57:30	Check with fingertip palpation that the glutes are most activated and upper traps are relaxed during the movement				
Total		/5	/5	/2	/2

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this (and copy this to the **Practical Assessment sheet** at the end of this document).

Important: For you to obtain CECs for this package you must send in the Evaluation Form, Theory Exam and Practical Assessment Sheet to either Michael or Brad (print and send in via snail-mail. Addresses are available at the web sites – listed in the header of each page).

If there are any discrepancies with the requirements for attaining CECs and your forms we will be in touch to explain the missing details and you will be given the opportunity to re-submit the Assessment forms.

A Fitness Australia Accredited certificate will be sent within a month on successful completion of the forms.

Thank you for purchasing and participating in the Optimal Training Methods education package. Contact Michael or Brad for more educational material to enhance your business.

Optimal Training Methods Evaluation Form

Name:	**Date:**

Instruction: *Please circle the responses to describe how you honestly feel.*

Presentation

1. How would you rate the quality of the *content*?

1	2	3	4	5	6	7
Excellent		Good		Fair		Poor

2. Does this content provide opportunities for *actively applying the material*?

1	2	3	4	5	6	7
Yes definitely		Yes Generally		Not really		No definitely not

Content

3. How would you rate the *content*?

1	2	3	4	5	6	7
Excellent		Good		Fair		Poor

4. How would you rate the *quality of the resources* (manual, DVD)?

1	2	3	4	5	6	7
Excellent		Good		Fair		Poor

Overall Evaluation

5. Overall, how *satisfied were you*?

1	2	3	4	5	6	7
Very satisfied		Satisfied		Dissatisfied		Very dissatisfied

Extra Comments:

6. Please note any strengths (valuable lessons):

7. Please note any weaknesses (things you didn't like):

8. Please note any other comments or suggestions for improving the package:

Thank you for your time in evaluating the Optimal Training Methods package

Optimal Training Methods Theory Exam

Name:	Date:

Q1.
List five practical points (pre-requisites) to check with your client's control that indicate they are able to perform the cability push up.
(i)
(ii)
(iii)
(iv)
(v)

Q2.
The method of checking (palpating) appropriate activation (often relatively relaxed) of superficial stability/phasic muscles is used because?
[circle one]
(i) This indicates the deep stability/tonic muscles aren't required to the exercise.
(ii) This indicates the deeps stability/tonic muscles are tight and weak.
(iii) This indicates the deep stability/tonic muscles are providing appropriate support.

Q3.
If a client asks "Why are we worrying so much about specific muscles activating correctly?" your answer is:
[circle one]
(i) Because correct muscle activation provides the best support which maintains evenly distributed forces therefore minimising risk of injury and maximising performance.
(ii) Because it is best to ensure we strengthen as much of the body at once as possible.
(iii) Because optimal training is achieved when we focus on the superficial stability/phasic muscle strength.

Q4.
The benefits Optimal Training exercises have over traditional gym resistance training are?
[Circle any/all appropriate answers]
(i) They challenge muscles performing good stability, strength and power at the same time.
(ii) When performed accurately the result is minimising the risk of injury and pain.
(iii) The client can appreciate the advanced, dynamic nature of the training.

Q5.
What possible ways might a good relationship with a Physiotherapist enhance your business?
[circle any/all appropriate answers]
(i) A gain in client loyalty as a result of impressive relationships with trusted health professionals(ii) A gain in word-of-mouth referrals as a result of impressive relationships with trusted health professionals.
(iii) You can learn how to 'fix' a client's injury or pain by applying what you see the Physiotherapist doing.

Mark /12 -> P / F=(<10/12)

Optimal Training Methods Practical Assessment Sheet

Name:	Date:

Exercise 1 - Swiss Ball Dumb Bell Press

Total	/6	/6	/7	/7

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 2 - Cability Push Up

Total	/4	/4	/4	/4

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 3 – Dumbbell Press / Lunge Combo

Total	/6	/6	/5	/5

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 4 – Swiss Ball Prone Jackie

Total	/4	/4	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 5 – Cability Push Up

Total	/6	/6	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 6 –Cable Press / Pull Combo

Total	/4	/4	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 7 - Single Arm Cable Pull

Total	/3	/3	/3	/3

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 8 – Woodchopper

Total	/3	/3	/6	/6

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 9 – Towel Pull / Push up Combo

Total	/4	/4	/4	/4

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Exercise 10 – Inverted Pull

Total	/5	/5	/2	/2

If your mock-client was unable to perform the progressions write the technique-fault identified that indicates this: _____

Thank you for participating in the Optimal Training Methods program!
Michael and Brad have many courses for rehabilitation, advanced training methods and for business growth and success.

Contact Brad and Michael via the web sites in the footer of this document for more information.