Want to prove your Coaching works?

The ONLY report sharing industry research and neuroscience effectiveness.
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Executive Summary
This report outlines the challenges with proving Coaching works. It then looks to neuroscience to help us understand why and how it does work.

Introduction
Coaching as a profession, and attitudes towards coaching, have changed dramatically over the last five decades, and continue evolving. This is true of coaching in general and is especially true of executive coaching. Amid increasing financial pressure within organizations, and with an ever-expanding number of coaching solutions to choose from, coaches face greater demands than ever before to prove the effectiveness and value of their coaching methods.

You as a coach, whether internal or external to the organization, must now demonstrate the benefits of employing a coach, and why that coach should be you. But what if all previous evaluation methods don’t work, or are inconclusive, or the client simply says to you, “SHOW ME!”

How do you prove YOUR coaching works?

Does This Apply to You?
Some may think that because they work in a particular area of coaching, that this doesn’t apply to them.

Perhaps you are employed by a large company as their head of teaching or employee development or some-such-name you may feel you are immune to the need for proof.

Anyone who is a coach needs to embrace the future of the profession. With that comes a strong and logical approach.
If you look through the various dictionary definitions, ignoring the references to four-wheeled vehicles (even though the origin of the modern usage lies in the idea of transporting someone from one place to another), the common elements point to someone who teaches, instructs, or trains someone else.

So, in an informal sense, many people are coaches. You may be a parent. You may take new employees at work under your wing. You may offer advice to a friend. These activities could be thought of as coaching. When we look at coaching through the lens of neuroscience, as we do later, it becomes even clearer.

For our purposes here though, we assume that one of the following options describes you:

- You are an employee responsible for teaching, instructing, or training within an organization
- You hire coaches from external sources to meet the needs of your organization
- You design and implement coaching programs as an independent contractor or part of a consulting service, hiring your services out to other organizations

If you fulfill any of these roles, you know you need to prove coaching works.

Finding clients who will hire you as a coach - or, if you are an employee, persuading your boss not to fire you - demands that the suggested coaching will work.

And the need for proof is increasing!

Why Do You Need to Prove Your Coaching Works?

Gray (2004) argued that many evaluations of the effectiveness of coaching programs were suspect because the source was the coaches or coaching organizations themselves. “If coaching is to achieve the level of credibility the coaching profession and the purchasers of coaching need, better designed evaluation is needed to ‘prove the case’” (p.13).

But this is not the only factor to undermine credibility when attempting to persuade potential clients of the effectiveness of coaching:

Lack of Effective Regulation. As mentioned earlier, coaching as a profession has changed dramatically. One thing that hasn't changed, however, is coaching has remained
unregulated in terms of education and certification (American Management Association, 2008, p.3). No license to practice is required.

It’s not exactly scientific, but do a quick Google search for “how to get certified as a coach.” We did this and received over 44 million results. Presumably, many are duplicates because of different pages on the same website, but it is still a staggering number.

And, within those results, a bewildering number of different certification and accreditation organizations present themselves. Anyone can present themselves as a coach.

How can a potential client decide if the coach is any good?
And how do you as a coach separate yourself from this crowd?

**Financial Pressures.** Most people would agree that times are tough, and not only for individuals; businesses are tightening their belts too.

There are many variables that affect the cost of a coaching program for an organization, but it is not cheap. In the past, expectation of benefit may have decided whether a coach was hired or a coaching department was opened within an organization. In the current economy, expectation is no longer enough.

Nowadays, the implementation of a coaching program is not a guarantee that the program will be funded in its entirety either. Patience is no longer considered a virtue in the business world. Return on Investment (ROI) needs to be seen, and seen quickly.

**The “It’s Just a Fad” Argument.** Despite numerous studies showing the benefits of coaching, many opponents remain skeptical. The idea that coaching is based on some sort of psychological mumbo-jumbo and that proponents are “suckers” is not uncommon. And without objective proof to the contrary, in tough financial times such arguments may receive more weight.

The difficulty in removing the fad label from coaching lies in the use of “soft skills” to develop similar “soft skills” in the coachee. Soft skills are often thought of as personality traits—traits such as communication skills, work ethic, reliability, calmness under pressure—traits that cannot easily be measured or assessed objectively unlike hard skills such as typing speed or driving ability.

Add to this the difficulty deciding whether a predicted and measurable goal is caused by the coaching program or by some other variable. To use an old scientific axiom: correlation is not causality.
**Failure of Previous Evaluation Methods.** Much of the criticism of previous methods used to evaluate the success of coaching programs, like the skepticism about coaching itself, lies in the subjectivity of the measures themselves.

An evaluation method still seen in many educational models is the **pre-test/post-test**. For a concrete or “hard” skill this works well. For example, in an anatomy class the client could not name the chambers of the heart before the training, but could after training. This is objective and measurable, and if the client could only name three of the four chambers the effectiveness of the training can be quantified.

This is not the case with soft skills. If you asked someone to pick a number value to describe, say, their communication skills before a coaching session and the answer will be totally subjective. A confident person may pick a high value; a less confident person a lower value. After coaching and the development of new skills, now that there is a new reference, point the confident person may realize that their skills before coaching were not as good as they thought they were. Conversely, the less confident person may realize they were a better communicator than they thought. In both cases the baseline information is wrong.

This led to the **“Post-Then”** type of evaluation which was supposed to eliminate the problems found in the pre-test/post-test method. Don’t ask the person to assess their level of skill until after they find the new reference point, the post-coaching point. The criticism here is that the evaluation is still subjective. The coachee may be so exhilarated with the training and new skills that the evaluation of prior skills is unnecessarily harsh. Or someone whose expectations of the program were not met may unconsciously inflate the assessment of their prior skills to illustrate their disappointment.

Perhaps the most famous method of evaluating the effectiveness of coaching is the **Kirkpatrick Four Levels of Evaluation Model**. But this model is not without its detractors. For a start, the model was first introduced in 1959, and remains essentially unchanged in its theory or application since then. In light of everything that has been learned in the 60+ years since then about human behavior and learning it seems unlikely that this model accounts for that new knowledge, or for the changing attitudes regarding what constitutes effective learning. Indeed,
some who have implemented the model have simply added other “levels” such as Return on Investment onto the original four.

Perhaps the biggest criticism of this model is that of the four levels—reaction, learning, behavior, and results—levels which should be evaluated in that order (Chapman, n.d.), the first level, how the client felt about the training, is entirely subjective. Then, the second level tends to rely on some form of the flawed pre-test/post-test methodology discussed here earlier. The third and fourth levels become more difficult to assess and are often discarded.

Another increasingly common method over recent years of evaluating coaching effectiveness is the **Return on Investment (ROI) Model**. At its core, this model compares the cost of the coaching to the change in profit margins after coaching is completed. Because the purpose of business is to make money, this model holds obvious attractions for executives, but it is not without its problems.

Bernard (2006, p.20) concludes that “[M]any factors besides coaching effectiveness may contribute to the economic effects of changed behavior:

- General market conditions (a rising tide lifts all boats)
- New or changing products or technologies
- Competitors’ actions
- Social and political events
- Unpredicted changes in the coachee’s life
- The Hawthorne Effect (defined as the tendency of people to improve their performance when they know their performance is being studied)”

Another critic of this model concluded that focusing purely on financial gain blinded organizations to other benefits of coaching programs, and “increased job-related stress and anxiety” (Grant, 2012, p.1).

**Enough with What Doesn’t Work!**

Okay, so we’ve shared the bad news. The pitfalls some people have fallen into. However, your potential and existing clients still want proof that coaching, and especially your coaching works, before they hire you or renew your contract.

- But you can’t just show them past successes because you are biased and needs have changed
• And if you show them subjective data, the number-cruncher in their finance department is going to ask for objective proof
• And if you show them “objective” data using the traditional evaluation tools someone will point out the flaws in those tools

So where do you go from here?

**Have you considered Neuroscience?**

No, we’re not proposing that you stick a bunch of electrodes into your clients’ brains and measure electrical discharges as you coach or anything like that. (Although one day...?) It can be much simpler than that.

The scientific methodology of neuroscience means that you can take current knowledge and theories about the neurophysiological effects of coaching on an individual, apply them to a particular coaching technique, predict the outcome, and then show that your prediction is correct through demonstration.

Perhaps you can demonstrate the theory of mirror neurons by predicting that someone will jump in a startled fashion when someone else does, even though there is nothing there to startle them.

Or you could predict and demonstrate the gratification of a dopamine release in the case of the interviewer by teaching them a new skill.

Or how about Hebbian learning? Or replacing old habits with new, and then stimulating the return of the old habit, all the while explaining what is happening in the brain so the potential client understands that you are not performing cheap parlor tricks. Rather you are applying neuroscientific knowledge to coaching.

These demonstrations may have to be performed over a period of time, but does that matter? You are building a relationship throughout the demonstrations, a relationship that can be advantageous once coaching starts, a relationship that may save time in the long run.

**A Closer Look at What a Coach Does**

If we are to prove that coaching works and we are to use neuroscience to do this, we need to look more closely at what a coach is and what they actually do. And for this we need to revisit a concept that that we mentioned earlier and introduce one that may be unfamiliar to you.
Earlier, we chose to ignore the dictionary references to four-wheeled vehicles or methods of transporting but acknowledged the importance of the imagery in the modern use of "coach". This metaphor lies at the very heart of how we can use neuroscience to prove coaching works.

Picture where your client is now and then picture where they want to be. You have two points. Moving from the first point to the second point is a journey. And it is the coach that takes them on that journey.

However, very few people simply state, “I am going a journey,” and set off.

• They figure out how they are going to travel.
• They decide whether they will need to stop
• If they need to stop where will they stay?
• How much money will they need?
• Do they take the dog?
• What will they do when they get there?

In other words, plans are made, methods are decided, and goals are set. This is what coaching consists of!

However, you can look at the client’s journey in another way. Thinking of it as a physical journey again, even if everything else is the same, when they reach their destination the location is different. So, every journey involves change.

This introduces the second, possibly, unfamiliar concept: NEUROPLASTICITY.

One definition of coaching is described in my book NEUROSCIENCE FOR COACHES: How to use the latest insights for the benefits of your clients: "An expert in facilitating self-directed neuroplasticity." (Brann 2014) The description continues:

Perhaps not the answer you normally hear, but certainly my favourite and one I use whenever I’m asked. Jeffrey Schwartz actually introduced me to this idea and I like to give credit to ideas I develop or share. Neuroplasticity is the brain’s ability to change. People are incredible and have a huge amount of potential. Coaches are skilled at
working with individuals to help them bring out the best in themselves and rewire their brains to make it easy for those changes to become the norm.

3 Examples of Neuroplasticity

For our purposes, let’s think of the brain as the hardware of the computer and the mind as the software. They can be thought of as separate but linked: one does not function without the other, and changes in one can cause changes in the other.

Repeated behavior can change the way in which neurons within your brain fire. Known as Hebbian Theory, in its most simplistic form it is thought of as “neurons that fire together, wire together.” As you have repetitive thoughts or take actions repeatedly your neurons fire again and again forming a stronger and stronger neuronal circuit” (Brann, 2014). Hebbian Theory, especially useful in understanding the formation of habits, is so well established that mathematical formulae have been designed to predict the increase in strength of this neuronal circuit.

“But,” you think, “does the habit cause the strengthening relationship between those neurons—does the behavior cause the changes in the brain—or do the changes in the brain cause the habit?”

This “chicken or egg” type of argument is frequently encountered by neuroscientists, and can be considered reasonable because we are still learning so much in neuroscience is not yet 100% certain. BUT two other famous studies appear to support the idea that new behaviors or new skills cause physical changes in the brain.

In the first (McGuire et al, 2000) performed Magnetic Resonance Imaging (MRI) on a group of London taxi drivers and a group of non-taxi drivers to study the hippocampus, a part of the limbic system in the brain, which is thought to be involved in spatial memory and navigation.

Before receiving a license to operate as a taxi driver in London, a person must undergo intensive training lasting up to several years regarding the layout of the city, gaining a level of knowledge that even the most experienced non-taxi driver would probably never achieve, and then navigate around this huge city on a daily basis. And to try and reduce the number of variables the taxi drivers chosen were all white, male, right-handed and all fell within specified age groups, as were the non-taxi drivers.

Among other things, the MRIs showed that the posterior hippocampi of the taxi drivers were much larger than those of the non-taxi drivers and, to counter the argument that people with large posterior hippocampi were attracted to taxi driving because of their ability to navigate well, the MRIs also showed that the degree of enlargement of that area of the brain was
also related to the length of time as a taxi driver in London: *Those who had been finding their way around London for the longest time had the largest posterior hippocampi.*

So it would appear that new knowledge, new skills, or new behaviors cause structural changes in the brain.

Another experiment further refuted the idea that the structure of the brain led to a certain skill which in turn led to a particular career choice. This time, rather than studying the brains of taxi drivers, the brains of jugglers were studied (or to be more accurate, non-jugglers).

A group of non-jugglers were separated into two smaller and equal groups. One group was taught to juggle and had to learn/practice for a specified amount of time each day. The other group did nothing. Brain MRIs were performed on everyone before the juggling tuition started for those in the juggling group, and no significant differences in brain structures were seen. Then the MRIs were repeated once the training was completed.

The non-jugglers, as expected showed no changes in their brain, but the jugglers all showed changes in the white matter areas of the brain thought to be connected with reaching and grasping (University of Oxford, 2009).

The main upshot of these experiments is that our brains are not fixed in adulthood, they are not unchanging. Therefore, coaches can teach an old dog new tricks, as the saying goes. But, in addition, we can infer that a specific skill requires use of specific parts of the brain, and that those parts of the brain can be developed through coaching.

**Goal Achievement as Proof of Coaching Effectiveness**

By combining the elements of coaching with the concept of neuroplasticity, we can look at one way a coach may work. This could be to facilitate the client’s evaluation of their goals, planning and deciding on methods to reach the goal(s). The coach may then do a combination of eliciting and suggesting strategies with and to the client. These strategies are intended to cause the changes in his or her own brain necessary to reach the goal(s).

When it comes to hard skills, goal setting is an easy way of measuring the achievement of goals. The sprinter or swimmer wants to shave two seconds off his or her best time. After
coaching, their time is either at least two seconds faster or it isn’t. Either the goal is met or it isn’t.

But how about soft skills? It surprises some to know that soft skills can also be assessed objectively using goal achievement if the goals are set appropriately.

*For example, consider a shy employee who fades into the background at networking events rather than introducing themselves and the company to new potential customers. The goal of coaching may be to provide the employee with the skills to speak with five new customers at every networking event they attend.*

**Question:** After coaching, the employee speaks with four new customers at every networking event they attend. Has the goal been met?

**Answer:** No . . . it’s great progress, but the goal hasn’t been met.

**Question:** After coaching, the employee attends 10 networking events. At nine events they speak with five new customers. At one event they speak with four new customers. Has the goal been met?

**Answer:** No . . . again, great progress, but the goal was five new customers at every event.

If the goal was speaking to five new customers at least 90% of networking events, or at least 40 customers over the next 10 events, the answer would have been yes.

A side effect of the latter example is that it illustrates the need for realistic goals—there are way too many possible variables to explain why only four customers were spoken to at that single event—but it also shows how goal achievement can be used as proof of coaching effectiveness. And the goals don’t have to be numerical, perhaps it’s a simple yes/no such as “did the shy employee retreat to the kitchen or not?”

"But It Might’ve Been Something Other Than the Coaching!"

For a determined skeptic, arguing against anything is possible. They achieved the goal not because of the coaching but because they’ve changed their diet, they’ve got a new girlfriend or boyfriend, they’ve moved away from (or back in with) their parents, the boss shouted at them.
Unless the client is in a situation where the only possible variable is that they’ve undergone coaching, a completely unfeasible situation, ascribing change 100% to coaching is difficult.

But if you can counter with why the coaching caused the behaviour change, and why the other variables would not have resulted in that particular change your proof becomes much stronger.

"Neuroscience underpins many Coaching methods, tools, ideologies and strategies. It explains why some things work and how some things don’t. It challenges ideals and has the potential to hold us to a higher standard as Coaches.” (Brann, Neuroscience for Coaches: The training)

**A Neuroscience-Based Model of Proof**

Hopefully, you now see that any proof of coaching effectiveness should be objectively assessed using goal achievement supported by a neuroscience-based explanation of what happened and why. Behavioural changes correlate with brain changes. *Using this model, the outcomes are also predictable and can apply to proof before you begin coaching that what you do will benefit your prospective client.*

To provide a framework that you can apply in your business let’s look back at a scenario similar to the taxi driver scenario and provide some proof of coaching effectiveness. Here we will keep things simple, but before we look at the example, just to show that real situations will be much more complex, let’s see some of the components of goal achievement as described in *NEUROSCIENCE FOR COACHES: How to use the latest insights for the benefits of your clients* (Brann 2014)

- Deciding on the goal
- Thinking creatively
- Planning how you will achieve it
- Visualizing the goal, and steps to reach it
- Paying attention to / being affected by relevant cues – conscious and unconscious programming (anchoring, nudging, priming)
- Exercising willpower or self-control
• Helpful habits
• Monitoring progress & adapting
• Inhibiting internal distractions (emotions)
• Inhibiting external distractions
• Taking action itself

Each of those components contains several sub-components, and there may even be sub-sub-components, each of which has some neuroscientific research behind it or supporting it. Obviously, we cannot cover every aspect here. Entire books have been written on just setting goals, let alone any of the other aspects of achieving those goals, but more detailed resources are available to you. For the moment, let’s just look at an extremely simplistic example of how you can use neuroscience to prove or support that you are the person to coach someone who wants to be a London taxi driver.

**Measurable goal:** At the end of coaching will pass any written and practical exams necessary to receive license as a London Cabbie.

**Knowledge/Skills required:** Detailed knowledge of London as laid out on map; Ability to find way from any point in London to any other point by most direct route without getting lost. *(Here we will assume that the client is able to drive and has a driver’s license if for no other reason than it would unlikely anyone who didn’t possess these would be training to be a London Cabbie)*

**Potential obstacles to learning:** Client is very nervous about ability to learn new information; Client is wary of coach who is not a London Cabbie.

**Steps necessary to achieve goal:** Client must learn to trust coach; Client must feel comfortable in ability to learn new information; Client must learn memorize map of London; Client must repeatedly drive around London with constantly changing instructions.

**Plan (with neuroscientific support):** Lack of trust in coach and nervousness about learning new information may both present as fear or anxiety. It is known that in fear and anxiety responses the amygdalae are highly stimulated. The amygdalae are also involved in memory, attention, and socializing, so the client will be unable to process new information from the coach while in this condition. Repeated trust exercises can calm the amygdalae, reduce fear based in anticipation, and may kill two birds with one stone here. Once trust has been established and anxiety removed the client will be in a position to learn and can move onto the next step.
This example is, obviously, extremely simplistic, and does not even cover all, aspects of the first step. However, it does show that neuroscientific knowledge can drive and support coaching decisions, and such plans can be offered as proof of what your coaching can achieve.

**Behavior Influencers**

There are a wide variety of influencers that can be used to achieve behavioral change, and all have been examined at a neurobiological level. A partial list of these influencers is:

- Habits
- Self-control
- States (linked to beliefs)
- Expectations
- Decision making
- Mindfulness

As you may have realized by now, we are scratching the surface of what a knowledge of neuroscience can offer to coaches and their clients. Such knowledge can be used in all stages of assessment, planning, intervention, and evaluation. In a moment we'll address how you as a coach can gather this knowledge. But first let's look at some other benefits that corporations can receive from coaching, and that you can highlight in any presentation.

**Additional Benefits of Coaching**

In considering additional benefits that coaching offers to corporations it is useful to look at the opinions offered by the “Big Four” at a workshop hosted by Ridler & Co, a United Kingdom coaching company, in November 2014.

The Big Four refers to the four largest accounting firms in the world: Deloitte; PricewaterhouseCoopers (PwC); Ernst & Young (E&Y); and Klynveld Peat Marwick Goerdeler (KPMG).

All four “have developed their internal coaching into particularly sophisticated functions where the credibility of internal coaching has become extremely well established” (Mann, 2015), and each has identified specific career points at which coaching is offered and the benefits received from this coaching.

Although one specific benefit mentioned was the reduction of cost achieved by developing an internal coaching mechanism rather than hiring an external coach, those of you
operating independent coaching business could use other benefits to support your approach to clients that do not have such internal coaching structures.

Examples of benefits, apart from an obvious hope to increase performance would be:

Staff Retention

Development of Future Leaders

To enable new, transferring, or promoted executives to transition easily into new roles

Aiding managers to overcome identified personal deficits or organizational challenges

Enhancing identified strengths

**Where Can You Learn All This?**

By now, it should be obvious that understanding neuroscience and its applications in coaching is and will become increasingly important in the modern coaching industry.

It may be that you have always been an excellent coach and achieved excellent results in the past using nothing more than some coaching knowledge and an intuitive “feel” for your clients and their needs. But that is no longer enough.

In many ways this is similar to the transition experienced by nurses in the 1970s. Ask older nurses and they will probably bemoan the loss of the “art” of nursing, shaking their heads as they tell you how it is all book-learning now, with very little use for intuition and empathy. Nurses now obtain the majority of their education in classrooms rather than on the wards. Those older nurses will tell you that nursing has become a science rather than an art.

The same is happening to coaching. You can’t objectively assess a hunch or a feeling. You won’t impress a client by “feeling” you can help them. Coaching is moving from an art to a science. This is progress and whether you like it or not will not stop it.

You could find much of the information that you need on the Internet in various places, but this is a highly inefficient way of doing this. You could send days and weeks and months finding and collating all the information you need. Of course you run the risk of swallowing some of the nonsense out there that claims to be science.

Or you may think you’ve gleaned enough from this report to bluff your way through.
In both cases you are doing something that if a client suggested it you may seriously think about slapping them until they came to their senses. (Obviously as a good coach you wouldn't do it but you might think about it.)

But you can avoid both scenarios by heading to www.neuroscienceforcoaches.com. This site is designed specifically so coaches can get quality information efficiently.

From a complimentary gift bundle to information about our neuroscience for coaches book or training programs, the tools are there for you to learn and keep up with cutting edge coaching theory.

REFERENCES


