

# **De-mystifying Research: An Introduction for Coaches<sup>1</sup>**

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*[Editor's Note: In an effort to promote the understanding of research by all interested coaches, the Second ICF Coaching Research Symposium included a presentation entitled "Introduction to Research". A large part of that presentation is presented in this article, included here as an introduction for the reader.]*

## **The Art of Coaching is also a Science**

We are now entering the second generation of coaching. The first generation, formed by visionaries and leaders, created the new fields of life-coaching and executive coaching. These were the enthusiastic, inspirational and wise leaders who put coaching on the map. It is now a specialty to be reckoned with. Tens of thousands of coaches have established successful practices; hundreds of thousands if not millions of clients are now receiving coaching. The former step-child has become the favored offspring.

This new favored status has a number of ramifications for the coaching practitioner. For a new field to become firmly established, it must move beyond the guru generation. It must begin to prove its worth, show that it isn't magic and that, given proper training, most can become good coaches. In addition, corporate and individual clients now arrive at sessions with more sophisticated expectations and higher hopes of what coaching can offer. To become a major force, the field needs to have a broader base. To withstand the scrutiny of a wider public the field needs to be able to explicitly describe what principles

inform interventions, suggest theories that explain why they work and to support itself on the foundation of solid empirical research.

I believe there is a vast array of collective wisdom on what forms and brings out the best in us. I also believe that coaching works. The basic empirical evidence each of us already has is that our clients pay for our services, give us the feedback that what we've done is helpful and show us the validity of their claims through changes in success, life satisfaction and goal attainment. But we need to broaden our personal experience to include more rigorous study and analysis of what works with whom, when, where, and how. Whether we are explicitly aware of it or not, there is, in fact, a deep theory and science of coaching. For many of us it lurks beneath the waterline of our conscious awareness. Although we may sense it, it may feel ephemeral when we try to describe it to the uninformed. Learning the basic skills of research empowers us to reach down and pull the knowledge into the light of day, where everyone can see it. Our theory and practice can be articulated, defined, researched, and replicated.

While there never will be a technology of the soul and much of what we do may seem elusive, there remains much that can be identified, understood, and explored in both quantitative and qualitative ways.

Let's begin!

## **Learning the language of coaching research**

Research is an attitude, and it can be cultivated. As such it informs how we think, and how we practice—even if the data we analyze stays limited to our own, and our client's, experiences. If you haven't had a lot of exposure to research, the vocabulary can

be a bit daunting at first. But remember, it's just a language and you can learn it. For those of you who have ever bought property or learned to give your car a tune up, at first the new information sounded like a babbling stream of jargon. Then the words began to make sense and wrapped around concepts you learned to use. What was once incomprehensible then became "easy" to understand. And like most fields, while some very advanced techniques may escape us, we can still get the gist of what's important and use what we know effectively.

The model I use for understanding scientific research is the metaphor of learning the art of intuition. Many coaches have extensive training in how to "use" intuition. If this is so for you, you learned how to be open to what emerges in your mind and also to be open to what you see unfolding before you in the coaching session. You've been trained to be detached from your idea and to see whether or not reality supports what popped into your head. Learning the Science of Research has many similarities to learning the Art of Intuition. Remember, researching is about knowing and then having a set of checks and balances to help keep you from deciding what is true prematurely or incorrectly.

For now, to illustrate how a researcher might address an issue, I'll take one assumption that many of us have and describe how it fits into a research orientation:

1. **"Hard" research consists of having an informed hunch (*hypothesis*).** A hypothesis is basically your idea of what you think might be happening. It can be based on a deep analysis of research articles, or it can be based on something you've just wondered about.

Coaches tend to believe this: *Coaches with good listening skills are more effective than those who don't listen to their clients.* How might a researcher study

this question? There are many possible hypotheses one could develop. For example: Coaches who listen well will have larger practices with a lower dropout rate. Or Coaches who listen well will have clients who reach their goals more quickly. Or Coaches who listen well will have clients with higher life satisfaction scores or greater sense of empowerment. In sum, a hypothesis is a focused question. We ask our question and try to address it in a methodical, accurate manner.

2. **After the hypothesis is generated, you must figure out how to measure the issue you are interested in studying.** This is usually described in detail in any research paper. The impact of what methods are picked to study a question is often far more powerful than you realize at first glance. To address this, research papers have extensive methods sections where all this is described. This helps the reader decide if the researcher has biased the results by how they designed the study. For now, we go back to our question about good listeners. In this case we must figure out how to define and measure “listening.” How can you know a coach is a good listener? You need to come up with what is called an “*operational*” *definition* of good listening. You have to have something you can put your hands on in some way.

You might get behavioral: good listening can be measured by behavior, e.g. how much each person talks. You could measure the actual amount of air time the coach takes up in the session. You then decide that if a coach talks less than 30% of the time, he or she is a “good” listener. But this is quantity of time, not quality of listening.

For quality of listening you might come up with a scale. After a session, or at set times during the session, the client can rate the coach on a scale of 1 to 6 with how

well they felt the coach listened. Quality of listening could also be measured by a questionnaire the client fills out sometime after the session is over.

You could come up with observational measures. Observers could listen to the session and rate how well the coach listened. They can do this once for a session, or every five minutes, or every new topic, or even every coach-coachee interaction. First, however, they would have to become *Reliable* – that is the raters would take practice runs and see how closely they agreed with one another. Hopefully your measure would also be *Valid* which means you are really measuring what you think you're measuring, not something else.

An entirely different approach to measuring listening would be to interview clients about their coaching experience. Did they feel listened to? What was the process like for them? There are many ways to then organize and categorize qualitative interview material.

3. **After you define and measure listening, you have to do the same thing with what's called the *outcome measure*.** Good listening leads to what outcome? If we think clients with good listening coaches will do better, how do we assess if clients are doing better?

We do the same thing again; find ways to define and measure "*better*." It could be a checklist of goals being met, or the client's life satisfaction or how clients felt about the effectiveness of the session

We could also use before and after tests. These are tests, measures or questionnaires administered before and then after a set number of coaching sessions.

You could measure life satisfaction, levels of depression, how effective the client feels and see if this measure you have chosen has gone up or down.

4. **Now it's time to be detached from whether our hypothesis was supported—that is, to be objective. Were our better listeners more effective?** Reality must be revealed for what it really IS, not what we want it to be. This is why we use statistics to analyze our results. There are many types, but these can be discussed later. For now, we plug in listening scores and outcome scores and see if they are or are not connected in the way we expected. Some statistics will divide the clients from “good listening” coaches and “bad listening” coaches into two groups and then compare the average level of client success. Other kinds of statistics will look at the range of association between listening and success and come up with a number that tells you how much of the variation in success appears to be associated with quality of listening. If you did find a difference, there are tables (computers now do this automatically) that tell you, given the number of people in your study and the strengths of your results, whether or not you've reached “statistical significance.” If you determine that ( $p < .05$ ), this simply means that there is a 5% or less chance these results could be due to chance.
5. Now that you've found differences, or a clear association, what does that mean? Here's where critical thinking comes in. We can immediately conclude that good listening leads to successful coaching experiences. This research study then should be repeated with another group of clients – this is replication. One study alone is great, but repeating it is crucial. The successful study can then be a building block for further inquiry and the next set of studies. For example, what was it about the

good listening? Was it really listening or were these coaches also warmer extroverts? If so, what's the most important quality of the coach? One study generates the next, refining the question in many possible different ways.

6. What if you have not found differences, or an association, what does that mean? It might mean that quality of listening didn't matter to this group. But what about alternative explanations for not finding the differences you expected? Is there no connection? Or were there problems with your methods or measures? For example, say you picked "achieving goals" as your outcome measure. Upon reflection, you realize it wasn't an accurate measure of success. After all, sometimes coaching "success" means the client realizes the goals he or she set up aren't leading to life fulfillment and should be abandoned. So what counts as failure might not be valid. As a result, a new study, more informed by reality takes form.
7. The researchers generate new hypotheses with better measures, and the cycle continues spiraling upward toward more knowledge.

As you've seen, researchers take regular questions and try to find meaningful, objective, and clear ways to study them. The truth is, with a bit of understanding, we can all be researchers, each according to our strengths, skills and interests. However, even if you never run a research study yourself, it is growing more important for coaches to understand how research works and to learn how to be informed by it. The inquisitive, open minded attitude where you don't automatically believe things, and also don't prematurely throw things out, is a key to becoming a more effective coach. For those who wish to know how to be directly or indirectly involved in the evolving field of coaching research, there is an incredible amount of opportunity opening up for you.

## An Overview of Different Kinds of Research

If you want to begin research of your own or to appreciate the different kinds of research, there is a large range of work possible and great need for research at all these levels. First, I'll go through types of studies, describing possible coaching studies at different levels of analysis. Then I will describe different kinds of efficacy (effectiveness) study possibilities.

### *Just Looking: Descriptive and Observational Studies*

We need to emphasize the importance of **descriptive and observational** studies. The coaching field needs more basic studies that simply describe and systematically observe coaching sessions. The questions might include: Just what does happen in a session? Who's using coaching, how long does it last, how do people decide when they're done? What types of goals do people choose?

To do this, one can look systematically at call focus forms, notes, videos or transcripts of sessions and simply report what is happening. What you discover might surprise you. Developmental psychology uses this kind of research frequently. One developmental study from the 1960's, for example, simply measured the amount of time mothers and fathers talked to their infants. Mothers talked to their children for hours, but fathers only spoke to their infants an average of 17 seconds a day. After replication, this "just looking" research lead to a number of interventions increasing fathers' involvement. It's important to observe, particularly with a new field of inquiry. You may find something important. If you have a way to code (or record) what you're looking at, you have a study. Many complicated looking projects are simple when you realize that



complex coding is just an organized way of looking at what you see every day. It's systematic observation.

For the question about good and bad listening coaches, what might you learn by simply looking? What are ways you could observe good listening? How could you describe how clients pick and choose goals?

*Just Talking: Content and Narrative analysis*

Here, in addition to observing, you develop a way to categorize and measure *what is said in the session*—its content. If you can categorize the content of a session, you have research. There are many ways to do this. You can determine 4-5 categories and check off how many times each is present throughout the conversation – micro-analytic analysis of the coach-client interaction. My dissertation was a micro-analytic analysis of parents coaching their five-year-old children on an impossible physical task for exactly five minutes. Each session was transcribed and divided into “utterances,” then the amount of parental coaching and involvement was measured and compared by gender, birth order and demographics.

There are many ways you could categorize good listening and its apparent impact on the client. You could decide some good listening is shown through reflecting back what is said as one category. Reflecting back with a question could be another category, reflecting back with feedback could be another. You could develop a number of ways to make a content analysis of how coaches listen and how clients seem to shift course in response. For the latter you could make client response categories: affirming the coaches comment, altering it, disputing it, making a self affirming comment inspired by the

coach, etc. As a result of the categories you could map out what happens to clients and what they say or do when they've been truly heard.

### *Putting It Together: Correlation studies*

There is a strong need to examine how things correlate. Correlation is how much one variable (such as good listening) is related to another (such as coaching success). Are listening style and effective coaching correlated? There are simple and complex correlations. Simple correlations are just looking at 2 things, such as listening and coaching success, how much of the change in success seems to be related to the listening style of the coach. There are also complex correlations, where you can mathematically take out the effects of other possible factors to clear up the connection between the two main things you are studying. In this case you can statistically remove the contribution of the coach's level of experience (what if all the bad listeners were new coaches and the good listeners were experienced), or you could remove other variables that might muddy the waters. When we try to understand why a coaching intervention does or doesn't work we often think this way, but don't realize that statistics can actually address this kind of issue if your measurements allow for it. We think this way all the time, but don't use this label to describe our thought processes.

### *Proving It*

There is a maxim that researchers are taught, over and over. Correlation does not mean Causation. In other words, no matter how obvious it feels, if two things are correlated you cannot assume the direction of influence—that one causes the other. It is quite possible for example that the “successful” clients created the kind of coaching relationship that made their coaches better listeners. To “prove” things you need more

complicated research studies, of the kind I'll describe below in the section on efficacy studies.

## **Ways Researchers Study if Coaching Works**

**These are typically called “Efficacy” Studies and they look at an intervention to see if it’s effective or not. I’ll familiarize you with a few ways this is done.**

Efficacy simply means, does a certain intervention work? How effective is it?

### *Single Subject Design*

This involves taking one person, systematically assessing their changes in performance over time, and exploring whether or not coaching can account for it. In other words, with just one client, you can do a single case research study. It is also possible to do this with a small number of clients and create a qualitative research study based on a deep analysis of a few clients. Qualitative research methods are not described further in this paper, but can be very useful to answer questions related to coaching.

### *Cross-sectional studies*

The most common studies are cross-sectional. For these, you measure members of two groups and see how they compare. For example: if you measured clients with the good listener coaches and those with the bad listener coaches and compared their scores on coaching satisfaction, goal attainment, etc.—that would be a cross sectional study. I think of this type of research as the “snapshot” approach—taking good, clear, focused pictures at a moment in time and studying differences. Other examples might include questions such as: Do companies who have regular coaching available to their executives have higher customer satisfaction than those who do not? Or, are clients who request whole life coaching vs. focused interventions different from one another (e.g. Intuiters vs.

Sensors on the Myers Briggs). You compare different groups of people and see what that can tell you about the issues that interest you.

### *Longitudinal studies*

In longitudinal studies, you take one or more groups of people and study them over time. It's not just a snapshot—you can take either multiple “shots” or almost a movie. This can be as complex as a lives-in-progress study (where you interview, observe and take many measurements) over the course of years, or a more focused study such as, “If a client fills a questionnaire out at regular intervals during the course of coaching, how do their scores change?” In a longitudinal study you might compare how people functioned both before and after a coaching experience and see if coaching made an impact.

However, you can't really “prove” it unless you do a true experimental design study.

### *Random Assignment, Double-blind, Placebo-controlled Study*

The random assignment, double-blind, placebo-controlled study is the gold standard of efficacy research. It's difficult to do, but it's easy to understand the gist of it.

Basically you have a pool of possible clients. Then you randomly pick some to get real treatment and others to get placebo treatment. The second group is called the “control” group. You have to have a control group in order to have something to compare your treatment group to in order to see if the treatment is really creating the change or if the change is simply the result of getting some kind of generic attention (placebo) and/or if some larger societal or historical changes are really responsible for any differences.

Double-blind means that the clients AND the researchers measuring client performance, etc., don't know what group they are in. This is to protect the study from being biased. If the raters, for example, know exactly who is in the “real” treatment

group and who is in the placebo group, they may feel pulled to see the treated group as doing better, or may be more attuned to seeing the good side of the treated clients.

So, if you have done previous research and have a fairly good theoretical and pragmatic reason an intervention should work, AND you can randomly assign a group of people to good treatment and control group AND your raters are blind to who is who AND you find significant differences THEN you have the beginnings of PROOF that your coaching works and it's your coaching interventions that created the change.

At this point in time nearly all medical treatments are required to pass this kind of test, and then to pass it again and again (replication). As coaching moves from the fringes into the mainstream of the corporate and private world, this kind of rigor is going to be expected of us. Psychological researchers have been doing this for years; now coaching researchers are starting in this direction as well.

## **Creating Research Studies**

While the random assignment study is a crucial piece of the research puzzle, there is a great need for all kinds of studies. For most of these, you do not need huge amounts of funding or research laboratories. *In fact, there is a reservoir of data already available to researchers and practitioners.* Many coaches already use call focus forms and other measures that could easily be used as a basis for coaching research. In addition, having clients fill out some before and after questionnaires or tests along with their coaching agreement forms is a very possible way to improve coaching practice and research. In addition, with the ICF's interest in bringing research to the coaching community, there will be many opportunities to create practitioner-researcher teams. The more research

there is, the more coaches can affirm to clients that there is good reason to embark on a coaching journey.

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