

THE BUTTERFLY EFFECT

"A little change can have a big result"



THE SCIENCE BEHIND CHANGE

By Katie Barr

Making positive changes in our lives and breaking old habits that no longer serve us can feel like a daunting task at times. Most of us tend to rely purely on will power and discipline to make change and hope that 'this time' we will be able to achieve our goals. However, we often find that we fall short on both will power and discipline after just a few days or weeks have passed, and our old habits persist.

The first thing that comes to mind are those same promises that we will all make this January to exercise more regularly and to cut back on fattening foods. Alas, by February the gyms and yoga studios are empty again and many of us have fallen back into our previous eating habits... but now with a few extra pounds to contend with.

This situation also applies to our behaviour within our relationships. We make promises to ourselves not to react to comments made by our partner or a family member, or not to feel threatened by something they do, only to find ourselves reverting back to old behaviours or responses that we know are no longer productive.

So how do we make lasting change or break old relationship patterns permanently?

If you are serious about making change in your life, the first thing you could consider doing is hiring a Coach. But if hiring a coach is not in your budget at this time, I want to provide you with some insight as to how you can use the resources you already have to start creating meaningful change *for yourself*. What I am about to share with you is a brief look at the *science* portion of the "Art and Science of Coaching." (Ref: Erickson College: The Art and Science of Coaching program).

To be effective in creating change, it is essential to understand the basics of how the brain works. The following is a simplistic overview but it can provide a window into understanding why applying sheer muscle to attempt to make significant change in our lives just doesn't work for most of us, or at least not for very long.

Humans have three physical brains, one inside the other. Each brain has a very unique function that forms the basis for the mind system we develop as we mature.

The first and oldest brain system is called the *reptilian brain*. Its main function is to look after the body and to keep it safe. When you feel *fear* the reptilian brain reacts automatically with the flight, fight or freeze response.

At times, this can be very effective (e.g. when touching a hot coffee pot). At other times, the reptilian brain can take over your mind and the effect is not as productive (e.g. overreacting to a situation with a spouse, friend or co-worker).

The second brain is called the *emotional brain*. This part of the brain gives us an emotional life, including memories and feelings such as love, anger and fear. Your emotional brain brings past learning into the moment of NOW and does not think of the future or long-term consequences.

Again this can be a very welcoming system when accessing positive memories of past events (e.g. when recalling vacations or remembering a loved-one) but can be destructive when those past events have had a negative impact on our psyche. In these cases, we may find our reactions to situations are disproportionate to the actual event or problem at hand. An example of this would be of a person who received a painful jellyfish sting when swimming in open water as a child. In adult life, if that person were to unexpectedly fall overboard into open water they may feel extreme panic, even though true danger is avoidable and help is close at hand.

A few key features to understand: (i) the reptilian and emotional brains have formed a solid and reliable relationship over the 50 million years that they have known one another; *and* (ii) the emotional brain prefers things to stay the same (i.e. *it has a strong desire to maintain long-term habitual patterns*). So when you feel resistance to change or realize you have reacted to a situation without the control you desire, it is important to note that your reptilian and emotional brains are running your mind.

The good news is you can learn to override the negative aspects of these basic brain reactions with a level of awareness and knowledge about how the brain systems work... and by consciously engaging your third and final brain system, the *cerebral cortex*.

The *cerebral cortex* is the youngest brain system to join the group (e.g. it is only 2 to 2.5 million years old) but this is a very powerful part of the brain with a speed and processing power thousands of times more flexible than the strongly *habitual* emotional brain.

The cerebral cortex is also the special part of the brain that has the capacity for self-awareness. When using this part of our brain, we can look back at ourselves and be aware of how we are feeling and thinking. We can then respond to cues based on our self-awareness – and not based on outdated beliefs or habitual emotional patterns.

Finally, this part of the brain has the capacity for visualizing change. In other words our third brain system allows our mind to *view many approaches to a situation AND to imagine the outcome we desire*.

Visualization techniques are well known and widely used by athletes when they are mentally rehearsing a skill or a successful outcome for a sporting event. The athlete repeatedly visualizes himself successfully performing the skill, as if he were an actor in a movie. As this occurs, the neural pathways in the brain involved in skill development are built and used, as are the pathways for experiencing a positive outcome i.e. WINNING!

So, while taking action and setting goals are very important, to start to make effective and long lasting changes in your life, visualization exercises are *key*!

When working with a coach, visualization techniques are combined with powerful questions to assist you in accessing your deeper knowing system more quickly and effectively. However, visualization activities can be performed easily on your own to imagine your future.

Whether performed on your own or with the assistance of a coach, *visualizations are the power behind creating a new reality with your mind*.

In summary, by using our three brain system fully (and especially our cerebral cortex for visualization) we can learn to act in new and more effective ways in our relationships, stay focused on our future, accomplish our goals *and* create the life we say we want.

The key to change lies within all of us. It is only a matter of using the appropriate doorway to access what lies beyond.

Let's all make 2009 a *year for change!*

*“To create the life you love, your positive images must be **more powerful** than any negative feelings in your emotional brain.” ~ unknown*

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