Emotional Intelligence (EQ) Increases from the Biocybernaut Institute Alpha One Neurofeedback Training

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Abstract

Objective: Emotional Intelligence or EQ accounts for 58% of success in all types of jobs and is now recognized as a Master Skill for success in life. However, the known methods of training to increase EQ are slow and tedious. The Biocybernaut Alpha One training has shown the ability to rapidly change moods, emotions and even core dimensions of personality, so it was chosen as a possible intervention to speed up EQ increases and to make EQ increases much larger, thus making happier, more successful and more prosperous people in work, play and personal relationships.

Method: EQ testing of Biocybernaut Alpha training was performed with 24 Male and 19 Female clients before and after their 7-Day Alpha One training at Biocybernaut Institute's Sedona, Arizona Neurofeedback training center. The Alpha Neurofeedback trainees were compared with a Self-Study group that did the TalentSmart online EQ tests and then studied for two weeks with written lessons from TalentSmart on how to improve their 3 weakest dimensions of the 7 dimensions of EQ measured by the TalentSmart online EQ test.

Setting: The Biocybernaut Institute Neurofeedback training center in Sedona, Arizona was the location for the TalentSmart EQ testing on Alpha training Males and Females and also for the Biocybernaut Alpha One Neurofeedback training program.

Results: Alpha trainees showed very large and highly statistically significant increases of all 7 dimensions of EQ for both Male and Female Alpha trainees. Males started lower in EQ than Females but had bigger increases in EQ, so that Males caught up to Females in EQ. The Post-training EQ scores did not differ between Males and Females. Self-Study comparison subjects, who started significantly higher in EQ than the Male Alpha trainees, also increased their EQ, but only ⅓ as much as the Male Alpha trainees and only ½ as much as the Female Alpha trainees.

Conclusion: An increase of one point in EQ nets the person an average of $1,300 more in annual income. The 15.83 EQ point increase in the Male Alpha trainees will net those men an additional $410,000 more income over the next 20 years compared to if they had not done the Biocybernaut Alpha One training. The 11.684 point increase in the Female Alpha trainees will net those woman over $303,000 more income over the next 20 years than if they had not done the Biocybernaut Alpha One training. EQ is seen to be a "Master Skill" for success in life, both professionally and personally. The Biocybernaut Alpha One training has been revealed to be a rapid, powerful and effective means for dramatically increasing one's Emotional Intelligence, in just one week, with far larger and much faster results than traditional teaching methods to increase EQ.

Keywords: Emotional Intelligence; Biocybernaut Institute; Alpha One Neurofeedback Training

Introduction

Emotional Intelligence, called EQ, is increasingly being recognized as the "master skill set" for success in life. EQ accounts for 58% of success in performance of all types of jobs, whereas IQ, or traditional Intelligence, accounts for only 10 - 20% of success ([1], pp. 7-8). Researchers into performance and human traits had been mystified as to why people with the highest IQs outperformed those with average IQs only 20% of the time. But people with average IQs outperformed the high IQ people 70% of the time. It became apparent that IQ is not the most important contributor to success. Years of research have now identified EQ, or Emotional Intelligence, as the most important factor. And yet only 36 percent of people are able to accurately identify their own emotions as they happen ([1], p. 14). This is a serious problem for any personal or business relationship. Lack of awareness of one's own emotions renders one unable to wisely manage one's own emotions and often leaves the person clueless about the emotions of other people. As a result, relationships suffer and fall apart and performance plummets. Dr. Travis Bradberry says, "The link between EQ and earnings is so direct that every one point increase in EQ adds $1,300 to an annual salary" ([1], p. 21).

EQ is also very important to effective Leadership. A Harvard Business Review article on Leadership [2] has identified Six different leadership Styles. Each Style requires a different mix of EQ abilities within the EQ spectrum. The best Leaders flexibly employ some or all of these Styles as the situation requires. This, of course, means such Leaders must have mastery of the different components of the total EQ spectrum. Total EQ is composed of two main sub-dimensions: (A) Personal Competence and (B) Social Competence. Each of these are composed of and further subdivided into Awareness and Management skill sets. So Personal Competence (A) consists of (A-1) Self-Awareness and (A-2) Self-Management. And Social Competence (B) consists of (B-1) Social Awareness and (B-2) Social (or Relationship) Management.

Because we know that EQ and it's sub-dimensions are extremely important to success in life and especially in Leadership situations, we are motivated to find much more rapid, powerful and effective ways to increase EQ. Daniel Golman [2] says increasing EQ is hard and takes months, not days, because, he says, "...the emotional centers of the brain, not just the neocortex, are involved. The neocortex, the thinking brain that learns technical skills and purely cognitive abilities, gains knowledge very quickly, but the emotional brain does not".

If Dr. Goleman is correct, then to rapidly produce large increases in EQ, we must find a novel method that has proven to be effective in producing large and rapid changes in human emotions, moods and even changes in major dimensions of personality. Some Psychiatrists view personality as stable over the adult lifespan, so any method capable of rapidly changing core dimensions of personality would be a good candidate to test as a rapid EQ enhancement method.

Dr. Bradberry and Jean Greaves are also among those who mistakenly believe that Personality and IQ cannot change. In page 18 of their book, *Emotional Intelligence 2.0*, they say, "Also like IQ, personality is stable over a lifetime." [1] We know this is not true and that the Biocybernaut Alpha training raises IQ an average of 11.7 points and the increase is stable at least for one year [30], and there are many examples of Biocybernaut Alpha training producing beneficial changes in core dimensions of personality [3-12].

There is substantial support in the literature for rapid and large (clinically significant) changes in core dimensions of personality and in a wide range of emotions and emotionally driven behaviors through the Biocybernaut Institute Alpha One Neurofeedback Training Program [3-12]. These reported changes include significant and clinically useful reductions in both State and Trait Anxiety [3-6,11,12], reductions of Paranoia, Schizophrenia and Psychaesthenia [6,11], reductions of Anger, Hostility, Aggression and Depression [11,12] and increases of Friendliness, Energy and Vigor [11]. Amazingly, both the graduates of the Alpha One training as well as their networks of family members and their friendship networks rated the Alpha One graduates as greatly improved in a very wide range of emotions, moods and important social behaviors [12]. After the Alpha One training, the Biocybernaut Alpha graduate was or had Less: Negative thinking, Being Judgmental, Meanness, Disgust, Upset, Moodiness, Resentment, Sarcasm, Swearing and Physical Fighting. In Addition, after the Alpha One training the Biocybernaut Alpha graduate was or had MORE: Optimism, Tolerance, Patience, Self-Honesty, Honesty-with-others, Integrity, Respectfulness, Peacefulness, Engaged Indifference, Kindness, Joy, Hope, Happiness, Laughter, Joking and more Positive Attitudes toward Life. Certainly it seems, with this amazing list of benefits of the Biocybernaut Institute Alpha One training, there should be some increases of EQ,- some significant boost of Emotional Intelligence in people after doing the Alpha One training program.

Therefore, the focus of this study was testing the EQ increasing effects of the Biocybernaut Institute Alpha One Training. The EQ test instrument chosen was the TalentSmart on-line form of the EQ test provided by Dr. Travis Bradberry and Jean Greaves. Free access codes

for two online administrations of the test are provided with each copy of their book, Emotional Intelligence 2.0 [2]. The research participants were 24 males and 19 females who, on their own initiatives, were taking the Biocybernaut Institute Alpha One Neurofeedback 7-Day Training in Sedona, Arizona. Each Alpha trainee took the TalentSmart online EQ test both before and after their 7-Day Alpha Neurofeedback training program.

The Biocybernaut Institute Alpha One Neurofeedback program is much more than just Neurofeedback. The Alpha One Program offers deep insights into a person's Emotions and Moods with thrice daily Mood Scale testing and interpretations and coaching given every day. Each of the Alpha trainees also do deep forgiveness work and Letting Go on the people, including themselves, who are at the root of many of the Emotional Traumas, both conscious and unconscious, that litter the landscapes of their minds and hold them back from the phenomenal success that is available to them after clearing out these emotional traumas with deep forgiveness and Letting Go. According to Psychiatrist Dr. David Hawkins, Letting Go and Forgiveness are faster and more effective than psychotherapy in facilitating emotional healing, transformation and expansion of awareness [27-29]. Skilled, Certified Biocybernaut Trainers are the guides and coaches for the Alpha trainees along the way of the Alpha trainees' journeys through forgiveness and Letting Go.

It is important to understand that the Biocybernaut Institute Alpha One training is not just Neurofeedback, and also to understand that, by itself, Neurofeedback alone, cannot, and will not, produce such large, important and beneficial changes of core dimensions of Personality, and, hopefully, of EQ. The attainment of profound mastery of the mind, creativity and the emotions, like that of great scientists [25] and advanced Zen Masters [26], which come through participation in the Biocybernaut Alpha One training program, all depend upon three pillars that support and enable the Biocybernaut Institute brain wave training programs:

[A] The Patented ergonomic Neurofeedback technology that uses Psychophysiological science to design and operate the interface between the brain and the experiential mind of the trainee;

[B] The Patented and optimized training protocols, and

[C] The Transformational Perspective of the Trainer.

In [A], the technology is designed with deep knowledge of the natural reactivity of the human Alpha rhythm, based on many decades of Psychophysiological research going back into the early nineteen hundreds [13-24]. Dr. Hans Berger discovered Alpha waves in 1908 and secretly researched them until first publishing his work in 1918. Biocybernaut has an archive of such research knowledge and is founded upon this deep scientific understanding of the psychophysiology of the human Alpha rhythm. And this means that the patented Biocybernaut technology, which is designed by Biocybernaut with full access to this deep archive of psychophysiological background knowledge, can, and does, provide the unique and patented Biocybernaut EEG feedback in unique ways that allow maximum learning in the shortest time with the greatest retention.

In [B], the Biocybernaut Institute Alpha training uses Massed Practice rather than Distributed Practice, so that instead of doing feedback for an hour a day several times a week, the Biocybernaut trainees experience an intensive learning program that has them at the training center 10 - 14 hours per day, even having dinner at the training center and then continuing with coaching discussions and data reviews thereafter. An airplane cannot take off by taxiing 100 feet once or twice a week. To achieve lift-off, to achieve transformation into an aerial vehicle, the plane on the ground must taxi continuously building up speed, until lift-off occurs. So is it in a Biocybernaut Alpha training, where there are long sessions, with detailed reviews of the data, and skilled debriefing for 7 consecutive 10 - 14 hour days: Massed Practice potentiates and facilitates transformation. Distributed practice indulges the curious.

In [C], all the Biocybernaut Trainers are Certified only after 12 - 14 hours per day of intensive training for several months in listening skills, empathy, understanding the Human Electroencephalogram, learning to interpret the computerized Mood Scales, how to remember the details of the daily subjective reports of up to 5 people in an Alpha training, mastering and disciplining their own egos and in developing total devotion to learning and remembering the details of the experiences of the trainees, and in holding a space of Love in which the trainees can feel safe to share their most intimate secrets and their most painful experiences, knowing that the Trainer's Engaged Indiffer-

ence plus love will help them to Forgive and to Let Go. Also the Trainers must master the Neurofeedback processes that they teach through their own personal Neurofeedback training. You cannot "teach" Alpha, but you can exemplify it and transmit it from the Beingness of the Alpha state. Exemplification and parables are important in guiding others in the way of Alpha. The trainees may have profound altered states of awareness in their Neurofeedback chambers, like in advanced meditation, and they may have done very deep forgiveness work. These are profound mystical experiences and are not abreactions, but rather the emergence of a deeper consciousness, such as described and taught in meditation and spiritual traditions around the world. The Trainer must empathize with and guide the trainee in the detailed retelling of their experiences in the feedback chamber. This enables the most valuable insights and the shifts in awareness from the neurofeedback session to be articulated and thus to become available to the linguistic and rational mind and thus to be much better remembered. Also the Trainer reviews the daily Mood Scale testing results with each trainee. The Mood Scale computer program, running while the trainee is being recorded for 8 channels of EEG, has the ability to identify and report to the Trainer, the existence of unconscious emotions in each trainee. These can be both positive and negative unconscious emotions. Aided by knowledge of the unconscious emotions within each trainee, the Biocybernaut Trainer can much more effectively guide the forgiveness work by each trainee, which then results in emotional healing, Letting Go and a much enhanced awareness by the trainee of their own emotions and their own consciousness. Recall that Travis and Greaves [2] found that only 36% of people they tested could accurately recognize their own emotions as they occurred. The Biocybernaut Alpha One training remedies this deficiency by dramatically increasing emotional self-awareness.

Method

Of the three operating Biocybernaut centers (Canada, Germany and USA), the USA center was chosen for having the largest number of clients per month and the most support staff to assist in this research study. From October, 2016 through May, 2017 all of the adult Males and adult Females who did the 7-Day Alpha One Training, took the TalentSmart on-line version of the Bradberry/Greaves Emotional Intelligence test at the start of their first day of the training program and at the end of their seventh and last day of the training program. This included 24 adult Males and 19 adult Females. The EQ scores were calculated by the TalentSmart online testing program and printed out and archived for later analysis. There were 7 scores generated for each person in each administration of the EQ test: 1] Overall EQ and the first main Sub-Scale, 2] Personal Competence, with its two sub-categories of 3] Self Awareness and 4] Self-Management. In addition, the second main Sub-Scale is 5] Social Competence with its two sub-categories of 6] Social Awareness and 7] Social or Relationship Management.

The 7-Day Alpha One Training consisted of 7 days of Neurofeedback training with depth interviews at the end of each day by a Certified Biocybernaut Trainer. In addition, there was computerized mood scale testing three times per day, conducted while the Neurofeedback trainees were seated in the sound and light-proof Neurofeedback training chambers and while their 8-channel EEGs were being continuously recorded. Each day also featured the Trainer leading daily data reviews that included discussions of the Mood Scale results, viewing the raw 8-channel EEG polygraph tracings, and viewing the colored graphs of the numerical scores for each of the 8 EEG Channels from the O_1, O_2, C_3, C_4, T_3, T_4, F_3 and F_4 cortical sites in each of 6 baseline conditions, 3 before and 3 after the 2 or 3 daily Neurofeedback sessions. The Neurofeedback sessions included one daily Alpha Suppression session on days 1 - 4 and two daily Alpha Enhancement sessions. These trainings were Premium Double trainings with two daily Alpha Enhancement sessions on all days except Day 4. The baseline conditions were Eyes Open, Eyes Closed and White Noise with eyes closed while listening to and counting interpolated random audio beeps.

The Neurofeedback training was provided in sound-proof and light-proof chambers equipped with a video display monitor, keyboard, 4 speakers at the 4 quadrants of the head, an intercom and a comfortable, upright (not a recliner), wheeled arm chair, and pillows and blankets as needed, because the chambers were kept at 68 Fahrenheit to prevent drowsiness. The Neurofeedback consisted of between 6 and 12 digital scores displayed on a screen in front of the Alpha trainees and between 4 and 12 audio tones (flutes, oboes, clarinets, saxophones and organs) that were amplitude modulated directly by the smoothed, full-wave rectified amplitude of the Alpha waves at the respective 4 - 8 sites from the 10 - 20 International System for EEG Electrode Placement. The number of scores displayed to trainees started at 6 on days 1 - 3, increased to 9 on days 4 - 5 and increased to 12 on days 6 - 7. Days 1 - 3 had 4 Integrated Amplitude Alpha

scores from O_1, O_2, C_3, C_4 and also had 2 Hemicoherence scores from the O_1, O_2, pair of channels and from the C_3, C_4, pair of Channels. On days 4 - 5 trainees received 9 scores, where there were 6 Integrated Amplitude Scores from O_1, O_2, C_3, C_4, F_3, F_4, and three Hemicoherence scores from the O_1, O_2 channel pair, and from the C_3, C_4 channel pair and from the F_3, F_4 channel pair. And on days 6 - 7 trainees received eight Integrated Amplitude scores from O_1, O_2, C_3, C_4, T_3, T_4, F_3, F_4 and four Hemicoherence scores from the four channel pairs: O_1, O_2 and C_3, C_4 and T_3, T_4 and F_3, F_4. The Hemicoherence scores are not phase coherence, but rather the percent time (times 10) that Alpha activity was present simultaneously in both Left and Right hemispheres at each of the four channel pairs: Occipital, Central, Temporal and Frontal. As the Alpha trainees went through their 7 days of the Alpha One Training Program, progressively more channels of digital scores and of audio feedback were added into their feedback training experiences. There were 5 of the 19 Female Alpha One trainees who did the Premium Alpha One training, instead of the Premium Double Alpha One. In the Premium training, all 7 days were like Days 1 - 3 of the Premium Double training, that was provided to all of the 24 Males and to the 14 other Females. The Premium trainees always had only six scores and only, optionally, went into the chamber for a second session on days 5, 6 and 7. The EQ scores of Females did not differ between the Premium Alpha Trainees and the Premium Double Alpha trainees, so the two groups were combined in all of the analyses making 19 total Female Alpha One trainees.

In addition to the 8 channels of Integrated Amplitude scores (and the audio feedback volumes there-from) that were proportional to the Amplitude of the full-wave rectified and smoothed EEG Alpha activity, there were also from 2 to 4 Hemicoherence channels of audio and of digital scores, which gave feedback on the Left/Right integration of the trainees' brains.

Self-Study Comparison Group

Consideration was initially given to several different kinds of Control groups for such a research study. A very good Control group would be the Wait Control. Ideally, anyone who registered for the Biocybernaut Alpha One training, would immediately do the TalentSmart EQ test online. When they arrived on Day 1 at the training center, they would take a second TalentSmart Pre-training EQ test online. The third test, taken online at the end of the 7th and last day of the training, would complete the EQ assessment in relationship to the Biocybernaut Alpha One training. A Wait Control group would have high statistical power because the "Control" subjects and the "treatment" subjects are the same people, just at different times. Thus the error variance would be much less than if the Control subjects and the Alpha trainees were from different groups, with possibly very different variances. Unfortunately, the current TalentSmart online EQ test is not suitable for a Wait Control Group, because the person, taking the test at home, perhaps immediately after registering for the Alpha training, is always given their scores by the testing program, immediately after the test is completed. In addition, the TalentSmart testing EQ testing program then also provides the person with three pages of EQ exercises to do to improve their three weakest areas within the EQ spectrum. The current TalentSmart form of the EQ test is obviously not suitable for a Wait Control, where people take their first Pre-test at home or their own office.

So a new research question was then added that would involve creating a Self-Study comparison group, the members of which would take the TalentSmart EQ test online, at home, and then study the EQ improvement lessons provided by the TalentSmart test for about 2 weeks. This would not be strictly a "control" group, but rather an alternative EQ improvement method, against which the Biocybernaut Alpha training could be meaningfully compared.

So now there were two research questions to be answered by this study:

1. Can the Biocybernaut Alpha training increase EQ in a meaningful way for Men and Women, in just one week?
   and

2. Can the Biocybernaut Alpha training beat the TalentSmart Self-Study method for increasing EQ both in size of EQ increases and in speed?

Using a "Self-Study Comparison" group involved comparing the Biocybernaut Alpha training with another available method for increasing EQ- which is Self Study with intelligent guidance from the creators of the TalentSmart EQ online test. This online test was used

with a highly motivated Self-Study Comparison Group in this research study. We recruited 14 Self-Study Comparison group subjects who were ardently interested in EQ and passionate about increasing their own Emotional Intelligence. There were 5 males and 9 females in the Self-Study group who took the TalentSmart EQ test online and then studied, for an average of 12.4 days, the written lessons that were provided on how to improve their EQ. The written lessons from the creators of the TalentSmart online EQ test were tailored to address the three EQ areas in each person that were in greatest need of improvement. The Self-Study Comparison subjects studied how to improve their EQ for between 7 and 31 days before taking the EQ test the second time,- average study time was 12.4 days. This was more than double the 6 days between Pre- and Post-tests for the Alpha training group. The Alpha trainees took the Pre- and the Post- tests just 6 days apart, on Day 1 and on Day 7 of their Alpha training.

Analysis

The data analysis was conducted by entering the Seven EQ scores from the Pre-Training and the Post-Training EQ test administrations into Excel spread sheets. Then the Excel function for performing t-tests was used. This testing allows the specification of single-tailed or double-tailed t-tests to be performed. The Excel function calculates the t values and the degrees of freedom and returns a p value, which allows a determination of whether the two sets of scores tested were significantly different ($p < .05$), or were highly significantly different ($p < .01$) or were very highly significantly different ($p < .001$). Since it was expected that the Alpha Feedback trainees would increase their EQ scores, single-tailed, paired t-tests were used on the Pre/Post score comparisons. Two tailed t-tests were performed on comparing Alpha trainees with Self-Study Group Subjects, which were not paired t-tests and there were different group sizes.

Results

These are the first statistical results on the EQ increases brought about by participating in the Biocybernaut Institute Alpha One Brain Wave Feedback Training Programs. Results are drawn only from people who trained at Biocybernaut's Sedona, Arizona Neurofeedback training center (not the Canadian Biocybernaut centre nor the German Biocybernaut center).

	Males (24)		Females (19)	
	Average		Average	
	Increase	p level*	Increase	p level*
Full EQ Increase	15.833	0.000,000,459,7	11.684	0.000,016,897,8
Personal Competence	15.458	0.000,000,229,2	13.105	0.000,052,622,6
Self Awareness	14.958	0.000,001,624,1	11.368	0.000,404.927,3
Self Management	14.875	0.000,004,428,8	13.526	0.000,064,825,8
Social Competence	16.625	0.000,003,767,0	11.263	0.000,008,025,7
Social Awareness	15.167	0.000,004,250,4	10.000	0.000,135,395,4
Relationship Management	18.250	0.000,003,787,9	11.474	0.000,026,118,1

***Table 1:** EQ INCREASES from Biocybernaut Institute Alpha One Training.*

The results include Men (24) and Women (19), considered separately. The EQ-testing compares the Post-Training EQ scores with the Pre-Training scores of 24 Men and of 19 Women who did the 7-Day Alpha One Training. Males were graduates of the Premium Double Alpha One training as were 14 of the Females. And 5 Females, who did the Premium Alpha One training, did not differ in their EQ scores from those who did the Premium Double trainings so the two Female groups were combined for 19 total Alpha One Female trainees.

The p-levels are from the Single-tailed Paired t-test and show the levels of statistical significance, i.e. the "p"robability that the results could have occurred by chance. In order for a scientist to claim "statistical significance," the p-level must be less than 0.05. This means that the probability that these results could have occurred "by chance," rather than being caused by the Neurofeedback, Emotional Healing,

Emotional Learning, Forgiveness and Letting Go of the Biocybernaut Alpha training, is less than 5%, or just 5 chances out of 100, i.e. $p <$ 0.05. As you can see, all of these results are much more significant than that minimum. Here below is table 2 showing the level of Statistical Significance that a scientist is allowed to claim with different p-values.

*p < 0.05	Statistically Significant
**p < 0.01	Highly Statistically Significant
***p < 0.001	Very Highly Statistically Significant

Table 2: *Rating of Significance by "p" Levels.*

As you can see from table 1 and table 2, ALL of the Biocybernaut Alpha trainee's EQ results are Statistically Significant, i.e. they are real effects and they are extremely large and valuable EQ-Boosting results of the Biocybernaut Alpha One training.

With Male trainees, ALL of the results are Very Highly Statistically Significant.
With Female trainees, ALL of the results are Very Highly Statistically Significant.

Why the EQ increases are larger for Male Alpha trainees than Female Alpha trainees is an interesting question. The Females started higher in EQ on all 7 of the EQ dimensions than did the Males, so the Females had less room to increase. The EQ scale only goes up to 100.

Table 3 below shows the statistical comparisons of Pre Alpha training EQ scores between men and women.

	Males (24)	**Females (19)**	*p* **level**
Total EQ	70.250	75.684	.083371
Personal Competence	71.500	74.789	.282036
Self Awareness	73.208	79.158	.064278
Self Management	70.333	71.105	.836752
Social Competence	68.500	75.895	.041249*
Social Awareness	69.708	78.526	.006747**
Relationship Management	67.250	73.737	.132257

Table 3: *EQ Differences, Pre-Alpha Training, between Male and Female Alpha trainees.*

After the Alpha One training, there were no longer any significant differences between Males and Females in their EQs - Emotional Intelligence. Men increased their EQ more than Women so that the Men caught up with the Women. Both Men and Women increased their EQs through the Alpha Brain Wave training with its optimized Neurofeedback, deep Forgiveness and Letting Go coaching by the Biocybernaut Institute Trainers.

Self-Study Comparison Group

There were no significant EQ differences between Males and Females in the Self-Study Comparison Group, so the data from the 5 Males and 9 Females were combined, giving 14 Self-Study Comparison Group subjects.

There are questions about the validity of comparing the Alpha trainees with the Self-Study Comparison Group because the Pre-Test EQ scores of the Male Alpha trainees were significantly lower than the Pre-Test EQ scores of the Self-Study Comparison Group. Nevertheless, those statistical comparisons were done and they are very interesting.

	Male Alpha Trainees (24)	Self-Study Group (14)	*p* level
Total EQ	70.250	77.571	.029,034*
Personal Competence	71.500	76.464	.126,293
Self Awareness	73.208	79.357	.076,922
Self Management	70.333	74.000	.355,047
Social Competence	68.500	78.107	.015,735*
Social Awareness	69.708	78.714	.012,823*
Relationship Management	67.250	77.857	.023,591*

***Table 4:** EQ Differences, in Pre-Tests, between Male Alpha trainees and Self-Study Group.*

EQ Changes of Alpha Trainees Compared to Self-Study Comparison Group

Table 5 shows the EQ changes of the Male Alpha trainees and the Self-Study Comparison Group. All of the seven EQ contrasts between Male Alpha trainees and the Self-Study Comparison people showed that the Alpha training was superior in producing EQ increases. Six of the seven measures show a Highly Significant advantage [p < .01] of the Biocybernaut Alpha training compared to the Self-Study Group, and the seventh measure (Self-Management) showed a statistically Significant advantage [p < .05] for the Male Alpha training group over the Self-Study Group.

	Male Alpha Trainees (24)	Self-Study Group (14)	*p* level
Total EQ	15.833	5.643	.003,00**
Personal Competence	15.458	6.571	.006,50**
Self Awareness	14.958	5.214	.009,68**
Self Management	14.958	7.000	.037,62*
Social Competence	16.625	3.500	.007,65**
Social Awareness	15.167	3.500	.003,43**
Relationship Management	18.250	6.429	.009,45**

***Table 5:** EQ Changes of Male Alpha trainees Compared to Self-Study Group.*

Female Alpha Trainees compared to Self-Study Group

Female Alpha Trainees started higher in EQ than did the Male Alpha trainees on all 7 dimensions of EQ. This pre-Alpha training Female EQ advantage over pre-Alpha training Males was statistically significant for 2 of the 7 EQ dimensions: Social Competence and it's sub-dimension Social Awareness. Therefore, in a range-bound score like EQ, which cannot score above 100 in the TalentSmart online EQ test, it might be more difficult for the Females to show bigger EQ increases than the Self-Study group. However, the Female Alpha trainees were nevertheless able to produce larger EQ changes than the Self-Study group. Table 6 shows the simple change scores obtained by subtracting the Pre-Alpha Training EQ scores of each Female Alpha trainee from her corresponding Post-Alpha Training EQ scores.

	Female Alpha Trainees (19)	Self-Study Group (14)	*p* level
Total EQ	11.684	5.643	.02314*
Personal Competence	13.105	6.571	.04267*
Self Awareness	11.368	5.214	.07078
Self Management	13.526	7.000	.07373
Social Competence	11.263	5.571	.02993*
Social Awareness	10.000	3.500	.03338*
Relationship Management	11.474	6.429	.14408

***Table 6:** EQ Changes of Female Alpha trainees Compared to Self-Study Controls.*

Discussion

This research study was undertaken to discover if the Biocybernaut Alpha One training was effective at increasing Emotional Intelligence (EQ). Goleman [2] says this process of increasing EQ takes months. But the results here, show that the Biocybernaut Alpha One

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training is a highly effective way to shorten the time needed (just 6 days) to increase one's Emotional Intelligence, one's EQ, and to also make larger, by double or triple, the size of the increases in EQ that are possible in a short time, say one week, compared to two weeks of Self-Study of EQ coaching lessons. The two methods that were studied were [1] The Biocybernaut Institute's 7-Day Alpha One brain wave feedback training program and [2] A Self-Study EQ course available through the TalentSmart online testing program for Emotional intelligence.

Results were clear that the Biocybernaut Institute's Alpha One training program could increase the EQ's of both Male and Female Alpha trainees by over 15 points for Men and over 11 points for Women. These EQ increases were highly significant increases of this extremely important set of life skills and abilities,- Emotional Intelligence. The Self-Study comparison group was not well matched to the Alpha trainees, which was demonstrated most clearly by the Self-Study Comparison group's EQ Pre-Scores that were significantly higher than the EQ Pre-Scores of the Male Alpha trainees. In spite of this mismatch between Pre-scores of the Self-Study group and the Alpha trainees, the Male Alpha trainees still had much bigger, about 3 times bigger, and all statistically significantly bigger, EQ increases than did the Self-Study group. The Female Alpha trainees also had much bigger, about 2 times bigger, EQ increases than did the Self-Study group, and the changes in four of the EQ dimensions for the Female Alpha trainees, compared with the Self-Study group, were statistically significant, as shown in table 6. Female Alpha trainees showed significantly larger increase in Total EQ, Personal Competence, Social Competence and Social Awareness than did the Self-Study group.

These research results are of more than academic interest, because EQ is one of the very important skills in life as explained by Bradberry and Greaves book on Emotional Intelligence, 2.0.

How are IQ and EQ related to your Success and to your Wealth in life?

Dr. Travis Bradberry and Dr. Jean Greaves (ISBN: 978-0-9743206-2-5) provide astonishing information here in some direct quotes from their 2009 book Emotional Intelligence 2.0, about how people with the highest levels of intelligence (IQ) outperform those with average IQs just 20 percent of the time. While people with average IQs outperform those with high IQs 70 percent of the time. This anomaly threw a massive wrench into what many people had always assumed was the source of success - IQ. Scientists realized there must be another variable that explained success above and beyond one's IQ, and years of research pointed to Emotional Intelligence (EQ) as the critical factor (pp. 7-8).

How much of an impact does EQ have on your professional success? The short answer is:

a lot! It's a powerful way to focus your energy in one direction with a tremendous result. We've tested EQ alongside 33 other important skills and found that it subsumes the majority of them, including time management, decision-making and communication (pp. 19-20).

Your EQ is the foundation for a host of critical skills - it impacts most everything you say and do each day (p. 20).

EQ is so critical to success that it accounts for 58% of performance in all types of jobs. It is THE SINGLE BIGGEST PREDICTOR OF PERFORMANCE in the workplace and the strongest driver of leadership and personal excellence (pp. 20-21).

We have found that 90 percent of high performers are also high in EQ. On the flip side, just 20 percent of low performers are high in EQ. Chances are slim that you could be a high performer without high EQ (p. 21).

The link between EQ and Earnings is so direct, that every one point increase in EQ adds $1,300 to an annual salary. These findings hold true for people in all industries, at all levels, in every region of the world. We haven't been able to find a job in which performance and pay aren't tied closely to EQ (pp. 21-22).

Based on this finding, a Man doing the Alpha One training at Biocybernaut Institute, and raising his EQ the average of 15.833 points, would expect to earn $20,582 more in the 1st year following his Biocybernaut training. And over 20 years, that man would earn $411,658 MORE than if he had not done the Biocybernaut Alpha One Brain Wave Feedback Training.

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Based on this finding, a Woman doing the Alpha One training at Biocybernaut, and raising her EQ the average of 11.684 points, would expect to earn $15,189 more in the 1st year following her Biocybernaut training. And over 20 years, that woman would earn $303,784 MORE than if she had not done the Biocybernaut Alpha One Brain Wave Feedback Training.

The 27 Main-Menu Biocybernaut Brain Wave Feedback training programs [Alpha (levels 1-9), Theta (levels 1-9) and Delta (levels 1-9)] are far beyond just Neurofeedback training. They offer people deep insights into their Emotions and Moods with Mood Scale testing every day, plus deep forgiveness work on those people, including oneself, who are at the root of many of the Emotional Traumas, both conscious and unconscious, that litter the landscape of the mind and hold people back from the phenomenal success they can have. Skilled, Certified Biocybernaut Trainers are the guides and coaches along the way to Emotional Understanding, Forgiveness and Letting Go.

It is important to understand that the Biocybernaut Institute Alpha One training is not just Neurofeedback, and Neurofeedback, by itself, would not produce such large and important increases of EQ. There are three pillars of this work that support and enable the attainment of mastery of the mind and the emotions that comes through participation in the Biocybernaut Alpha One training program. The first pillar is [A] the Patented ergonomic Neurofeedback technology. The second pillar is [B] the Patented and optimized training protocols. And the third pillar is [C] the Transformational Perspective of the Trainer. Some of the important roles of the Biocybernaut Trainer are to debrief the trainees after their Neurofeedback sessions. Since the trainees may have had profound altered states of awareness and may have done very deep forgiveness work, the Trainer must understand, empathize with and guide the trainee in the retelling of their altered-awareness experiences during their time in the Neurofeedback chamber. Without this skilled debriefing, many of the most valuable insights and shifts in awareness would be quickly forgotten. Also the Biocybernaut Trainer reviews the daily Mood Scale testing results with each trainee. The mood scales go far beyond identifying and quantifying emotions like anger, fear, sadness, happiness, vigor and clear thinking. The Biocybernaut Mood Scale testing is done while the trainees are being monitored for their EEG activity in their Neurofeedback training chambers. The proprietary Mood Scale software identifies the degree of truthfulness of each response the trainee makes to each emotion-word or feeling-word on the Mood Scales. Thus if a trainee selected zero as their response to the word "Angry", the Trainer would know from a report by the computer program if this was likely to be accurate or inaccurate. If the person said they had Zero anger, but the Mood Scale program suggested otherwise, the Trainer would ask the trainee what they were angry about. And the opening and forgiving and healing would begin. Thus the Biocybernaut Institute Mood Scale program has the ability to identify and report to the Trainer, the existence of unconscious emotions, both negative unconscious emotions and positive unconscious emotions.

Aided by knowledge of the unconscious emotions within each trainee, both the positive and the negative emotions, the Biocybernaut Trainer can much more effectively guide the forgiveness work by each trainee that will result in deeper emotional healing, forgiving, Letting Go and a much enhanced awareness by the trainee of their own emotions. Recall that Travis and Greaves have reported [2] that 64% of the people they tested were NOT able to accurately identify their own emotions as they occur. The Mood Scale work within the Biocybernaut Alpha training and the forgiveness work and the Letting Go that are done in the High Alpha State during the Alpha Enhancement Feedback sessions at Biocybernaut Institute are all strong contributors to the big increases in EQ that result from the Biocybernaut Alpha One training.

And there are also big implications for Leadership training with the Biocybernaut Alpha One training. EQ is also very important to effective Leadership. Recall that a Harvard Business Review article on Leadership [2] identified Six different leadership styles. Each style requires a different mix of EQ abilities within the EQ spectrum. The best Leaders flexibly employ some or all of these Styles as the situation requires. This, of course, means such Leaders must have mastery of the different components of the total EQ spectrum. Given that the Alpha trainees had large and statistically significant increases in all 7 dimensions of their EQs, this would support any Leader's effective use of some or all of the 6 Primary Leadership Styles. The Biocybernaut Institute Alpha One training will clearly support the EQ mastery necessary for Leaders to flexibly employ some or all of the main leadership Styles in dynamic response to the needs of each moment. EQ is very important to effective leadership and the Biocybernaut Institute Alpha One training boosts all seven dimensions of EQ two to three times more than an EQ Self-Study program.

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Volume 6 Issue 1 November 2017