

NATURE, THE ARTS AND THE HUMAN ANIMAL BOND: A MUTUAL HOMEOSTASIS

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A DISSERTATION

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Abstract

I propose to write a dissertation which will validate my journey, my expertise in working with the arts and nature as a healer and constant support network throughout and the benefits it creates in understanding the human animal bond. I aim to develop an autobiographical account which will expand and enable me to share the knowledge shared with me from nature at the same time as meeting the academic requirements needed to gain PhD in Earth Science. Using descriptive methods, incorporating Naturalistic observations, and case studies, and empirical literature, this project will aim to validate the natural healing process when traversed in nature, with the aid of therapeutic arts and verified by empirical information, literature reviews and personal observation. This thesis will offer fifty-two weeks of validation. Personal Experiences which will share how nature, nurtures our innate connections and educational tools to carry those connections throughout our lives. Added to the validating evidence will be the effects of the arts and nature on the human animal bond. Due to the autobiographical nature of this project, it will be written in the first person. With a brief personal history prior to discussing the research question. Before once more offering validation for the proposed argument for the successful use and connection of the arts, nature, and the human animal bond.

Keywords: eco-psychology, homeostasis, human animal bond, natural environment, the arts.

Nature The Arts and The Human Animal Bond: A Mutual Homeostasis

Declaration

do hereby attest that I am the sole author of this project/thesis and that its contents are only the result of the readings and research I have done.

Heather Laurence

Acknowledgements

I would like to thank my husband for his continuous support and encouragement throughout life. His ever-enjoyable humour is forever the bolster to stabilize even the most difficult journey. I would also like to show my endless gratitude to the animals who share my life. They are the best teachers and never cease to educate those around them. A constant reminder that despite the variation of species, we are all a part of the larger picture of life.

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Introduction

In contemporary society, our relationship with nature is not something that is thought about often enough, yet it is the key to our very existence. That we are part of nature and that nature is us is a truth we often omit from our lives. Surrounded by material goods, in a target driven world, we constantly strive to be 'better' to own more, to drive a bigger car, live in a bigger house, be the best, hit those targets, (until the boss increases them again).

We continuously brainwash our children and each other with stories of how we 'should' be. How old were you when you first heard the words: "don't be silly" "grow up!" "act your age"? We have all heard these words, and in most cases changed our behaviour accordingly, we were quiet in class, we stopped being silly, we adopted calmer dispositions, we hid our childlike behaviour and we "grew up." We became the parents and teachers who tell our children to do the same.

We teach them that nature is scary, it is dangerous, it is full of 'not nice' things, we tuck them up indoors, we purchase electronic equipment so that virtual reality is as close as many get to nature. We choose to live in urban areas, so we can be closer to our places of work, closer to the shops, closer to all things we consider to be convenient. Teenagers and pre-teenagers are struggling, mounting peer pressure and constant access to social media sites, drip feeding them stories of how they should be 'thinner' 'taller' 'shorter' have 'longer legs', have 'a six pack', the list is endless.

This never-ending cycle of perceived needs is causing misery, not only to those stuck on the treadmill of 21st Century life, but to the very planet that sustains us all.

It does not have to be this way.

What if I introduced you to yourselves, how long is it since you could just be you? I would guess in most cases, it will be a while, there will be several models of you, there will be the teacher you, the parent you, the one who shops for food, the lover, the partner, the cleaner, the cook, yet none of these people will be you, the you who can just 'be'. This is because of what I referred to in the last paragraph, we are raised to believe the stories we are told, and to live by the expectations of others upon us.

How many of us would trust nature to teach you about life? How many of us would use nature to solve problems? How many of us would use nature to help build up broken down relationships? How many of us know about Natural Intelligence Attractions and Love (NIAL)? And how many of us know that the answer to the above questions is YES, we can do all these things using nature as a teacher.

I have trusted in Nature (or rather Natural Intelligence Attraction and Love [NIAL]) since I was six years old, I was blamed by my mother for giving her rubella which caused her to give birth to a stillborn baby. Her blame was relentless, she was grieving, but at the time she would say incredibly hurtful things. I turned to the love of my dog, who I thought of in those days as a sibling, she loved me unconditionally, there was never a cross word between us, when my Mother was having a bad moment, and giving me her worst, in quiet tones so no one was alerted, I would escape to the garden, with the dog, we would lose ourselves in games, hide and seek, sit and stay and other games I had made up for us to play. When we were there, in nature, I was safe, safe from the hurt, safe from the pain of believing my mother's stories, I knew then, innately (although I did not consciously realize that at the time) that when I was in nature, things were OK, I had support, I had family, I had friends, I regarded all animals, insects and more like my friends. This sort of trust and security has been with me throughout my lifetime, there are no sharp tongues in nature, therefore I know I can trust it not to hurt me mentally, I also know that I can rely on my innate sensory perceptions to keep me safe, again, trusting completely in NIAL. When there was a disconnection between myself and my birth mother, there was never a disconnection between me and my earth mother.

Our abilities to feel these sensory perceptions are innate, sadly we have been taught to ignore them, the nature separated stories we grow up listening to, means that we learn to ignore our relationship with nature, yet we all continue to accept the story that we have five senses. Yet once realized, very few people deny that this phenomenon is their greatest truth. Many of us spend 18,000 hours in school, an indoor environment, molding impressionable children with the same indoor life stories we were told. Yet at the same time, the realisation that the planet is in trouble is starting to enter the minds of some. We know this to be true, the planet is in trouble, we suffer because of our nature disconnection, we allow the planet to suffer too.

Just as we cannot learn to swim from a textbook, we must be in the water to do it. We cannot connect with our natural selves and therefore nature, by reading about it. The experiences described in this thesis allowed the connections to be made, which will introduce those reading to nature, they will make sensory connections which will allow the participant to realise the connection that every being on the planet has to each other. They will allow nature to teach the participant about Natures Intelligence, Attractions and Love. We all take care of things we love, so learning to love nature, exploring our felt senses and realising that we can improve relationships with every being and therefore ourselves.

The use of the Arts to aid our connection journey, means that there is a way of communication open to all participants, there will be activities which incorporate tactile creations, singing, musical inventions, (using traditional instruments and found materials) traditional art (using traditional and found materials), nature trails and exploration. some will be able to be completed as individuals, others as a group.

Methodology

The methodology used will be observational, naturalistic, and personal observation. Shared experiences and communications.

I will include examples of activities, the rational for them and examples of client responses. There will also be full case studies and client comments included.

Humans are animals too.

It is widely accepted that there are many anatomical similarities between the human skeleton and that of the canine [*canis familliaris*] or horse [*Equus ferus caballus*] and that they have partnered each other in a companion form for decades, in 1978, an archaeological find at the Narufian Israeli site discovered the preserved remains of a female human and a sub-adult dog, estimated to be from the first century BC. (*Smith & Valkenburgh*, 2021). The similarities between the two skeletons are clear.



Figure 1 The Natufian Skeletons (1978, Davis and Valla)

When these remains were analysed by *Schoenbeck* et al (2021) concluded that the dog was most likely to be an ancestor of the sighthound breeds we know today.

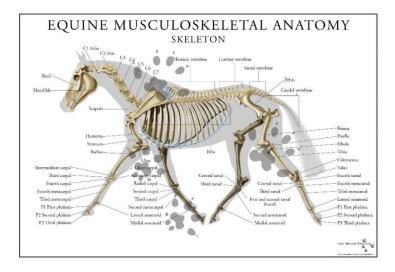


Figure 2 The Equine Musculoskeletal Anatomy curtesy of *Inkymousestudios* [accessed online]

Historically, there have been interaction between the three species for millennia, yet, humans have chosen to repeatedly claim superiority, considering them to be of lower intelligence. *Darwin (1879)* suggesting that perhaps it was domestication which altered the character of animals, indicating that they indeed develop extreme differences. Commenting,

"When we look to the hereditary varieties or races of our domestic animals and plants, and compare them with species closely allied together, we generally perceive in each domestic race, as already remarked, less uniformity of character than in true species. Domestic races of | the same species, also, often have a somewhat monstrous character; by which I mean, that, although differing from each other, and from the other species of the same genus, in several trifling respects, they often differ in an extreme degree in some one part, both when compared one with another, and more especially when compared with all the species in nature to which they are nearest allied". Strongly influenced by Darwin's The Origin of Species (1859), Galton (1883) developed his own theories on inherited traits. He studied identical twins and worked on the first intelligence test in his exploration of the roles of "nature and nurture" — a phrase coined by Galton — in human attributes, Galton also coined the term "eugenics," a controversial field of study about selective breeding in humans to produce preferred traits. Indeed, perhaps influenced by Darwin, yet his hypothesis of selective breeding [of humans] would offer superior intelligence was ethically flawed and incorrect. The theory of Eugenics was that society was undergoing a process of 'degradation,' due to the slowed reproduction of the 'wealthy, white, intelligent' elite classes of Europe, and the supposed increased reproduction of those deemed to be of 'inferior' breeding stock - the 'mentally defective,' 'feeble-minded,' and non-white populations of the world. These populations were thought to inherit traits like criminality, alcoholism, and deviancy from their family line, living lives of debauchery and winding up within public institutions - asylums, prisons, and hospitals. Eugenicists like Galton conducted numerous studies to try to prove their theories and advocated for the sterilisation of those they determined to be an inherent danger to society.

Galton and his followers generated statistical models comparing traits between individuals of different classes and races. He created artificial connections between physical attributes (skin colour, stature, head shape etc.) with mental capability and overall societal value. For instance, one of his failed experiments looked for evidence that African fingerprints were less sophisticated than European fingerprints. (*Langkjaer Bain*, 2019).

Despite the flurry of eugenics and the decades of tragic events which followed, including the hypothesis being adopted by the Nazi regimen during the second world war and the

holocaust, research has finally designated the negative sides of this area into the history books and continues to move forwards in direction.

To prove that all animal species evolve from similar matter, researchers *Goldstein* et al (1995), *Cavalli Sforza* (1988) *Stringer & Andrews* (1988) all conclude with archaeological and palaeontological evidence that the evolution of the human we recognise, evolved from one area of the planet, and that the prospect of evolution from primates is a viable one. Empirical studies of human evolution and personality by *Fuentes* (2020) suggesting that indeed, we share a lot of personality traits with fellow primates, this study is as always in science argued by Hill and Boyd (2021) who state,

"Not all social scientists agreed. Cultural anthropologists were mostly aghast at the rigidly scientific and overtly biological nature of this perspective, viewing it as blatantly flawed. They claimed that differences between and within human societies were mainly due to variant cultural belief systems".

Science versus Now

Whilst science continues to argue and debate the evolution, and the similarities between individuals and species. There is a remaining fact that there remains innate in us all, a natural intelligence and a desire to remain in a state of homeostasis.

When we combine the principles of both eco-art(s) and ecopsychology and using the natural environment as an area to work, talk, listen, and learn we can achieve results that speak for themselves. Using the natural systems thinking process and exploring our 54 innate felt sensory perceptions, we discover what becomes self-evident in that moment.

Ecopsychology

Ecopsychology studies the relationship between human beings and the natural world through ecological and psychological principles. The field seeks to develop and understand ways of expanding the emotional connection between individuals and the natural world, thereby assisting individuals with developing sustainable lifestyles and remedying alienation from nature. Evidence suggests that many environmentally damaging behaviours are addictive at some level, and thus are more effectively addressed through positive emotional fulfilment rather than by inflicting shame. Other names used to refer to ecopsychology include, Gaia psychology, ecotherapy, environmental psychology, green psychology, global therapy, green therapy, Earth-cantered therapy, nature-based psychotherapy.

Eco-Arts

Art, in the form of visual and vocalisation, dance and performance have been used as communication since man first picked up clay and made markings on walls of caves. Indigenous people used symbols to share stories, record events and celebrate occasions. The barrier of the spoken word or language was never an issue.

When art(s) are used to communicate, all the barriers of traditional communication are eliminated, the words we struggle to say, the thoughts we are struggling to make sense of. With natures teaching, we can reconnect with our inner child and communicate with the same ease as we did when we were children and first picked up crayons to draw.

A combination of traditional science-based psychology and ecopsychology, eco-art therapy offers a solution to crossing barriers and negatives.

The Art of Play

Every living creature on the planet needs to spend some time playing. To begin with animals, they play to practice, dogs, practice skills that they would use if they were living with nature instead of in our indoor lives, they mimic fighting, they stalk prey (in the form of stalking and chasing) they will use exaggerated body language to communicate that they are playing and not seriously fighting, they will bark, growl, snarl and snap at each other but all in an amicable way. Horses will gallop around, rearing, bucking, and nipping and running with each other in a paddock, again, keeping fit and practicing for that time when they need to run for real, flight animals survive that way. Cats will chase toys, scamper after leaves and shadows in the same way that they would hunt a mouse or a vole. An artistic performance worthy of the best Shakespearean actor. We have taken away domesticated animals need to hunt so we replicate it with toys, most pet owners do this without thinking, they get the dog to retrieve a ball, they buy the cat a clockwork mouse, they do this because they believe that the dog/cat/horse and other pets, will be happier for it, as a society, we have followed scientific advice, read the journals and listened to experts and we know this to be a fact. Yet as a society, we forget we too are animals, we supress our need to play as soon as we leave childhood, we are even very too often as children told "don't be silly" "stop that, people will see you and think you are nuts" "grow up!" "act your age!" and other phraseology that I am sure has been familiar parlance throughout most of our lives. What are we [humans] if not animals? Why should our need to play be any different?

On a personal level, I have never lost the art or desire to play, I teach people to play with their animals and use play therapy in my work. I teach the importance of being "a bit silly" every now and again. I do not consider what those nearby may think, I will do what feels right at the time, if it is safe and not breaking any laws, or hurting anyone or anything, then it is good, it is fine to sing in public, fine to run on the fells, fine to be barefoot on the grass or at the beach. It is fine to spin in circles and make yourself dizzy and many more things that we did as children that we are repeatedly suppressed from doing "in case we look silly". When I began this activity, it began with a walk in our fields, I picked up a clod of wet mud and threw it at my husband, I ran away laughing as I would have done as a child, he threw mud back we giggled like children and threw some more, (this sort of behaviour is not uncommon for us, we both believe the same theories about play and the importance of it) we then went to the woodland area to walk the dogs, I was enchanted by the last few rich red leaves that were falling off the trees, the remaining leaves of autumn, I stood under them and felt what I can only describe as self-evident that I was part of this whole equation, I was covered in mud, I was happy from laughing, I felt all my senses were alive, awake, I was alive and awake. I thanked the trees, the area, and my husband for just being there.

I decided to use watercolour paints and finger paint with my none-dominant [right] hand to complete the activity a task that was not as easy as I had hoped it would be, it was awkward but fun. I was so enamoured by the trees and the falling leaves that I wanted to replicate it. I called the piece *Falling Leaves* Yes, I am critical of the work I produced but overall, happy to have been able to share the experience that allowed me to create it. I intend to do this way more in the future and help other people to become connected and learn more about themselves in the way that nature wants us to know about ourselves.

I also tried to use some oil pastels (in the same way as I used wax crayons as a child) I again used the 'other' hand, this was weird too as for so many years I have held tools in a

different hand, so it was like learning all over again. I wanted to show the movement of the wind. The second piece I called *Petals*.





Figure 4 author's own image

Figure 3 author's own image

When we use these games, fun activities together, we strengthen our connection to nature, and those we share the planet with. When we have developed a bonding connection with an animal, a relationship or friendship, the labels for this are endless. We can elicit the play to enhance it.

Conditioning vs Play

We can condition an animal to do our bidding, in ways of *Pavlov* and *Skinner* who made the following conclusions, and thus shaped the field of modern animal training.

Ivan Pavlov, (1049-1946) developed his 'conditioned response' theory, following his findings during experiments on dogs. He was collecting saliva from a dog and rewarding

with food. He noted that the dog produced more saliva when the food arrived. He began introducing a bell, ringing prior to the presentation of food. The dog would produce more saliva on hearing the bell, in anticipation of the food. The food at this point was an unconditioned stimulus, it evoked an unconscious response, the dog salivated upon seeing/smelling the food. The bell became a conditioned stimulus, an associated sound. The dog would hear the bell and it would trigger the same results as seeing/smelling the food. When this exercise was repeated, it gave a continuous result, of upon hearing the sound, the dog would salivate.

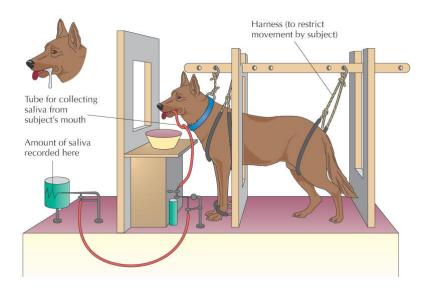


Figure 5. Pavlov's experiment, image curtesy of www.pscyhologywizard.net [online]

This was very much the work and resulting outcome of work by *B.F Skinner* (1904-1990) who believed that indeed, all behaviour was such because of environmental [external stimuli] and that humans offer different behaviours depending upon their environment. His theory differing slightly from that of *Pavlov*, in that *Skinner* deemed his "operant conditioning".

Developing his own version of the experiment, what became later known as the *Skinner Box* refined *Pavlov's* experiment, his thoughts were that a behaviour could be altered or repeated depending upon the environment and whether there were consequences. Suggesting that it was the consequences that determined whether the behaviour would be repeated or not. He considered whether the schedule of reinforcement was an actuality, and concluded that, continuous reinforcement was optimal in establishing a behaviour, or pattern of behaviours, in turn this led to his exploration of varying the time between rewards and deciding whether behaviours would continue with a 'promise' or 'possibility of reward'. He discovered that indeed, an animal would present a behaviour or learn to press a lever several times in order to release a treat [the skinner box'] referring to this as a ratio schedule, a fixed schedule was when a reward was offered after a set and definite period, for example a reward would be released after six lever presses, every single time, and a variable schedule which is when the release of reward was not predictable.

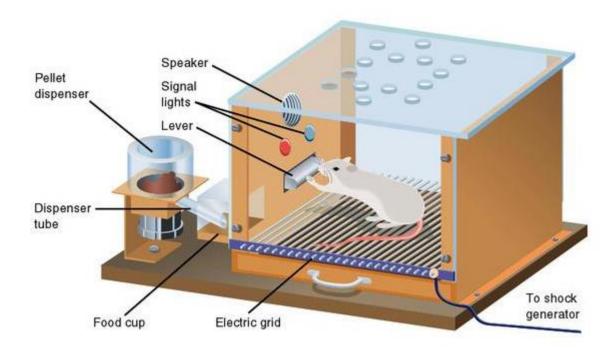


Figure 6 The Skinner Box image curtesy of wwwsimplypscyhology.org (online)

This is a method which is still very much used in dog training today, it has been honed slightly and the bell is generally a click noise which 'marks' the desired behaviour, the dog will make the association firstly between food and the sound, and then it transfers the action to whatever body shape it was in, [such as sit] or whatever behaviour it was offering, [such as bark] when the 'click' was sounded. In anticipation of a reward [food] it will repeatedly offer the same behaviour 'in anticipation of reward'.

These methods work if you want an animal to respond in an almost autonomous way to offer you a behaviour of your choice. They are a safe and almost guaranteed way of teaching most animals to do this. However, they can be taught by any person to any animal and positive results can be gained, with most animals choosing to interact with the human, due to the reward which is almost always food based. Indeed, it is a method used for the training of service dogs, detection dogs and pet dogs alike. Working for over thirty years in the dog training industry I have observed this being used as a successful teaching tool.

However, what I did not observe was the improvement of the relationship between the human and the animal. In some cases, there were signs of a relationship, but it was still very much a situation of 'owner and pet' or 'handler and working dog' in that the human desired the behaviour from the animal and the animal had been conditioned to display it.

In the same way as humans will go to work for an employer for monetary reward. The dog's natural behaviours are curtailed and often eliminated completely, in the same way as we offer a different set of behaviours when we are in a different workplace situation.

Again, I question why? Why does anyone need a slave? It is complete nonsense to me. Yet, still, there are those in society who need to feel such a level of empowerment over others that they will capture, enslave, and control another human for the benefit of themselves. Historically, it was accepted by some that certain members of humanity were inferior to others and they were used as slaves, controlled, beaten and fear driven to offer complete servitude to those who were 'master'.

I used the term historically, referring to the events of the 1800s, (slavery being abolished in the UK in 1807 and in the USA in 1865) when it was commonplace to purchase a person to use as a slave. There are still cases today of slavery being carried out in a more underground manner, it is just as abhorrent today as it was decades ago.

We are all equal, just as nature intended us to be, it does not matter what colour, size, faith or religious (or non-religious), we are all the same, we are the species of animal that nature created, just the same as a dog, a horse, a chimpanzee, and we should not be bought or sold. The irony is of course, that contemporary society is so goal and reward driven that we are brainwashed into thinking we cannot survive without money, and indeed in the way we live today, it would be a difficult, if not impossible task to do so. Does this mean we are still being purchased? Only, this time we are gaining monetary reward. We are still being controlled, there is still a hierarchy of those who have more money who can quite easily control the life of those who do not.

Such is our disconnection to nature, is that all that would disappear if we lived a more connected life. I often offer connection to nature workshops using music and the arts to those who would like to build a better working team in their indoor offices. Transporting the work area to outdoors, it is always pleasing, to see that it is a complete level playing field when bosses and employees begin to connect to nature and gain the realisation that it does not matter what you are wearing, Gucci shoes get just as muddy as those from the cheapest market. It does not matter how much money you earn or are spending; our own natural music is what it is, we can all link our heartbeat to a tree. As can be seen in this participant-based activity.

The prejudice begins to fade. Our main task here is to keep the natural connection and let the prejudice disappear.

It could be prudent to ask the question of whether the animals would continue to remain in our company if we were not rewarding them for it. I have observed many human/animal relationships over decades which would clearly not be viable if the rewards were to vanish. Just as in contemporary society, it is sadly a fact that money does hold a certain amount of power over how we live. We are led to believe that we only succeed if we can 'afford' to buy bigger, better, more expensive items, houses, luxury cars and fast fashion clothes. If things do not go our way make sure you have enough money to buy your way. The height of success seems to be judged on where you live, if you can demolish acres of trees and wild areas to build a stone house and then create a manicured garden into which you offer every deterrent to keep nature out, (pesticides and other chemicals aimed at controlling nature). This disconnection and blatant lack of realisation of the similarities between our own felt sensory perceptions, are easy to see when laid out side by side, we work in a conditioned manner for reward, in the same way as an animal will offer a behaviour [work] for reward. Personal observation of over two thousand animals with owner/animal bond issues show this to be. However, there are those who have a connection with nature and animals who can offer an alternative. This can be seen in the activity below.

Validation activity 2

At the current time, of isolation and lockdown, due to the Corona Virus Pandemic, it would have been difficult for me to do this activity with another human, as I only have face to face contact with my husband, and we do this kind of activity constantly.

I opted to do the activity with one of my horses. I sat on the grass in the field, the sun was shining **#1** (**polarized light**) and for the first time this year I felt its warmth on my skin, there was still a cool breeze, **#7** (**temperature**)**#14** (**touch**) but it was refreshing rather than cold. I noticed the new shoots, the realisation that spring is happening, nature is continuing a journey whilst the modern world is on lockdown was pleasing, **#40** (**appreciation**) as there is so much news via all means of media now that it is easy to feel like everything has stopped. It could be suggested that nature is enjoying [theoretically speaking] this event as a whole, as it is offering the opportunity for growth, reclaiming and mending damaged connections

that have been injured by human interference and is regaining homeostasis The new shoots were bright green, **#3(color)** they were poking through the cracks in the soil, which was grazed bare over the winter by the horses, yet, I did not notice the bare soil, I noticed the green shoots, the bare soil was not there, in the same way as the face or vase picture. Yet, it was very much there. Two of my small horses came over, they wanted fuss, cuddles, scratches they were attracted to spend time with me, they too noticed the green shoots and between receiving fuss, hugs and returning the affection to me, they nibbled on the succulent shoots, innately knowing that they are the tastiest at this point, and have more nutritional value than at any other time during the growing cycle [apart from a secondary growth burst in late summer/early autumn) **#42 (memory) #43 (mind and consciousness)**

I sat and continued this mutual fussing for a few minutes, no idea how long it was in 'real' time, #47 astral time) I was relaxed, I felt part of the picture, #37 (colonizing) #35 sense of self, and friendship) it was a much needed feeling at this point as too much enforced time indoors is not good for me (nor anyone) and I was beginning to feel suffocated by it. My senses told me that I needed to do this activity, in which I did not actually 'do' anything, I sat surrounded by what was there and was able to just 'be'. 54 (homeostasis) The company and unconditional love from these animals, who have an innate flight response to anything they are not comfortable with, is really one of the most rewarding experiences, and a wonderful way for Nature to show us that we are worth spending time with.

This activity was one of validation, that animals will indeed choose to be with you as a human, [fellow animal] when human behaviours are natural and not demanding or requiring a response from the animal. I have successfully worked with my own detection dog team, a working team of four, each dog had a working life full of finds when we worked alongside law enforcement agencies, such as the police and the prison service. These dogs were 'trained' to an exceptional standard, to the inexperienced eye, the dogs were trained to a behaviour standard which enhanced the security industry standards [Bs-1785-2]. However, to the humans I have trained, or who have read the text book to accompany my teaching course, it becomes clear that the dogs are not 'trained' to find the desired scent, yes, one could argue that they have a shaped behaviour, and it can be conditioned, as scent work, is simply, linking a specific scent with a reward and paying the reward on the indication from the dog that they have found the scent. This can be done with any dog, some breeds finding this an easier task than others and brachycephalic breeds struggle due to their inhibited olfactory system. Years of experience in this field, showed that the best results come from the dogs who develop a strong owner/handler bond, these results are gained by play. I always suggest that I want my dogs to work with me not for me, we play professional hide and seek. Such play really works to build up the innate bond which, when broken down to encompass the afore mentioned fifty four senses, it becomes obvious that the animals are experiencing the same.

There are many ways an owner/handler can communicate with the animal, they do not use linguistics in the way humans do, but they do clearly communicate.

A dog who wishes to elicit play either with another dog or human companion, will lower their front legs into a semi lying position, whilst holding the rump in the air and wagging or waving the tail, this 'play bow' is seen in domestic and wild dogs. They will often grab at each other and run away, enhancing the chance of a chase, in the same way as I threw mud at my husband, pre-empting his reaction would follow as a game. Dogs will play fight, in the same way as two small boys will emulate rough and tumble games. Yes, often in animals, just as with children, they will become more boisterous than intended and inadvertently cause one another pain, which is clearly indicated by either an audible yell or an action returning such an injury such as a slap, punch in humans or a yelp, nip or bite from the dogs. Equines, are seen to do the same, I have spent copious hours emulating the play actions of the horses, whilst playing with them, they run into each other, ducking out of the way just prior to impact, or they will jump towards each other, in a sideways movement, they too elicit games of chase, they can be observed backing into one another and mimicking a kick at each other, never making contact but the 'kicker' is chased by the 'kicked'. These forms of play are inclusive of all who are in the area at the time, I have observed the dogs offering playbows to the horses, and horses running and playing chase with the dogs, or the tail pull of a horse by a dog who desired to be chased. Such behaviours are frequently misread by owners who consider them to be bad manners or unacceptable. There is no doubting that such behaviours carry an element of danger, but when they are innate and can be recognised when linked to Cohen's fifty-four sensory perceptions list, then it becomes self- evident that there are sensory perceptions in play with also keep both the animals and humans safe.

Just as humans develop strong relationships, so do animals. With many grieving the loss of a favoured companion. *King* (2016) discusses the issue of grief within the animal kingdom. "Based on this understanding of grief, it is not only big-brained mammals like elephants, apes, and cetaceans who can be said to mourn, but also a wide variety of other animals, including domestic companions like cats, dogs, and rabbits; horses and farm animals; and some birds. With keen attention placed on seeking where grief is found to occur and where it is absent in wild and captive animal populations, scientists and others interested in animal

emotion and animal minds can build up a database that answers questions about patterns of grief in the animal kingdom."

A keen study with exceptional results, however, never at any time does the consideration that humans are large-brained mammals too, we grieve when we lose loved ones in ways which are exceptionally culturally dependant. Yet, it is widely studied that humans experience grief at the loss of a domestic animal, in the same way as they would if they lost a human companion or family member, this often leaves them feeling ostracised or with limited support from peers and indeed fellow family members who perhaps did not have such a developed bond with the deceased animal. *Morales* (1996) concludes that the rationale for this is that "the death of a pet is often devoid of rituals, with no accepted practices to facilitate the working through of grief." A rational which is currently being questioned, and a new concept of grieving being discussed (*Marone* 1998). The newness of this concept can be held to question, when we consider that the innate way we grieve, versus the culturally acceptable stance, timescale and the expected time to return to normal socially acceptable functioning according to contemporary society.

Art and Healing

There is a veritable treasure trove of literature concerning the use of arts as therapy, however there is limited availability to concur with the use of the arts and nature.

The use of the Arts therapy has been used for decades as an inaugural part of the healing and therapeutic process whether the therapy is used as a group session or an individual session, it breaks down the barriers which often occur in communication. *Arthur Robbins in The Artist as Therapist* (2019) refers to the therapeutic process for patients as "an ongoing struggle to discover true inner representations and symbols, and then give them form in terms of developing richer more congruent living realities".

He continues to suggest.

"as therapists, we experience the gestalt pattern of verbal and non-verbal symbolic forms that make up the patient's field of communication, and we assess on a diagnostic level that organizes such diversity of clinical material"

Robbins discusses the positives of words in the facilitation of the separation/individuation process, suggesting that verbalization is indeed less useful in the group of patients who view verbal communication as intrusive and find it essentially non supportive. Continuing to suggest that the way an individual [patient] uses colour, form, space and their choice of media makes a psychodynamic statement, often reflecting or communicating an underlying personal conflict.

Additional discussions from Robbins, include the use of art therapy for end-of-life patients and their carers, depicting the difficulties often encountered in communicating, addressing the issue and often the denial of the impending death. This point is addressed by *Diane Waller* (2002) in *Arts Therapies and Progressive Illness, Nameless Dread* who suggests that a diagnosis of Dementia is a "sentence of 'no hope" which condemns all concerned to a neverending series of losses and humiliations. *Waller* discusses the point of arts therapies being "person centred" (*Rogers*, 1951; 1961) and build upon the life attributes of the patients, assuming that they can be creative at some level. Her hypothesis that for those with dementia, who may feel like they have lost their identity, and have often lost their ability to communicate via speech, writing or even touch can show recognition in the form of expression, when it comes to the arts, often recalling music from decades ago. And expressing emotions in the moment. Heal & Wigram (1993) in Music Therapy Health and Education define the use of music in a therapeutic relationship as offering "definite possibilities" which allow the patient to project what are often confused, chaotic feelings and experiences which they are finding it impossible to control. The patient being able to express these feelings and sensations via musical interaction. Oldfield (1993) attribute improved communication with dysfunctional family units to the ability to communicate with each other with the use of music as a therapy, using instruments such as pianos and allowing both parents and children to 'play freely'. Oldfield comments "playing instruments together can be an easy way for families to be re-introduced to the idea that they can all enjoy an activity together. Each family member is 'equal' in this activity and conflicts regarding control can be temporarily put aside."

Leslie Bunt (1996) in Music Therapy An Art Beyond Words, covers a plethora of situations, life issues and scenarios where music therapy can be of positive benefits. Suggesting it can be used either as a standalone therapy or as a partnership or relationship with other therapeutic interventions. Suggesting the benefits for both group sessions and individual cases.

Mercedes Pavlicevic (2002) presents a collection of nine case studies all of which boast the success of music therapy in both children and adults.

The literature mentioned all used observational techniques, yet none were in a naturalistic environment, they were possibly a little less formal than a laboratory study but they were still organized and pre learned techniques presented to clients/patients as tried and tested methods of therapy. This is an acceptable and well used methodology of music therapists. The methods and the results are often reported in a clinical setting, with no signs that the environment or surroundings were considered.

In *The Book of Music & Nature (2001)* edited by *Rothenburg & Ulvaeus* there are several discussions from a plethora of researchers which take the therapy of music away from the clinical environment and into nature, which is, the natural environment of a human. *Khan* Discusses the music of the universe as being the "background of the little picture we call music" describing our sense of music [and] our attraction to music shows that music is is in the depths of our being. We are drawn to it as our whole being is indeed music. He argues that there is "no other language, language is rhythm". "Which we hear, not with our ears" his hypothesis is that "Everyone shows harmony, or disharmony according to how open he or she is to the music of the universe".

There is more to the music and art than simply hearing or seeing, *Schafer (2001)* depicted the "soundscape as a plenum" and to make music in a 'music room' or clinical setting, is not making music at all, as he felt that for all it was a methodical and arranged way to do this, the sound [music] reaches us from one direction only, and does not incorporate the

environmental soundscape, he also notes that in a clinical setting, or music room setting, the music has a beginning and an end, something which does not happen in nature. His hypothesis that when we adopt focused listening which contrasts with peripheral listening, [the type of listening where the ear remains open to the sounds from any direction or distance, scanning the environment for information from anywhere] we can subsequently change attitudes.

"When we move music from one context to another, everything changes since effects intended for one situation must be adapted to another. Listening attitudes also change" He indicates that along with listening attitudes changing, then the overall attitude of a being can be changed too.

David Dunn (2002) suggests "each of us is constructed as a miraculous community of systems that function together to form the coherent totality of a living thing, capable of sensing the external world".

Artistic Communication

The use of words to communicate is a human trait, made up of vibrations, sounds, tones and rhythms that we use to form what we recognize as words is something that has evolved over thousands of years into a selection of sounds which have become unique to some cultures. These selections of sounds are often referred to as language. The understanding of the linguistic tones of those who do not live within a localized distance of us is often challenging for us to comprehend. Many people choose to explore and learn about these languages, mimicking the tones and rhythms along with association of their personal label for the same item thus becoming familiar with them.

The use of sounds, tones and rhythms is something that happens in and around us continuously. Earth has a whole symphony of sounds which play continuously. The very beginning of the planet has even been given the label of *the big bang*. A label which has been adopted by both academics and non-academics over centuries. Once we begin to explore the music of the planet, we can reconnect with a language which is innate to us all, we do not need to learn this, our *old brains*, know it.

Western society gives the label of music to a collection of sounds that we use for the pleasure of our ears, using music as entertainment. Listeners not encouraged to associate music with anything else, concentrating upon its aesthetic merits and ignoring the fact that our attraction to music shows that it is indeed something that we innately felt sense. However, anyone who has ever been surrounded by music in an area such as a concert hall or has stood next to a brass band will have experienced *feeling* the music. Many more of us have joined in a musician and tapped our feet to the beat, or danced along to the sounds, in and unconscious way.

A common 21st century sight is to see people with headphones or earphones listening to music, they are using music often as a therapeutic way of helping to gain homeostasis. However, the music they can hear is often electronically reproduced, recorded, and replayed or even sounds which have been manufactured using artificial sound making equipment. It is often unrealized that there is music, freely available in nature, and that we can even be an instrument of music ourselves, the human body being able to produce vast varieties of sounds, and yet, still music is listened to with ears alone.

A natural hypothesis

Personal observational example of hearing natural music.

I closed my eyes and listened, I heard so much song, so many tunes, there were whistles, rustles, blowing sounds, scratching sounds, squeaking, cattle sound, sheep noises. The music of that field played a wonderful tune. I was attracted to listen more, I began to pick out tunes, listening to one more than another, I began to mimic the sound, it just felt like the right thing to do. I was part of the area; I did not wish to spoil the music with words.

An excellent way of beginning to reconnect to nature, the listeners are attracted to the sounds, rhythms, and tones, and their being seeking to gain balance from them.

It is this hypothesis that indicates that animals gain homeostasis from the arts too. They could hear and feel the same soundboard as I could. The animals in that scenario were extremely relaxed and showing no obvious signs of stress, they were in the same physical state of being as I was.

During my work as a teacher, it is required that students are taught using contemporary teaching methods, the of use recognized methods of pedagogy, and learning cycles such as that coined by *Kolb* (1984) and *Gravells* (2014) which uses the experiential learning theory, Kolb believing that to immerse one's self in a task and carrying out an assigned task *the doing stage of the cycle* followed by observing and reflecting on the task or experience, *the thinking stage* where the learner can use their values and thoughts to influence their thinking about the activity they have done, before the abstract conceptualization stage, the *planning stage* the stage in learning where learners can plan how to take their learning forwards, to the active experimental stage the *further action or redrafting* part of learning, where learners

decide which way to go based upon experiences and personal reflection. These experiential methods of teaching and learning are utilized by myself, where the invitation to learners is to immerse themselves in activities that will allow them to participate, reflect, plan and move forward.

The immersive element is paramount to learning with EcoArts, as the introduction to felt senses, Natural Systems Thinking Process (NSTP) and Natural Intelligence, Attractions and Love (NIAL) is such that for participants to understand, they first need to experience.

When participants submerge themselves in the activities, the validation of Natural Intelligence becomes clear, with many discussions about how the "old brain" in other words, participant's personal natural thinking processes, as they would have been before contemporary society developed its own, controlling state, of brainwashing stories, which not only prevented our *old brains* from developing, but in numerous instances we switched off, creating a *new brain* not literally, of course, but thought patterns and beliefs which were so disconnected from nature that we now think we are completely separate entities. Not one continuous web of life. People still to realize that without our connections to nature, we would not exist. A point beautifully made by Cohen when he stated:-

"Nature's wisdom automatically heals areas disturbed by natural forces. Forest burns and tornado damage in time, return to their former state. Nature in us also heals our scrapes, breaks and bruises. Nature's multisensory intelligence knows how to heal and regenerate, how to keep us in balance. However, much of our upbringing wrangles us to trust and communicate through language, stories that separate us from nature." (Cohen, 2007)

When we put a band-aid over a cut, it is not the band aid that heals us, but nature, yet time and time again, we believe that there are some magical properties attached to that sticking plaster. A story often told to children, by those who are older and influential to them, leading to extensions of the belief that the story is true. It can be challenging to move away from the stories that you may have been told since childhood and to learn to trust the support, the healing and multisensory intelligence that is nature. It is almost akin to learning a foreign language. A nonverbal, language, which removes names, labels, and offers instead, attractions, felt senses and love. According to *Cohen*, "It is these natural attractions that hold everything together" *Cohen* ,(2006) with every living thing, being attracted to every other living thing. These attractions are the pinnacle of the survival of the planet, and universe, yet so many of the invisible strings that hold these attractions together are bent, distorted and even broken beliefs we continue to harbor and action or inaction. The constant need to name or label everything using our human verbiage, which in nature, is distinctly meaningless to all but humans.

When we remove labels, we can begin to communicate in a vastly different way. We can then open up and allow innate natural attractions and felt senses to lead us to a very different way of thinking and connecting with nature and also ourselves and every relationship we have.

One of my business aims is to help people improve their relationship with the animals that they choose to share their lives with. This is often a difficult task, as the animals very often get no choice whether they are attracted to living that life, or not, so they must evolve and develop some unnatural ways of living to allow their natural attractions to continue. For example, personal observation shows countless instances of humans who use the terminology [or label] of owning an animal and wishing the animal to obey their every command. However, the animals, do not understand the language spoken by the humans, and so, will adopt a method of coping with the gap in communication, based upon natural attraction. An example of this is a natural behavior offered by an animal, such as a puppy exploring and chewing his surroundings to see what feels good, tastes good, is food, or danger, peeing in their chosen spot, hiding under the bed in the dark, grabbing the tail of the cat, and more. The puppy, using their felt senses to explore what will offer homeostasis in their life, without words or labels. Such behaviors are not seen as an acceptable behavior in contemporary society, so very often, the puppy is punished, it is shouted at, using words it doesn't understand as our language is foreign to it, and is sometimes physically hurt in the form of a smack with a hand, or object such as an electric shock collar. The puppy quickly develops new behavior patterns, which may not be a natural one for the puppy, but they will adopt a method of coping and behaving, which will not evoke a perceived negative response in a human. The connection between them is now bent, if not broken. The puppy, naturally attracted to not being surrounded by negativity, punishment or other misery, learns to adopt a new way of living, which will not evoke such behavior from the human it is now forced to reside with. It accepts the life it now lives, but it is not a natural way of living for that animal and the puppy's natural homeostasis is no longer there.

Issues have developed into epidemic proportions during the last century and continuing. Not only with animal/human relationships, but also with human/human relationships. The current use of social media and technology offers new and modern ways for us to communicate quickly with each other, in our usual verbal and optical way, offering opportunities to use more labels, and gain control of those around us. There are some labels in society viewed as suitable labels. When these labels are used, a person will thrive and flourish, as far as society is concerned. Historically, these labels have been accompanied by praise, fortune, and all manner of positivity. Examples of these labels such as pretty, attractive, thin, intelligent, dignified, clever, rich, better, expert, perfect et. Al. There are other used labels too, more derogatory terminology, such as fat, stupid, ugly, clumsy, poor, imperfect, blemished, rubbish, et.al. All these labels are detrimental to our mental wellbeing, despite the understanding of them to mean the opposite of each other. There are high expectations in contemporary society, for humans to be included in the former list. Often, peer pressure given via social media means that it is becoming a cause of mental stress to a lot of people, statistics showing that 2,500 teenagers per day are turning to prescription drugs to try to regain homeostasis. (adolescent-substance-abuse.com 2019) not only do we not want to have the negative labels attached to us. We try and defer negative judgement, the desire to acquire the positive labels can often mean that we strive to become someone who we are not, the very same way as the puppy. Our lives are still being lived, but we evolve into a being who is not enjoying homeostasis, and this can cause significant mental pain and distress for us, often leading to being attracted to other things to try and restore the balance, for example substance abuse, eating disorders or bullying others. The fact that we begin to perceive ourselves as possessing the labels is a great cause for concern, as we then, begin to place the labels upon others, both human, other living things. We as a species cannot just simply *BE*.

One way we can continue to carry on using Natural Systems Thinking Processes in our modern world, and therefore regaining homeostasis in our lives is to use a combination of Nature and The Arts as a form on nonverbal communication. The removal of labels, and the act of transferring our thoughts, which of course we think in terms of words to feelings which we can express in a nonverbal way. Using Natural Intelligence Attraction and Love, we can use either traditional art materials, natural found materials, sounds created or heard in nature or with traditional instruments, most of which have historical links with nature, performance, and create either permanent or ephemeral art which we can use to make a psychodynamic statement. Because the arts can be presented without words, the need for labels has gone, and the feelings, or rather innate felt senses that we have when creating the pieces are much clearer to communicate than they would be by using words and therefore labels. This offers a quite different form of communication, and if we are working in a therapeutic environment, it offers an aid to clients to share their feelings with their therapist, and ultimately with themselves, as very often it is the disconnection, or buriel of these feelings and therefore nature, that have caused the imbalance in the person in the first place. *Robbins* (2000) validates the point when he states:

"As therapists, we experience the gestalt pattern of verbal and nonverbal symbolic forms that make up a patient's field of communication, and we assess the diagnostic level that organizes such diversity of clinical material".

It is not just the therapist that uses the Arts to communicate. It is also an excellent way to reconnect with nature and to experience homeostasis, possibly for the first time since birth for many people. Society's brain washing begins early, every infant, born is innately connected to nature, yet, in society, we begin to break down the connection as soon as the child leaves the womb. We, in our endeavours to nurture and care for them, make the new

born wear clothing, often in a room that has been heated to be more than warm enough to prevent any harm coming to the baby. We keep the infant indoors if the weather is slightly inclement, with a lot of children never feeling rain on their skin until school age. Personal observation of this left me quite shocked when I realized following several conversations that this was the case. We sterilize everything, sanitize with chemicals, remove all traces of muck, as that now carries one or several of the afore mentioned negative labels. It is considered, dirty, dangerous, unpleasant, unsafe, not aesthetically pleasing. Children often being told to continuously wash their hands, even when only playing on a swing for ten minutes, and a total deep clean being required after a visit to a petting zoo or farmyard, if the children can gain parental permission to go at all. There is a difference between basic hygiene, and the crazy place where society puts nature right now. I have had children screaming in a confused state of horror, terror, humour and awe when they have seen a horse that I was riding poo on the roadside. Rather than teach them that to excrete is a healthy, natural function, that they do, it is told as a story of horror, and given all kinds of labels. Unlike the days in recent history when my Grandfather used to collect same, use it as land fertilizer and say it was "good for the rosebushes."

Recent personal interaction with some children in an outdoor classroom environment offers an example of when I utilized a form of musical Eco-Arts to help them understand the good side of natural excretion.

Children all ages 6 to 7 and their teacher, and myself were in an outside area. They were being shown how to use tree bark and paper to create art, using a wax crayon to do a rubbing.

Shouting and screaming was heard from one of the children. A bird had excreted on her from above. Whilst the teacher had disappeared to pick up something to clean the mess, the girl was surrounded by the group, who began to shout and laugh, they were throwing labels at her, "smelly" "you stink" "eeewww, go away" "poopy pants" and more. These labels were hurting the girl a lot and she began to cry, her homeostasis gone, she was experiencing mental pain, distress, fear. I was attracted to help resolve this and saw a chance to help the children understand their broken connection to the natural act of excretion and how it is a good thing in nature. I chose to use music to teach, recreate group cohesiveness and create a more cathartic state for the group which would in turn offer them all the chance to reconnect with nature and offer the girl an opportunity to regain her homeostasis. Thus, the *poop music* was created. Using voices as instruments, we made poop sounds, each child using their unique sounds to resemble their feelings of poop, we searched an area around a tree we were all attracted to, we found animal poop, we found fallen leaves which were re labelled "Tree poop", we looked around the area for more natural things that excrete waste, we found a lot. There was a lot of new interest in poop, it was no longer a thing of horror, but it was a thing of fun, interest and creation, the new knowledge that poop was turning into food for the trees, and some animals gave it a whole new sense of belonging. The "smelly" label was now forgotten, and the girl reinstated in her place of belonging within the group. The creation of the new music, was a unique experience, a therapeutic way to create homeostasis which used the innate sensory ability of the young learners to allow them to repair injured and bent natural connections as well as an invitation to explore sounds and music, which provides, according to *Bunt* (1996)

"more than a primitive excursion into unchartered waters of creative inspiration, a quick dip into the all-embracing oceanic feelings."

Words which resonated with me as validation that traditional therapists have indeed begun to recognize that the felt senses and our innate sensory capability is a very valid point.

The use of NSTP, NIAL combined with Eco-Arts is an exemplary model for teaching and learning, and contemporary society would benefit in countless ways if this were to become a lifestyle choice rather than a few organized activities.

Communication, Personality and Environment

When we consider communication, it is likely that our first thought would be speech. The mixture of sounds and verbalisations we use daily and hear from within the womb, which enables us to associate objects, places, people, and everything around us. Words as we recognise them, are linked to objects and environmental situations which, when heard by another person in the same region, can be understood and the object recognised as the word linked. For example, if one were to say to another "pass me the ball" and you were both near a ball, the recipient of the ball, would know you wanted them to physically transport the ball from its whereabouts into their hand. This kind of communication is commonplace, according to *The Communications Trust* (2019) approximately 90% of children having the ability to communicate verbally in line with their development. The remaining 10% are as follows:

• 7% of children who have speech, language. and communication difficulties as their main difficulty. This is also referred to as specific language impairment and is often severe and complex. There is no obvious reason or cause for these difficulties with language, and their non-verbal skills are often well developed.

• 3% of children who have speech, language, and communication difficulties as part of another condition such as autism, hearing impairment, general learning difficulties etc.

• Of these children, an estimated 1% of children have the most severe and complex speech, language. and communication difficulties, which prevent them from expressing their basic needs.

The above statistics are only involving verbal communication, but we have more than one method of communication, to understand speech, we need to have adequate aural communication, we need to be able to hear paralanguage, intonation in speech to aid comprehension. It is much more difficult to comprehend an individual who has little, no, or incorrectly placed intonation in their speech.

We use kinetic communication, often referred to as body language, which is considered a silent communication, (ie nonverbal, but there are instances when our body language is audible, for example if we give a round of applause to show appreciation, it is non-verbal, but nor is it silent.

We also have proxemics, we can relate our position of our bodies and how close they are to another, to relay intimacy, authority, and emotional concepts. This tends to be a visual communication.

Also visual is the communication of association, we send messages to others by for example, what we wear, the car we drive or even what we eat in a restaurant.

Dr Cohen (1976, 1983, 1990, 1999, 2020) has concluded that we also have a felt sensory communication, based upon natural intelligence, attraction. For example, we remember that a nettle stings, we choose to move position, rather than sit on the painful nettle, is it because we dislike the nettle? No, it is because we are more attracted to another area, thus communicating to those present that the nettled area is not to be sat on. We physically position our bodies away from the nettle. Dr Cohen has published several papers and over forty books and has along with participants worldwide, researched and concluded that we also communicate using 54, felt sensory perceptions. My own personal research in this field concluded that we can indeed communicate both intra and inter species regardless of linguistic verbiage, or comprehension.

When we communicate with others, we use a mixture of all of the above, our facial expressions, and tone of voice can convey an emotion or a direction or instruction to the person or people we are communicating with. It is often seen in a crowded room of people who are all talking between themselves, that to try and get their attention verbally will be almost impossible, so the speaker will use a non-verbal communication such as a hand clap

(audible) or he/she will stand up on a stage, lectern, podium or similar and raise an arm, making it clear that they need to be heard, this visual signal is easily seen by all in the room.

When thinking of audible communication, we tend to refer to listening or hearing. We commonly listen to music, it is even used as a therapy, yet we often overlook the value of listening to or playing music as a non-verbal communication. Clare et al (2020), Hobika & Samson (2020) and Leitchy (2020) have recently all concluded the benefits of listening to music with dementia patients, opening lines of communication, with those who were none verbal, to enhancing memory recall, enabling the listener to convey their mood by their responses to the sounds. These studies were with participants who were dementia sufferers, similar studies have been carried out on all age groups, with the same results shown. Personal observation showing that the introduction to music following a brain injury can aid communication between adults, the participant had suffered a cerebral arterio- venous malformation (AVM) and had become aphasic and confused when presented with the need to communicate. It was seen that when music was played, he was able to convey mood, emotion, and some verbal communication which without the music he was unable to do. The damage to his brain meant that his use of facial expression was limited, making it difficult for his caregivers to assess his mood. Facial expression and kinetic body language being a huge source of non-verbal communication.

The attitude of those communicating is also vital to those involved, attitudes are Attitude, it is a common misconception that we develop attitudes as part of our stages of development. However, because attitudes are forever changing and by no means a constant part of our make up or development, we can consider the reasoning behind this, and what the components are that make up the word Attitude. Cognition, Evaluation and Behavioural Disposition, the three components of Attitude. Our attitudes are based upon these three areas.

Cognition, or, what we know, or think we know or believe about something, be it a scenario, a person, another person's viewpoint, or belief. For example, if we are shared the doctrine of one area, the chances are we would believe the doctrine as a fact, and thus adopt an argumentative attitude towards those who followed a different pathway. In situations such as religion, this is commonplace, historically. and more recently, wars have been fought based purely upon a conflict in religious beliefs. We may or may not have proof that our beliefs are truth or fiction, that does not mean that we do not carry on believing what we do, that is until something [or someone] offers us an alternative.

We may state that we find a subject in school boring, or we think that a person who follows a different lifestyle to us is wrong and that they are not good people, we evaluate our own beliefs and often carry on believing them, again, until someone offers an alternative. For example, a client had a totally negative attitude towards drug users, her opinion was that they were "low life scum" such was the strength of her evaluation of her cognitive thoughts about those who use drugs. Her cognition and evaluation led her to behave in a way which meant she avoided those who used drugs, in a big way, she would not donate to drug misuse charities, and would walk away with words of verbal disgust if approached in the street by someone asking for help due to the imbibing of substances. Her beliefs were strong, her behaviours belied her beliefs. This changed for her when a close family member was discovered to be abusing substances, and she had to deal with the conflict between the attitude she had developed over time, the behaviours she had consequently adopted and the love of her family member. Such was her need to nurture her family member, the client sought out new knowledge about drug misuse, she learned a lot, the reasons behind it, the reasons for addiction and more. She also found that she had a completely new attitude towards those who used substances and she eventually became an addiction rehabilitation worker. No longer were her opinions derogatory, they were based upon validated information and facts.

That scenario was observed by the writer, the client had her original attitude, because she felt it kept her safe. She had extraordinarily little knowledge of substance misuse and she saw the consequences of it as something worrying and unpredictable, so she had a defensive attitude which, she hoped prevented any or further interaction between herself and the individual who was approaching. Her schema was such that she believed that the unkempt person must be lazy, not wanting to improve his/her situation, and that they were most likely dishonest and would commit crime to get what they wanted. She had no proof of this, but as discussed previously, she had heard and read negative reports from the media and others of crimes committed by those who misused substances. Her attitude was coined as she had a need to feel safe, secure and it also gave her self- esteem a boost as it made her feel as if she were the better person in a moral sense.

It was clear once she became aware of her family member in trouble with substance misuse, that she needed to rebuild her schema, her beloved family member was none of the things she had originally placed in the box of drug abuser, they were the person she loved, cared for and she knew she needed to help them. She actively learned about the situation, the cause, the effect, the rationale, and thus she developed [changed] her attitude, subsequently followed by a change in her behaviours.

During this process, the client experienced cognitive dissonance, she struggled with her beliefs, she had always considered prior to her discovery, she made a conscious decision to help her loved one, despite her original beliefs. She behaved with counter attitudinal dissonance, when she found herself offering hugs and comfort to her loved one prior to her changes in attitude.

When we look at the communication, and attitude of our human companions it often unearths the psychological argument which has been rumbling for decades between those in the field of whether communication and attitude conflicts are down to individual personality, or whether they are influenced by environmental stimuli.

The Cambridge English Dictionary defines personality as "the special combination of qualities in a person that makes that person different from others, as shown by the way the person behaves, feels, and thinks. There has been debate for decades between psychologists who argue the similarities and differences between individuals. The arguments appear to be founded upon how and what methods they adopt to test for these. Cooper (2002) states that Odbert (1939) found over 4,500 words to describe personality traits, this was soon found to be an unreliable method to use as different people use different words to describe the same thing. Cattel (1978) developed a theory which narrowed the vast number of words down to five categories, believing that it was a much more successful way of assessing people, his theory was that everyone will fit into the five categories at one end of a scale or the other. This is known in psychology as 'the big 5'. The 'big 5' are: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. This theory was backed up by *Eyesnck* (2018) who has worked for over fifty years publishing articles which argue the positive and validity of the 'big 5' trait theories'.

This theory was argued by *Goldstien* (1939)who argued that an individual's perception of the world is what develops a personality, this was a theory that influenced Rogers (1939) who followed the humanistic approach and that of self-actualisation, the idea that individuals strive to improve and be the best that they can be and that personality is learned approval therefore by the desire for bringing about "positive selfа experience" Bernstien (2015) who describes a situation where an individual can develop into a person who learns to believe that a situation is positive or negative depending upon what they heard as a child, for example, the child who grows up being not good at mathematics because they were told off or called silly for mistakes as a child could either end up, hating maths and not trying or applying themselves fully. The theory being that if this is a constant approach of adults towards children, the child will develop the feelings of 'feel good being a negative thing.

The study of perception and behaviour is a method used by those who follow this approach. The argument that the development of personality evolves or that it is learned is still being studied. *Bledorn & Schwaba* (2018) argue that personality continues to develop throughout adulthood and does not become stable until old age. A theory which is disputed by *Prall & Matuba* (2018) who state that the time personality develops most is during late teenage years.

The methods of testing personality are also an argued point between researchers, historically, *Cronbach* (1957) and *Cronbach & Gleser* (1965) state that there are two types of test for personality, Correlational & Experimental. They argued that singly, both methods were flawed and that if the methods were to be integrated then the results would be more reliable and have more validity. An argument backed up today by *Hedge, Powel & Petroc* (2018) who explain reasons for failure when only one method of testing is carried out.

This brings reason to question whether results from the various theories are valid or reliable, do the '*stroop test*' or the '*Rorchack*' tests really give a valid result of an individual's personality? Do the current online versions of tests give a true reflection of a personality? These tests have been historically used in legal cases, would it be correct to trust them as valid due to the number of theories currently used and argued by researchers? It appears that there are several similarities between all the theories, one being that it is a consensus that there are indeed personality differences, and that the references to the 'big five' traits are mentioned in all of the theories to some degree. The adjectives used to describe the behaviours of individuals are the same. Would the results vary depending upon the reason for the test is for something of a higher stake, for example, a student doing a personality test before university entry or an applicant for a high paid job will show higher

results in conscientiousness, agreeableness, openness, and extroversion than if the same people took a personality test with low-stake results such as a social media share or a survey. To conclude, it seems that the arguments between researchers which have been going on for decades will continue to be debated for the foreseeable future. For all the theories have similarities, they are tested in a different way which will also mean that they have been studied in a different way which may impact upon results. *George* (2018) states "even if people agree upon the lessons drawn from a particular historical case, they often misapply those lessons to a new situation that differs from the past one in important respects." This could apply to a lot of the methods of study as they involve a lot of historical cases.

It would leave the question unanswered as to which theory is the most accurate or are, they indeed all saying the same thing and agreeing upon the hypothesis that every personality is unique?

The arguments above are based upon human studies yet can be compared in full to those of animals. Where there is an argument for this as being anthropomorphism *Waytz & Cacioppo* (2007) suggest.

"when people are likely to anthropomorphize and when they are not, focused on three psychological determinants--the accessibility and applicability of anthropocentric knowledge (elicited agent knowledge), the motivation to explain and understand the behaviour of other agents (effectance motivation), and the desire for social contact and affiliation (sociality motivation)."

Personal observation validates time and again the differences between human and animal behaviours are minimal, and also effected by the same environmental stimuli and also inherited personality traits, often referred to as breed traits in animals. An area frequently enhanced by those breeding animals for a purpose, for example a strong desire to hunt would be no good for a guide dog for a blind person, so breed traits such as hunting desires are diluted through selective breeding of the animal prior to selection to work.

The need for anthropomorphism has a purpose when writing, both scientific and nonscientific papers, a conclusion reached by Tomson et al (2021) when the stated.

"that anthropomorphism acts as an evocative, albeit potentially distracting, technique but does not cause significant misconceptions. Writers should feel free to use anthropomorphic techniques if they are appropriate for their topic and their audience."

I suggest that the observations and findings I report here will both validate to and encourage the reader of the lack of anthropomorphism and the reality of both animals and humans having the ability to display their innate felt sensory perceptions throughout their lifetimes.

One could discuss the behaviour of a working police service dog, who is trained/conditioned to 'guard and protect'. his/her natural instinctive guarding behaviour traits are used to deter the behaviour of humans through fear. They fear getting hurt by the seventy two teeth on display accompanied by a very vocal sound. If we use the felt sensory perception list in this instance, it is clear to see that the human would change his/her behaviours because they are more attracted to staying safe rather than being bitten, their senses of fear, anxiety and possible pain are overriding the others causing a sensory imbalance. The dog can also be

observed displaying felt sensory perceptions, according to Cohen's list: the sense of play, sport, pleasure, (it is all a game to the dog) this 'game' will also exacerbate feelings of trust, support, companionship, and community. Yet the same dog, who in his/her working environment displays such guarding behaviours, can also be observed curled up in front of the fire in the handler's home, or be playing a different game alongside the handlers children, such is his felt sensory position of belonging, and receptive awareness of his fellow creatures.

Human animal communication.

Once we understand the concept of individual differences both in humans and their animal companions, and we rid ourselves of the desire to be in a command and obey relationship, the outdated concept of the need to train animals to obey our every command and that we [humans] are the dominating species, with the cross-culture mis perception of humans being the superior beings. We can begin to look at methods of communication across species. When we spend time in an outdoor area, we can audibly tune in to the orchestral quality symphonies which surround us.

Validation activity 3

I am sat in a natural area, my garden, I am sitting on a swing seat with my dog, **# 18 (motion and body position)** gently allowing the rhythm of the earth to take us back and forth, **#17(earth rotation)** (I was not rocking the seat myself) I can feel the spring breeze on my face, cool but not cold, **#14 (touch on the skin) #7 temperature** I close my eyes, I can feel the warmth of the sun **#7(temperature)** and the softness of my dogs fur under my hand, her

breath on my leg as she rests her head in my lap. #34 (trust)#35 (friendship) I can hear the birds, happily singing, some courting, some telling the world that they have a nest in the area, others just chirruping to each other. #39 (language)#28 (courtship) I inhale slowly, the mixed scents of the nearby lavender and rosemary bushes are mixed with the scent from the bushes behind the swing,#19(scent) I am so relaxed, I may fall asleep.#49(sleep and relaxation) I feel that I am a part of the area when I have my eyes closed, we (my dog and I) belong there, we are part of the garden furniture, part of the plants, part of the birds.

##34(belonging)#37(colonization)

I feel a gentle movement, a butterfly lands on my foot, **#14(touch)**it tickles, **#29(play, laughter)**I open my eyes to see what it is, **#1(sight)** it stays for a short time and then flies off, landing on a nearby dandelion flower. I look up at the oak tree, the exquisite patterns in the bark, the holes drilled by a woodpecker, I see a nuthatch, this makes me smile because they are rare to this area, I am happy to think that they are attracted to come and live here. I am happy, I am being, I am me. **#54(homeostasis)**

The activity above, allowed me to tune into the communication that was going on around me at the time, that moment. I could hear the birds communicating, I did not need to understand what they said in a linguistic way, I sensed their meaning due to the moment of homeostasis. This manner of relaxation and appreciation can be seen in many animals who are feeling moments of homeostasis in their natural area.

I always consider myself incredibly lucky to have never said goodbye to my inner child, she has been my constant companion and company for fifty years, sometimes, yes, I have had to keep her a secret, to avoid the 'judgement' or negative thoughts of others causing me hurt, but I have never let her go. Despite life traumas, losses, emotional imbalance due to relationship issues and other society created events, my inner child is still in there, gently talking in my ear, (metaphorically speaking) and telling me to go jump in the puddles, go climb the tree, go to where you know you are OK. My eldest daughter used to often joke that she was the grown up and I was the child when we were out in nature, as I would be the one with my shoes off enjoying the stream or I would be the one running barefoot on the sand. My inner child keeps me sane, her love of nature, her trust of Natural Intelligence Attraction and Love, her love of connecting to the natural beat of the earth, listening to earth's music, and using it to heal is why I am alive today. Had I succumbed to all that society and their stories have thrown at me over the years, then I am not sure that I would not have just left society completely.

Music is an amazing way of not letting go (or re-introducing yourself) to your inner child, I do not mean picking up a printed score and recreating a song from Mozart or Chopin, but to pick up either a natural or manufactured instrument and creating sounds that allow you to reconnect to nature and therefore your inner child. Most people assume that music is only to be appreciated when played by those who 'can' play, but there are melodies in us all, which when explored can turn into great symphonies.

I refer to the previous activity, we are still in 'lockdown' and still not being able to have the freedom to remain outdoors is causing me frustration, however, I have not let this change anything for me, I am still me, nature is still nature.

Validation Observation 4

I am spending so many hours in my garden right now that I now feel that I personally know each of the birds who live there,#35(sense of self and companionship) I have learned each personality, I can recognise their different family units, who is nesting where and with who, they are now also so used to my being there that they no longer feel me as a threat and are attracted to continuing their lives as 'normal'. #34 (emotional place) #28 (courting [birds]) They have even begun to happily approach me and sit close enough to share the space, when I talk to them, it is so rewarding to know that they accept my being, that they listen (a very obvious head tilt)#39(language) and that they are attracted to stay. I have been playing a lot of music outdoors, quiet music, relaxing tones on indigenous instruments and drums, the latter I need to be careful as my neighbours may not find it as rewarding as I do, they are extremely disconnected and are still at the stage where they refuse to listen and think of nature in a very 'new brain' way, it is dirty, scary, full of creepy crawlys etc. I have noticed that they have recently added a bird feeder to their garden, which means that they are beginning to realise the beauty of having visiting birds, so all is not lost, they will be much more connected by the end of this pandemic than they were before it. I am sure that this will be the case for many others too, there is so much that people take for granted in nature that they won't appreciate it until it is denied them as it is under current circumstances. I worked on an activity with a client, he is a man in his 40s and an adept and accomplished musician. He wanted to know more about how nature could teach through music. We went to a natural area and gained consent to stay. I had previously gone through the 54 senses with him and he was able to grasp the concept of this, he understood how we can gain homeostasis from being in nature, but he was struggling with the asking nature to teach part. I asked him to

participate in a variety of activities using nature and music, yet for all he saw the educational side of the activity, he understood the connection via using your heart as a drum, he could not see how to get nature to teach him anything. The gentleman had, previously composed music, played in front of huge crowds and more, yet, he said he felt stuck. He had no idea how to get nature to teach him anything.

I asked him, to look around, to find four sticks he could make a rectangle with, he came back quickly with four large twigs that he had found on the ground. I had some string with me (I had previously planned this activity) and together, we tied the four twigs at each corner to make a rectangle, I then suggested we run strings between the two vertical twigs, to make a shape resembling a musical stave (something the gentleman was hugely familiar with) when this was complete, I asked him to hold up the frame and look through it, placing a note where he was attracted to do so, such as where a tree branch crossed the line, or where a bird flying filled the space.

We were on familiar ground (theoretically speaking) the gentleman, was instantly composing tunes, which he wrote down on manuscript paper (a musician always has his manuscript book apparently) he then moved the rectangle to another area he was attracted to, and repeated the exercise, and then another. He then, being a musician, wanted to repeat the first part, but when he placed his body and frame where it was before, it was totally different, the wind had blown the branch, the bird was no longer there as had continued his/her flight, there were other things now, different notes, he had a definite moment of realisation.

"it is continuous" "it doesn't stop" "it is how nature is" "Oh my God, nature has taught me this, and also composed a tune at the same time" he was so enraptured with the activity that he carried on for ages after our session had timed out, he sent me a recording of his composition for my own interest after the session, it is amazing, it is so varied, so many notes yet, so flowing and correct that any musician could not have done better with ten thousand hours of learning.

I have done this activity so many times myself, it is an amazing way of nature teaching us what we need to know. Not only the continuous life cycle, but the important of invisible strings of connection, the sounds of nature and the natural intelligence of what grows and lives next to what. I have also combined this activity with over one hundred others both in groups and individuals, using natural (EcoMusic) and have had one hundred percent positive results.

Universal Music

L, Dow Balliett (1911) asked the question of what is music? And of what is its source? Her reply was "vibration of numbers answers the question, providing that each individual thing found in the animal kingdom is the source and foundation of music. Every leaf of the forest has its note which is heard by the all-hearing ear and would be heard by ours if we lived in conscious relation with the divine. We would hear the grass grow and the voice of all created things. This is true if we lived in tune with the infinite. "

A religious based argument typical of the time it was written, however, if we can look at the language and replace the words divine and infinite with the words nature, then we can see the truth in her words. She continues.

"to succeed in all musical rendition of another's work, one must unite their soul, with the soul of the composer. The link lies in the silent notes, by loving the sounds of these notes and feeling that the instrument is but an extension of yourself, and you are but an open reservoir of melodious forces that nature has loaned for your use, then by placing your fingers upon the keys of an instrument, with blessings and love, sensitive ears, hear tones floating all about you- these are the silent tones of the dominant ones you will strike, but the sweetest tones are those you feel through your body, soul and spirit"

Her argument, even though it can hardly be described as an empirical study, helps to validate the moments we live in today. The connections we make to other living beings and indeed the earth we reside in.

If we are to understand them, and live alongside them, there needs to be a connection. When we apply our innate felt sensory perceptions to the moment we are in, we can also hear the silent tones, the tones spoken by the animal, in a non-verbal language. This can be akin to a finely tuned orchestral instrument, which will play with precision, the exquisite linguistic conversations of birds, for example, who not only sing to communicate, emitting tones which can signify attack, be a territorial warning, a mating call or serenade, but they also use song as a way of an anxiety/stress relief, studies by *Stevenson* et al, (2020) observing this behaviour in both male and female European Starlings.

Using music as a relaxation tool is something which has been used by humans for centuries, studies by *Santiago et al* (2014) show that when a genre [new age] is listened to, there is a

significant slowing of the heart rate to levels associated with relaxation. *Soontorntanaphol* (2021) studied the playing of music to elderly patients who were visiting hospital, and concluded, that "results revealed that when the elderly has participated in music activities, they feel better than usual in terms of physical health, emotion, and feeling."

The behavioural changes, [relaxation] have also been studied and the results from independent studies, all conclude that animals experience enhanced relaxation when they listen to music.

Alwerth & Beurkle (2013) discuss the use of music to enhance the welfare of rats in a laboratory setting suggesting that it is beneficial. *Amaya et al* (2020) discuss the whether the pitch of the music is of any consequence to behavioural changes in kenneled dogs in a rescue environment, concluding that low pitch sounds make the dogs more vigilant of their surroundings, but not discussing or considering the communication between a bitch and her puppies, when the mother would use gentle, low pitch noises to communicate, personal observation of whelping bitches are that they are always quiet around young puppies, and hardly raise their tone over a hiss or low growl (the latter as the puppies become more active and the mother feels the need to have a modicum of control) this implies that the vigilance comes from the innate urge to listen, intently to low pitch sounds. *Marchetto et al* (2021) conclude that auditory enhancement of the environment is seen to prevent anxiety and stress behaviour in zebra fish.

Drumming

Drumming has been used for communication since prehistoric times. Indigenous people used drumming to communicate, often over vast distances, although this is unable to historically accurate, there have been generations of stories passed down and some archaeological evidence to show that both audio and visual [such as smoke signals] were used as a form of communication. Apart from communicating across distances, drums were also used as part of a story, a dance, a healing ritual and as a coping mechanism in times of trauma, tragedy, and war. The people believed that the drums held the spirit of the animal whose skin was over the drum and would help to keep them safe, such was the sacredness of the drum. Indigenous women would drum continuously when their husbands were at war, believing that the drum sent the spirit over the distance to keep the men safe from harm, remaining in a state of trance until they returned, they continued to drum. Overall, this seems like an obvious choice of belief, as they had knowledge of the vast area the drum could communicate However, empirical studies show that the use of constant drumming can cause an over. altered state of consciousness. According to Boddy, (1994) associated states of consciousness in the form of spiritual practice, were until recently comprehended as being within biomedical paradigms as a form of psychopathy or only as a physiological response to stress. Boddy also considered the use of trance processes could not be medicalized or universalised but were best recognised "on its own unique terms".

Whilst acknowledging that trance processes commonly display "alterations or discontinuity in consciousness awareness, personality or other aspects of physical functioning" *Cohen* (2007).

On establishing this state of altered consciousness in humans, it is also seen in stabled equines, who may begin to kick at a door out of frustration, their sensory need to run free being greater than their attraction to staying indoors. This kicking can initially be controlled, they will do it when they are aware of a human presence, and use it as a method of communication, simple conditioning as they are aware that the human will attend to their needs, and either release them into an open space or otherwise offer alternative stimuli. However, if this kicking is allowed to continue unchallenged, the horse will also begin to weave in a side to side, [rocking of the head] action, which will be accompanied by continuous kicking, which, replicates a drumming. The horse can be observed as being in a state of altered consciousness throughout this behaviour and will not respond to verbalisation or sounds which would usually gain attention. That this behaviour is in a flight animal, whose first response would be to jump and flee from an unexpected sound, yet, when in this state does not appear to hear it, implies that indeed, an altered state of consciousness has taken place.

Rhythm and Dance

The use of rhythm is not always negative, many riders will utilise rhythm bells which ring to the sound of the hoof beat, a four beat for a walk, two beat, for a trot and three for canter, the three most commonly chosen gaits in ridden equestrianism. The use of these have shown improvement in balance for both horse and rider, with both it seems, focusing upon the rhythm at the same time and are in frequent use in equine training establishments. In 2002 I set up an animal assisted therapy program using equines, in an unridden manner. The programme which ran for six years before being mothballed due to the health of my daughter and my enhanced carers responsibilities, showed continuous enhancement of motor actions, both general and fine, enhancement of speech and social interaction, stimulation and focus from the service users, who were varied in ability, mental state, and physical capacity. The one thing which was a continuous result throughout was the ability of every participant to 'tune in' to the beat of the walking horse. Unlike the state of trance, which is an altered state of consciousness, the change of focus was a conscious action.

In the year 2000, my then partner suffered a cerebral hemorrhage which left him with many physical, linguistic, and mental challenges. One such challenge was the complete loss of balance, the bleed caused irreparable damage to the cerebellum. Losing the ability to walk was at that point unthinkable to him, aged only thirty-four with a young family, this was devastating for all involved.

I was already aware of the exceptional physical therapy results of equestrianism, as I had previously purchased a pony for my daughter to enable her to gain the therapeutic benefits to aid the treatment of Cystic Fibrosis. The pony was diminutive in size and a perfect size to lean on, as a balance aid. I was then struck with the idea that if he [my partner] could work with the pony, then he was at least going to be upright and potentially take his therapy forwards, to perhaps become able to balance enough to ride, thus gaining physical and mental strength as my daughter had done.

My hypothesis was only going to work if both parties [human and horse] were attracted to the idea, as, too much fear from the gentleman would have caused the pony to sense this and remove himself from the situation, and, too much excitement from the pony would exacerbate stress in the human, so risk a cycle of feelings which may be detrimental to the plan. So, quietly we began to work at this, the gentleman building a bond with the pony from the confines of his wheelchair, no food rewards, and the untethered pony free to walk away at any point. The pony was groomed, stroked, fussed by the gentleman, with limited verbal interaction due to the aphasias he suffered.

Over the following seven days, we repeated the exercise, with the pony arriving unrequested for this interaction, then leaving the area when he chose. Day seven, my partner attempted to stand placing a hand upon the pony and pushing himself up, I was too far away at that moment to be of physical aid and could only observe. The pony was attracted to allow his human companion to use him as a balance aid, and stood for ten minutes, before turning his head away indicating that his body would follow, yet he did not move until the gentleman was seated again. This continued, daily, over the following month, before, the pony took a step accompanied by his human companion, within twenty-four hours of the first step, the pair were walking together, the pony was still comfortable to take the weight of the unsteady human, and the human, sensing the rhythm of the horses walking gait [a four beat steady pace] was able to balance by focusing entirely upon the rhythm. The moment he lost focus, he also lost balance and fell, the pony waiting whilst his human partner began again. This activity continued daily, for two more weeks, until the gentleman was able to walk unaided, albeit with an unsteady gait.

Interestingly, the gentleman was unable to tap out a four-beat rhythm on a flat surface, or drum, nor was he able to visualise a four-beat rhythm with-out the aid of the animal companion, and when offered a static walking aid, was unable to process the messages from his brain to his legs to maintain balance or rhythm. After his walking ability improved, to an unaided state, the gentleman was still unable to replicate the rhythm, nor did he consciously think of a rhythm when walking.

Apart from, the afore mentioned benefits of rhythm, it is also the pinnacle of the concept of Dance.

When we consider dance, we may think of leisure activities, and gyrating, twirling, and moving to the rhythm of the music playing, most western society can visualise darkened night clubs, with flashing lights and music, our sensory functions being deluged in a plethora of light, sound, and movement. There are many occasions when, upon hearing another playing a designed musical instrument, those listening will be tapping a foot, or swaying to the rhythm, such is the attraction of our senses to the rhythm and vibrations we can hear and often feel through our feet. Such is our sensory attraction to the rhythm. According to *Harries* (2013)

"all forms of performance are to some extent participatory, but the degree of engagement can vary. Even less participatory types of performance such as a symphony orchestra concert, the audience is engaged in active interpretation".

It is the area of active participation which can be seen in both animals and humans when it comes to music, rhythm, and dance.

Dance, a time-honoured way of communication, connection, and storytelling, yet so many of us are told, as with music, that we are not good at dance. Yet we will all happily watch a baby or a toddler rocking or bouncing in time with some music, there is a current rise in popularity of dance-based television shows, people enjoy watching others do something that they feel they cannot do, because society or cultural demands.

Again, society states that to dance successfully and paint an aesthetic picture, we must be a certain shape or size, we must be able to bend and twist in certain ways, for many dances this means following a set pattern of instructions, a sequence of steps, or for different genres, different sets of movements, for example, Irish Dancing, still arms down by sides at all times whilst feet tap in a variety of jumps and rhythms, contemporary/modern dance where the whole body is used and contorted into set shapes, you only win the competition if you have encompassed them all in your routine. These are only a few of the rules of 'dance'.

There is a concept here that is failed to be seen, the fact that, we can all dance, dancing in nature is the most liberating thing, we can dance with or without traditionally played music, (however, this is often preferred by a lot of people) but there are plenty of natural music which allow us and other species to dance.

Personal experience of this, saw me sat on a large rock, listening, I tuned into the sounds of a woodpecker tapping a tree, I began to copy his rhythm with my foot, just using my toes, tap, tap, tap, tap, I stood up, it was easier to do it that way, tap, tap, tap, I became lost in the sound, tapping and joining, in the rhythm and the movement, my body followed my feet and so my dance began. It was short, the woodpecker stopped, but it was a definite dance. This activity can be observed with both equines and dogs, who can be observed rocking or playing in synchronised timing with the sounds of another animal, water, or weather when they are in a relaxed and safe venue.

Dances and Romances

It is widely recognised that dance in humans is enjoyable, it is seen throughout many cultures as a pleasurable experience its benefits of or feelgood factor promoted by health organizations globally. Psychologists suggesting that when we have fun, we feel better. Studies by *Emory and Clayton* (2015) suggesting that birds play, they experience enjoyment by "social play, which can easily be confused with fighting and courtship, and tends to involve a lot of chasing, tussling and rough and tumble. Social play frequently involves objects, where favoured objects are stolen or fought over. For example, captive rooks will often play tug-of-war with strips of newspaper, even when the birds are standing in thousands of examples of the same material. This strongly suggests that the birds were having fun with little function outside a pleasurable experience."

Note, there is no mention in this conclusion of dance, or displaying behaviours. Avian species are well known for their exquisite courtship displays, for example, the male peacock will display his phenomenal tail feathers and parade, in front of the female, in a ritualistic dance, which to the observer suggests he is showing the female just how wonderful it would be for her to choose this magnificent male as a breeding partner. These displays can be a spectacle to behold to the observer. A naturally kept stallion will dance for his mare, and then they will dance together prior to mating, he will parade around her with his neck arched, tail

raised and penis displayed, showing off his athletic prowess to attract his potential mate, he will, approach her head, sniffing, and offering verbal communication, if she accepts this approach he will then begin a closer dance, they will circle nose to tail, prior to him mounting from the side, just to double check her consent is still there before mounting her fully. If she does not accept his initial approach to the head, and squeals a verbal objection, he will continue to dance for her. Dogs are similar, if allowed to mate naturally without human interference, the male will dance, he will the same as the equine, show his strength of his arched neck, he will begin to display signs of an erect penis prior to approaching the head of the female, usually paying a lot of attention to her neck where she will be secreting scent and inviting him to join her, a female who is ready to mate will encourage this behaviour whereas one who is not will actively offer verbal objections and body language signals of a definite no. This is a very brief explanation of the courtship dances of two species which are considered by contemporary society to be vastly different, yet they both display a remarkably similar dance. Indeed, we can observe similarities in the behaviour of humans, when we consider the afore mentioned night club setting, with flashing lights and music, to help us with the rhythmic music of our bodies, which society had enforced us to forget, but when observed, those humans dancing who are looking for a mate will offer a way more promiscuous display than those who have found an established partner.

Artistic Communication

When we use the arts, (art in the traditional painting or drawing form, or music, poetry, song or drama) we use communication which hold much more in the way of feelings than do written words. For example, it is common in music and songs to repeat a line or two and then to have a 'chorus' which is repeated over and over, this is a really easy way to get the feelings across to the listener. If we sing a 'happy' song, a dancing tune or a ditty, then the listener innately knows that it is a happy tune or ditty, whereas it is also really easy to recognise a funeral 'dirge' or a war song. This is not always due to the song lyrics, but more about how the music makes us feel. There are many famous songs that were written/created as 'morale boosters' during the 2nd world war, you only need to mention the name Vera Lynn to most western allies of a certain generation and they will instantly recall a 'good place' just because of the music, the fact that they listened to the music in the midst of a war when life was so full of uncertainty and atrocity was not the part they remember, they remember the 'good' feelings that the song created. This has been recorded time and again throughout history, with soldiers using music to boost morale during times when fear would take over.

It is the same today, we are living in the middle of a pandemic, and it is a time when a lot of people are scared, are they posting videos to you tube of them crying in a corner? No, most are posting material which is music based and an extremely easy way to connect them to other people in a mood enhancing manner.

The music is trusted to create 'good' feelings in us all. The innate desire for people to create music is there, the need to rid people of the notion that you can only create music after 10000 hours of lessons to 'perfect' the art, and to be able to 'read' the language of dots and lines is a story that needs to be re told. We are each a natural musician, we can all dance to our own

tune. We can all make music, we can communicate to others in this way, possibly saying way more than words alone.

When using arts as communication, humans use the written word, we can create a visual picture in our minds by using words, recognised in our memories to visualise a scene. For example:

Teatime Serenade.

By H, Laurence, (2020)

A cacophony of whinny's,

A symphony of neighs,

An orchestral performance,

Even on the coldest of days.

The songs create a picture,

Puffs of steam, like magic clouds,

The images are wonderful,

And anything but loud,

A range of vocal sounds appear,

Even to the untrained ear.

There are pitches in soprano,

Alto, even base.

There is one who even sounds.

Like he has been sprayed with Mace.

His screams are not quite musical,

They sound more like a pain, He still sings loud; he still sings proud. He sings exceptionally loud. His lack of vocal skills don't count, He wants his tea, this hungry mount, His food is served, the singing stops. Replaced by slurps, and chomps and scoffs. The sounds that follow, make my day. Six happy horses, munching on hay.

The overall shape of the text is recognisable as a poem therefore art, the sounds and descriptive words chosen will cause an instant recall from memory of what the words mean, the likening the animal sounds to those of an orchestra, will allow people to instantly visualise a, an orchestra and b, the animal. Once more using words to depict a happy place. An apt question here perhaps is, what is happy?

Positive Psychology

Pre the mid-1990s, psychology mainly focused upon mental illness, abnormalities, and behaviour, exploring mainly the causes of mainly negative aspects of how and why our brains work and develop. It was widely recognised that mental health issues, were something which pscyhologists and therapists tackled, studied, experimented with, and explored in depth, to, for example, make someone with depression, less depressed, or to make someone with suicidal thoughts, no longer wish to die. These studies were and still are a valuable contribution to the world of psychology. However, in 1994, a new concept or theory was developed. *Martin Seligman*, coined the theory of positive psychology, his hypothesis being that for all it is commendable and necessary to be able to explore and manage mental health conditions, perhaps some of them would not manifest if positive psychology were to be used as a tool prior to the occurrence of such events.

Seligman suggested that if people were experiencing positive emotional experiences rather than negative, then they could begin to change their direction of thought. In turn reducing the detrimental impact of long-term negative emotions on an individual's mental and physical health. He considered what he called "authentic happiness" the hypothesis that people can feel happiness from experiences. His theory refers to The Pleasant Life, this, the innate positive emotions we feel when we experience pleasant sensations such as taste, such as when eating ice cream or when we experience an enjoyable event such as a fairground ride, things we find 'fun'. The engaged life is what is referred to as flow, when an individual becomes totally absorbed in an activity, that they lose track of time, and are not consciously thinking of anything else, they are putting all their focus into engaging with the activity. This occurs in both work and leisure areas of life.

For flow to occur the individual needs to be facing a challenge or a goal of some kind. Flow causes an intrinsic reward and motivation, or the positive energy to do other things or face more challenges.

The meaningful life: [or the ultimate goal in life] However engaging flow activities may be, they can be utterly meaningless and fill a person with a void after some time. For example, after being absorbed in a puzzle and finishing it, one can still feel like life is worthless.

According to *Seligman*, to feel meaning, people need to be engaged in something that serves a goal beyond themselves, such as in religion, politics, or family.

The meaningful life debate continues, as it is often argued that what makes a life meaningful for one person, will not work for another. In fact, there are those who argue that one will never truly find a meaningful life as we live on a continuous journey, and that what may have given you a meaningful life may now not fulfil your needs, for example, when as a mother, you focus your entire life on your children, you raise them, you cater for their every physical and mental need, they are your world, your very existence, your flow. Yet then, they grow up, they leave home, and your focus moves, they are still very much a part of your life, but no longer are you totally absorbed in their every breath. Does this mean that the mother's life is now meaningless or that she needs to find another focus or gain her happiness [or meaning] elsewhere? An argument explored and remaining inconclusive by *Metz* (2001). Studies by *Baumeister* et al, (2020) concluding.

"Happiness was largely present oriented, whereas meaningfulness involves integrating past, present, and future. For example, thinking about future and past was associated with high meaningfulness but low happiness. Happiness was linked to being a taker rather than a giver, whereas meaningfulness went with being a giver rather than a taker. Higher levels of worry, stress, and anxiety were linked to higher meaningfulness but lower happiness. Concerns with personal identity and expressing the self-contributed to meaning but not happiness. We offer brief composite sketches of the unhappy but meaningful life and of the happy but meaningless life." Taking these studies into account, it is indeed that we need a meaning in our lives or as *Seligman* states a meaningful life, but it is still under great debate about what that is, and indeed whether it is necessary in order to gain happiness. *Cohen*, (1980, 2020) suggests that one can only find happiness, or as he describes it "felt sense homeostasis" when all of the 54 felt senses are being applied in any singular moment. If our felt senses are out of sync and we, for example are feeling more of our 25th to 27th sense [Cohen's list of 54 sensory perceptions] then we are feeling too many of the negative emotions or felt senses, once the others begin to gain their place, then the balance shifts from the negative emotions to positive ones and our own homeostasis is restored.

Studies have confirmed that individuals all have different views upon what makes life meaningful, a study of suicidal patients by *Costanza* et al (2020) concluding that "meaningfulness may lie in apparent smallest things".

The discussion of what makes life meaningful will continue with the constant deliberation possibly never ending as we all find different rewards from different areas of our lives. However, the solution that positive thinking goes a long way towards making us 'feel better' is a consistent throughout. Culturally we all adopt differences of what we need to be happy or life a fulfilled life, or what could be considered a subjective wellbeing a contemporary western society ideology will be considerably different to that of a tribal, nomadic society who still follow a hunter gatherer lifestyle and do not include western society ideals in their lives.

So, it has been established that the search for happiness is ongoing and vastly differing between cultures and societies but the need for positivity remains constant.

Positive Mental Attitude, one could even go so far as to say it is the ability to have a PMA which keeps us alive. To be able to 'think positive' is a commonly spoken phase which is used in a plethora of circumstances. As a child growing up in a financially challenged household, there were several times when it would have been easy to develop an attitude of thinking life was rubbish, and that I was constantly unhappy due to the lack of material gains. This was of course not the case and I was raised to see the positive of any situation, this held me in good stead for later life when my [ex]husband suffered a vascular haemorrhage and was left severely disabled by it, my daughter was born with Cystic Fibrosis and later passed away aged 12, and the loss of my entire family in the space of five years. Again, it would have been an easily explained situation had my thoughts and focus turned to negativity and thus suicidal. However, the need to focus upon positive areas, and restore my mental balance was a much-needed key to my own survival.

Positive psychology allows researchers to delve into the reasoning behind what makes us 'feel better' and use the results to allow others to maintain a healthy mental balance and wellbeing.

Both culture and society have a huge impact upon what individuals consider to be happiness. Historically the search for the perfect life has been debated and deliberated by psychologists, philosophers, and laypeople. Each depicting their own version of what makes us happy, whether being happy is the best state, whether we can be happy or do we need more or less of something to be happy.

Happiness is a simple word, yet to find the meaning of it is possibly one of the most difficult, if not impossible areas of psychology, it is a word which manifests many studies, and many variations in the conclusions. Often referred to as objective happiness, and subjective happiness, it is considered by most individuals to be a life goal. We all have an innate desire to be happy, yet many of us do not really know what it is.

Aristotle (384-322bc) stated.

"Now such a thing happiness, above all else, is held to be; for this we choose always for itself and never for the sake of something else, but honour, pleasure, reason, and every virtue we choose indeed for themselves (for if nothing resulted from them we should still choose each of them), but we choose them also for the sake of happiness, judging that through them we shall be happy. Happiness, on the other hand, no one chooses for the sake of these, nor, in general, for anything other than itself."

A plethora of mixed emotions which we choose to repeat, to feel the same good emotions. This principle is still very much in play today when researchers talk of Happiness or subjective well-being is often measured by assessing individuals' judgments of life satisfaction and experience of positive and negative affect.

Objective happiness is possibly easiest described as what one assumes of others. For example, we may view the family over the street, who have a six-figure salary, a bigger house, newer car, three holidays per year and a lifestyle which appears to be the western society version of perfect. We may, without evidence other than visual, assume that they are happy, this of course may be an exceptionally incorrect assumption, but it is also how others see us, whether we are happy or not. Once again, a very often incorrect assumption. We imagine that if we work harder, emulate their way of living and strive to live a parallel life to these people we too would be happy.

It could be suggested that objective happiness, is an imaginary happiness, it is how we imagine happiness to be. Whereas subjective happiness, is how we are really feeling in the moment.

There are so many factors to what makes subjective happiness a reality, that some think it should be measured on a scale the National Health Service (NHS) use a scale coined by Arron Beck (1961) which factors 21 multi-faceted psychometric test aiming to aid the diagnosis of depression.

Beck's Depression Inventory

This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire.

1.	0	I do not feel sad
	1	I feel sad
	2	I am sad all the time and I can't snap out of it
	3	I am so sad and unhappy that I can't stand it
	<u> </u>	
2.	0	I am not particularly discouraged about the future
	1	I feel discouraged about the future
	2	I feel I have nothing to look forward to
	3	I feel the future is hopeless and that things cannot
		improve
	L	
3.	0	I do not feel like a failure
	1	I feel I have failed more than the average person
	2	As I look back on my life, all I can see is a lot of failures
	3	I feel I am a complete failure as a person
	1	
4.	0	I get as much satisfaction out of things as I used to

	1	I don't enjoy things the way I used to
	2	I don't get real satisfaction out of anything anymore
	3	I am dissatisfied or bored with everything
5.	0	I don't feel particularly guilty
	1	I feel guilty a good part of the time
	2	I feel quite guilty most of the time
	3	I feel guilty all of the time
6.	0	I don't feel I am being punished
	1	I feel I may be punished
	2	I expect to be punished
	3	I feel I am being punished
I		
7.	0	I don't feel disappointed in myself
	1	I am disappointed in myself
	2	I am disgusted with myself
	3	I hate myself
8.	0	I don't feel I am any worse than anybody else
	1	I am critical of myself for my weaknesses or mistakes
	2	I blame myself all the time for my faults

	3	I blame myself for everything bad that happens
9.	0	I don't have any thoughts of killing myself
	1	I have thoughts of killing myself, but I would not carry
		them out
	2	I would like to kill myself
	3	I would kill myself if I had the chance
10.	0	I don't cry any more than usual
	1	I cry more now than I used to
	2	I cry all the time now
	3	I used to be able to cry, but now I can't cry even though I
		want to
11.	0	I am no more irritated by things than I ever was
	1	I am slightly more irritated now than usual
	2	I am quite annoyed or irritated a good deal of the time
	3	I feel irritated all the time
12.	0	I have not lost interest in other people
	1	I am less interested in other people than I used to be
	2	I have lost most of my interest in other people

	3	I have lost all of my interest in other people
13.	0	I make decisions about as well as I ever could
	1	I put off making decisions more than I used to
	2	I have greater difficulty in making decisions more than I
		used to
	3	I can't make decisions at all anymore
I		
14.	0	I don't feel that I look any worse than I used to
	1	I am worried that I am looking old or unattractive
	2	I feel there are permanent changes in my appearance that
		make me look unattractive
	3	I believe that I look ugly
·		
15.	0	I can work about as well as before
	1	It takes an extra effort to get started at doing something
	2	I have to push myself very hard to do anything
	3	I can't do any work at all
I		
16.	0	I can sleep as well as usual
	1	I don't sleep as well as I used to

	2	I wake up 1-2 hours earlier than usual and find it hard to
		get back to sleep
	3	I wake up several hours earlier than I used to and cannot
		get back to sleep.
17.	0	I don't get more tired than usual
	1	I get tired more easily than I used to
	2	I get tired from doing almost anything
	3	I am too tired to do anything
18.	0	My appetite is no worse than usual
	1	My appetite is not as good as it used to be
	2	My appetite is much worse now
	3	I have no appetite at all anymore
19.	0	I haven't lost much weight, if any, lately
	1	I have lost more than five pounds
	2	I have lost more than ten pounds
	3	I have lost more than fifteen pounds
20.	0	I am no more worried about my health than usual
	1	I am worried about physical problems like aches, pains,
		upset stomach, or

		Constipation
	2	I am very worried about physical problems and it's hard
		to think of much else
	3	I am so worried about my physical problems that I cannot
		think of anything else
21.	0	I have not noticed any recent change in my interest in sex
	1	I am less interested in sex than I used to be
	2	I have almost no interest in sex
	3	I have lost interest in sex completely

Interpreting Beck's Inventory

Now that you have completed the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three. This would mean you circled number three on all twenty-one questions. Since the lowest possible score for each question is zero, the lowest possible score for the test would be zero. This would mean you circles zero on each question. You can evaluate your depression according to the Table below.

Total Score_____ Levels of Depression

- 1-10 _____ These ups and downs are considered normal
- 11-16_____Mild mood disturbance

- 17-20_____Borderline clinical depression
- 21-30_____Moderate depression
- 31-40_____Severe depression
- Over 40 _____ Extreme depression

McGreal & Joseph (1993) argued that perhaps, those who score 1-10 on this scale, are indeed happy.

However, researcher Sarah White (2020) argues whether happiness is an actual thing, or is it a marketing concept by the media exploitation in order for us to persue objective happiness, when all the while we may not be happy at all?

"The fabled variety in understandings and usage of happiness and wellbeing notwithstanding, their ubiquity can be read as marking a widespread cultural anxiety – a critical sense that something is missing, the uneasy 2 feeling that at some deep level, all may not be well. The fact that the current preoccupation with happiness and wellbeing crosses discourses of the self and social policy suggests that its root may be common to both."

Michalos (1997) suggesting a similar argument when asked if education is the key to happiness, he concluded that it may well be influential in gaining monetary wealth, it does not equate to happiness, and he suggests that again, it is a created concept, this time politically driven to suggest that happiness can be gained by education.

Studies into whether those who are from a sound socio-economic background and live a financially sound lifestyle can be seen to be considered subjectively happy, yet a study by *Feuentes & Rojas* (2001) discovered that there appears to be limited difference between those with higher incomes and those from a deprived socio economic area, as they "found that income does not have a strong influence on neither well-being nor on the probability of happiness. However, people tend to overstress the impact that additional income would have on their subjective well-being. This fact could explain the importance that people place on increasing their income level, and it could possibly explain the relative sense of dissatisfaction once a higher income level is achieved."

It could be questioned whether subjective happiness, is enough to give us this hedonistic sensation. In other words, are we ever satisfied to the point where we do not want anything more. Are we ever rich enough to be happy?

If we take these and copious other studies into consideration, it will seem that contemporary society have a desire to feel hedonistic happiness, in other words, we seem to hold an innate desire to be well, and satisfied, to hope that the positive experiences in our existence outweigh the negatives and that we are financially able to purchase the comforts we desire to make this happen.

To live in such a hedonistic way, may make one feel better [happy] for a brief period, until the feeling of dissatisfaction becomes such that one makes another goal to strive for, we would again perhaps describe ourselves as being happy once the goal is achieved, for example, we bought another car, a bigger, more powerful, faster model than our last one. There is of course an alternative to this, Eudemonic Happiness, a term which could also be described as holistic happiness, a more fulfilled life, one where the concentration is on what we have now rather than the constant striving for more.

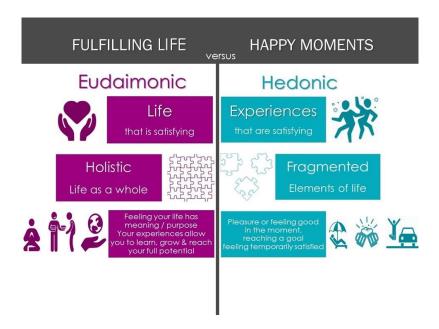


Figure 7 Eudemonic versus Happy Moments

It could be suggested that a eudemonic lifestyle is more fulfilling to an individual, because the outcome is that of self-realisation rather than constant goal setting.

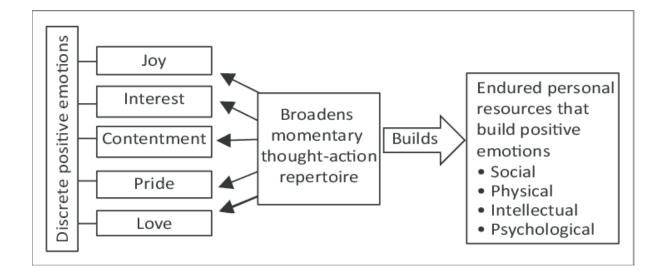
The holistic [or eudemonic] approach to life is seen by many as a method of wellbeing. When we are 'well' it is more than simple happiness, as happiness as a word has little meaning, et al (2020) suggesting that happiness is often "Mis-Measured" due to the words we associate with being what we perceive as happy, stating: "subjective well-being reflects an overall evaluation of the quality of a person's life from her own perspective. In other words, happiness, operationalized as subjective well-being, is cognitive in nature because it consists of people's own judgments of their life as a whole [and] As such, it is influenced by what is salient in people' minds at the moment of the assessment. Indeed, global judgments of happiness are based on previous experiences that have caused evaluative reactions and emotional reactions."

In other words, if we think we are fulfilled socially, emotionally, and psychologically, then we are more likely to see ourselves as happy. If there remains a need within which still feels unfulfilled, we will most likely find ourselves searching for more.

Positive Emotions and Well Being

When we consider emotions, it is fair to suggest that we experience a plethora of them. Positive pscyhologists look at both the positive and negative emotions to gain a picture of how an individual is feeling. For example, if an individual were to say they were feeling anxious, scared, angry, guilty, then these are clearly negative emotions, they are all negative effect 'feel bad' emotions, but if the person were to say they were feeling, happy, content, elation, then they are suggesting that they are experiencing positive effect [feel good] emotions.

Fredrickson (1998) coined the Broaden and Build theory, her hypothesis being that if an individual uses their positive emotions and allows them to broaden their thought/action repertoire, they will then build more positive emotions which can undo negative moments.



Fredrickson's rationale is that positive emotions can undo the effects of negative emotions, and even stop the negative emotions from occurring, however it is considered that they do not override each other, but often occur together, with the positive emotions allowing the physical changes to take place in the brain which will encourage the action brought about by the positive emotions. Therefore, appearing to have a positive effect. Moreover, the concept that positive emotion builds resilience, and the ability to comeback from a negative event with minimum effect therefore improving well-being.

To life a fulfilled life, it is argued by *Seligman* (2002) that it is necessary to encompass the PERMA theory in our lives

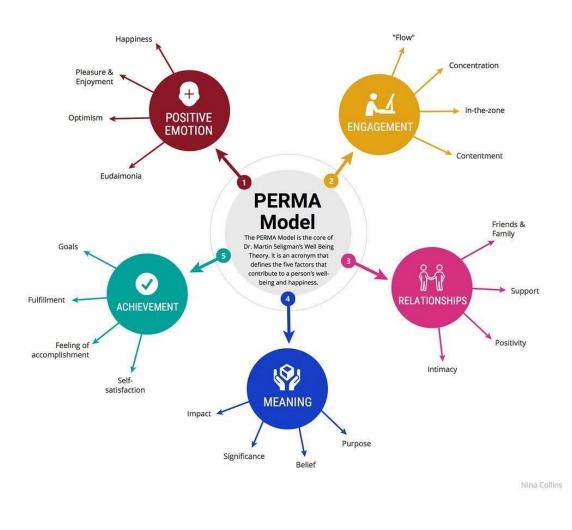


Figure 8 The PERMA Model

The above model offers an example of how the PERMA model operates, *Seligman* believing that if we achieve all this model our lives will be fulfilled, and to have a fulfilled life means our well being is maximised.

Well-being is a terminology which is now commonplace in the workplace, educational establishments and daily life.

Chen et al (2020) state that individuals are responsible for their own wellbeing, yet, if this is the case, why are so many people driven by their desires? For example, we know that from a physical health perspective, consuming too much high calory food or sweet treats such as chocolate, fizzy drinks or alcohol can have a seriously detrimental effect. We can live a healthy life without consuming these things at all, but our desire to gain the pleasurable emotional effects from their consumption is great, therefore, we carry on consuming way more than is healthy for us. This point, according to *Echevarria* (2020) is something which we do not have conscious control over, he suggests,

"Desires, insofar as they are emotions, apparently belong to the non-rational and not free sphere of the human being, and are often activated without the participation of reason, will and consciousness."

Yet, we continue to indulge, the need to 'feel good' again at the fore. The mind has now found its own way to cope with negative input, the consumption of these foods, will and do allow the release of endorphins which in turn offer a chemical 'feel good'. This effect is temporary and will never be the responsible way to manage our wellbeing. It would be safe to agree in this case with both studies, in that yes, we are responsible for our own wellbeing, we consciously know what is best for our overall health and well-being, yet we are still, at times driven by the desires we possess for an instant chemical boost of 'feel good'.

If we refer once again to the PERMA model, it is simple to see how the temporary feel good is not in fact a part of living a fulfilled life but more of the equivalent to sticking a band aid on an infected wound. It may no longer bleed, but it is by no means going to heal. This behaviour is atypical of a coping mechanism many adopt during times of crisis. We are currently residing amid a global pandemic. Studies by *Avery* et al (2020) found an association between both stress and anxiety and increased alcohol use, where higher levels of stress and anxiety were more likely to report an increase in alcohol consumption. *Ramalho* (2020) stating.

"The time for action is now, and all necessary measures to prevent an increase in alcohol related problems should be adopted. At the same time, healthcare services should also prepare for such potential increase, while adapting to the exceptional circumstances presented by the pandemic, such as physical distancing".

Vandebruggen et al (2020) also noting an increase in consumption of alcohol, and cannabis consumption since the beginning of the pandemic.

A longitudinal analysis of adults in the UK carried out by *O'connor* et al (2020) concluding that there was indeed an increased volume of the consumption of alcolol, drugs and comfort foods, used as a comforting or coping mechanism during a period of extreme anxiety and fear, yet those who took part in the study reported a positive change to their well-being, with the mental health of participants improving the longer they are exposed to the pandemic lifestyle.

Such adaption allows us to envisage that indeed, as a population, the majority are indeed responsible for their own well-being and that of those around them, in that, during a crisis period, there was reliance upon artificial coping aids, yet, once the new pandemic routine was established, the reliance in the majority relaxed and they began to explore how to life a fulfilled life in the situation they were in. Allowing them to flourish and even savour the time they were having to spend in their new 'normal'.

Happiness and The Facts of Life

Life, a unique experience lived by us all, whether we have a happy life is again unique to every one of us.

There are factors we can consider which can be used as markers for research purposes, for example, we can look at age groups, and use developmental stages as the marker for our assessment, we could for example look at teenagers, and ask them which is the happiest part of their lives, they may say right now at this time, they might reflect upon their childhood and say the time when they were in primary school or Christmas when they were four. This is of course a hypothetical example, and not one which we can consider accurate, because the life of a teenager is just that, teenage. They have the experiences they have lived through up until that point and can give an opinion or answer, but it will never have the same results for example if we asked the same question to a retired company CEO who hit billionaire status when he was 60. His reflection would be vastly different, he may say it was when he made his money, he may look at when he me his life partner, he could go back to any point

during his life and he obviously would have many more experiences to draw upon to consider when he was happiest.

It would be prevalent to suggest that the most important time to feel happy, is of course right now, in the moment. In this instance I am referring to the terminology happy as the balanced, calm, positive feelings which offer stability and comfort to our well-being. Learning to accept the moment and experience your now is a way to gaining your homeostasis, your feeling of happiness. (Cohen,2020)

Researchers have looked at the impact of where we live on our happiness, *Gros-Manos & Shimini* (2020) discovering "that children living in the urban periphery presented significantly lower subjective well-being compared to children in the center and the rural periphery. Significant interaction effect demonstrates that children living in the center who possess fewer material resources are at higher risk for negative impact on their social well-being"

Which would appear to imply that to be happy, children need material goods, perhaps a bias study. *Berry & Okulicz-Kozaryn* (2013) discovered that children appear to be happier in nature, living in a rural setting with few material goods and less peer pressure than those living in urban areas. An argument backed up by *Burger* et al (2020) who conclude that there are lower numbers of children living in a rural setting yet there are more of them appear to show that they are happier by comparison to those in an urban environment.

The studies did not consider other factors which could be considered such as parental relationship stability nor the socioeconomic factor which may influence the subjective happiness of the children. Nor did they appear to look at gender.

The paradox of gender is a complex one, plainly, there are obvious, physical, and biological differences in gender which need to be considered. However, there are also emotional differences too, with studies showing that women experience more positive emotions than men but are also more likely to involve dysphoric emotions when faced with a moral dilemma too. *Cordilleri* et al (2020) finding the gender gap a large one when it came to a moral choice. *Tella* et al (2020) concluding that women were more empathetic than men when they studied the difference in the views of men and women regarding sex, an argument validated by *Rattel* et al (2020) who suggested that women were more emotionally involved and showed more emotional responses when viewing a sexual scene than men did.

Historically, sex was associated with marriage, and the ideal of many women was that happiness could only be achieved by getting married to a gentleman of good moral standing, who was financially sound and could allow them to be cared for in return for bearing children and keeping house. Of course, it helped if the woman could form an emotional attachment to the man, and 'love' him, and he return the feelings. This ideal was promoted by the media, in novels and the church.

This ideal was prevalent in the 1970s and earlier when it was culturally acceptable and considered the way to live. However, studies by *Betsy & Wolfers* (2009) showed that the gap

between genders was becoming narrower in that women were reporting their subjective happiness to be less however, the report also suggested that the subjective happiness of men was higher. Research by *Mencorini & Sironi* (2012) suggesting that the closure of the gap was due to the gender inequality regarding housework and the traditionally accepted role which was now considered to be outdated and that women were now equal to men with regards to societies acceptance of these roles.

When we consider these things, it could be questioned whether the actual marriage is the crux of the happiness, or whether we are romantically swayed by media and society to think we are happy.

It is proven that well-being campaigns have a positive impact upon the subjective happiness and well-being of those who participate. *Lee & Yoon* (2020) concluding this.

Considering all the factors we consider to be included in our quest to be happy, the need to accept who we are and our surroundings in the moment, rather than to live by the ideology of others will indeed allow us to experience more positive emotions than if we carried on searching for happiness.

CONCLUSION

If as previously discussed, humans and animals are all able to experience the fifty four felt sensory perceptions depicted by *Cohen*, (2021) then it could be suggested that both humans and animals can experience happiness when they are in the moment which they recognise the fifty four senses, they do not have to experience them in one scenario, but the recognition of which ones need to be rebalanced is innate, and all species possess the innate ability to naturally gain their homeostasis. The use of the arts in one of the many associated forms can be utilised to regain homeostasis in both humans and animals, thus recognising therefore increasing the bond between them.

The regaining of homeostasis is the route of all healing, whether biological, mental, or physical, the use of the arts enhances the healing process of healing in both humans and animals.

Both humans and animals can gain mood changes and homeostasis from experiencing the natural phenomenon of the innate artistic abilities in all species. Thus, gaining mental and physical homeostasis and increasing the recognition of the human animal bond.

BIBLIOGRAPHY

(n.d.). Retrieved December 07, 2020, from

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7544945/

- (n.d.). Retrieved December 08, 2020, from https://academic.oup.com/esr/article abstract/28/2/203/485932
- (n.d.). Retrieved December 08, 2020, from https://books.google.co.uk/books?hl=en
- (n.d.). Retrieved December 10, 2020, from https://psyarxiv.com/3s4nr/
- (n.d.). Retrieved December 12, 2020, from https://academic.oup.com/mtp/articleabstract/32/2/118/2857059
- (n.d.). Retrieved December 12, 2020, from https://www.bing.com/search?FORM=SLBRDF%2Chttps%3A%2F%2Fberlinwisdo mmodel.weebly.com%2Fcompeting-theories.html
- (n.d.). Retrieved December 17, 2020, from https://books.google.co.uk/books?hl=en
- (n.d.). Retrieved January 13, 2021, from https://osf.io/preprints/socarxiv/q9b23/
- (n.d.). Retrieved May 31, 2020, from https://www.bing.com/search?FORM=SLBRDF
- (n.d.). Retrieved May 31, 2020, from https://www.bing.com/search?FORM=SLBRDF
- (n.d.). Retrieved November 14, 2020, from https://heinonline.org/HOL/LandingPage?handle=hein.journals%2Fjrlsasw47
- (n.d.). Retrieved November 14, 2020, from https://heinonline.org/HOL/LandingPage?handle=hein.journals%2Fjrlsasw47

- (n.d.). Retrieved October 03, 2020, from https://www.bing.com/images/search?view=detailV2
- (n.d.). Retrieved October 03, 2020, from https://www.bing.com/images/search?view=detailV2
- (n.d.). Retrieved October 19, 2020, from https://www.apa.org/topics/therapy/psychotherapy-approaches
- (n.d.). Retrieved October 19, 2020, from https://www.apa.org/topics/therapy/psychotherapy-approaches
- (n.d.). Retrieved October 22, 2020, from https://academic.oup.com/brain/article/139/5/1605/2468755
- (n.d.). Retrieved October 22, 2020, from https://academic.oup.com/brain/article/139/5/1605/2468755
- (n.d.). Retrieved October 22, 2020, from https://www.nhs.uk/conditions/clinicaldepression/diagnosis/
- (n.d.). Retrieved October 22, 2020, from https://www.nhs.uk/conditions/clinicaldepression/diagnosis/
- (n.d.). Retrieved October 23, 2020, from https://www.nhs.uk/conditions/panic-disorder/
- (n.d.). Retrieved October 23, 2020, from https://www.nhs.uk/conditions/panic-disorder/
- (n.d.). Retrieved October 25, 2020, from https://www.nhs.uk/conditions/body-dysmorphia/
- (n.d.). Retrieved October 25, 2020, from https://www.nhs.uk/conditions/body-dysmorphia/
- (n.d.). Retrieved October 26, 2020, from https://www.nhs.uk/conditions/attention-deficithyperactivity-disorder-adhd/

(n.d.). Retrieved October 26, 2020, from https://www.nhs.uk/conditions/schizophrenia/

- (n.d.). Retrieved October 26, 2020, from https://www.nhs.uk/conditions/attention-deficithyperactivity-disorder-adhd/
- (n.d.). Retrieved October 26, 2020, from https://www.nhs.uk/conditions/schizophrenia/
- (n.d.). Retrieved October 26, 2020, from https://www.uhs.nhs.uk/OurServices/Brainspineandneuromuscular/Neurology/Cognit ive-disorders/Useful-information.aspx
- (n.d.). Retrieved October 26, 2020, from https://www.uhs.nhs.uk/OurServices/Brainspineandneuromuscular/Neurology/Cognit ive-disorders/Useful-information.aspx
- (n.d.). Retrieved September 23, 2020, from http://ecopsych.com/mjcohen.html
- (n.d.). Retrieved September 23, 2020, from http://ecopsych.com/mjcohen.html
- (n.d.). Retrieved September 23, 2020, from http://www.ecopsychology.org/journal/ezine/ep_origins.html
- (n.d.). Retrieved September 23, 2020, from http://www.ecopsychology.org/journal/ezine/ep_origins.html
- (PDF) The Big Five, Type A Personality, and Psychological Well-Being. (n.d.). Retrieved December 10, 2020, from https://www.researchgate.net/publication/323320339_The_Big_Five_Type_A_Perso nality_and_Psychological_Well-Being
- A Hacettepe University Faculty of Health Sciences. (n.d.). Effectiveness of the virtual reality on cognitive function... : International Journal of Rehabilitation Research. Retrieved December 23, 2020, from

https://journals.lww.com/intjrehabilres/Abstract/2020/03000/Effectiveness_of_the_virtual_reality_on_cognitive.3.aspx

- A.. Abbey, F., F.M.. Andrews, S., P.. Brickman, D., A.. Campbell, P., Cantril, H., E..
 Diener, C., . . . Veenhoven, R. (1985, January 01). Economic Theory and Subjective Well-being: Mexico. Retrieved November 30, 2020, from https://link.springer.com/article/10.1023/A:1007189429153
- A_Chupcavich Follow. (2011, February 13). Ch. 1 intro to psych.key. Retrieved October 11, 2020, from https://www.slideshare.net/A_Chupcavich/ch-1-intro-to-psychkey
- A_Chupcavich Follow. (2011, February 13). Ch. 1 intro to psych.key. Retrieved October 11, 2020, from https://www.slideshare.net/A_Chupcavich/ch-1-intro-to-psychkey
- Abel, S. (2020, December 17). Biederman's recognition by components theory Cognitive Psychology. Retrieved January 03, 2021, from https://www.doctorabel.us/cognitivepsychology/biedermans-recognitionbycomponents-theory.html
- Adamjee, M. (2020, April 25). Using Mirror Therapy for Stroke Rehabilitation. Retrieved October 14, 2020, from http://commons.lib.niu.edu/handle/10843/22406
- Adamjee, M. (2020, April 25). Using Mirror Therapy for Stroke Rehabilitation. Retrieved October 14, 2020, from http://commons.lib.niu.edu/handle/10843/22406
- Additional informationFundingThis work was supported by an operating grant of the Canadian Institutes of Health Research awarded to Jens C. Pruessner (MOP125913). (n.d.). Laughter yoga reduces the cortisol response to acute stress in healthy individuals. Retrieved December 15, 2020, from https://www.tandfonline.com/doi/abs/10.1080/10253890.2020.1766018
- Additional informationNotes on contributorsKevin Guyan Kevin Guyan is an independent scholar, & Browne, R. (n.d.). Constructing a queer population? Asking about sexual

orientation in Scotland's 2022 census. Retrieved January 17, 2021, from https://www.tandfonline.com/doi/full/10.1080/09589236.2020.1866513

- Alexandrova, A., J. E., Applegate, K., M. W., Bauer, K., Bentham, J., Crocker, R., E., Diener, J., . . D., Witter, M. (1970, January 01). Education, Happiness and Wellbeing. Retrieved November 30, 2020, from https://link.springer.com/article/10.1007/s11205-007-9144-0
- Allardt, E., R., Andorka, I., E. M., Andresen, B., E. M., Andresen, B., Andrews, F., F. M., Andrews, S., . . . J. E., Ware, K. (1975, January 01). Social Indicators Research and Health-Related Quality of Life Research. Retrieved November 30, 2020, from https://link.springer.com/article/10.1023/A:1025592219390
- Alsop- Shields, L., & Mohay, H. (2001, December 20). John Bowlby and James Robertson: Theorists, scientists and crusaders for improvements in the care of children in hospital. Retrieved June 06, 2020, from https://onlinelibrary.wiley.com/doi/full/10.1046/j.1365-2648.2001.01821.x?casa_token=HPiNzzYNso4AAAAA%3AGI8qEc7G641AnavXN RbdyHBCXekAImFORCMVuuIN7uRTXc-QexaCFVgneTFlGL786PHbRp3jlxRVw
- Alsop- Shields, L., & Mohay, H. (2001, December 20). John Bowlby and James
 Robertson: Theorists, scientists and crusaders for improvements in the care of
 children in hospital. Retrieved June 06, 2020, from
 https://onlinelibrary.wiley.com/doi/full/10.1046/j.13652648.2001.01821.x?casa_token=HPiNzzYNso4AAAAA%3AGI8qEc7G641AnavXN
 RbdyHBCXekAImFORCMVuuIN7uRTXc-QexaCFVgneTFlGL786PHbRp3jlxRVw
- Alworth, L. C., & Buerkle, S. C. (2013, January 22). The effects of music on animal physiology, behavior and welfare. Nature News. https://www.nature.com/articles/laban.162.

- Amaya, V., Descovich, K., Paterson, M. B. A., & Phillips, C. J. C. (2020, December 23). Effects of Music Pitch and Tempo on the Behaviour of Kennelled Dogs. MDPI. https://www.mdpi.com/2076-2615/11/1/10.
- American Psychological Association. *APA PsycNet*. American Psychological Association. https://psycnet.apa.org/doiLanding?doi=10.1037%2F0033-295X.114.4.864.
- An Urban-Rural Happiness Gradient. (n.d.). Retrieved December 08, 2020, from https://www.tandfonline.com/doi/abs/10.2747/0272-3638.32.6.871
- Angrist, Pischke, Baker, M., Gruber, J., Milligan, K., Bauernschuster, S., . . . Mj. (1970, January 01). Does Starting Universal Childcare Earlier Influence Children's Skill Development? Retrieved June 07, 2020, from https://link.springer.com/article/10.1007/s13524-019-00836-9
- Angrist, Pischke, Baker, M., Gruber, J., Milligan, K., Bauernschuster, S., ... Mj. (1970, January 01). Does Starting Universal Childcare Earlier Influence Children's Skill Development? Retrieved June 07, 2020, from https://link.springer.com/article/10.1007/s13524-019-00836-9
- APA PsycNet. (n.d.). Retrieved December 17, 2020, from https://psycnet.apa.org/record/2020-21910-001
- APA PsycNet. (n.d.). Retrieved June 06, 2020, from https://psycnet.apa.org/doiLanding?doi=10.1037%2F0012-1649.28.5.759
- APA PsycNet. (n.d.). Retrieved June 06, 2020, from https://psycnet.apa.org/doiLanding?doi=10.1037%2F0012-1649.28.5.759
- APA PsycNet. (n.d.). Retrieved November 03, 2020, from https://psycnet.apa.org/record/2020-30723-001

- APA PsycNet. (n.d.). Retrieved November 03, 2020, from https://psycnet.apa.org/record/2020-30723-001
- APA PsycNet. (n.d.). Retrieved November 07, 2020, from https://psycnet.apa.org/journals/apl/79/5/659/
- APA PsycNet. (n.d.). Retrieved November 07, 2020, from https://psycnet.apa.org/journals/apl/79/5/659/
- APA PsycNet. (n.d.). Retrieved October 26, 2020, from https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-3514.51.4.790
- APA PsycNet. (n.d.). Retrieved October 26, 2020, from https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-3514.51.4.790
- Are arranged marriages legal? (n.d.). Retrieved December 15, 2020, from https://www.localsolicitors.com/family-guides/are-arranged-marriages-legal
- Attachment orientations and emotion regulation. (2018, February 14). Retrieved from https://www.sciencedirect.com/science/article/pii/S2352250X18300071

Attwood, T. (n.d.). THE COMPLETE GUIDE TO ASPERGER'S SYNDROME Paperback -

- Autism Spectrum Disorder. (n.d.). Retrieved October 26, 2020, from https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml
- Autism Spectrum Disorder. (n.d.). Retrieved October 26, 2020, from https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml
- Back_to_Aristotle-Mitrouchev.pdf. (n.d.). Retrieved from http://www.ivanmitrouchev.com/pdf/Back_to_Aristotle-Mitrouchev.pdf

- Bakwin, Blum, Bowlby, Edelston, Goldfarb, Harlow, . . . Zazzo. (1970, January 01).
 Loneliness in Infancy: Harry Harlow, John Bowlby and Issues of Separation.
 Retrieved June 06, 2020, from https://link.springer.com/article/10.1007/s12124-008-9071-x
- Bakwin, Blum, Bowlby, Edelston, Goldfarb, Harlow, . . . Zazzo. (1970, January 01).
 Loneliness in Infancy: Harry Harlow, John Bowlby and Issues of Separation.
 Retrieved June 06, 2020, from https://link.springer.com/article/10.1007/s12124-008-9071-x
- Balliett, L. D. (1911). The Symphony of Nature and Its Universal Music.
- Bergsma, A., Buijt, I., & Veenhoven, R. (2020, July 14). Will Happiness-Trainings Make Us Happier? A Research Synthesis Using an Online Findings-Archive. Retrieved December 10, 2020, from https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01953/full?utm_source=F-AAE
- Bernstein, D. A., Pooley, J. A., Cohen, L., Gouldthorp, B., Provost, S. C., & Cranney, J.(2018). *Psychology*. South Melbourne, Victoria: Cengage Learning Australia.
- Bernstein, D. A., Pooley, J. A., Cohen, L., Gouldthorp, B., Provost, S. C., & Cranney, J. (2018). *Psychology*. South Melbourne, Victoria: Cengage Learning Australia.

BIBLIOGRAPHY

- Bobo doll experiment. (2020, August 31). Retrieved October 03, 2020, from https://en.wikipedia.org/wiki/Bobo_doll_experiment
- Bobo doll experiment. (2020, August 31). Retrieved October 03, 2020, from https://en.wikipedia.org/wiki/Bobo_doll_experiment

- Boddy, J. *Spirit Possession Revisited: Beyond Instrumentality*. Annual Reviews. https://www.annualreviews.org/doi/abs/10.1146%2Fannurev.an.23.100194.002203.
- Borodo, M. (1970, January 01). On Cannibals and Savages: Translators' Treatment of Racial Issues. Retrieved October 03, 2020, from https://link.springer.com/chapter/10.1007/978-3-030-38117-2_8
- Borodo, M. (1970, January 01). On Cannibals and Savages: Translators' Treatment of Racial Issues. Retrieved October 03, 2020, from https://link.springer.com/chapter/10.1007/978-3-030-38117-2_8
- Bowe, M., Wakefield, J., Kellezi, B., McNamara, N., Harkin, L., & Jobling, R. (2019, February 28). 'Sometimes, it's not just about the food': The social identity dynamics of foodbank helping transactions. Retrieved November 09, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1002/ejsp.2558
- Bowe, M., Wakefield, J., Kellezi, B., McNamara, N., Harkin, L., & Jobling, R. (2019, February 28). 'Sometimes, it's not just about the food': The social identity dynamics of foodbank helping transactions. Retrieved November 09, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1002/ejsp.2558
- Bunt, L. (2002). Music therapy: an art beyond words. London: Routledge.
- Calosci, A. (1970, January 01). Beyond visual literacy: Communication design as a cultural mediation process. Retrieved October 14, 2020, from https://riull.ull.es/xmlui/handle/915/18478
- Calosci, A. (1970, January 01). Beyond visual literacy: Communication design as a cultural mediation process. Retrieved October 14, 2020, from https://riull.ull.es/xmlui/handle/915/18478

- Carrell, P., & Eisterhold, J. (2012, January 04). Schema Theory and ESL Reading Pedagogy. Retrieved November 09, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.2307/3586613
- Carrell, P., & Eisterhold, J. (2012, January 04). Schema Theory and ESL Reading Pedagogy. Retrieved November 09, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.2307/3586613
- Cattell, R. B. (1979). SCIENTIFIC USE OF FACTOR ANALYSIS IN BEHAVIORAL AND LIFE SCIENCES. NEW YORK ; LONDON: PLENUM PR.
- Cattell, R. B. (1979). SCIENTIFIC USE OF FACTOR ANALYSIS IN BEHAVIORAL AND LIFE SCIENCES. NEW YORK ; LONDON: PLENUM PR.
- Cavalli-Sforza, L. L., Piazza, A., Menozzi, P., & Mountain, J. (1988, August 1). Reconstruction of human evolution: bringing together genetic, archaeological, and linguistic data. PNAS. https://www.pnas.org/content/85/16/6002.short.
- Cherry, K. (2020, March 31). What Are Piaget's Four Stages of Development? Retrieved October 03, 2020, from https://www.verywellmind.com/piagets-stages-of-cognitivedevelopment-2795457
- Cherry, K. (2020, March 31). What Are Piaget's Four Stages of Development? Retrieved October 03, 2020, from https://www.verywellmind.com/piagets-stages-of-cognitivedevelopment-2795457
- Children of Divorcing Families: A Clinical Perspective. (n.d.). Retrieved June 7, 2020, from https://journals.sagepub.com/doi/pdf/10.1177/1359104599004001004
- Children of Divorcing Families: A Clinical Perspective. (n.d.). Retrieved June 7, 2020, from https://journals.sagepub.com/doi/pdf/10.1177/1359104599004001004

- Citkowska-Kisielewska. (n.d.). Obsessive-Compulsive Symptoms in Obsessive-Compulsive... : Journal of Psychiatric Practice®. Retrieved October 25, 2020, from https://journals.lww.com/practicalpsychiatry/Abstract/2020/03000/Obsessive_Compu lsive_Symptoms_in.4.aspx
- Citkowska-Kisielewska. (n.d.). Obsessive-Compulsive Symptoms in Obsessive-Compulsive... : Journal of Psychiatric Practice®. Retrieved October 25, 2020, from https://journals.lww.com/practicalpsychiatry/Abstract/2020/03000/Obsessive_Compu lsive_Symptoms_in.4.aspx
- Clare, A., Camic, P., Crutch, S., West, J., Harding, E., & Brotherhood, E. (2019, December 08). Using Music to Develop a Multisensory Communicative Environment for People with Late-Stage Dementia. Retrieved November 14, 2020, from https://academic.oup.com/gerontologist/article/60/6/1115/5669944
- Clare, A., Camic, P., Crutch, S., West, J., Harding, E., & Brotherhood, E. (2019, December 08). Using Music to Develop a Multisensory Communicative Environment for People with Late-Stage Dementia. Retrieved November 14, 2020, from https://academic.oup.com/gerontologist/article/60/6/1115/5669944
- Clarke-Stewart, A. (1998, March 01). The NICHD Study of Early Child Care. Retrieved June 07, 2020, from https://www.psychiatrictimes.com/child-adolescentpsychiatry/nichd-study-early-child-care
- Clarke-Stewart, A. (1998, March 01). The NICHD Study of Early Child Care. Retrieved June 07, 2020, from https://www.psychiatrictimes.com/child-adolescentpsychiatry/nichd-study-early-child-care
- Cohen, E. (2007). *The mind possessed the cognition of spirit possession in an Afro-Brazilian religious tradition*. Oxford University Press.

Cohen, M. J. (2007). *Reconnecting with nature*. Minnesota: Finney Company. Cohen, M. J. (2018). *Principles of Organic Psychology*. Friday Harbour: PNC

- Comarados. (n.d.). Retrieved from http://shura.shu.ac.uk/26043/1/friends-and-purposeevaluation-of-camerados-PLR.pdf
- Communication difficulty statistics 2019. (n.d.). Retrieved from https://www.thecommunicationtrust.org.uk/media/2612/communication_difficulties_-_facts_and_stats.pdf
- Communication difficulty statistics 2019. (n.d.). Retrieved from https://www.thecommunicationtrust.org.uk/media/2612/communication_difficulties_____facts_and_stats.pdf

Cooper, C. (2002). Individual Differences 2nd Edition. London, UK: Arnold.

Cooper, C. (2002). Individual Differences 2nd Edition. London, UK: Arnold.

- Currie, J., & Goodman, J. (2020, January 17). Parental socioeconomic status, child health, and human capital. Retrieved October 03, 2020, from https://www.sciencedirect.com/science/article/pii/B9780128153918000185
- Currie, J., & Goodman, J. (2020, January 17). Parental socioeconomic status, child health, and human capital. Retrieved October 03, 2020, from https://www.sciencedirect.com/science/article/pii/B9780128153918000185
- Darwin, C. (2018). The origin of species by means of natural selection, or, The preservation of favored races in the struggle for life. IAP.
- Darwin, C., & Barrett, P. H. (1980). *The collected papers of Charles Darwin*. Chicago: University of Chicago Press.
- Darwin, C., & Barrett, P. H. (1980). *The collected papers of Charles Darwin*. Chicago: University of Chicago Press.
- Dean, J. (2020). *The good glow: Charity and the symbolic power of doing good*. Bristol, UK: Policy Press.

- Dean, J. (2020). *The good glow: Charity and the symbolic power of doing good*. Bristol, UK: Policy Press.
- Dijk, J. V. (2020). The network society. London: SAGE.
- Dollard and Miller: Psychoanalytic Learning / Stimulus Response Theory. (n.d.). Retrieved November 15, 2020, from https://psynso.com/dollard-miller-psychoanalytic-learningstimulus-response-theory/
- Dollard and Miller: Psychoanalytic Learning / Stimulus Response Theory. (n.d.). Retrieved November 15, 2020, from https://psynso.com/dollard-miller-psychoanalytic-learningstimulus-response-theory/
- Đorđić, V., Tubić, T., & Jakšić, D. (2016, October 27). The Relationship between Physical, Motor, and Intellectual Development of Preschool Children. Retrieved October 03, 2020, from https://www.sciencedirect.com/science/article/pii/S1877042816313477
- Đorđić, V., Tubić, T., & Jakšić, D. (2016, October 27). The Relationship between Physical, Motor, and Intellectual Development of Preschool Children. Retrieved October 03, 2020, from https://www.sciencedirect.com/science/article/pii/S1877042816313477
- Dr. Stephen Behnke APA Ethics Director. (n.d.). On being an ethical psychologist. Retrieved June 01, 2020, from https://www.apa.org/monitor/julaug05/ethics
- Dr. Stephen Behnke APA Ethics Director. (n.d.). On being an ethical psychologist. Retrieved June 01, 2020, from https://www.apa.org/monitor/julaug05/ethics

Drum Timeline - Important Moments in Drum History. Timeline of Drums - Important Moments in Drum History. http://www.historyofdrums.net/drum-history/timeline-ofdrums/#:~:text=1000-%20500%20BC%20%E2%80%93%20Sri%20Lanka%20and%20African,African%2 0drums%20were%20widespread%20in%20Greece%20and%20Rome.

- DSM-IV-TR. (2013). *Diagnostic and statistical manual of mental disorders DSM-5*. Washington, DC: American Psychiatric Association.
 - Dynamics of wellbeing co creation: A psychological ownership. (n.d.). Retrieved from https://www.emerald.com/insight/content/doi/10.1108/JOSM-09-2019-0297/full/html
 - E. P., Benedeck, D., Bulkley, J., S. J., Ceci, D., Chi, M., R. L., Cohen, M., A. W., Collins, H., . . . Zaragoza, M. (1985, January 01). Children's definitions of the truth and their competency as witnesses in legal proceedings. Retrieved October 02, 2020, from https://link.springer.com/article/10.1007/BF01061712
 - E. P.. Benedeck, D., Bulkley, J., S. J., Ceci, D., Chi, M., R. L., Cohen, M., A. W., Collins, H., . . . Zaragoza, M. (1985, January 01). Children's definitions of the truth and their competency as witnesses in legal proceedings. Retrieved October 02, 2020, from https://link.springer.com/article/10.1007/BF01061712
 - Eccles, J., Barber, B., Stone, M., & Hunt, J. (2003, November 18). SPSSI Journals. Retrieved October 11, 2020, from https://spssi.onlinelibrary.wiley.com/doi/abs/10.1046/j.0022-4537.2003.00095.x
 - Eccles, J., Barber, B., Stone, M., & Hunt, J. (2003, November 18). SPSSI Journals. Retrieved October 11, 2020, from https://spssi.onlinelibrary.wiley.com/doi/abs/10.1046/j.0022-4537.2003.00095.x
 - Echavarría, M. (1970, January 01). Desire and Freedom: Are We Responsible for Our Emotions? Retrieved December 07, 2020, from https://link.springer.com/chapter/10.1007/978-3-030-47001-2_5
 - Edwards, H. (n.d.). From Negative Biases to Positive News: Resetting and Reframing News Consumption for a Better Life and a Better World. Retrieved November 13, 2020, from https://repository.upenn.edu/mapp_capstone/123/

- Edwards, H. (n.d.). From Negative Biases to Positive News: Resetting and Reframing News Consumption for a Better Life and a Better World. Retrieved November 13, 2020, from https://repository.upenn.edu/mapp_capstone/123/
- Ellenbroek, B., & Cools, A. (n.d.). The Long-Term Effects of Maternal Deprivation Depend on the Genetic Background. Retrieved May 31, 2020, from https://www.nature.com/articles/1395496
- Ellenbroek, B., & Cools, A. (n.d.). The Long-Term Effects of Maternal Deprivation Depend on the Genetic Background. Retrieved May 31, 2020, from https://www.nature.com/articles/1395496
- EMedTV. (n.d.). Welcome to the Mental Health Channel. Retrieved October 26, 2020, from http://mental-health.emedtv.com/
- EMedTV. (n.d.). Welcome to the Mental Health Channel. Retrieved October 26, 2020, from http://mental-health.emedtv.com/
- Emery, N. J., & Clayton, N. S. (2015, January 5). Do birds have the capacity for fun? Current Biology. https://www.sciencedirect.com/science/article/pii/S0960982214011403.
- Emery, N. J., & Clayton, N. S. (2015, January 5). Do birds have the capacity for fun? Current Biology. https://www.sciencedirect.com/science/article/pii/S0960982214011403.
- Engelhardt, C., Bartholow, B., Kerr, G., & Bushman, B. (2011, April 05). This is your brain on violent video games: Neural desensitization to violence predicts increased aggression following violent video game exposure. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0022103111000928
- Engelhardt, C., Bartholow, B., Kerr, G., & Bushman, B. (2011, April 05). This is your brain on violent video games: Neural desensitization to violence predicts increased

aggression following violent video game exposure. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0022103111000928

- Eysenck, M. W., & Keane, M. T. (2020). *Cognitive psychology a student's handbook*. London: Psychology Press Taylor & Francis Group.
- Family, Parenting, Pet and Lifestyle Tips That Bring Us Closer Together. (n.d.). Retrieved December 15, 2020, from https://littlethings.com/lifestyle/1950s-good-housewifeguide/1095876-1
- Fathers in Attachment Theory Research. (2009). Retrieved from https://www.tandfonline.com/doi/full/10.1080/03004430903414661?casa_token=Ugs p7RphHscAAAAA%3Az0dLhWKW0kvhHjzUYwIPpGHbBYrt3Kj7eGIb44w5mRb zy8paud3cXSs0BYGXy6XBYc1RL8zIwok
- Fathers in Attachment Theory Research. (2009). Retrieved from https://www.tandfonline.com/doi/full/10.1080/03004430903414661?casa_token=Ugs p7RphHscAAAAA%3Az0dLhWKW0kvhHjzUYwIPpGHbBYrt3Kj7eGIb44w5mRb zy8paud3cXSs0BYGXy6XBYc1RL8zIwok
- Firman, G. (2020, April 01). MedicalCRITERIA.com. Retrieved June 07, 2020, from https://medicalcriteria.com/web/autism5/
- Firman, G. (2020, April 01). MedicalCRITERIA.com. Retrieved June 07, 2020, from https://medicalcriteria.com/web/autism5/
- Firman, G. (2020, April 01). MedicalCRITERIA.com. Retrieved June 07, 2020, from https://medicalcriteria.com/web/autism5/
- Firman, G. (2020, April 01). MedicalCRITERIA.com. Retrieved June 07, 2020, from https://medicalcriteria.com/web/autism5/

- Friedland, J., Emich, K., & Cole, B. (n.d.). Uncovering the moral heuristics of altruism: A philosophical scale. Retrieved November 15, 2020, from https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0229124
- Friedland, J., Emich, K., & Cole, B. (n.d.). Uncovering the moral heuristics of altruism: A philosophical scale. Retrieved November 15, 2020, from https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0229124
- From the archive: 'Testimony and evidence: A scientific case study of memory for child sexual abuse' by S. Bidrose & G. S. Goodman (2000). Applied Cognitive Psychology, 14, 197-213 with commentary. (2011). *Applied Cognitive Psychology*, 25(S1). doi:10.1002/acp.1782
 - Gamers, writers and social media influencers: Professionalisation processes among teenagers. (1970, January 01). Retrieved November 15, 2020, from http://www.revistalatinacs.org/074paper/1328/11en.html
 - Gamers, writers and social media influencers: Professionalisation processes among teenagers. (1970, January 01). Retrieved November 15, 2020, from http://www.revistalatinacs.org/074paper/1328/11en.html
 - Garcia, D., Nima, A., Kjell, O., Granjard, A., & Sikström, S. (1970, January 01). The (Mis)measurement of Happiness: Words We Associate to Happiness (Semantic Memory) and Narratives of What Makes Us Happy (Episodic Memory). Retrieved November 29, 2020, from https://link.springer.com/chapter/10.1007/978-3-030-37250-7_10
 - Garcia, D., Nima, A., Kjell, O., Granjard, A., & Sikström, S. (1970, January 01). The (Mis)measurement of Happiness: Words We Associate to Happiness (Semantic Memory) and Narratives of What Makes Us Happy (Episodic Memory). Retrieved November 30, 2020, from https://link.springer.com/chapter/10.1007/978-3-030-37250-7_10

- Gates, B., JM. Shultz, Y., HS. Kim, D., RS. Lazarus, S., B. Marloes, B., S. Komasi, M., ...
 Greenfield, E. (1970, January 01). When altruists cannot help: The influence of altruism on the mental health of university students during the COVID-19 pandemic.
 Retrieved November 15, 2020, from https://link.springer.com/article/10.1186/s12992-020-00587-y
- Gates, B., JM. Shultz, Y., HS. Kim, D., RS. Lazarus, S., B. Marloes, B., S. Komasi, M., ...
 Greenfield, E. (1970, January 01). When altruists cannot help: The influence of altruism on the mental health of university students during the COVID-19 pandemic.
 Retrieved November 15, 2020, from https://link.springer.com/article/10.1186/s12992-020-00587-y
- Gestalt Principles, why we search whole. (n.d.). Retrieved from https://www.kut.org/post/gestalt-principles-and-why-we-search-whole
- Gestalt Principles, why we search whole. (n.d.). Retrieved from https://www.kut.org/post/gestalt-principles-and-why-we-search-whole
- Global Trends in the Funding of Inclusive Education: A Narrative Review. (n.d.). Retrieved January 13, 2021, from https://www.emerald.com/insight/content/doi/10.1108/S1479-363620210000015006/full/html
- Glover, S. (1970, January 01). [PDF] Visual illusions affect planning but not control: Semantic Scholar. Retrieved January 03, 2021, from https://www.semanticscholar.org/paper/Visual-illusions-affect-planning-but-notcontrol-Glover/5fb0b1de5188f321285ce67f7ae625107287bd01
- Gold, S., Köhler-Forsberg, O., Moss-Morris, R., Mehnert, A., Miranda, J., Bullinger, M., . .
 Otte, C. (2020, August 20). Comorbid depression in medical diseases. Retrieved
 October 19, 2020, from https://www.nature.com/articles/s41572-020-0200-2

- Gold, S., Köhler-Forsberg, O., Moss-Morris, R., Mehnert, A., Miranda, J., Bullinger, M., . .
 Otte, C. (2020, August 20). Comorbid depression in medical diseases. Retrieved
 October 19, 2020, from https://www.nature.com/articles/s41572-020-0200-2
- Goldstein, D. B., Linares, A. R., Cavalli-Sforza, L. L., & Feldman, M. W. (1995, July 18). Genetic absolute dating based on microsatellites and the origin of modern humans. PNAS. https://www.pnas.org/content/92/15/6723.short.

Gómez-Carlier N, Powell, S.. Art therapy for grief and selfcare in medical settings. In: Weber AS, Verjee MA, editors. Proceedings of the 1st International Conference on Medical Humanities in the Middle East [Internet]; 2018 Nov 17-18: Doha, Qatar: Innovations in Global Health Professions Education; 2019 March. p. 36-38. (Innovations in Global Health Professions Education; vol. 2019, spec. no.: 1). https://dx.doi.org/10.20421/ ighpe2019.01.12

Goshwani, U. (1996). *Child Psychology a Very Short Introduction*. Oxford: Oxford. Goshwani, U. (1996). *Child Psychology a Very Short Introduction*. Oxford: Oxford.

- Goswami, U. (2014). *Child psychology: A very short introduction*. Oxford: Oxford University Press.
- Goswami, U. (2014). *Child psychology: A very short introduction*. Oxford: Oxford University Press.

Gravels, A & Simpson, S (2014) *The Certificate in Education and Training*. London:Sage Greensong SOS. (n.d.). Retrieved from <u>https://www.greensong.info/s-o-s#</u>!

- *Grieving in silence: The loss of companion animals in modern society.* Taylor & Francis. https://www.tandfonline.com/doi/abs/10.1080/10811449708414419.
- Gross-Manos, D., & Shimoni, E. (2020, May 01). Where you live matters: Correlation of child subjective well-being to rural, urban, and peripheral living. Retrieved December

08, 2020, from

https://www.sciencedirect.com/science/article/abs/pii/S0743016720301601

- Growth Chart from WHO. (n.d.). Retrieved from https://cdn.kellymom.com/wpcontent/uploads/2012/05/WHOgrowthcht_wfa_girls_p_0_2.jpg
- Growth Chart from WHO. (n.d.). Retrieved from https://cdn.kellymom.com/wpcontent/uploads/2012/05/WHOgrowthcht_wfa_girls_p_0_2.jpg
- Gyldensted, C. (n.d.). Innovating News Journalism through Positive Psychology. Retrieved November 13, 2020, from https://repository.upenn.edu/mapp_capstone/20/
- Gyldensted, C. (n.d.). Innovating News Journalism through Positive Psychology. Retrieved November 13, 2020, from https://repository.upenn.edu/mapp_capstone/20/
- Harlow's Experiments on Attachment Theory. (2019, August 11). Retrieved May 31, 2020, from https://exploringyourmind.com/harlows-experiments-on-attachment-theory/
- Harlow's Experiments on Attachment Theory. (2019, August 11). Retrieved May 31, 2020, from https://exploringyourmind.com/harlows-experiments-on-attachment-theory/
- Hatfield, G. (2014, January 16). René Descartes. Retrieved September 29, 2020, from https://plato.stanford.edu/entries/descartes/
- Hatfield, G. (2014, January 16). René Descartes. Retrieved September 29, 2020, from https://plato.stanford.edu/entries/descartes/

Hayes, N. (1996). Principles of social psychology. Hove: Lawrence Erlbaum Associates.

Hayes, N. (1996). Principles of social psychology. Hove: Lawrence Erlbaum Associates.

Hedge, C., Powel, G., & Petroc, S. (2018). The reliability paradox: Why robust cognitive tasks do not produce reliable individual differences. Retrieved from https://doi.org/10.3758/s3758-017-0931-1

- Hedge, C., Powel, G., & Petroc, S. (2018). The reliability paradox: Why robust cognitive tasks do not produce reliable individual differences. Retrieved from https://doi.org/10.3758/s3758-017-0931-1
- Herek, G. (n.d.). The Psychology of Sexual Prejudice Gregory M. Herek, 2000. Retrieved January 17, 2021, from https://journals.sagepub.com/doi/abs/10.1111/1467-8721.00051
- Hill, K., & Boyd, R. (2021, January 15). Behavioral convergence in humans and animals. Science. https://science.sciencemag.org/content/371/6526/235.
- Hilvert-Bruce, Z., & Neill, J. (2019, September 12). I'm just trolling: The role of normative beliefs in aggressive behaviour in online gaming. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0747563219303310
- Hilvert-Bruce, Z., & Neill, J. (2019, September 12). I'm just trolling: The role of normative beliefs in aggressive behaviour in online gaming. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0747563219303310
- Himanshu, Kaur, A., Kaur, A., & Singla, G. (2020, February 28). Rising dysmorphia among adolescents : A cause for concern. Retrieved October 25, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7114025/
- Himanshu, Kaur, A., Kaur, A., & Singla, G. (2020, February 28). Rising dysmorphia among adolescents : A cause for concern. Retrieved October 25, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7114025/
- Hobeika, L., & Samson, S. (2020, June 05). Why do music-based interventions benefit persons with neurodegenerative disease? Retrieved November 14, 2020, from https://www.sciencedirect.com/science/article/pii/B9780128174227000134

- Hobeika, L., & Samson, S. (2020, June 05). Why do music-based interventions benefit persons with neurodegenerative disease? Retrieved November 14, 2020, from https://www.sciencedirect.com/science/article/pii/B9780128174227000134
- Hobfoll, S. (n.d.). Social and Psychological Resources and Adaptation Stevan E. Hobfoll, 2002. Retrieved January 16, 2021, from https://journals.sagepub.com/doi/10.1037/1089-2680.6.4.307
- How Do "Body Perfect" Ideals in the Media Have a Negative Impact on Body Image and Behaviors? Factors and Processes Related to Self and Identity. (n.d.). Retrieved October 25, 2020, from https://guilfordjournals.com/doi/abs/10.1521/jscp.2009.28.1.1
- How Do "Body Perfect" Ideals in the Media Have a Negative Impact on Body Image and Behaviors? Factors and Processes Related to Self and Identity. (n.d.). Retrieved October 25, 2020, from https://guilfordjournals.com/doi/abs/10.1521/jscp.2009.28.1.1
- Humphrey, N. (2013). A History of the Mind: Evolution and the Birth of Consciousness. Cork: BookBaby.

Increase Personal And Planet Wellness. (n.d.). Retrieved from http://projectnatureconnect.org/

- Individual Differences in Personality. (n.d.). Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/jopy.12327
- Individual Differences in Personality. (n.d.). Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/jopy.12327
- Infant-mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. (n.d.). Retrieved from https://psycnet.apa.org/record/1975-07118-004
- Infant-mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. (n.d.). Retrieved from https://psycnet.apa.org/record/1975-07118-004

- Is Justice Really Blind? Effects of Crime Descriptions, Defendant Gender and Appearance, and Legal Practitioner Gender on Sentences and Defendant Evaluations in a Mock Trial. (n.d.). Retrieved November 13, 2020, from https://www.tandfonline.com/doi/abs/10.1080/13218710903566896
- Is Justice Really Blind? Effects of Crime Descriptions, Defendant Gender and Appearance, and Legal Practitioner Gender on Sentences and Defendant Evaluations in a Mock Trial. (n.d.). Retrieved November 13, 2020, from https://www.tandfonline.com/doi/abs/10.1080/13218710903566896
- Isaac, A. (2019, January 24). Realism without tears II: The structuralist legacy of sensory physiology. Retrieved October 11, 2020, from https://www.sciencedirect.com/science/article/pii/S0039368118301201
- Isaac, A. (2019, January 24). Realism without tears II: The structuralist legacy of sensory physiology. Retrieved October 11, 2020, from https://www.sciencedirect.com/science/article/pii/S0039368118301201
- J. Agerström, F., DP. Aldrich, R., A. Aleman, M., S. Baron-Cohen, S., CW. Bauman, A., CL. Beal, A., . . . N. Yacker, S. (1970, January 01). Gender Differences in Solving Moral Dilemmas: Emotional Engagement, Care and Utilitarian Orientation. Retrieved December 08, 2020, from https://link.springer.com/article/10.1007/s12646-020-00573-9
- J. Archer, I., NS. Bauer, T., MJ. Breiding, M., AH. Buss, M., AH. Buss, W., Deeanna M.. Button, R., . . . D. Wolke, N. (1970, January 01). Relationships Between Experiences of Sibling Physical Aggression and Lifetime Aggression Using Statistical Controls for Poly-Victimization. Retrieved November 15, 2020, from https://link.springer.com/article/10.1007/s10896-020-00134-8
- J. Archer, I., NS. Bauer, T., MJ. Breiding, M., AH. Buss, M., AH. Buss, W., Deeanna M.. Button, R., . . . D. Wolke, N. (1970, January 01). Relationships Between Experiences of Sibling Physical Aggression and Lifetime Aggression Using Statistical Controls

for Poly-Victimization. Retrieved November 15, 2020, from https://link.springer.com/article/10.1007/s10896-020-00134-8

- Jamil, S., Shoaib, M., Aziz, W., & Ather, M. (2019, November 05). Does male factor infertility impact on self- esteem and sexual relationship? Retrieved December 10, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1111/and.13460
- Jeong, H., Lee, H., Kwon, Y., Yim, H., & Lee, S. (2019, December 23). Gaming disorder and bidirectional relationships with aggression and impulsivity. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/pii/S2352154619301342
- Jeong, H., Lee, H., Kwon, Y., Yim, H., & Lee, S. (2019, December 23). Gaming disorder and bidirectional relationships with aggression and impulsivity. Retrieved November 15, 2020, from https://www.sciencedirect.com/science/article/pii/S2352154619301342
- Jordane Boudesseul, L. (n.d.). An Evolutionary Approach to Binge Drinking Impression Formation: A Cross-Cultural Comparison Between France and Peru - Jordane Boudesseul, Luc Vieira, Laurent Bègue, 2020. Retrieved November 03, 2020, from https://journals.sagepub.com/doi/full/10.1177/1474704919897602
- Jordane Boudesseul, L. (n.d.). An Evolutionary Approach to Binge Drinking Impression Formation: A Cross-Cultural Comparison Between France and Peru - Jordane Boudesseul, Luc Vieira, Laurent Bègue, 2020. Retrieved November 03, 2020, from https://journals.sagepub.com/doi/full/10.1177/1474704919897602

Jung, C. G. (1986). Analytical psychology: Its theory and practice. London: ARK.

Keenan, T. (2016). An introduction to child development. London: SAGE.

Keenan, T. (2016). An introduction to child development. London: SAGE.

- King, B. J. Animal mourning: Précis of How animals grieve (King 2013). WBI Studies Repository. https://www.wellbeingintlstudiesrepository.org/animsent/vol1/iss4/1/.
- Koluchová, J. (2006, December 07). SEVERE DEPRIVATION IN TWINS: A CASE STUDY. Retrieved June 06, 2020, from https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-7610.1972.tb01124.x
- Koluchová, J. (2006, December 07). SEVERE DEPRIVATION IN TWINS: A CASE STUDY. Retrieved June 07, 2020, from https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-7610.1972.tb01124.x
- Koluchová, J. (2006, December 07). SEVERE DEPRIVATION IN TWINS: A CASE STUDY. Retrieved June 06, 2020, from https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-7610.1972.tb01124.x
- Koluchová, J. (2006, December 07). SEVERE DEPRIVATION IN TWINS: A CASE STUDY. Retrieved June 07, 2020, from https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/j.1469-7610.1972.tb01124.x
- Korkiakangas, T., Dindar, K., Laitila, A., & Kärnä, E. (2016, May 17). The Sally–Anne test: An interactional analysis of a dyadic assessment. Retrieved June 07, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1111/1460-6984.12240?deniedAccessCustomisedMessage=
- Korkiakangas, T., Dindar, K., Laitila, A., & Kärnä, E. (2016, May 17). The Sally–Anne test: An interactional analysis of a dyadic assessment. Retrieved June 07, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1111/1460-6984.12240?deniedAccessCustomisedMessage=
- Lai, W., Yang, Z., Mao, Y., Zhang, Q., Chen, H., & Ma, J. (2020, June 06). When Do Good Deeds Lead to Good Feelings? Eudaimonic Orientation Moderates the Happiness Benefits of Prosocial Behavior. Retrieved November 15, 2020, from https://www.mdpi.com/1660-4601/17/11/4053

- Lai, W., Yang, Z., Mao, Y., Zhang, Q., Chen, H., & Ma, J. (2020, June 06). When Do Good Deeds Lead to Good Feelings? Eudaimonic Orientation Moderates the Happiness Benefits of Prosocial Behavior. Retrieved November 15, 2020, from https://www.mdpi.com/1660-4601/17/11/4053
- Landau, I. (2020, September 03). Externalism, internalism, and meaningful lives. Retrieved November 29, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1111/rati.12290
- Langan, R., & Goodbred, A. (2016, May 15). Identification and Management of Peripartum Depression. Retrieved October 23, 2020, from https://www.aafp.org/afp/2016/0515/p852.html
- Langan, R., & Goodbred, A. (2016, May 15). Identification and Management of Peripartum Depression. Retrieved October 23, 2020, from https://www.aafp.org/afp/2016/0515/p852.html
- Latham, N., & Mason, G. (2007, May 29). Maternal deprivation and the development of stereotypic behaviour. Retrieved June 06, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0168159107001165
- Latham, N., & Mason, G. (2007, May 29). Maternal deprivation and the development of stereotypic behaviour. Retrieved June 06, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0168159107001165

Laurence, H. (2018). Scent Detection Team Handbook . HPL Publishing.

Lawrence Stacey, I. (n.d.). Complicating parents' gender and sexual expectations for children: A comparison of biological parents and stepparents - Lawrence Stacey, Irene Padavic, 2021. Retrieved January 17, 2021, from https://journals.sagepub.com/doi/abs/10.1177/1363460720906988

- Lee, M., & Yoon, K. (2020, January 10). Effects of the Health Promotion Programs on Happiness. Retrieved December 08, 2020, from https://www.mdpi.com/2071-1050/12/2/528
- Leo Kanner's 1943 paper on autism. (2019, April 02). Retrieved January 22, 2021, from https://www.spectrumnews.org/opinion/viewpoint/leo-kanners-1943-paper-on-autism/
- Let's understand Skodak and Skeels, finally. (n.d.). Retrieved June 06, 2020, from https://www.tandfonline.com/doi/abs/10.1080/00461527309529086
- Let's understand Skodak and Skeels, finally. (n.d.). Retrieved June 06, 2020, from https://www.tandfonline.com/doi/abs/10.1080/00461527309529086
- Li, T. (2020, August 28). Analysis on the Causes and Treatment of Public Speaking Anxiety. Retrieved October 23, 2020, from https://www.atlantispress.com/proceedings/isemss-20/125944124
- Li, T. (2020, August 28). Analysis on the Causes and Treatment of Public Speaking Anxiety. Retrieved October 23, 2020, from https://www.atlantispress.com/proceedings/isemss-20/125944124
- Loftus, E. (n.d.). Our changeable memories: Legal and practical implications. Retrieved October 02, 2020, from https://www.nature.com/articles/nrn1054
- Loftus, E. (n.d.). Our changeable memories: Legal and practical implications. Retrieved October 02, 2020, from https://www.nature.com/articles/nrn1054
- M. R. Rankin Young, M. (n.d.). Social Withdrawal: Self-Efficacy, Happiness, and Popularity in Introverted and Extroverted Adolescents - M. R. Rankin Young, M. T. Bradley, 1998. Retrieved October 23, 2020, from https://journals.sagepub.com/doi/abs/10.1177/082957359801400103

- M. R. Rankin Young, M. (n.d.). Social Withdrawal: Self-Efficacy, Happiness, and Popularity in Introverted and Extroverted Adolescents - M. R. Rankin Young, M. T. Bradley, 1998. Retrieved October 23, 2020, from https://journals.sagepub.com/doi/abs/10.1177/082957359801400103
- Mack, M. A., & Banich, M. T. (2003). *Mind, brain, and language: Multidisciplinary perspectives*. Mahwah, NY.: Lawrence Erlbaum Associates.
- Mack, M. A., & Banich, M. T. (2003). *Mind, brain, and language: Multidisciplinary perspectives*. Mahwah, NY.: Lawrence Erlbaum Associates.
- Makaskil, A. L., Day, L., & Maltby, J. (2007). *Ersonality, Individual Difference and Intelligence*. Essex: Pearson/Hall.
- Makaskil, A. L., Day, L., & Maltby, J. (2007). *Ersonality, Individual Difference and Intelligence*. Essex: Pearson/Hall.
- Marchetto, L., Barcellos, L. J. G., Koakoski, G., Soares, S. M., Pompermaier, A., Maffi, V. C., ... Barcellos, H. H. de A. (2021, February 9). Auditory environmental enrichment prevents anxiety-like behavior, but not cortisol responses, evoked by 24-h social isolation in zebrafish. Behavioural Brain Research. https://www.sciencedirect.com/science/article/abs/pii/S0166432821000565.
- Margoliash, D. (2004, January 7). Chapter 20 Do sleeping birds sing? Population coding and learning in the bird song system. Progress in Brain Research. https://www.sciencedirect.com/science/article/pii/S0079612301300213.
- Marlene Behrmann, D. (n.d.). Hemispheric Organization for Visual Object Recognition: A Theoretical Account and Empirical Evidence - Marlene Behrmann, David C. Plaut, 2020. Retrieved January 03, 2021, from https://journals.sagepub.com/doi/full/10.1177/0301006619899049

- Marrone, R. *Grieving and Mourning: Distinctions in Process Robert Marrone, 1998.* SAGE Journals. https://journals.sagepub.com/doi/abs/10.2190/IL6.3.f.
- Martin Seligman. (n.d.). Retrieved November 29, 2020, from https://www.pursuit-of-happiness.org/history-of-happiness/martin-seligman-psychology/
- Martinez-Torteya, C., Rosenblum, K., Beeghly, M., Oppenheim, D., Koren-Karie, N., & Muzik, M. (2018, June). Maternal insightfulness protects against the detrimental effects of postpartum stress on positive parenting among at-risk mother-infant dyads. Retrieved June 07, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6287079/
- Martinez-Torteya, C., Rosenblum, K., Beeghly, M., Oppenheim, D., Koren-Karie, N., & Muzik, M. (2018, June). Maternal insightfulness protects against the detrimental effects of postpartum stress on positive parenting among at-risk mother-infant dyads. Retrieved June 07, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6287079/
- McDermott, J. (2008, May 14). *The evolution of music*. Nature News. https://www.nature.com/articles/453287a.
- McDermott, J. (2008, May 14). *The evolution of music*. Nature News. https://www.nature.com/articles/453287a.
- Mcleod, S. (1970, January 01). Bowlby's Attachment Theory. Retrieved June 06, 2020, from https://www.simplypsychology.org/bowlby.html
- Mcleod, S. (1970, January 01). Bowlby's Attachment Theory. Retrieved June 06, 2020, from https://www.simplypsychology.org/bowlby.html
- Mcleod, S. (1970, January 01). Psychology Perspectives. Retrieved September 30, 2020, from https://www.simplypsychology.org/perspective.html

- Mcleod, S. (1970, January 01). Psychology Perspectives. Retrieved September 30, 2020, from https://www.simplypsychology.org/perspective.html
- Mcleod, S. (n.d.). Konrad Lorenz's Imprinting Theory. Retrieved May 31, 2020, from https://www.simplypsychology.org/Konrad-Lorenz.html
- Mcleod, S. (n.d.). Konrad Lorenz's Imprinting Theory. Retrieved May 31, 2020, from https://www.simplypsychology.org/Konrad-Lorenz.html
- Me, the Selfie and I. (n.d.). Retrieved from https://psycnet.apa.org/fulltext/2018-41168-001.pdf
- Meeus, A., Beullens, K., & Eggermont, S. (2019). Like me (please?): Connecting online selfpresentation to pre- and early adolescents' self-esteem. *New Media and Society*. doi:https://doi.org/10.1177/1461444819847447
 - Mental Health Statistics 2019: UKS Mobility. (2019, March 20). Retrieved October 22, 2020, from https://www.uksmobility.co.uk/blog/2019/03/mental-health-statistics/
 - Mental Health Statistics 2019: UKS Mobility. (2019, March 20). Retrieved October 22, 2020, from https://www.uksmobility.co.uk/blog/2019/03/mental-health-statistics/
 - Mental health statistics. (2020, October 16). Retrieved October 22, 2020, from https://mhfaengland.org/mhfa-centre/research-and-evaluation/mental-health-statistics/
 - Mental health statistics. (2020, October 16). Retrieved October 22, 2020, from https://mhfaengland.org/mhfa-centre/research-and-evaluation/mental-health-statistics/
 - Mental health statistics: Depression. (2020, January 16). Retrieved October 22, 2020, from https://www.mentalhealth.org.uk/statistics/mental-health-statistics-depression
 - Mental health statistics: Depression. (2020, January 16). Retrieved October 22, 2020, from https://www.mentalhealth.org.uk/statistics/mental-health-statistics-depression

- Mental health statistics: Suicide. (2019, November 06). Retrieved October 22, 2020, from https://www.mentalhealth.org.uk/statistics/mental-health-statistics-suicide
- Mental health statistics: Suicide. (2019, November 06). Retrieved October 22, 2020, from https://www.mentalhealth.org.uk/statistics/mental-health-statistics-suicide
- Metz, T. (2001). The Concept of a Meaningful Life. Retrieved from https://www.jstor.org/stable/20010030?seq=1#metadata_info_tab_contents
- Mindfulness-Based Therapy (MBCT)- Harnessing Positive Energy. (2020, December 10). Retrieved December 17, 2020, from https://doctorlavine.com/mindfulness-basedtherapy/
- Norbert Wiener. (2020, December 04). Retrieved December 10, 2020, from https://en.wikipedia.org/wiki/Norbert_Wiener
- Northoff, G., & Lamme, V. (2020, August 09). Neural signs and mechanisms of consciousness: Is there a potential convergence of theories of consciousness in sight? Retrieved January 06, 2021, from https://www.sciencedirect.com/science/article/abs/pii/S0149763420304802
- Obituary: Edmund Trebus. (2002, October 05). Retrieved October 25, 2020, from https://www.theguardian.com/news/2002/oct/05/guardianobituaries
- Obituary: Edmund Trebus. (2002, October 05). Retrieved October 25, 2020, from https://www.theguardian.com/news/2002/oct/05/guardianobituaries
- O'Connor, R., Wetherall, K., Cleare, S., McClelland, H., Melson, A., Niedzwiedz, C., . . .
 Robb, K. (2020, October 21). Mental health and well-being during the COVID-19 pandemic: Longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study: The British Journal of Psychiatry. Retrieved December 07, 2020, from https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/mental-health-and-wellbeing-during-the-covid19-pandemic-

longitudinal-analyses-of-adults-in-the-uk-covid19-mental-health-wellbeingstudy/F7321CBF45C749C788256CFE6964B00C

- Olierook, H., Scalzo, R., Kohn, D., Chandra, R., Farahbakhsh, E., Clark, C., . . . Müller, R. (2020, June 18). Bayesian geological and geophysical data fusion for the construction and uncertainty quantification of 3D geological models. Retrieved September 27, 2020, from https://www.sciencedirect.com/science/article/pii/S1674987120301195
- Olierook, H., Scalzo, R., Kohn, D., Chandra, R., Farahbakhsh, E., Clark, C., . . . Müller, R. (2020, June 18). Bayesian geological and geophysical data fusion for the construction and uncertainty quantification of 3D geological models. Retrieved September 27, 2020, from https://www.sciencedirect.com/science/article/pii/S1674987120301195
- On The Origins of the Species by Charles Darwin. (n.d.). Retrieved from http://darwin.amnh.org/files/images/pdfs/e83461.pdf
- On The Origins of the Species by Charles Darwin. (n.d.). Retrieved from http://darwin.amnh.org/files/images/pdfs/e83461.pdf
- Origins of Eugenics: From Sir Francis Galton to Virginia's Racial Integrity Act of 1924. Eugenics: Three Generations, No Imbeciles: Virginia, Eugenics & Buck v. Bell. http://exhibits.hsl.virginia.edu/eugenics/2-origins/.
- Pankaj C. Patel, C. (n.d.). LGBT Workplace Equality Policy and Customer Satisfaction: The Roles of Marketing Capability and Demand Instability - Pankaj C. Patel, Cong Feng, 2021. Retrieved January 17, 2021, from https://journals.sagepub.com/doi/abs/10.1177/0743915620945259

Pavlov's Dog Image. (n.d.). Retrieved from www.psychologywizard.com

Pavlov's Dog Image. (n.d.). Retrieved from www.psychologywizard.com

- Paxton, S. J., Schutz, H. K., Wertheim, E. H., & Muir, S. L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology*, *108*(2), 255-266. doi:10.1037//0021-843x.108.2.255
 - Pearson, O. M. (2004, July 29). Has the combination of genetic and fossil evidence solved the riddle of modern human origins? Wiley Online Library. https://onlinelibrary.wiley.com/doi/abs/10.1002/evan.20017.

Pelham, G., & Stacey, J. (1999). Counselling skills for creative arts therapists. London: Worth.

- Pérez Lloret, S., Diez, J. J., Domé, M. N., Alvarez Delvenne, A., Braidot, N., Cardinali, D.
 P., & Vigo, D. E. (2017, December 12). *Effects of different "relaxing" music styles on the autonomic nervous system*. Repositorio Institucional. https://ri.conicet.gov.ar/handle/11336/30482.
- Perez, A. (2018, June 15). NLP and PTSD: The Visual-Kinesthetic Dissociation Protocol " Memory Reconsolidation. Retrieved December 17, 2020, from https://reconsolidation.dk/2018/06/15/nlp-and-ptsd-the-visual-kinestheticdissociation-protocol/
- PERSONALITY: Meaning in the Cambridge English Dictionary. (n.d.). Retrieved October 11, 2020, from https://dictionary.cambridge.org/dictionary/english/personality
- PERSONALITY: Meaning in the Cambridge English Dictionary. (n.d.). Retrieved October 11, 2020, from https://dictionary.cambridge.org/dictionary/english/personality
- Pollak, J., & Millar, J. (2019). Medication/Substance- Induced Mild Neurocognitive Disorder/MND: A Review for Medical Psychologists. *Journal of the Accadamy of Medical Psychology*, 1(1), 40. Retrieved from https://amphome.org/wordpress/wpcontent/uploads/2019/05/AMP_Vol10Issue1-May-2019.pdf#page=40.

- Posttraumatic Stress Disorder (PTSD) DSM-5 309.81 (F43.10). (n.d.). Retrieved October 26, 2020, from https://www.theravive.com/therapedia/posttraumatic-stress-disorder-(ptsd)-dsm--5-309.81-(f43.10)
- Posttraumatic Stress Disorder (PTSD) DSM-5 309.81 (F43.10). (n.d.). Retrieved October 26, 2020, from https://www.theravive.com/therapedia/posttraumatic-stress-disorder-(ptsd)-dsm--5-309.81-(f43.10)
- Pratt, M. W., & Matsuba, M. K. (2018). The life story, domains of identity, and personality development in emerging adulthood: Integrating narrative and traditional approaches. New York: Oxford University Press.
- Pratt, M. W., & Matsuba, M. K. (2018). The life story, domains of identity, and personality development in emerging adulthood: Integrating narrative and traditional approaches. New York: Oxford University Press.
- PSYCHIATRIC CONSIDERATIONS ON INFANTICIDE: THROWING THE BABY OUT WITH THE BATHWATER. (n.d.). Retrieved from http://www.psychiatriadanubina.com/UserDocsImages/pdf/dnb_vol32_noSuppl%201/dnb_vol32_noSuppl% 201_24.pdf
- PSYCHIATRIC CONSIDERATIONS ON INFANTICIDE: THROWING THE BABY OUT WITH THE BATHWATER. (n.d.). Retrieved from http://www.psychiatriadanubina.com/UserDocsImages/pdf/dnb_vol32_noSuppl%201/dnb_vol32_noSuppl% 201_24.pdf
- Psychological Wellbeing Scale. (n.d.). Retrieved December 10, 2020, from http://sparqtools.org/mobility-measure/psychological-wellbeing-scale/
- Psychology and Sexual Orientation. (n.d.). Retrieved January 17, 2021, from https://books.google.co.uk/books?id=Vnh0DwAAQBAJ&dq=sexual%2Borientation %2Bpsychology&lr=

- Psychology, Statistics, Criminology. (2015, September 16). Retrieved October 02, 2020, from https://www.galtoninstitute.org.uk/sir-francis-galton/psychology-statisticscriminology/
- Psychology, Statistics, Criminology. (2015, September 16). Retrieved October 02, 2020, from https://www.galtoninstitute.org.uk/sir-francis-galton/psychology-statisticscriminology/
- Ramalho, R. (n.d.). Alcohol consumption and alcohol-related problems during the COVID-19 pandemic: A narrative review - Rodrigo Ramalho, 2020. Retrieved December 07, 2020, from https://journals.sagepub.com/doi/full/10.1177/1039856220943024
- Randolph Blake1 and Maggie Shiffrar2. (n.d.). Perception of Human Motion. Retrieved January 05, 2021, from https://www.annualreviews.org/doi/full/10.1146/annurev.psych.57.102904.190152
- Rattel, J., Mauss, I., Liedlgruber, M., & Wilhelm, F. (2020, January 17). Sex differences in emotional concordance. Retrieved December 08, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0301051120300053
- Relationships: Social Exchange Theory: Psychology. (2021, January 18). Retrieved January 19, 2021, from https://www.tutor2u.net/psychology/reference/relationships-social-exchange-theory
- Representation and Recognition of the Spatial Organization of Three-Dimensional Shapes. (n.d.). Retrieved from https://www.jstor.org/stable/77391?seq=1#metadata_info_tab_contents
- Response distortion on personality traits in applicants: Comparing high-stakes to lowstakes medical settings. (n.d.). Retrieved from https://doi.org/10.1007/s10459-017-9796

- Response distortion on personality traits in applicants: Comparing high-stakes to lowstakes medical settings. (n.d.). Retrieved from https://doi.org/10.1007/s10459-017-9796
- Revadigar, N. (2020, March 25). Substance Induced Mood Disorders. Retrieved October 19, 2020, from https://www.ncbi.nlm.nih.gov/books/NBK555887/
- Revadigar, N. (2020, March 25). Substance Induced Mood Disorders. Retrieved October 19, 2020, from https://www.ncbi.nlm.nih.gov/books/NBK555887/
- Reyes-Centeno, H. (2016, January 13). Out of Africa and into Asia: Fossil and genetic evidence on modern human origins and dispersals. Quaternary International. https://www.sciencedirect.com/science/article/abs/pii/S1040618215011891.
- Reyes-Centeno, H. (2016, January 13). Out of Africa and into Asia: Fossil and genetic evidence on modern human origins and dispersals. Quaternary International. https://www.sciencedirect.com/science/article/abs/pii/S1040618215011891.
- Rita McGreal, S. (n.d.). The Depression-Happiness Scale Rita McGreal, Stephen Joseph, 1993. Retrieved November 30, 2020, from https://journals.sagepub.com/doi/abs/10.2466/pr0.1993.73.3f.1279
- Robbins, A. (2000). *The artist as therapist*. London: Jessica Kingsley Publ.Robbins, A. (2000). *The artist as therapist*. London: Jessica Kingsley Publishers.
 - Robinson, K., & Schnachter, J. (n.d.). The Contemporary Freudian Position: Past and Present. Retrieved from https://www.kut.org/sites/kut/files/styles/medium/public/201510/gestalttherapie_0.jpg
 - Robinson, K., & Schnachter, J. (n.d.). The Contemporary Freudian Position: Past and Present. Retrieved from

https://www.kut.org/sites/kut/files/styles/medium/public/201510/gestalttherapie_0.jpg

- Rockwell Tomson Lyon McGellin, A. G. Stop avoiding the inevitable: The effects of anthropomorphism in science writing for non-experts - Rockwell Tomson Lyon McGellin, Ann Grand, Miriam Sullivan, 2021. SAGE Journals. https://journals.sagepub.com/doi/abs/10.1177/0963662521991732.
- Rosenzweig, M. R., Leiman, A. L., & Breedlove, S. M. (2003). *Biological psychology*. Sunderland: Sinauer Associates.
- Rosenzweig, M. R., Leiman, A. L., & Breedlove, S. M. (2003). *Biological psychology*. Sunderland: Sinauer Associates.
- Samantha E Schulz, R. (n.d.). Sensory hypersensitivity predicts repetitive behaviours in autistic and typically-developing children - Samantha E Schulz, Ryan A Stevenson, 2019. Retrieved January 22, 2021, from https://journals.sagepub.com/doi/10.1177/1362361318774559

Schema anthology. (n.d.). Retrieved from https://www.aclweb.org/anthology/D13-1178.pdf

Schema anthology. (n.d.). Retrieved from https://www.aclweb.org/anthology/D13-1178.pdf

- Schenck- Fontaine, A., Lansford, J., Skinner, A., Kirby, Giunta, L., Dodge, K., . . . Chang, L. (2018, October 01). Associations Between Perceived Material Deprivation, Parents' Discipline Practices, and Children's Behavior Problems: An International Perspective. Retrieved June 06, 2020, from https://srcd.onlinelibrary.wiley.com/doi/full/10.1111/cdev.13151?casa_token=0juxzk zO1KYAAAAA%3Aqm3_3_gl8uY0UVr1UIgTCHCyN3s4Q3Iy_lAcQzKN-Bzor3AQRDvgukURUeyp4pqceVwCI569fKf7qA
- Schenck- Fontaine, A., Lansford, J., Skinner, A., Kirby, Giunta, L., Dodge, K., . . . Chang,L. (2018, October 01). Associations Between Perceived Material Deprivation,

Parents' Discipline Practices, and Children's Behavior Problems: An International Perspective. Retrieved June 06, 2020, from https://srcd.onlinelibrary.wiley.com/doi/full/10.1111/cdev.13151?casa_token=0juxzk zO1KYAAAAA%3Aqm3_3_gl8uY0UVr1UIgTCHCyN3s4Q3Iy_lAcQzKN-Bzor3AQRDvgukURUeyp4pqceVwCI569fKf7qA

- Scripts, plans, goals and understanding. (n.d.). Retrieved from https://psychnet.apa.org/record/1979-07723-000
- Scripts, plans, goals and understanding. (n.d.). Retrieved from https://psychnet.apa.org/record/1979-07723-000
- Searching for "The Roots" of masculinity in Primates and the Human Evolutionary Past. https://www.journals.uchicago.edu/doi/pdf/10.1086/711582.
- Searching for the "roots" of masculinity in Primates and the Human Evolutionary past. https://www.journals.uchicago.edu/doi/pdf/10.1086/711582.
- Shi, J., Honjo, T., Zhang, K., & Furuya, K. (2020, April 03). Using Virtual Reality to Assess Landscape: A Comparative Study Between On-Site Survey and Virtual Reality of Aesthetic Preference and Landscape Cognition. Retrieved December 23, 2020, from https://www.mdpi.com/2071-1050/12/7/2875/htm
- Snowdon, C. T., Zimmermann, E., & Altenmüller, E. (2015, January 31). Music evolution and neuroscience. Progress in Brain Research. https://www.sciencedirect.com/science/article/pii/S007961231400020X.
- Social Exchange Theory. Annual Review of Sociology. (n.d.). Retrieved from http://www.jstor.org/stable/2946096
- Social Exchange Theory. Annual Review of Sociology. (n.d.). Retrieved from http://www.jstor.org/stable/2946096

Some key differences between a happy life and a meaningful life. (n.d.). Retrieved November 29, 2020, from https://www.tandfonline.com/doi/abs/10.1080/17439760.2013.830764

- Soontorntanaphol, N. "THE RESULTS OF MUSIC ACTIVITIES ON THE EMOTION OF THE ELDERLY IN VISITING OUTPATIENT DIVISION". Psychology and Education Journal. http://www.psychologyandeducation.net/pae/index.php/pae/article/view/2371.
- ST;, L. (n.d.). The long-term marriage: Perceptions of stability and satisfaction. Retrieved December 15, 2020, from https://pubmed.ncbi.nlm.nih.gov/2272699/
- Stevenson, S. A., Piepenburg, A., Spool, J. A., Angyal, C. S., Hahn, A. H., Zhao, C., & Riters, L. V. (2020, July 6). *Endogenous opioids facilitate intrinsically-rewarded birdsong*. Nature News. https://www.nature.com/articles/s41598-020-67684-1.
- Strelau, J., & Eysenck, H. J. (1987). Personality dimensions and arousal. New York: Plenum Press.
- Strelau, J., & Eysenck, H. J. (1987). *Personality dimensions and arousal*. New York: Plenum Press.
- Stringer, C. B., & Andrews, P. (1988, March 11). Genetic and fossil evidence for the origin of modern humans. Science. https://science.sciencemag.org/content/239/4845/1263.abstract.

Substance Abuse and Addiction Statistics, Data & Facts [2019]. (n.d.). Retrieved from https://drugabusestatistics.org/. 12th December 2019.

Suicide prevention from a public health perspective. What makes life meaningful? The opinion of some suicidal patients. (n.d.). Retrieved from https://www.researchgate.net/profile/Alessandra_Costanza2/publication/340575397_ Suicide_prevention_from_a_public_health_perspective_What_makes_life_meaningf ul_The_opinion_of_some_suicidal_patients/links/5e9444f792851c2f529c37c4/Suicid e-prevention-from-a-public-health-perspective-What-makes-life-meaningful-Theopinion-of-some-suicidal-patients.pdf

Sweeney, T. (n.d.). *Eco Art Therapies Creative Activities that let the Earth Teach*.

- T he I nk B l o t . c o m. (n.d.). Retrieved October 14, 2020, from http://theinkblot.com/
- T he I nk B l o t . c o m. (n.d.). Retrieved October 14, 2020, from http://theinkblot.com/
- Take a free, online Stanford-Binet test! (n.d.). Retrieved October 02, 2020, from https://stanfordbinettest.com/
- Take a free, online Stanford-Binet test! (n.d.). Retrieved October 02, 2020, from https://stanfordbinettest.com/
- Team, P. (2016, September 19). PsychLiverpool. Retrieved June 07, 2020, from https://www.psychliverpool.co.uk/psychology-news/developmental/genie-apsychological-case-study/
- Team, P. (2016, September 19). PsychLiverpool. Retrieved June 07, 2020, from https://www.psychliverpool.co.uk/psychology-news/developmental/genie-apsychological-case-study/
- Tella, M., Miti, F., Ardito, R., & Adenzato, M. (2020, April 16). Social cognition and sex: Are men and women really different? Retrieved December 08, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0191886920302348
- Tella, M., Miti, F., Ardito, R., & Adenzato, M. (2020, April 16). Social cognition and sex: Are men and women really different? Retrieved December 08, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S0191886920302348

- Teufel, C., & Fletcher, P. (2020, March 10). Forms of prediction in the nervous system. Retrieved January 03, 2021, from https://www.nature.com/articles/s41583-020-0275-5
- The Fear of Policemen. (n.d.). Retrieved from https://www.cairn-int.info/revue-societes-etrepresentations-2003-1-page-389.htm?contenu=auteurs
- The Fear of Policemen. (n.d.). Retrieved from https://www.cairn-int.info/revue-societes-etrepresentations-2003-1-page-389.htm?contenu=auteurs
- *The Role of the Native American Drums in Indigenous Culture*. American history from native american to independence. http://theamericanhistory.org/native-american-drums-indigenous-culture.html.
- The visual perception of human and animal motion in point-light displays. (n.d.). Retrieved January 05, 2021, from https://www.tandfonline.com/doi/abs/10.1080/17470910902826820
- Theories of the autistic mind. (n.d.). Retrieved June 07, 2020, from https://thepsychologist.bps.org.uk/volume-21/edition-2/theories-autistic-mind
- Theories of the autistic mind. (n.d.). Retrieved June 07, 2020, from https://thepsychologist.bps.org.uk/volume-21/edition-2/theories-autistic-mind
- Tim Vizard, J. (2020, August 17). Coronavirus and depression in adults, Great Britain: June 2020. Retrieved October 22, 2020, from https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavir usanddepressioninadultsgreatbritain/june2020
- Tim Vizard, J. (2020, August 17). Coronavirus and depression in adults, Great Britain: June 2020. Retrieved October 22, 2020, from https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavir usanddepressioninadultsgreatbritain/june2020

Triandis_theory. (n.d.). Retrieved from http://www.cres.gr/behave/pdf/Triandis_theory.pdf

- Understanding Virtue. (n.d.). Retrieved December 12, 2020, from https://www.google.co.uk/books/edition/Understanding_Virtue/yNQBEAAAQBAJ?h l=en
- Unwanted Sterilization and Eugenics Programs in the United States. (n.d.). Retrieved October 02, 2020, from https://www.pbs.org/independentlens/blog/unwantedsterilization-and-eugenics-programs-in-the-united-states/
- Unwanted Sterilization and Eugenics Programs in the United States. (n.d.). Retrieved October 02, 2020, from https://www.pbs.org/independentlens/blog/unwantedsterilization-and-eugenics-programs-in-the-united-states/
- Vally Koubi, Q. (n.d.). Environmental migrants and social-movement participation Vally Koubi, Quynh Nguyen, Gabriele Spilker, Tobias Böhmelt, 2020. Retrieved January 13, 2021, from https://journals.sagepub.com/doi/abs/10.1177/0022343320972153
- Vanderbruggen, N., Matthys, F., Laere, S., Zeeuws, D., Santermans, L., Ameele, S., & Crunelle, C. (2020, September 22). Self-Reported Alcohol, Tobacco, and Cannabis Use during COVID-19 Lockdown Measures: Results from a Web-Based Survey. Retrieved December 07, 2020, from https://www.karger.com/Article/Abstract/510822
- Verbal aggression in violent and nonviolent marital disputes. (n.d.). Retrieved November 15, 2020, from https://www.tandfonline.com/doi/abs/10.1080/01463379009369773
- Verbal aggression in violent and nonviolent marital disputes. (n.d.). Retrieved November 15, 2020, from https://www.tandfonline.com/doi/abs/10.1080/01463379009369773
- Virtue Theory and Abortion. (n.d.). Retrieved from https://www.jstor.org/stable/2265432?seq=1#metadata_info_tab_contents

- Wagner, B. B. (2019, October 5). Primeval Communication and the Beat of the Drum. Ancient Origins. https://www.ancient-origins.net/history-ancient-traditions/drum-0012677.
- Wang, X., Wong, Y., & Yuen, K. (2021, January 06). Rise of 'Lonely' Consumers in the Post-COVID-19 Era: A Synthesised Review on Psychological, Commercial and Social Implications. Retrieved January 13, 2021, from https://www.mdpi.com/1660-4601/18/2/404
- Wednesday's Child: Research into Women's Experience of Neglect and Abuse in Childhood and Adult Depression: Amazon.co.uk: Moran, Patricia, Bifulco, Antonia: 9780415165273: Books. (n.d.). Retrieved June 06, 2020, from https://www.amazon.co.uk/Wednesdays-Child-Experience-Childhood-Depression/dp/041516527X
- Wednesday's Child: Research into Women's Experience of Neglect and Abuse in Childhood and Adult Depression: Amazon.co.uk: Moran, Patricia, Bifulco, Antonia: 9780415165273: Books. (n.d.). Retrieved June 06, 2020, from https://www.amazon.co.uk/Wednesdays-Child-Experience-Childhood-Depression/dp/041516527X
- Wescott, D., Soehner, A., & Roecklein, K. (2019, August 26). Sleep in seasonal affective disorder. Retrieved October 22, 2020, from https://www.sciencedirect.com/science/article/pii/S2352250X19301460
- Wescott, D., Soehner, A., & Roecklein, K. (2019, August 26). Sleep in seasonal affective disorder. Retrieved October 22, 2020, from https://www.sciencedirect.com/science/article/pii/S2352250X19301460
- Westenberg, W. (1970, January 01). The influence of YouTubers on teenagers : A descriptive research about the role YouTubers play in the life of their teenage viewers. Retrieved November 15, 2020, from http://essay.utwente.nl/71094/

- Westenberg, W. (1970, January 01). The influence of YouTubers on teenagers : A descriptive research about the role YouTubers play in the life of their teenage viewers. Retrieved November 15, 2020, from http://essay.utwente.nl/71094/
- What difference does it make? Exploring the transformative potential of everyday climate crisis activism by children and youth. (n.d.). Retrieved January 13, 2021, from https://www.tandfonline.com/doi/abs/10.1080/14733285.2020.1870663
- What Do Women Want? Housewives' Associations, Activism and Changing Representations of Women in the 1950s. (n.d.). Retrieved December 15, 2020, from https://www.tandfonline.com/doi/abs/10.1080/09612025.2015.1123029
- Widström, A., Brimdyr, K., Svensson, K., Cadwell, K., & Nissen, E. (2019, October 14). A plausible pathway of imprinted behaviors: Skin-to-skin actions of the newborn immediately after birth follow the order of fetal development and intrauterine training of movements. Retrieved May 31, 2020, from https://www.sciencedirect.com/science/article/pii/S0306987719310230
- Widström, A., Brimdyr, K., Svensson, K., Cadwell, K., & Nissen, E. (2019, October 14). A plausible pathway of imprinted behaviors: Skin-to-skin actions of the newborn immediately after birth follow the order of fetal development and intrauterine training of movements. Retrieved May 31, 2020, from https://www.sciencedirect.com/science/article/pii/S0306987719310230
- Wood, A., Joseph, S., & Maltby, J. (2008, December 27). Gratitude predicts psychological well-being above the Big Five facets. Retrieved December 10, 2020, from https://www.sciencedirect.com/science/article/abs/pii/S019188690800425X
- Yellow and Black moving illusion. (n.d.). Retrieved from https://cdn.wallpapersafari.com/25/73/4imZtM.jpg

Appendix A

The Fifty Four Natural Senses and Sensitivities as Identified by Dr M, J, Cohen (1961)

- 1. sense of height and sight, including polarized light.
- 2. Sense of seeing without eye such as heliotropism or the sun sense of plants.
- 3. Sense of colour.
- 4. Sense of moods and identities attached to colours
- 5. Sense of awareness of one's visibility or invisibility and consequent camouflaging.
- 6. Sensitivity to radiation other than visible light including radio waves, x rays etc.
- 7. Sense of temperature and temperature change
- 8. Sense of season including the ability to insulate, hibernate and winter sleep.
- 9. Electromagnetic sense and polarity which includes the ability to generate current (as in the nervous system and brain waves) or other energies.
- 10. Hearing including resonance, vibrations sonar and ultrasonic frequencies.
- 11. Awareness of pressure, particularly underground, underwater and to wind sand and air.
- 12. Sensitivity to gravity
- 13. The sense of excretion for waste elimination and protection from enemies.
- 14. Feel, particularly touch on the skin.
- 15. Sense of weight, gravity, and balance.
- 16. Space or proximity sense
- 17. Corioulus sense or awareness of the effects of the rotation of the earth.
- 18. Sense of motion, body movement sensations and sense of mobility.
- 19. Smell, with and beyond the nose.
- 20. Taste with and beyond the tongue
- 21. Appetite or hunger for food, water, and air.
- 22. Hunting, killing or food obtaining urges.
- 23. Humidity sense including thirst, evaporation control and the acumen to find water or evade a flood.
- 24. Hormonal sense as to pheromones and other chemical stimuli.
- 25. Pain, external and internal

- 26. Mental and spiritual distress
- 27. Sense of fear dread of injury, death, or attack.
- 28. Procreative urges, sex awareness, courting, love, mating, paternity and raising young.
- 29. Sense of play, humour, sport, pleasure, and laughter.
- 30. Sense of physical place, navigation senses including detailed awareness of land and seascapes of the positions of the sun, moon and stars.
- 31. Sense of time and rhythm
- 32. Sense of electromagnetic fields
- 33. Sense of weather changes
- 34. Sense of emotional place, of community belonging, support, trust and thankfulness
- 35. Sense of self including friendship, companionship and power.
- 36. Domineering and territorial sense
- 37. Colonizing sense including compassion and receptive awareness of one's fellow creatures sometimes to the degree of being absorbed into a superorganism.
- 38. Horticultural sense and the ability to cultivate crops as is done by ants who grow fungus, by fungus who farm algae or birds that leave food to attract their prey.
- 39. Language and articulation sense used to express feelings and convey information in every medium from the bee's dance to human stories and literature.
- 40. Sense of humility, appreciation, ethics.
- 41. Senses of form and design
- 42. Sense of reason, including memory and the capacity for logic and science.
- 43. Sense of mind and consciousness
- 44. Intuition or subconscious deduction
- 45. Aesthetic sense including creativity and appreciation of beauty, music, literature, form, design, and drama.
- 46. Psychic capacity such as foreknowledge, clairvoyance, clairaudience, psychokinesis, astral projection and possibly certain animal instincts and plant sensitivities.
- 47. Sense of biological and astral time, awareness of past, present, and future events
- 48. The capacity to hypnotize other creatures.
- 49. Relaxation and sleep including dreaming, meditation, brainwave awareness.
- 50. Pupation including cocoon building and metamorphosis.

- 51. Sense of excessive stress and capitulation
- 52. Sense of survival by joining a more established organism.
- 53. Spiritual sense, including conscience, capacity for sublime love, ecstasy, a sense of sin, profound sorrow, and sacrifice.
- 54. Sense of homeostatic unity, of natural attraction as the singular mother/seed essence of all our other senses.