

# ***THE GENETIC GIVEN TOWARDS AN EXISTENTIAL UNDERSTANDING OF INHERITED 'PERSONALITY TRAITS'***

***Mick Cooper***

## **Abstract**

Traditionally, existential therapists have tended to reject genetic accounts of how people come to be the way they are but, with increasing evidence in support of the genetic position, these accounts can no longer be brushed aside. The following paper presents evidence in support of the genetic position, and argues that genetic influences can be incorporated in to an existential understanding of human being-in-the-world by considering inherited psycho-physiological characteristics as one of the givens with which people are thrown into the world. Furthermore, it argues that this understanding can augment the practice of existential therapists in a way that is unique amongst therapeutic modalities.

## **Introduction**

Within the literature on existential therapy, little mention can be found of the role that genetic factors may play in influencing how a client comes to experience their world in the way that they do. Indeed, having been involved in the world of existential therapy for a number of years, my impression is that many existential therapists are relatively hostile towards this position - on the grounds that many of those who have argued that genes influence 'personality' (e.g. Eysenck, 1967) have held views that are diametrically opposed to those held by existential thinkers and practitioners. To a great extent, this has, indeed, been the case. Whilst Eysenck, for instance, has argued that human activity is determined by specific, causal mechanisms, existentialists have emphasised the possibility of choice and freedom (e.g. Sartre, 1943/1958). Similarly, whilst Eysenck and others have described 'personality' as a multidimensional structure, existential thinking and practice has been grounded in the view that 'The person is not a Thing, not a substance, not an object' (Heidegger, 1923/1946, p.73) but an on-going flux of experiencing. A third major difference is that, whilst Eysenck and others have focused on processes that are 'inside' the human mind, the existential approach has argued that human Being can only be understood as Being-in-the-World and Being-with-others (e.g. Heidegger). The difference between these two viewpoints, however, has perhaps been most manifest in the long-running furore over

the aetiology and treatment of schizophrenia. Here, existential therapists like R.D. Laing have found themselves placed in direct opposition to those who viewed schizophrenia as a genetically inherited 'mental disorder' (e.g. Eysenck, 1973).

In recent years, however, much has changed within the 'pro-genetics' camp. First, many of those who now argue that genes influence 'personality' have moved away from a strict hereditarianism and towards a much more sophisticated understanding of the complex interaction between genes and environment (e.g. Plomin, Chipuer and Loehlin, 1990). Second, an increasing amount of empirical evidence is lending support to the view that genes really do influence a whole range of thoughts, feelings and behaviours. The time would seem ripe, therefore, for existential practitioners to move away from the traditional enmity between existential and genetic viewpoints, and instead look at ways in which they might be able to incorporate some of the arguments and findings from behavioural genetics into their work.

## **Genetic Influences: The Evidence**

'Over the past decade,' write Pervin and John (1997, p.266), authors of probably the most authoritative textbook on personality theory and research, 'an impressive amount of evidence has been gathered to support the view that many important personality traits have a substantial inherited component'. What differentiates this evidence from the earlier 'evidence' supporting this view is the degree of rigour with which it has been collected. Whilst many of the early 'pro-genetic' studies were riddled with methodological flaws - culminating in Burt's fabrication of collaborators and subjects (Hearnshaw, 1987) - more recent studies have been based on carefully sampled, carefully controlled, and carefully executed designs, e.g. The Minnesota Study of Twins Reared Apart (Tellegen, Lykken, Bouchard, Wilcox, Segal and Rich, 1988), The Swedish Adoption/Twin Study on Aging (e.g. Pedersen, Plomin, McClearn and Friberg, 1988). More importantly, perhaps, contemporary behavioural geneticists do not appear to be driven by the same (ultra-)conservative agenda as the likes of Eysenck, Jensen, Herrnstein (Harwood, 1976) and, before them, the Nazis and eugenicists. John C. Loehlin, for instance, one of the leading researchers in the field of behavioural genetics, was also first author of *Race Differences in Intelligence* (1975), a book that thoroughly critiqued Jensen's (1969) claim that black people were genetically predisposed to have lower IQs than white people. The fact that many liberal-minded authors of leading psychology textbooks - such as Pervin and John, Gleitman (1999) and Shaffer (1996) - now accept the place of genetic

influences in an individual's psychological 'make-up' also makes it increasingly difficult to write off behavioural geneticist findings on the grounds that they have been fabricated to legitimise race-, class- or gender-based inequalities.

What, then, is this impressive amount of evidence? Much of it comes from comparing the similarities in 'traits' between identical twins and non-identical twins, based on the assumption that the former have similar environments and identical genes, whilst the latter have similar environments but only about 50 percent of the same genes. Hence, if identical twins are more similar to each other than non-identical twins, it would suggest that this must be due to genetic, rather than environmental, factors. This does, indeed, seem to be the case. Jang, Livesley and Vernon (1996), for instance, found that identical twins were more similar to each other than non-identical twins on all five of the 'big five' personality dimensions. On 'Neuroticism', for instance, the correlation for identical twins was .41 compared with .18 for non-identical twins, for 'Extraversion' the correlations were .55 and .23 respectively, and for 'Openness' the correlations were .58 and .21 respectively. The problem with this line of research, however, is that it does not take into account the fact that identical twins may be treated in a more similar manner than non-identical twins: for instance, they may be more likely to be dressed in a similar manner.

Another approach, therefore, is to compare the similarities in 'personalities' between adopted children and their biological parents and adopted children and their adoptive parents. This is based on the assumption that if an adopted child is closer in 'personality' to their biological parent than their adoptive parents, it is likely that their inherited genes are having a greater effect on their 'personality' than the characteristics of those bringing them up. Findings do, indeed, show this to be the case on a range of traits (e.g. Loehlin, Willerman and Horn, 1985). Again, however, there are some methodological difficulties surrounding this line of research. Unless the children are adopted at birth, for instance, the greater similarity with their biological parents may be due to very early social influences rather than genetic factors.

More conclusive evidence, however, comes from studies that combine these twin and adoptive research strategies, such as The Swedish Adoption/Twin Study on Aging (e.g. Pedersen et al., 1988). Using information from the Swedish twin registry, which contained information on both members of nearly 25,000 pairs of same-sex twins, the researchers compared the similarities in 'personality' of 160 pairs of identical twins reared together, 99 pairs of identical twins reared apart, 212 pairs of non-identical twins reared together, and 229 pairs of non-identical twins reared

apart. In support of the argument that genetic inheritance can influence an individual's 'personality', the researchers found that identical twins were generally more similar to each other than non-identical twins, and that this occurred whether the identical twins were brought up in a shared or different environment. Indeed, identical twins brought up in different environments were generally found to be more similar to each other than non-identical twins brought up in the same environment. For instance, on measures of 'Extraversion', the correlation for identical twins reared apart was .30, compared with just .06 for non-identical twins reared together. Similarly, for 'Impulsivity', the correlations were .40 and .09 respectively. Similar patterns have been found for measures of 'Openness', 'Agreeableness', 'Emotionality-Distress', 'Emotionality-Fear', 'Emotionality-Anger', 'Activity', 'Type A Personality' and 'Locus of Control' (Plomin et al., 1990), and strongly suggest that genetic factors can influence an individual's 'personality' in ways that can not be accounted for by environmental factors. Indeed, from these findings, Plomin et al. (1990) state that genetic variance accounts for 29 percent of the total variance along a range of traits.

There are a number of further findings of interest that come out of these behavioural geneticist studies. First, age of separation seems to have little effect on the degree of similarity between twins (Pedersen et al., 1988), suggesting that very early, shared childhood experiences can not account for the marked similarity in identical twins reared apart. Second, inheritability estimates seem to be relatively similar across a range of traits (Tellegen et al., 1988). Third, and perhaps most surprisingly, behavioural genetic research has found again and again that 'shared' familial influences - i.e. influences that all siblings will tend to experience, like social class or parenting style - seem to have very little influence on an individual's subsequent 'personality'. Indeed, whilst Pedersen et al. (1988) calculated that 'non-shared' environmental influences (such as a child's particular place in the family 'system', or experiences that are unique to that child alone) account for the greatest proportion of variance in 'personality traits', shared environmental factors contribute only about ten percent of the total variance.

In recent years, findings from twin and adoption studies are also providing an increasing amount of support for the argument that there may be a considerable inherited component to the aetiology of severe forms of 'mental distress'. With respect to schizophrenia, for instance, fourteen percent of the biological relatives of adopted schizophrenics have been found to have schizophrenia themselves, compared with just 2.7 percent of the adoptive relatives (e.g. Kety, 1988). Similarly, if one identical twin develops schizophrenia, there is a 48 percent chance that the other twin

will do so, compared with only seventeen percent for non-identical twins (Gottesman, 1991). For unipolar depression, these percentage chances have been found to be 46 and twenty, respectively (McGuffin, Katz, Watkins and Rutherford, 1996). Similar findings provide preliminary support for the argument that there is an inherited component to a wide range of other forms of 'mental distress': such as generalised anxiety disorder, panic disorders, stress disorders, bipolar depression, anorexia nervosa and substance abuse (Comer, 1998).

## Existential Genetics

From the position of an existential therapist, these findings can make uncomfortable reading. If an individual's experiencing of their world is determined - at least, in part - by their fixed genetic inheritance, then to what extent can a therapist help clients to transform this experiencing - to help them 'retrieve the intensity and fullness of human existence' (Van Deurzen-Smith, 1997, p. 188)? One possible answer is that existential therapists should simply ignore the genetically-fixed '29 percent', and instead focus their work on the '71 percent' that is amenable to transformation. Such an answer, however, would be entirely at odds with an existential approach that considers human being-in-the-world an embodied whole, and refuses to separate off an individual's physical being (including their genetic inheritance) from their 'mental' faculties.

Furthermore, to try to work within the '71 percent' would be to assume that existential therapeutic practice is solely concerned with working with human freedom, when, of course, it is as much concerned with the encounter between human freedom and the "'given" characteristics of existence' (Cohn, 1997, p. 121-122). Rather than understanding genetic influences, then, as something to be split off and put outside of the existential therapeutic frame, an alternative approach would be to understand it as an existential given - just as Cohn (1997) considers human sexuality. That is, just as human beings are 'thrown' into the world into a particular family, socio-cultural and linguistic context not of their choosing, so they are thrown into the world with a *particular* psycho-physiological constitution not of their choosing. That is, more than just being embodied (Merleau-Ponty, 1962) human beings come into the world in a *particular* embodied form, with a psycho-physiological make-up that is unique to them alone. As with each of the existential givens, human beings can not choose or control this particular mode of embodiment, but this does not mean that they are determined or controlled by it. Rather, just as human beings can respond to death or freedom in an infinite variety of

ways, so there are many ways in which they can act towards and through their particular psycho-physiological constitution.

For example, an individual may be born with a genetic predisposition towards 'neuroticism'. If we follow Eysenck's (1973) argument, what this means is that the individual is born with an autonomic nervous system that is more labile, more easily aroused, and less easily calmed than other people's. In other words, in a frightening situation, an individual high in 'neuroticism' is likely to experience a greater than average rush of adrenaline, his stomach may feel queasy for longer than other people's, and his breathing may fasten more than most. These psycho-physiological response tendencies can be considered as givens with which the individual is thrown into the world. Yet there is nothing here to say that these genetically-inherited characteristics *cause* this individual to be any particular type of person, or to act towards his world in any particular way. Certainly, they predispose him to behave in particular ways - and the empirical research suggests just that but this individual has the possibility of reacting to, and making sense of, his physiological responses in a plethora of ways. In experiencing a profound queasiness in his stomach and a fastening of his breathing, for instance, he may choose to run away from whatever is frightening him, but he may also choose to 'stay with' his feelings of fear and confront his feared object. (Indeed, it is ironic that the mode of therapy most favoured by Eysenck behaviour therapy - relies on exactly this choice as the basis for its therapeutic practice). Equally, this man may interpret his emotionality lability as a sign of weakness and thereby come to see himself as inadequate; but he also has the freedom to interpret his emotional lability as a sign of sensitivity, and thereby come to see himself as a gentle and receptive person.

This latter possibility for self-definition is an important one. For, just as an acceptance of the possible role of genetic factors in the development of an individual's particular way of being-in-the-world does not necessitate an acceptance of deterministic thinking, so it does not necessitate an acceptance of the essentialist notion of thing-like 'personality' structures, traits or dimensions. An individual may be born with tendencies towards particular psycho-physiological responses, but to understand a human being as the sum of these response-tendencies would be to overlook the lived-actuality of that human being's existence. As Sartre (1943/1958) argues, a human being is not merely an in-itself, but also a fluid for-itself that continually defines and re-defines its own essence. An existential understanding of the possible role of genetic factors in human being-in-the-world, therefore, has no need to fall in with the essentialist, trait-based outlook that increasingly dominates the field of personality psychology (e.g. Costa and McCrae, 1992). Rather, it is a quite unique way of making

sense of human Being: one that looks towards human freedom and human lived-experiencing, yet takes into account the specific psycho-physiological bases on which those possibilities are built.

### **Implications for existential psychotherapy**

Understood as a given of existence, an appreciation of the possible role of genetic factors on an individual's being-in-the-world is entirely subsumable within an existential approach to therapy. Just as existential therapy helps clients to authentically face - and respond to - such existential givens as anxiety, guilt and death, so the existential therapist can help clients to engage with the particular givens of their psycho-physiological constitution. The individual with a predisposition towards experiencing a great deal of anxiety, for instance, may have spent much of his life trying to turn away from the intense rushes of adrenaline that he has the capacity to experience. He may have constricted his sphere of activity as much as possible to try and ensure that he feels minimal amounts of fear, or spent much of his life trying to find the childhood 'cause' of his anxiety. Through a phenomenological exploration of his lived-existence, however, he can begin to simply face up to the intense feelings of anxiety that pervade his existence, and begin to look at the ways in which he attempts to evade these feelings. Just as importantly, perhaps, he may begin to explore the isolation and aloneness that may go with the awareness that this configuration of feelings is uniquely *his*. For the knowledge that he, alone, has that particular body and those particular feelings may be profoundly unsettling for an individual - indeed, one could argue that a rejection of the possibility of inherited individual differences is one means by which an individual can stay within the safe confines of 'the they'. Such a phenomenological exploration will almost certainly not make the feelings go away, but, as Cohn (1997) writes, it could bring about two things: first, it could help the client to accept the inevitable characteristics of his existence; and, second, it could help the client to affirm his possibility of choosing his own specific response to what is 'given'. Through existential therapy, therefore, a client may come to accept that he experiences a greater degree of psycho-physiological anxiety than most; but that, within this parameter, *he* has the capability and responsibility to determine how he lives out his life.

Of course, within this therapeutic exploration, it would be entirely inappropriate for an existential psychotherapist to suggest to their client that the reason they feel the way they do is because of their genetic inheritance. Not only would such an 'explanation' be pure speculation at best, but it would almost certainly serve to impose on the client a very

particular interpretation of their experiencing. Nevertheless, by keeping in mind the possibility that a client's experiencing may be framed within the parameters of a particular genetic constitution, an existential therapist's work may be augmented in four ways. First, as discussed above, she may be more open to - and hence more ready to explore - the possibility that a client's lived-difficulties have arisen through an encounter with the givens of his psycho-physiological constitution. Second in accepting that the client may simply have been born 'that way', the existential therapist may be less tempted to search for childhood, developmental explanations for 'why' a client experiences his world in the way he does, and thereby more able to slay with the actuality of the client's lived-being - and particularly his embodied-being - at a purely descriptive level. Third, the existential therapist may be more enabled to help her *client* move away from trying to find explanations for why he is the way he is, to a more descriptive exploration of his lived-actuality. Fourth, he or she may be more willing to accept that the client physiologically experiences his world in a very particular way, and therefore may be more willing to accept and engage with the client's very particular descriptions of his embodied experiencing. An existential approach to therapy, therefore, can easily accommodate the finding that genetic factors influence an individual's way of being-in-the-world, and is able to develop as a result of this incorporation. The same can not be said, however, of most other therapeutic modalities. This is because the existential approach to therapy - particularly as developed by the London School (Van Deurzen-Smith, 1997) - is one of the few forms of therapy that is primarily descriptive rather than analytical. That is, its main focus is in helping clients to describe their lived-world, and, as such, has no particular investment in any one theory of human development over another. By contrast, other approaches, like the person-centred or psychodynamic approach, are based on very specific theories of human development - theories that leave little room for the role of genetic factors. A person-centred practitioner, for instance, offers her clients unconditional positive regard on the grounds that the client's lived-difficulties have emerged as a result of internalised conditions of worth. Assert that the client's lived-difficulties are actually a result of her genetic inheritance, and the whole edifice of person-centred practice is called into question. Similarly, a psychodynamic practitioner who works to help her clients discover the childhood 'causes' of her problems is fundamentally challenged by the assertion that the 'problems' may actually be genetic in origin. This challenge is magnified further by the finding that, as discussed earlier, children's 'personalities' do not seem to be particularly influenced by shared family factors such as parenting style. Indeed, if the findings continue in this direction, those psychotherapeutic modalities built on the

assumption that people are the way they because of the way they have been brought up may need to undergo major re-evaluations in the near future.

## Conclusion

As we move into an era of increasingly sophisticated behavioural genetics research - as well as of genetic engineering, cloning and 'designer babies' - it would seem increasingly sedimented to simply ignore the fact that genetic factors may play some part in influencing how people come to experience their world in the way that they do. In this paper, I hope to have shown a way in which existential therapists can overcome the traditional enmity being existential and genetic understanding of human being, and instead incorporate - and develop their practice as a result of learning from -behavioural genetic findings. By re-conceptualising inherited psycho-physiological characteristics as an existential given, existential therapists have the capacity to develop a greater understanding of, and openness to, the particular way in which their clients experiences their world. Furthermore, by understanding the client's psycho-physiological constitution in this way, the groundwork has been laid for understanding how other ways of being-in-the-world - such as sexual preference and gender roles - may be influenced by biological factors. Of course, this is not to suggest that existential therapist should un-critically accept the plethora of 'findings' suggesting that everything from criminality to altruism is innate, nor to ignore the possibility that such findings may play into the hands of the un-democratically-minded, nor to ignore the fact that the relationship between psycho-physiological characteristics and behaviour is fundamentally bi-directional. Yet by understanding an individual's particular psycho-physiological constitution as one of the givens by which they may be thrown in to the world, existential therapists can be open to the best of the behavioural geneticist findings, whilst at the same time retaining a commitment to the possibility of human freedom, choice and dignity.

**Mick Cooper** is a Senior Lecturer in counselling at Brighton University and an existential psychotherapist. He is Co-Editor of *The Plural Self: Multiplicity in Everyday Life* (Sage, 1999).

## References

- Boss, M. (1963). *Existential Foundations of Medicine and Psychology*. Jason Aronson Inc., Trans. S. Conway and A. Cleaves.
- Cohn, H.W. (1997). *Existential Thought and Therapeutic Practice*. Sage.

- Comer, R.J. (1998). *Abnormal Psychology* 3<sup>rd</sup> ed. N.Y.: W.H. Freeman & Co.
- Costa, P.T., Jr., & McCrae, R.R. (1992). *NEO-PI-R: Professional Manual*. Odessa, Fla.: Psychological Assessment Resources.
- Eysenck, H.J. (1967). *The Biological Basis of Personality*. Springfield, 111.: Charles C. Thomas.
- Eysenck, H.J. (1973). *The Inequality of Man*. Temple Smith.
- Gleitman, H. (1999). *Psychology*, 5<sup>th</sup> ed. W.W. Norton & Co.
- Gottesman, I.I. (1991). *Schizophrenic Genesis*. N.Y.: W. H. Freeman & Co.
- Harwood, J. (1976). The race-intelligence controversy: a sociological approach II -"external" factors. *Social Studies of Science*, 7, 1-30.
- Hearnshaw, L.S. (1987). Burt, Sir Cyril Lodowic (1883-1971). In R.L. Gregory (ed.). *The Oxford Companion to The Mind*. Oxford: Oxford University Press.
- Heidegger, M. (1926/1962). *Being and Time*. Oxford: Basil Blackwell. (Trans. J. Macquarrie and E. Robinson).
- Jang, K.L., Livesley, W.J., & Vernon, P.A. Heritability of the big five personality dimensions and their facets: a twin study. *Journal of Personality*, 64, 577-591.
- Jensen, A.R. (1969). How much can we boost IQ and scholastic achievement? *Harvard Educational Review*, 39, 1-123.
- Kety, S.S. (1988). Schizophrenic illness in the families of schizophrenic adoptees: Findings from the Danish national sample. *Schizophrenic Bulletin*, 14, 217-222.
- Loehlin, J.C. (1989). Partitioning environmental and genetic contributions to behavioural development. *American Psychologist*, 44, 1285-1292.
- Loehlin, J.C, Lindzey, G., & Spuhler, J.N. (1975). *Race Differences in Intelligence*. San Francisco: W. H. Freeman & Co.
- Loehlin, J.C, Willerman, L., & Horn, J.M. (1985). Personality resemblances in adoptive families when the children are in late adolescents and adults. *Journal of Personality and Social Psychology*, 48, 376-392.
- McGuffin, P. Katz, R., Watkins, S., & Rutherford, J. (1996). A hospital-based twin register of the heritability of DSM-IV unipolar depression. *Archive General Psychiatry*, 53, 129-136.
- Merleau-Ponty, M. (1962). *The Phenomenology of Perception*. Routledge. Trans. C. Smith.
- Pedersen, N.L., Plomin, R., McClearn, G.E., & Friberg, L.T. (1988). Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. *Journal of Personality and Social Psychology*, 55, 950-957.

- Pervin, L.A. and John, O. (1997). *Personality Theory and Research*. Chichester: John Wiley.
- Plomin, R., Chipeur, H.M., & Loehlin, J.C. (1990). Behavioural genetics and personality. In L.A. Pervin (ed.). *Handbook of Personality: Theory and Research*. N.Y.: Guildford Press.
- Sartre, J.-P. (1943/1958). *Being and Nothingness: An Essay on Phenomenological Ontology*. Routledge. Trans. H.E. Barnes.
- Shaffer, D. (1996). *Developmental Psychology*, 4<sup>th</sup> ed. Brooks/Cole.
- Tellegen, A., Lykken, D.T., Bouchard, T.J. Jr., Wilcox, K.J., Segal, N.L. and Rich, S. (1988). Personality similarities in twins reared apart and together. *Journal of Personality and Social Psychology*, 54, 1031-1039.
- Van Deurzen-Smith, E. (1997). *Everyday Mysteries: Existential Dimensions of Psychotherapy*. Routledge.