

What makes you
what you are



**ASSIGN
BUSTER**

Personality: What makes you the way you are? -ScienceNews - The

Independent At some point in your life, you've probably filled in a personality questionnaire (" Do you see yourself as....? "), and wondered as you ticked the boxes if there can really be any validity to such a simplistic way of assessing people. Surely the scores just reflect your mood on the day, or what you want the investigator to think. Surely everyone gives the same answer, which is " it depends".

Or even if the scores measure something, surely it is how the person sees themselves, rather than how they actually are. In a new book, I examine what the extent of the science underlying personality psychology really is. The answer is: more than you would think. While it has always been popular in business and pop psychology, and within academic psychology, personality research has been a poor relation to the parts of the discipline with experiments and hard objective measures. However, this is changing fast.

The field of personality is undergoing a renaissance. The reasons for the renaissance are several. Academics now have some really good long-term studies of the same individuals, and it turns out that those brief, simplistic, pencil-and-paper questionnaires have surprisingly useful properties. They produce a wide range of self-descriptions. The responses are fairly repeatable over intervals of many years. They also correlate quite well with ratings of the person given by their spouse, friends or colleagues.

Much more importantly, though, the responses turn out to predict objective events. For example, in a famous cohort of gifted Californian children recruited in the 1920s, and who are elderly or deceased now, personality " scores" – numerical representations of answers to questions – are significant

predictors of life expectancy. In another long-term study, this time of American married couples, the quality and duration of the marriage is predicted by the personality scores of both parties prior to marriage.

There are many other examples, with personality scores predicting substance addiction, problem gambling, and the onset of psychological illnesses. Of course the prediction is a statistical one – you can assign odds, not make oracular pronouncements – but this is how it always is in psychology. Humans are such complex systems that you are happy to explain a portion of the variation in outcomes, and never expect to explain it all. In recent years there has been renewed interest in personality assessment. This has been greatly aided by the fact that there is now a consensus on what the key variables are.

Its early development, the field was greatly hampered by every investigator having his or her own scales, often using different names and measures for what turned out to be the same thing, or indeed the same names for what turned out to be different things. But over the last 20 years, many studies in several different cultures have shown that much of the systematic variation in personality can be reduced to scores along five dimensions (the "Big Five"): Extraversion, Neuroticism, Conscientiousness, Agreeableness, and Openness. It's important to stress that these are all continuous dimensions.

That is, there are no discrete important to stress that these are all continuous dimensions. That is, there are no discrete "types" of person. Personality dimensions are like height or weight, which vary continuously, not like being a left- or a right-hand writer. Your score on one dimension is independent of your scores on all the others, so there is an almost infinite

diversity of different overall profiles possible. If developments within psychology have facilitated the renaissance of personality studies, it is at the interface with biology where the exciting developments are beginning to come.

Neuroscientists have shown, mainly using the increasingly sophisticated brain imaging techniques that are now available, that those simple pencil-and-paper personality scores correlate significantly with the size or neurophysiological reactivity of specific regions of the brain. Moreover, these turn out to be the very regions that other types of evidence (evidence from brain damage, for example) would lead us to expect would be involved in that particular area of psychological function. Geneticists, too, are getting involved in personality research.

It has recently become apparent that more of the human genome differs from individual to individual, even within our rather genetically homogenous species, than was previously thought. We know this *inter alia* from the complete sequence of Dr Craig Venter's genome, which was published earlier this month. About 0.5 per cent of the genetic information in his maternally-inherited genome is different from his paternally-inherited one. Variant sequences affect nearly half his genes, and it is likely that in many cases those variants will have some functional effect on body, brain or behaviour.

In a few cases, we even know which genetic variants have effects on personality. There is a gene that encodes a receptor molecule for the neurotransmitter dopamine, and which contains a repeating sequence whose length varies from person to person. A number of studies have found that

the length of this sequence correlates with self-reported extraversion and reward-seeking behaviour. In another gene, the serotonin transporter, individuals with one variant are more likely to develop depressive symptoms in response to stressful life events than bearers of the other version.

In a few years, we may be in the position of actually understanding the molecular bases of the differences in nature that we observe between healthy humans. (But note that genetic effects will not turn out to be the whole story; only around half of the variation in personality looks like being heritable, with the rest probably shaped by early environmental exposures and other developmental processes.) The other group of researchers getting interested in personality is evolutionists. Personalitylike variation has been found in organisms as diverse as fish, mammals and birds.

Indeed, Darwin's whole theory of evolution rests on the observation that individuals vary from one another. Without such variation there can be no natural selection and no evolutionary change. The question for evolutionists is why you would find variation persisting in populations, when selection always reduces diversity in favour of the optimal type. In fact, it turns out that there are often multiple optima, even within a single habitat, with individuals of one type doing well under certain conditions, while faring less well than their competitors under others. Thus, under certain conditions, while faring less well than their competitors under others. Thus, selection rarely narrows the population to uniformity because individuals with different qualities flourish in different contexts. I rather like this as a guiding framework for thinking about personality in modern humans. Rather than imagining that there is some personality profile that is uniformly good to

have, let's assume that all have their strengths and all have their pitfalls. Indeed, the failure of any one profile to dominate the human population attests to their roughly equal fitness in the long run.

So, whatever your score on the Big Five, the point is not to try to change it, or fight it. The point is to establish which niche within the complex ecology that is modern society will be a good one for you to ply your trade in, and which of the diverse dangers (social isolation, addiction, depression...) that lurk in our both beneficent and hazardous habitat are the ones against which you should be most vigilant. This is where self-knowledge comes in, and taking the personality test overleaf can be part of that. Scoring your personality won't tell you anything you don't know.

It's based on how you see yourself, so logically it couldn't. But it can reveal to you how you compare to other people, and can also tap you into a wealth of accumulated psychological knowledge about the strengths and liabilities that other people similar to you have experienced. This is what the questionnaire and the interpretation overleaf are designed to do. Daniel Nettle is the author of *Personality: What Makes You the Way You Are* (£12.99), published by Oxford University Press. To order a copy for the special price of £11.69 (with free P) call Independent Books Direct on 0870 079 8897, or visit www.independentbooksdirect.co.uk What kind of personality are you? Take this test to discover the truth Introducing the big five Once you have completed the questionnaire and added up your scores, you should have an indication of whether you score low, medium-low, medium-high, or high on each of the Big Five dimensions of human personality. But what do these scores mean? Here, I explore the Big Five to examine their effects on

our lives. Extraversion This is a familiar concept. High-scorers are fun-seeking and cheerful, but they are not necessarily immediate hedonists; they are often ambitious and hard-working.

They are also sexually adventurous and love to be the centre of attention. Low-scorers are not necessarily shy so much as aloof; they can take or leave success, praise and pleasure. The best way to think about this dimension is in terms of response to reward. Society offers certain incentives; money, power, fame, attention, sex, thrills, and so on, and some people certain incentives; money, power, fame, attention, sex, thrills, and so on, and some people pursue them full-out, while others have a more muted response and thus won't work so hard to capture them.

The strengths of high-scorers: energy, charisma, drive, the ability to make things happen. The weaknesses: a tendency to get bored, restlessness, infidelity, risky decisions. Strengths of lowscorers: detachment, pursuit of intrinsicgoals, prudence, fidelity. The weaknesses: not thrusting themselves forward, not having fun, a flat emotional tone. There is no value-judgement about which of these is better from the point of view of a potential employer or spouse, but is certainly worth being aware of the likely pitfalls and most suitable habitats for your particular level of Extraversion.

Conscientiousness Conscientiousness measures how good people are at setting themselves goals and sticking to them. High-scorers are disciplined, efficient and systematic. They can resist temptation and stick to priorities they have set themselves. In most modern occupations, and particularly those where you have to manage your own time and priorities, fairly high Conscientiousness is advantageous. Low-scorers are more likely to get

distracted from tasks, renege on plans, and succumb to weaknesses of the will. Indeed, low Conscientiousness is a risk factor for developing addictions of all kinds.

Being high in Conscientiousness is not always an unalloyed benefit, though. Sometimes it is indeed important to stick to plans. But at other times it is important to be able to change them on a sixpence. Very high scorers are perceived as grim, pedantic, unspontaneous, even miserly. There is even a name for excessive Conscientiousness – obsessive-compulsive personality disorder – and this is a very socially disabling condition. There are many human activities, including, crucially, social relationships, where it is essential to be able to respond in the moment to your environment as it changes.

Highly conscientious people are rigid, often sticking to tasks and plans even when the point of them has been overtaken by events, or when the needs of others around them require spontaneous reorganising of priorities. Thus, if you are very low in Conscientiousness, for the sake of your career, your health, and your wellbeing, you may need to work effortfully at seeing your plans through, and being self-disciplined. If you are a very high scorer, you may need to learn to be more spontaneous and intuitive, again for the benefits that this will bring in terms of flexibility and improved social relationships.

Neuroticism I would like to dispel the notion that Neuroticism is always a bad thing, a kind of pathology, and that the best level of Neuroticism to have is a very low one. The evidence for the prosecution: yes, high-scorers live their lives under the Damoclean swords of depression, anxiety, stress, and

disappointment. Whatever the world says about them, they are often uncomfortable in their inner lives, and go through life either with bouts of difficult times, or with a constant vague feeling that something is not quite right.

However, if we think logically, negative emotions, such as worry, are always going to be there for a reason. One would not want to be entirely without worry. It would be as damaging to life decisions as the inability to feel physical pain is to peripheral physiology. High Neuroticism scorers can bring to bear enormous powers of deep thought, detailed analysis, novel insight. They care about the details that others can't be bothered to follow up. Under some circumstances they do well academically. If you are a high-scorer, you may well be a member of a thinking profession such as an academic or a writer.

High Neuroticism scorers, then, have hidden advantages. The challenge for them is to find ways to deal with the negative sequels of their personality. Some people respond well to cognitivebehavioural therapy, some to meditation, many to exercise. Low-scorers, too, have disadvantages. You probably don't suffer much in life, which is good, but maybe you are not thoughtful enough. Maybe you let details go, and don't think deeply enough about future drawbacks or problems. Maybe you are too carefree or rose-spectacled to see every potentiality. Agreeableness Agreeableness is a dimension of empathy towards others.

High-scorers are often found in caring professions such as nursing and counselling.. They have larger-than-average social networks, and their relationships with others are harmonious. They don't get into fights and are

generally slow to anger. By contrast, the very lowest-scorers are sociopaths; they callously use others for their own ends. So far so good. It is better to be well-liked than to be a sociopath. However, in many fields, high Agreeableness reduces occupational attainment. Nice guys really do finish last, and moreover, plenty of our leaders have something of the sociopath about them.

Successful artists and executives, though, tend to be rather low in Agreeableness. This means that the high Agreeableness scorer may not be prepared to be hard-headed. You may stay in relationships that do you no good out of empathy for the others involved. Agreeableness is the most sexually-patterned of the Big Five, with – no prizes for guessing – women scoring more highly on average than men. This adds an interesting new perspective on the paucity of women in positions of power. Many of them find it difficult to be callous enough.

Should we be encouraging them to be more callous, or trying to change what we reward? Openness Openness is a dimension of imagination. High-scorers make mental associations that go beyond what is given to the senses, or what is logically deducible. They are keen on poetry and the arts, and often have metaphysical or esoteric ideas. Nobody wants to be called unimaginative, but when you stop and think about it, it is not evident Nobody wants to be called unimaginative, but when you stop and think about it, it is not evident that being imaginative in this sense is necessarily useful in life.

Low-scorers can be very intelligent and capable, though they will be oriented towards the practical and the soluble. High-scorers will be more able and willing to venture into the domains of the aesthetic. However, they can also

develop eccentric, paranormal or even delusional beliefs, and fail to solve simply resolvable practical problems. Neither a high nor a low score is inherently desirable; it is simply a matter of harnessing the strengths that you have. www.independent.co.uk/ht/w.needn.ou/essineprotp/wwidpnetc.knw/cec/esnlt-htmksyutewyyuae426.tl.aiywa-ae-o-h-a-o-r-069hm [ht:/o.lfgtp/gog/fS](http://o.lfgtp/gog/fS)