

Labeling our brains: a new frame of reference for human intelligence

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Black or white. Good or bad. Acceptable or unacceptable. Right or wrong.

It's a feature of the human condition that we like to put labels on things, labels which allow us not only to identify the essence of a thing - its fundamental nature - but also its perceived worth or value to us.

In pre-history, when our intellectual development was slight, crude labeling kept us alive: 'edible' or 'not edible', 'predator' or 'prey', 'friend' or 'foe' were all labels of obviously paramount importance to prehistoric man.

And this labeling mechanism continues to this day – only now the labelers are often third parties: companies who use brands and brand names to telegraph meaning and discriminatory cues to consumers faced with literally thousands of competing commercial messages every day of their lives. If we needed labels in Neanderthal times, we certainly need them today.

But while labeling is generally useful, it is prone to misuse – most commonly by oversimplification. And nowhere in life does this crude, un-nuanced labeling appear with greater regularity – or with greater consequence – than in the field of mental health. For in that field, all of us belong to one of just two groups:

We are either **Normal**, or **Abnormal**.

And, just as in ancient times, society uses these labels to reach simplistic and often very damaging judgments about the people supposedly described by them.

In fairness to the medical profession, codifying physiological normality was a

vital step on the road to efficient modern diagnostics: only by comparing a given patient's observed physical state with that of a healthy control is accurate diagnosis and therefore cure possible. But what works in the world of physical medicine does not always transfer comfortably to its psychological counterpart.

To begin with, 'Normal' and 'Abnormal' in the context of mental health are highly pejorative terms. The *subsidiary* meaning of both terms - what we think 'Normal' and 'Abnormal' people are like or believe their relative worth to be rather than what they actually are or do – has become the *primary* functional meaning in much of society.

People who are abnormal are dangerous. People who are abnormal should be viewed with suspicion. People who are abnormal don't get the big jobs. And so-on.

Given the weight of pejorative meaning surrounding these terms, it would seem obvious that we should use them judiciously – or, better, that we find new terms to describe those phenomena or characteristics undeserving of social stigma in the first place.

Indeed, the biggest problem with the use of Normal/Abnormal is the simple absence of consensus around what Normal is and, therefore, what constitutes abnormality. According to Webster....

Normal

(Psychology)

a. approximately average in any psychological trait, as intelligence, personality, or emotional adjustment.

b. free from any mental disorder; sane

In this definition, 'Normal' is equated to either averageness, or freedom from insanity. And there are problems with each of these equations – problems with a common root.

Because it is now known that many hundreds of millions of people around the world experience mental phenomena which are clearly not 'average' but which do not negatively affect their functioning in society - certainly not to an extent that warrants the stigma of the term 'Abnormal', much less 'Insane'.

Indeed, it seems that the opposite may be true: in a surprisingly large number of cases, these non-average experiences can be seen as offering an *advantage* to the person experiencing them. To use a crude analogy, some of these 'abnormal' experiences are a bit like air conditioning or power windows in a car: the car performs its basic functions perfectly adequately without them, but delivers an enhanced experience with them. Expressed another way, some car models can be purchased with either a diesel or a petrol engine. Both versions will perform a very similar end function, but the means of achievement are quite different, each with its own strengths and weaknesses.

Most people, when confronted with this thought, understand it intuitively: we know that we're each as unique as our fingerprints and irises, and very few would take the view that all of our brains function identically. But what's intuitively true in this case turns out to be mathematically true as well.

To illustrate, let's look at a few examples in the world of psychological experience, all relatively uncontroversial:

Super-tasting and Non-tasting

Something like 25% of the global population can be categorized as Supertasters and a similar percentage as Nontasters – people whose experience of taste is far more or far less intense than that of the rest of the population. It's an interesting example because the ability to experience taste (along with the other four senses) would surely be one of the core definitions of psychological normalcy – and yet, even this most basic experience differs greatly from one person to the next, with the largest single group of experiences representing only half of the world's population. Is 50% a sufficient threshold for a group to take the high ground of 'normalcy'? Or should there be another term?

Voice Hearing

It is believed that around 250 million people around the world hear voices - in other words, they report an inner dialogue with a voice which they do not perceive as their own. Presently, and in Western society especially, voice hearing is (all too) readily identified with madness or illness, and particularly the illness of schizophrenia. However, this diagnosis is a false one, and one that does material harm to a lot of people.

Repeated epidemiological research has shown that hearing voices is an experience apparent in about 4% of the general population. Of these, only one-third need any kind of help with the experience, while two-thirds cope with it perfectly well and use the experience to their benefit. This research has also shown that not more than one in six of this overall group might reasonably be diagnosed as being genuinely schizophrenic. In short, 84% of voice hearers

are needlessly discriminated against because of the 16% that might be diagnosed with a genuine illness. This is a very clear example of the mislabeling problem.

Significantly, this has not always been the case: in earlier times, hearing voices was openly experienced by some very revered brains, including those of Socrates, Sigmund Freud, Carl Jung, the poet William Blake, the composer Robert Schumann, the philosopher Emanuel Swedenborg, Martin Luther King Jr, Elisabeth Kubler-Ross and Mohandas K Gandhi.

Furthermore, voice hearing undoubtedly lies at the roots of the great religions: Moses reported hearing God's voice on Mount Sinai when God dictated to him the ten commandments. St Paul heard the voice of Jesus on the road to Damascus . The God of the Old Testament even promised that he would reveal Himself to human beings through voices and visions, and so He did.

In this context, of course, numerous other examples could be cited: Saint Teresa, Saint Augustine, Saint Francis, Joanne of Arc, Luther, John Bunyan, George Fox (the founder of the Quakers); Joseph Smith (founder of the

Mormons) and even Mohammed.

It is sobering to imagine what kind of world we'd now live in if these titans of intellectual and spiritual thinking had been driven into hiding by the fear of social ridicule and even exclusion that voice hearers now experience. In our zeal to neatly compartmentalize human experience into 'normal' and 'abnormal', we run the grave risk of marginalizing the exceptional intellects upon which the development of civilization has largely depended.

Homosexuality

Estimates vary as to the percentage of the global population that is homosexual, with most falling within the range of 3-7%, or 195-455 million people. Homosexuals are 'abnormal' only in the sense that they do not

represent the majority experience – a useless criterion, if ever there was one. Only the most conservative and arguably unenlightened members of society would argue that the existence of homosexuality as a dimension of human experience is in any meaningful way damaging to society.

Homosexuality is an interesting example in this context because there may be a physical as well as functional difference in the homosexual brain (specifically in the relatively small size of the third interstitial nucleus of the anterior hypothalamus). So here we have a case of what the medical profession might be tempted to view as an abnormality – but which might more usefully be seen as a simple difference, in itself unworthy of stigma of any kind.

Super-Intelligence

According to the existing definitions of normalcy (which require people to be close to average) being very, very intelligent makes one abnormal. While this could be argued to be technically accurate, it seems inappropriate and misleading. This is an uncontroversial illustration of the limited way in which we have, thus far, labeled our brains.

There are, of course, many other subtle variations in mental functioning: our ability to perceive colour, our sensitivity to sound, our ability to gauge distances, speeds, see patterns, spot similarities and differences between things, our hand/eye coordination. All point to the brain as an organ with not just two types – normal or abnormal – but a myriad of types.

Indeed, Howard Gardner's 1983 work 'Frames of Mind' sets out the idea of multiple intelligences in some detail, suggesting that instead of one standard definition and measurement protocol there are at least seven distinct forms of intelligence – not all of which score well when measured conventionally.

We therefore contend that psychological experience itself is not binary, and is not helpfully described as normal/abnormal (or, inferentially, good/bad). We see the brain as a mosaic of abilities and possibilities, with almost as many variations as there are owners. And yet the nomenclature fails to acknowledge this.

But is this really a problem, or simply a question of semantics? The authors suggest that it is a real problem, and on a number of levels.

Chief among these is that the stigma attaching to the concept of abnormality (which, as we've seen, isn't always that abnormal after all) creates a social climate not at all conducive to open discussion of individual experience. The risk of mis-labeling and thence social marginalization is too great.

Voice hearing in this regard is an excellent example: for the majority of people who experience it, voice hearing is not only 'not a problem', it is experienced as a useful added capability.

Sadly, many other voice hearers grew up hearing a familiar schoolboy joke: "What's the definition of madness? Hearing voices in your head. What's the definition of insanity? Talking back to them". For these voice hearers, their experience is something to be denied, or at best coped with. If they felt that society would view their voice hearing experience as 'just another of the myriad features of the human brain', they would be far more inclined to admit to having the experience in the first place. If they did, many could transform what they've been conditioned to see as a disability of some sort into something genuinely life-enhancing.

The strong possibility that our 'Normal/Abnormal' nomenclature drives many people underground has potentially serious consequences for those who never benefit from an outside perspective on their experiences, or the relief that comes from knowing that they're not alone in those experiences. Over

and over again, we meet people who are genuinely afraid to admit to voice hearing because of its reputation as a symptom of illness or even madness. They then hide this experience and become more and more isolated and insecure, greatly hindering their own development. This unnecessary secrecy creates added stress in relation to the workplace, where admitting to such an experience is seen as a fast track to unemployment.

More optimistically, a psychiatric and indeed social climate in which variations are seen as just variations might encourage a breakthrough in human development, whereby one might learn to seek out and develop one's individual 'feature set' rather than denying its existence. Who knows what we might achieve if we used our differences productively rather than pretending they didn't exist?

So if the nomenclature is so important, and 'Normal/Abnormal' so unhelpful, what might we use instead? How might we re-label the Human Brain?

Going forward, we might consider whether a person is **Standard Brained** or **Non-Standard Brained** (instead of Normal or Abnormal).

A **Standard Brain** would 'measure up' in terms of standard features: all senses present and correct, IQ within a (broad) range, short- and long-term memory functions typical for age, no significant physical damage, no obvious psychoses or other real problems.

A **Non-Standard Brain**, on the other hand, would be all of the above plus one or more added features, capabilities or recurrent experiences not considered to be more or less universal.

Why would this help to change our perspective? A skeptic might say that this small linguistic turn changes little. But small changes of language often create dramatic changes of meaning. The words 'negro' and 'nigger' are not intrinsically very different – but a chasm of difference exists between their meanings and impact when used (even if neither is seen as polite in the modern era).

We think that 'Standard/Non-Standard' is a considerable improvement over 'Normal/Abnormal' as a way to describe our brains, for a number of reasons:

1. *The terms are not inherently pejorative.* In the lexicon of everyday life, there's nothing wrong with a Standard X, and there's nothing necessarily better about a Non-Standard X than a Standard X. Although....
2. *The gentle implication that Non-Standard features might add value.* When we buy a car or a household appliance, the Standard version of the product in question is expected to perform adequately, while the Non-Standard version will often have an added capability or feature which makes it more useful and/or valuable. If that 'expected meaning' carried over to the world of mental health, it would represent a complete change in the way we currently think about our brains.
3. *Standard/Non-Standard is a sustainable way to describe our manifold mental states.* It is inevitable that our understanding of the human brain will

increase over the years, probably at an accelerating pace. This greater understanding will surely lead to the emergence of a more, not less, complicated picture. In that environment, the vast oversimplification represented by the terms Normal and Abnormal will surely fail to survive.

4. *Makes it easier for added features previously described as Abnormalities to be discussed openly and help (where needed) sought.* Most people would be far more comfortable seeking help/reassurance about their Non-Standard Brains than they would for their Abnormal brains....

5. *Who wants to be Standard?* There's nothing wrong with Standard, but it isn't necessarily an aspiration for most. Being Non-Standard places one in a world of positive linguistic associations: different, special, unique, gifted, one-off.....