



The return on investment from personality testing

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My recent article, "Personality at work – does it make a difference?", described some of the common sense logic linking personality to success or failure in the world of work as well as some of the recent headlines suggesting the impacts and potential costs to organisations of personality at work. But, a perfectly reasonable question is; "What is the financial return to organisations from assessing personality?" That is the focus of this article.

A typical scenario

The best way to answer this question is by illustration. Using a basic, but familiar scenario and an established baseline this article will outline a return on investment case for assessing personality at work.

Let's assume that an organisation is looking to recruit or promote one hundred managers over a given time (it could be months or a year). Let's also assume that the average salary is £40,000. The value provided by an employee to an organisation can be expressed as a multiple of salary. Research has shown that depending on where that employee sits on the performance curve this varies between one and two-and-a-half times salary. If they are in the bottom 15 per cent of performers, there is little return over and above what they are paid in salary, so the multiple is one. If the employee is average in performance, then the multiple is two; their contribution is worth twice their salary and the return in our scenario would be £80,000. If the employee is in the top 15 per cent of performers then research shows that the return should be in the region of 2.5 times salary or £100,000.

Of course, all organisations would like as many of their staff to perform in the top 15 per cent (compared to industry peers) at whatever level in the organisation they are. One way to answer the question posed at the start of this article is, therefore, to show the extent that assessing personality can shift the balance of employees along the performance curve. That is, demonstrate that the use of personality assessment reduces the numbers of low performers and increases the number of high performers.

Setting the baseline

Let's now look at a baseline for making a comparison. Statistical models used for research into this question compare the relationship between personality and performance with what would be expected from random chance alone. Put another way, how much more do I expect to gain from it than I would from simply making recruitment decisions on the flip of a coin? Now, while Orville and Wilbur Wright are said to have used the latter to choose who would undertake the first manned flight, most of us would hope that airlines do not apply the same method today!

Of course, organisations will use some form of screening of applicants for jobs or promotion, usually by looking at an applicant's experience through a curriculum vita combined with an interview. Research has shown that selecting on the basis of experience alone leads to a gain in performance among those selected of around 15 per cent. Research has also shown that using personality assessment based on a good understanding of the requirements for a job delivers a 35 per cent gain in performance over chance or randomly selecting people from a pool of applicants.

The maths of personality at work

From this research, we can then calculate returns for our scenario. To recap, the key ingredients in our calculations are that:

- The average salary is £40,000
- The bottom 15 per cent of employees contribute value to the organisation equal to one times their salary (which minus salary equals a zero return)
- The middle 70 per cent of employees contribute value of twice their salary (which minus salary equals a return of 100 per cent)
- The top 15 per cent of employees contribute a value of two and half times salary (a 150 per cent return once salary is deducted)

Also, from the mathematics of the performance curve (the normal or Gaussian distribution), we can calculate the average shift in performance from basing our select/promote decisions on experience alone or on personality assessment.

The table below shows the number of recruits that we could predict would fall into each of three bands of performance if we were to use the various selection methods described. 'Random' selection uses no objective assessment at all; 'experience' bases selection on CV or basic interview, and 'personality' uses a well-constructed and relevant assessment of personality against role requirements.

Band	Random	Experience	Personality
Low	15% or 15	12% or 12	3% or 3
Middle	70% or 70	73% or 73	68% or 68
High	15% or 15	18% or 18	28% or 28

So, this is how the performance of our new employees would be distributed. What impact will that have on overall performance – can we put a figure on it? We can calculate the net return across our three scenarios. For those in the lower performance band, the net return is going to be contribution (salary x 1) minus salary or zero. For those in the middle band, the net return will be contribution (salary x 2) minus salary, and for those in the high band the net return will be contribution (salary x 2.5) minus salary.

We can then multiply each of these sums by the number of people in each performance band and aggregate across performance bands to calculate the net return across all 100 managers.

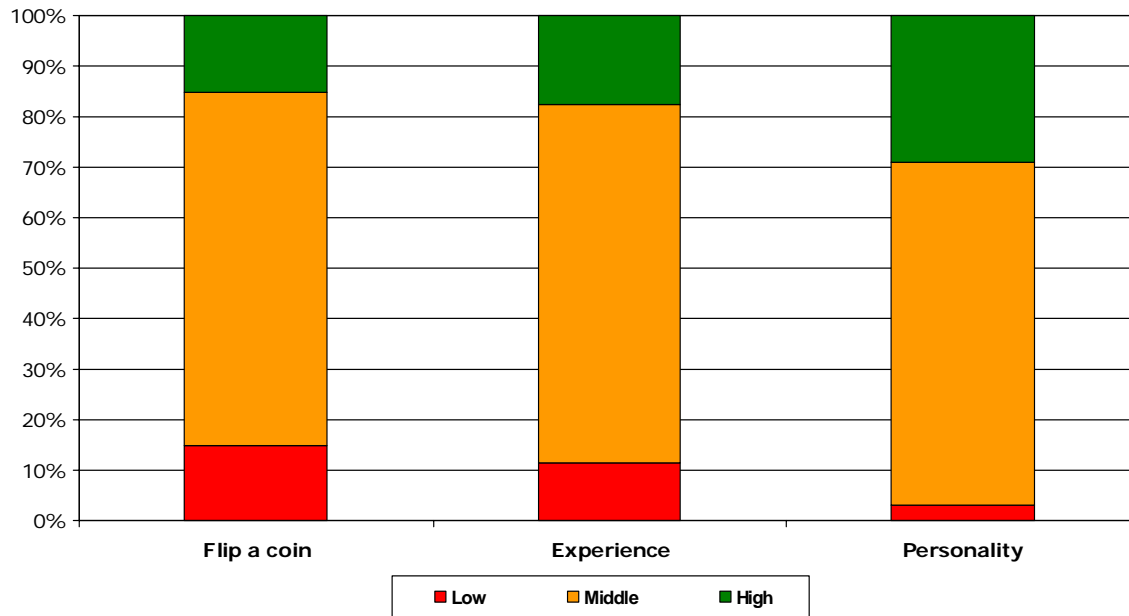
Band	Random	Experience	Personality
Low	15 x £0 = £0	12 x £0 = £0	3 x £0 = £0
Middle	70 x £40,000 = £2.8m	73 x £40,000 = £2.92m	68 X £40,000 = £2.72m
High	15 x £60,000 = £0.9m	18 x £60,000 = £1.08m	28 X £60,000 = £1.68m
Net return	£3.7m	£4m	£4.4m

What these figures show is, when compared against selection at random, experience offers 108 per cent return while personality assessment offers an extra 119 per cent return – equating to an additional £700,000 contribution annually. With bottom-line impacts like this the value of investment in assessing personality at work becomes crystal clear.

These figures are likely to prove conservative if one considers the well established principle that performance equals 'can do' multiplied by 'will do', where the 'will do' factor is captured by personality assessment. The figures in the above tables also look at gains in performance only, and there will be opportunity costs associated with managing the lower performers. Recent research suggests that managers spend between eight and 24 percent of their time managing poor performers. Minimise the number of low performers, and you naturally gain from freeing up the higher performing managers to generate still higher returns.

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Comparison across scenarios of proportions of low, middle and high performers



I am not suggesting that people be selected or promoted on personality assessment alone, and, of course, experience and training must play a part in people's performance at work. However, in the "knowledge economy" of today, the shelf life of past experience is ever shortening and has been estimated recently to range from 3 to 5 years depending on which occupation and on which industry one is looking at. Moreover, it is relatively easy to build skill and experience through training - it is much harder to influence personality. Having the right personalities in role provides a firm foundation for further development that can push potential contributions even higher.

Either way, the capacity to learn, adapt to change, operate more and more in virtual and international environments, as well as use constantly changing technologies are all key factors influencing people's performance. Yet

again, then, one can see and understand how substantial the impact of personality at work is on success and failure of organisations and their employees.