

Eysenck at work: the application of his theories to work psychology

Adrian Furnham¹

¹Research Department of Clinical, Educational and Health Psychology

University College London, 26 Bedford Way, London, WC1H 0AP

Email: a.furnham@ucl.ac.uk

Phone: 00 44 207 679 5395

Acknowledgments: I have been greatly helped in this paper by the comments of many of those who worked with Hans, namely Paul Barrett, Sybil Eysenck and Glenn Wilson as well as others who knew his work well, particularly Phil Ackerman, Philip Corr, Filip de Fruyt, Chris Jackson, and Dino Petrides

Abstract

This rather personal paper looks at the extent to which Hans Eysenck's research influenced work psychology presently and in his life time. Whilst he was interested in, and eager to apply his theory very widely from criminology to politics, he seemed less interested in the world of work. Yet his influence can be seen in correlational work psychology, which looks at personality and intelligence correlates of work beliefs and behaviours as well as experimental work psychology, which uses classic experimental psychology to test hypotheses. He "gave away" intellectually his measures and ideas to entrepreneurs preferring to test his ideas in the laboratory, classroom or clinic.

Introduction

In a masterful overview of Eysenck's work, in the year of his death, Netter (1997) pointed out various principles and practices promoted and developed by him in his career that, in part, explained his influence. These included his interest in theory development and hypothetical deductive reasoning; adopting a multilevel approach to research measurement; extrapolations from psychopathology to normal personality and back; an interest in how one could use drugs to test personality theory. His work influenced a generation of researchers and his legacy is profound. This legacy is primarily in differential psychology and to a lesser extent in biological, clinical and educational psychology. Despite his wide interests and eagerness to show how personality traits explained many phenomena and accounted for a significant amount of the variance in various outcomes and settings he was less interested in applied and work psychology. This paper considers his influence in this area.

Twenty years ago I wrote a chapter entitled "Eysenck's personality theory and organisational psychology" in Nyborg's (1997) festschrift. In that chapter I noted that whilst he tested his theories particularly in clinical, educational, experimental, forensic and health psychology, he seemed much less interested in organisational, vocational or work psychology. It is not entirely clear why he seemed less interested in work psychology. He was an experimentalist interested in theory building and work psychology may be one of all the areas of psychology where good theory-derived experimental work thrives the least. Also he seemed less interested in, and sensitive to, the concerns of work psychologists and consultants. One good example lays in the names of factors. Psychoticism has always proved a difficult term even in academic circles, and is particularly problematic in selection contexts. To have to feedback

the fact that one scores highly on this scale presents all sorts of problems to the consultant, not least of which is the potential reaction of genuinely high P scorers.

The same problem even confronts work psychologists when talking about Neuroticism. Some have tried to avoid the problem by talking about Social Adjustment, where low adjustment is high Neuroticism or Negative Affectivity. There is even a Big Four as opposed to a Big Five Inventory which simply drops Neuroticism because of the “problems of feedback” (Furnham, 1996). One could imagine how Eysenck would have reacted to this. It was not only bad science but an example of the pusillanimity of those in selection who would not give honest feedback

Paul Barrett who worked with him for many years noted:

“Hans just wasn’t very interested in the appliance of his work/thinking to the organizational domain. He’d sign contracts with various ‘entrepreneurs’ to allow them to utilize his questionnaires (for the royalty benefits etc.) but would pass any analysis/calibration/product norms/setup work onto myself or Glenn Wilson.

Hans was first and foremost a scientist - in some respects like a Dick Feynman - who was only interested in substantive scholarship, and the thinking/explanatory theory, potential experimentation which went hand-in-hand with this. I/O psychology for Hans was simply an area which might provide an income via use of his name/questionnaires - without him having to do anything that would get in the way of his primary work/identity as a research scientist”

Even in his famous and very popular Penguin paperback series that attracted so many people to psychology *Uses and Abuses of Psychology* (1953), *Sense and Nonsense in Psychology* (1957), *Fact and Fiction in Psychology* (1969) and *Psychology is About People* (1972) very few of his highly approachable and challenging essays concerned the world of work. *Uses and Abuses* had a section called “Vocational Psychology” and had four chapters one about ability,

two on selection and one on work productivity and motivation. Most of these chapters were reviews and comments on others studies. Few of the others had anything recognisably in the field of organisational psychology.

In the long foreword to my book *Personality and Work (1992)* it is clear that Eysenck's understanding of what his work could contribute was mainly about selection: devising personality and ability tests to select better candidates. Interestingly there is evidence that Hans looked at industrial apprentices at the Ford Motor company in the 1960's investigating the consequences of the belief that performance is important to work success (Corr, 2016), though this work seems not to be published. Philip Corr's (2016) important book indeed explains that Hans's was approached by many organisations because of his reputation to help them with various research questions.

In my earlier chapter on this topic I observed a number of themes. First, the use of the Eysenckian questionnaires like the MPI and the EPI in business settings (Furnham et al., 2008). Most of these studies were done in the 1960s and 1970s and were piecemeal from a theoretical point of view, probably reflecting more the fact that there were few personality tests to be used. Other sections of my chapter looked at attempts to use Eysenckian factors to examine job fit; accidents, training, job satisfaction and distractability at work. I recall the same problem then as I have now in trying to understand why the Eysenckian ideas and use of scales is so piecemeal in work psychology.

A few factors may, in part, explain the relative low impact of Eysenck's work to this area of psychology. *First*, Eysenck was a theory builder and interested in constructing powerful parsimonious theories to explain individual differences in affect, behaviour and cognition.

Overall, work psychologists seem less interested in theory building and testing having either rather grand, but bland, theories like McGregor's theory X and theory Y, or mini-theories which attempt to explain particular processes (Furnham, 1992). The theories that existed in work psychology, such as they were, tended to be almost untestable because of definitional issues (see Maslow's concept of self-actualisation) or else it was (and still is) very difficult to obtain realistic performance data in order to assess them. That is, work psychologists seem primarily interested in *prediction* and *description*, and Eysenck in *explanation*. His books "fizz" with ideas and possible explanations, not with "actionable" information of consultants and managers. Certainly some in the business world, particularly those from Human Resources seemed unwilling or unable to try to "translate good theory into practice" as they tended to want things "spelled out" for them.

Prof Jeffrey Gray, a student of, and successor to, Hans Eysenck, once famously described his personality theory as akin to somebody finding St. Pancras Railway Station in the jungle. The station is an extremely impressive piece of highly elaborate, complex and beautiful Victorian architecture situated in central London. What Gray meant was that Eysenck's theory stands out dramatically from all around it. This was particularly true for the period 1950-1970 when Eysenck was at his most intellectually productive.

Second, Eysenck was always interested in the biological basis of personality which has never been a concern of work psychologists, except those coming from an ergonomic background. Indeed, evidence of this can be seen in the relatively late, and limited, interest in neuro-science even now among the work psychologist. He was clearly "before his time" battling with the environmentalists of many different persuasions who ideologically rejected the idea that a whole range of psychological processes and mechanisms had a clear biological basis. However,

one could expect that Eysenckian theory should become more influential as biological accounts gain greater prominence in work psychology through things like neuroimaging. The 1960s and 1970s were a time of “situationism” in applied and social psychology. It was nurture not nature that accounted for individual difference which were even considered to be form of inequality which had to be dealt with. Things look very different now but Han’s voice can be clearly heard. He was often the outsider and the rebel and had the ability to withstand the criticism and rejection that he so often encountered.

More importantly there are those work psychologists who like to stress group, organisational and situational determinants over individual difference predictors of work place behaviour. This is the ghost of the Person-Situation debate that set personality theory back about 20 years and which Eysenck fought so powerfully to maintain the differential psychology tradition.

Third, Eysenck was interested in “outliers” than those at the middle of the continuum. Indeed he was one of the first to formulate the now accepted “spectrum hypothesis” which sees normal and abnormal behaviour on a continuum. The increasing interest in the dark side of behaviour and the use of the Hogan Developmental Survey in business settings speaks essentially to his early interests (Furnham, 2015).

Fourth, in many ways he came “late to the party” with regard to work psychology. The catalyst of the Second World war, in which the young Eysenck played a part in defending London against incendiary bombs, meant that a great deal of work had been done by differential work psychologist interested in selection. It was much the same for Cattell, an old adversary of Eysenck, though Cattell had probably more influence through his 16PF scale.

It is possible to divide work psychologists into differential work psychologists interested in individual difference

1. Two Psychologies and Eysenck's Contribution

There is a great deal of tension in work psychology between those who come from an experimental psychological vs a personality psychology background (Cronbach, 1975). The latter accuse the former of neglecting individual differences that have powerful explanatory power, while the former berate the latter for ignoring the influential situational factors. This can best be seen in a very spirited debate in the journal *Personnel Psychology* between those powerful journal editorial figures who seemed to dislike differential psychology (Morgeson, Campion, Dipboye, Hollenbeck, Murphy, & Schmitt, 2007a, b) and those who gave a spirited defence (Tett & Christiansen, 2007). To my knowledge, this signalled to some young and talented researchers to stop working and submitting to work psychology journals because of the fear of rejection not based on science but ideological differences.

It is the person-situation debate all over again (Argyle, Furnham & Graham, 1981), and the disputes between the old Cronbachian ghost of the two psychologies. Eysenck always championed and demonstrated his desire to do both rigorous experimental psychology that was laboratory-based as well as good differential psychology which may rely more of self-report or observational measures

A. Correlational Work Psychology

Eysenck devised and validated Around half a dozen inventories that are still widely in use. The paper which provides free access to the EPQ-R has been cited over 1400 times (Eysenck, Eysenck & Barrett, 1985). The paper on Impulsiveness and Venturesomeness is Eysenck's third most quoted paper with nearly 500 citations (Eysenck & Eysenck, 1978).

Furnham, Eysenck and Saklofske (2008), suggested five reasons why these measures have stood the test of time.

a. Parsimony. The PEN model offers a first-class conceptual foundation for the Eysenck Personality Questionnaire (EPQ), which is one of the most parsimonious and psychometrically robust personality inventories. It compares favourably with the sixteen dimensions of Cattell's 16PF or the Big Five, Six or Seven (there have been several attempts to expand Big Five models by adding allegedly new traits; and even reducing all of them the Big One).

b.

The parsimony may, however, have led to the EPQ being less used in work psychology. Selectors simply cannot believe that their, or candidates, multifaceted and complex personality could possibly be reduced to three numbers. Many of the popular and less validated tests used in work psychology offer a multifaceted analysis with up to seven domains and multiple facets. It was apparent from many early books and papers that Eysenck had a clear facet model for his theory. Provoked by colleagues and consulting psychologists the Eysenck Personality Profiler (EPP; Eysenck & Wilson, 1991) was devised which is a 420-item questionnaire measuring 21 primary scales. This was done in Eysenck's last years and he never expressed a great deal of interest in it, though many acolytes have tested its qualities. Thus,

paradoxically, parsimony may be the enemy of consultancy and the widespread use of tests (Baron, 1996; Barrett, Kline, Paltiel & Eysenck, 1996; Petrides, Jackson, Furnham, & Levine, 2003).

c. *Explanation of Process.* More than any other test developers in the twentieth century, the Eysenck's were not content to just describe and categorise traits: they constantly sought to escape tautological explanations.

Revelle (1997) argued that the classic Eysenckian hypothesis of arousal, underpins his Extraversion factor. The basic assumptions were: 1) introverts are more aroused than extraverts; 2) stimulation increases arousal; 3) arousal related to performance is curvilinear; 4) the optimal level of arousal for a task is negatively related to task difficulty; and 5) arousal related to hedonic tone is curvilinear. Assumption 1 was based on studies associating EPI-E with (low) physiological arousal. Assumptions 3 and 4 were based upon the Yerkes-Dodson Law and Assumption 5 was founded on Berlyne's discussion of curiosity and arousal. From assumptions 1 – 4, it can be predicted that introverts should perform better than extraverts under low levels of stimulation but should perform less well at high levels of stimulation. Similarly, assumptions 1, 2, and 5 lead to the prediction that extraverts should seek out more stimulation than introverts.

d. *Experimentation:* Eysenck was an enthusiast for the experimental tradition at a time when behaviourism and psychoanalysis triumphed. 'Experimental psychology' was his rallying call to attack non-experimental psychoanalysis. He believed it essential that the correlational (individual differences) and experimental branches of psychology unite, so that personality effects will cease to be treated as error variance.

Unlike many psychologists of his day he was as comfortable with experimental and correlational psychology eager to show how individual difference variables helped to explain experimental findings. Indeed PAID is still one of the few journals where it is possible to see studies where experiments taking into account individual differences (Furnham, Trew & Sneade, 1999).

e. Wide Application : The Eysencks were psychological pioneers as well as risk takers; they were eager to extend their research programme to look at the significance of personality functioning in areas as disparate as: sex, crime, parapsychology, astrology and health, and behavioural genetics, among many others. As noted above the most notable exception to this was work psychology. An important question is why no one has taken up the mantle to test Eysenkian theory in work contexts. I have tried in a modest way but have few followers.

f. Continuous Improvement and Development. For nearly 40 years the Eysencks engaged in a systematic research programme aiming to improve, update and validate their range of personality measures. Because their scales have been so widely used in research world-wide they have been subject to detailed but, at times, ungenerous scrutiny by many people. Their observations and research studies, particularly those emphasising a cross-cultural perspective, led to continuous improvements over time, with items being removed, changed, and replaced. Importantly, all of this psychometric development was guided not by commercial opportunities, but firmly by theoretical considerations and empirical evidence.

However there remains one Eysenckian test used widely in consulting circles. The Eysenck Personality Profiler (EPP), developed by Eysenck and Wilson, is widely used in research and consultancy. It measures 21 traits of personality that are consistent with the three major dimensions of personality as defined by Hans Eysenck. The 21 traits are: **Extraversion:** Activity, Sociability, Expressiveness, Assertiveness, Ambition, Dogmatism and Aggressiveness. **Neuroticism:** Inferiority, Unhappiness, Anxiety, Dependence, Hypochondria, Guilt and Obsessiveness. **Psychoticism:** Risk-taking, Impulsivity, Irresponsibility, Manipulativeness, Sensation-seeking, Tough-mindedness and Practicality.

In many ways the story of this test is illustrative. Whilst Eysenck strove always for parsimony consultants soon found that people found it impossible to believe that the richness and variety of a person's personality could be reduced to three scores. Consultants wanted a model with facets like the NEO-PI-R or the popular OPQ (Barrett et al. 1996). Whether or not this level of measurement added anything seems irrelevant to many people in business: with more scales, they feel at least they are getting their money's worth. More scores implied greater comprehensiveness and, no doubt, the possibility of more charges. Possibly three scores are sufficient to explain the behaviour of their competitor's employees, but not their own highly multi-faceted ones, a curious type of attribution error. A business person spotted this opportunity when reading the ever popular and still in print *Know your own Personality* (Eysenck & Wilson, 1975) and persuaded them to derive a facet version. This resulted in the EPP, which attracted some serious psychometric investigation (Jackson & Corr, 1998; Jackson & Francis, 2004; Petrides et al., 2003). Indeed, I discovered a consultancy in New Zealand which was using this measure and collecting interesting data at an assessment centre and published a number of papers on this topic (Furnham, Forde & Cotter, 1998ab; Jackson, Furnham, Forde & Cotter, 2000).

There are two reasons why this test is less well known and used compared to the other facet level tests like the NEO-PI-R. One is the fact that the marketing has not been so aggressive, but also the scale names/labels still have too much an “abnormal” flavour. For a test to sell to HR specialists and other clients, negative concepts like Dogmatism need to be repackaged as “Firmness” or something more commercially acceptable, although more anodyne and less explanatory of psychological factors.

B Experimental Work Psychology

Experimental work psychology is usually informed by theories and issues in three areas: ergonomics, experimental social psychology and cognitive psychology. Although Eysenck did not always do work in some areas himself, his followers and students did work in areas like accidents (Venables, 1956). If you go to the ergonomics journals and search for his name you see dozens of papers on things like shiftwork, stress, fatigue, vigilance and circadian rhythms. If you repeat the exercise in experimental social psychology papers appear about religious prejudice, emotional regulation and relationships, which quote his work. Whilst it has been his son Michael Eysenck, who has made most contributions to cognitive psychology, there was a great deal of work in the 1950s and 1960s, which was classic experimental psychology applied to topics like drive and memory (Eysenck, 1964).

Despite being a leading member of the London School of Differential Psychology, Eysenck’s always said he favoured the experimental method. Thus, he titled one book *Experiments with Drugs*, and this is a very good example of his use of pure experimental method and how they can be used to explore individual differences which was a theory derived description of many experiments.

However the fact that still so many experimentalists see individual differences as error variance there still remain few who measure personality in experimental designs which seems to many very strange after all these years

2. Eysenck's Personal Work Style:

There is often a fascination with the work pattern of highly productive people. Just as there is some interest in the process, rather than the product of creativity and writing in particular, there are various speculations on how working style informs output. Eysenck was very famous for his efficiency. I recall him delivering a book chapter less than 10 days after I sent him a letter inviting him to do so. Apparently, he dictated his early Penguin books in less than a month. It was this seemingly effortless ease with which he wrote that both beguiled and frustrated his admirers and enemies.

What of his work-style? Glenn Wilson who worked with Hans for around 30 years noted: *"Hans liked to work fairly consistent hours each day. He walked through Ruskin Park, no doubt drafting what he was about to write in head, and started fairly early (between 8 and 9am I think). Every lunchtime he would break for tennis, with myself and others, usually me driving him down to the Dulwich club. Again, he told me he was drafting his next chapter/paper in his head as he played, before spilling it out upon return to his office.*

Hans' wife, Sybil, in a short note wrote. *"Hans was at all times very well organised. His secretaries will attest to the fact that when he wrote an article or book, he rarely if ever changed his mind. Thus, once written, manuscripts did not need retyping. This meant an enormous saving of time for all concerned. How did he do this? ...Hans planned articles and books in particular, well before he ever attempted to write. He used to type manuscripts and later dictated via Dictaphones. Some years ago, we owned a bungalow in the Isle of Wight where we took our children on school holidays. Our routine there was such that Hans drove the kids to meet me at our favourite coffee rendezvous to which I walked. He then walked back by the sea, able to think out plans for*

books. Moreover, I believe he was able to get research ideas as well as slotting facts he had read up to obtain the theories he subsequently came up with. These hours he spent walking by the beach, free of interruptions from traffic, telephone calls or the family, were a great boon and certainly facilitated his productivity.

Circumstances at home were almost as conducive. Hans went to the office in the morning, played squash or tennis in the lunch hour and came home promptly for tea at 5pm. After that he read. He rarely read “work books” at home but was fascinated by autobiographies, biographies and thrillers. Here then was another of his talents, he could read at a phenomenal rate, so that he got through an enormous number of books both at home as well as work books and articles in the office. We, as a family, were fortunate that Hans was extremely even-tempered and was very easy to live with”

3. A Personal View

I got to know Hans in the 1980s and 90s. I used to cycle to the Institute of Psychiatry library which had specialist journals I was interested in, and would pop in for tea. We also often found ourselves travelling to ISSID conferences together. He was interested in gossiping about UCL, but very little in “small talk” and more interested in individual difference research in other branches of psychology. He quizzed me a lot, but also indicated when silence was what he wanted, rather than the flippant conversation of an impulsive and disinhibited extravert.

Around 1990 I proposed to him a special issue of PAID concerning “Personality and Organisational Behaviour”. His reply was characteristically quick and clear: yes, if the papers are of rigorous scientific quality. We advertised twice in the journal and by the deadline only got about eight papers, three of which made it through the review process. It was not enough for a special issue and the idea was quietly dropped. They appeared in a regular issue.

Around the same time I was aware of a number of “entrepreneurs” hovering around him eager to get into the psychometric test market and approaching him for help. He seemed more

amused than anything else; not eager to jointly start a psychometric company and make a lot of money. This struck me as odd as he was very interested in test development (both intelligence and personality) and the popularisation of the tests as in the very popular *Know your Own Personality* and *Know your Own Intelligence*.

He certainly was not an “intellectual snob” of the sort I knew from “Oxbridge” who despised “applied psychology”. If anything he struck me as rather naïve. By contrast his brilliant successor Jeffrey Gray started a “consulting” business attached to the psychology department precisely to make money for research.

Hans certainly was used to dealing with businessmen. Indeed he told me how after a short meeting with Robert Maxwell he got agreement to start PAID. What he liked about (some/most) business people was the fact they gave quick and decisive answers, unlike the ponderous, risk-averse, generally negative administrators at universities whom he, like many others despise.

He seemed also little interested in making money for himself. We often travelled on public transport though occasionally he would treat me to a long distance taxi ride on the way back from an ISSID meeting. He wanted money to support his research and he looked elsewhere for that.

I believe, quite simply, he did not think that the work psychology offered as much as biological, clinical, criminal or educational psychology to test his theories. It is for this reason that he tended to have less interest, and perhaps therefore less impact in, the whole field of occupational/organisational/industrial/work psychology.

4. Conclusion

In a book called *Personality and Social Behaviour* Patrick Heaven and I reviewed a range of topics in various chapters all with the title “Personality and...”. For instance Personality and Health, and Learning, and Relationships, and Crime, and Leisure. In each chapter we rightly referenced relevant Eysenckian theories as he had written in detail about each. There was a chapter on Personality and Work but it contained fewer Eysenckian references than the others.

To some extent the “triumph” of the “Big Five” over the “Gigantic Three” makes it appear as if Eysenck’s contribution to work psychology is minimal. Work psychologists who increasingly use personality tests have favoured various Big Five measures partly out of fashion, partly because of continuing psychometric problems associated with the trait Psychoticism and partly because of the trend in using measures that offer the opportunity to measure both Domains/Super Traits and Facets/Primary Traits. That said, there remains an active interest and research in the EPP which is sold to consultants (Jackson et al. 2009).

In the last 10 to 20 years of his life Hans Eysenck was a very well known figure. I remember once going through customs with him and the Security Official recognising his name. Whilst he enjoyed and even courted controversy many consultants spoke of the “double-headed sword” of the Eysenck name. On the one hand it meant good science but it also meant often strong and less acceptable views on race, intelligence and health. It is difficult to speculate on whether his tests would have had more impact had he kept calling them after the Maudsley as opposed to himself.

However, his contribution has been substantial because of his interest in theory and causal explanations for the mechanisms and processes underlying personality-behaviour observations. Whilst many researchers seem obsessed with taxonimization (which model is more parsimonious; who was the first to discover/describe the big five; and whether a facet model is superior to a domain model? Eysenck was much more concerned to describe and explain the process or mechanisms that enabled one to understand how personality traits predicted behaviour. Thus the famous inverted-U arousal theory of extraversion makes it possible to derive specific and testable hypotheses relating to numerous aspects of work from accidents to vocational choice.

From the beginning and at odds with the zeitgeist, which was to last for 30 years Eysenck insisted on biological explanations for behaviour. Work psychology has been late to pick up these ideas though current developments in neuro-psychology has meant that work psychologists have at last embraced the biological perspective.

I think Hans would have been pleased and amused by the idea that he made, perhaps from his perspective, a serendipitous contribution to work psychology. Indeed the breadth of his interests and power of his theories would suggest there are few areas of psychology that are and were not touched by his contribution.

References

- Argyle, M., Furnham, A., & Graham, J. (1981). *Social Situations*. Cambridge: CUP.
- Baron, H. (1996). An evaluation of some psychometric parameters. *Journal of Occupational and Organisational Psychology*, 69, 21-23.

- Barrett, P., Kline, P., Paltiel, L., & Eysenck, H. (1996). An evaluation of the psychometric properties of the concept 5.2 Occupational Personality Questionnaire. *Journal of Occupational and Organisational Psychology*, 69, 1-19.
- Buchanan, R. D. (2011). Research report: Doing a biography of Hans J. Eysenck. *History of Psychology*, 14, 210-213.
- Corr, P. J. (2000). Reflections on the Scientific Life of Hans Eysenck. *History & Philosophy of Psychology*, 2, 18-35.
- Corr, P. J. (2016). *Hans Eysenck: A Contradictory Psychology*. London: Palgrave.
- Cronbach, L. J. 1975. Beyond the two disciplines of scientific psychology. *American Psychologist* 30:671–84
- Eysenck, H. (1964). Involuntary rest pauses in tapping as a function of drive and personality. *Perceptual and Motor Skills*, 18, 173-174.
- Eysenck, H. J. (1995). *The Eysenck Personality Profiler (EPP) and Eysenck's theory of personality*. London: Corporate Assessment Network.
- Eysenck, H. J., Barrett, P. Wilson, G. D. & Jackson, C. (1992). Primary trait measurement of the 21 components of the P-E-N system. *European Journal of Psychological Assessment*, 8, 109-117.
- Eysenck, H. J. & Wilson, G. D. (1975). *Know Your Own Personality*. Harmondsworth: Penguin
- Eysenck, H. J. & Wilson, G. D. (1991). *The Eysenck Personality Profiler*. Cymeon: Australia
- Eysenck, H. J., Wilson, C. D. & Jackson, C. J. (1996). *Eysenck Personality Profiler (short)*. Cymeon: Australia
- Eysenck, H. J., Wilson, C. D. & Jackson, C. J. (1998). *Eysenck Personality Profiler EPP-D. Manual*. Frankfurt/Main: Swets Test Service.

- Eysenck, S. B.G. (2001). H. J. Eysenck: a personal view. *Personality and Individual Differences*, 31, 5-6.
- Eysenck, S., & Eysenck, H. (1978). Impulsiveness and venturesomeness – their position in a dimensional system of personality description. *Psychological Reports*, 43, 1247-1255.
- Eysenck, S., Eysenck, H., & Barrett, P. (1985). A revised version of the Psychoticism Scale. *Personality and Individual Differences*, 6, 21-29.
- Francis, L. L. & Jackson, C. J. (2004). Which version of the Eysenck Personality Profiler is best? 6-, 12- or 20-items per scale. *Personality and Individual Differences*, 37, 1659-1666.
- Furnham, A. (1992). *Personality at Work*. London: Routledge
- Furnham, A. (1996). The big five versus the big four. *Personality and Individual Differences*, 21, 303-307
- Furnham, A. (1997). Eysenck's personality theory and organisational psychology. In H. Nyborg (Ed). *The Scientific Study of Human Behaviour*. Oxford Pergamon, pp 462-490
- Furnham, A. (2015). *Bullies and Backstabbers*. London: Bloomsbury.
- Furnham, A., Jackson, C. J. & Miller, T. (1999). Personality, learning style and work performance, *Personality and Individual Differences*, 27, 1113-1122.
- Furnham, A., Forde, L., & Cotter, T. (1998a). Personality scores and test taking style. *Personality and Individual Differences*, 24, 19-23.
- Furnham, A., Eysenck, H., & Saklofske, D. (2008). The Eysenck Personality Measures: fifty years of scale development. In G. Boyle, G. Matthews & D. Saklofske. (Eds) *Handbook of Personality Testing*. California: Sage pp 199-218
- Furnham, A., Petrides, K.V., Jackson, C. J. & Cotter, T. (2002). Do personality factors predict job satisfaction? *Personality and Individual Differences*, 33, 1325-1342.

- Furnham, A., Trew, S., & Sneade, I. (1999). The distracting effects of vocal and instrumental music on the cognitive test performance of introverts and extraverts. *Personality and Individual Differences, 27*, 381-392.
- Jackson, C. J., & Corr, P. J. (1998). Personality-performance correlations at work: individual and aggregate levels of analyses. *Personality and Individual Differences, 24*, 815-820.
- Jackson, C. J. & Francis, L. J. (2004). Primary scale structure of the Eysenck Personality Profiler (EPP). *Current Psychology: Development, Learning, Personality, Social, 22*, 295-305.
- Jackson, C. J., Furnham, A., Forde, L. & Cotter, T. (2000). The structure of the Eysenck Personality Profiler. *British Journal of Psychology, 91*, 223-239.
- Jackson, C. J., Hobman, E. V., Jimmieson, N. L. & Martin, R. (2009). Comparing different approach and avoidance models of learning and personality in the prediction of work, university, and leadership outcomes. *British Journal of Psychology, 100*, 283-312.
- Martin, T. & Kirkcaldy, B. (1998). Gender Differences on the EPQ-R and Attitudes to Work. *Personality and Individual Differences, 24*, 1-5.
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N. (2007). Are we getting fooled again? Coming to terms with limitations in the use of personality tests for personnel selection. *Personnel Psychology, 60*, 1029-1049.
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N. (2007). Reconsidering the use of personality tests in personnel selection contexts. *Personnel Psychology, 60*, 683-729.
- Netter, P. (1997) Digging forward into the past: Modern research on the neurochemical basis of individual differences rooted in Hans Eysenck's Theory. ISSID Conference, Giessen. July.
- Nyborg, H. (1997)(Ed). *The Scientific Study of Human Behaviour*. Oxford: Pergamon

- Petrides, K., Jackson, C., Furnham, A., & Levine, S. (2003). Exploring issues of personality measurement and structure through the development of a short form of the Eysenck Personality Profiler. *Journal of Personality Assessment*, *81*, 271-280.
- Poropat, A. E. (2010). The Eysenckian personality factors and their correlations with academic performance. *British Journal of Educational Psychology*, *81*, 41-58.
- Revelle, W. & Oehlberg, K. (2008). Integrating Experimental and Observational Personality Research—The Contributions of Hans Eysenck. *Journal of Personality*, *76*, 1387-1414.
- Smillie, L. D., Yeo, G. B., Furnham, A. F. & Jackson, C. J. (2006). Benefits of All Work and No Play: The Relationship Between Neuroticism and Performance as a Function of Resource Allocation. *Journal of Applied Psychology* *91*, 139-155.
- Tett, R., & Christiansen, N. (2007) Personality tests at the crossroads. *Personel Psychology*, *60*, 967-993.
- Venables, P. (1956), Car driving consistency and measures of personality. *Journal of Applied Psychology*, *40*, 21-24.