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THE EFFECTS OF EXTRAVERSION AND NEUROTICISM ON SUBJECT'S
GRAPHIC EXPRESSIVE BEHAVIOUR AND PREFERENCES FOR GRAPHIC
STIMULI

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Enid M. Roberts,
1977.

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Much research has investigated the possibility of generalised personality dimensions, and two that have been most frequently demonstrated by factor-analytical studies are those of Extraversion-Introversion and Neuroticism-Stability. Physiological and perceptual research have produced evidence suggesting that extraverts have a higher sensory threshold than introverts, which probably causes behavioural differences between individuals at the extremes of the Extraversion-Introversion continuum. Other studies have indicated that Extraversion and Neuroticism may interact to produce overt behaviour that is contradictory to the behaviour that would be expected for an individual's recorded Extraversion level.

It is recognised that artists produce work with an individual "style", and its relationship with personality has been investigated. Also, the effect of works of art as perceived sensory stimuli has been examined and theories have evolved to explain the sensory arousal experienced with different types of stimuli. The level of sensory stimulation required to produce optimum arousal is higher in extraverts than introverts, and personality research has shown that extraverts tend to prefer more complex, angular stimuli, which have more arousal potential, than introverts.

This need for greater sensory stimulation leads to more active, impulsive behaviour being produced by extraverts, and this is demonstrated graphically by more expansive expressive movements. The present study is an attempt to examine the differences between extraverts and introverts in graphic expressive movements and in preference for sensory stimulation. It also attempts to investigate the effect on these differences of higher or lower levels of Neuroticism.

Subjects for the study were patients at the psychiatric unit of a public hospital, who presented varying levels of Neuroticism as measured by the Eysenck Personality Inventory. No significant results were obtained, but trends tended to support previous research that indicated extraverts preferred more complex and angular stimuli than introverts, and that high levels of Neuroticism altered this relationship. Information was also produced which generated hypotheses for future research and indicated improvements in the experimental design which might produce more significant results.

CHAPTER I

TRAITS OR PERSONALITY DIMENSIONS

Regardless of the different emphases of various theorists, there is a core of agreement in considering personality as an integration of traits which can be investigated and described in order to render an account of the unique quality of an individual (Chaplin, 1970).

Theories on the structure of personality have been put forward for centuries. Hippocrates, and later Galen, divided individuals into four types: choleric, melancholic, sanguine and phlegmatic. These groupings he formulated from a supposed predominance of one of the bodily humours: yellow bile, black bile, blood and phlegm (Mischel, 1971).

More recently links were sought between personality and somatic type by such theorists as William Sheldon (1942). He looked for associations between body build and temperament, postulating three types: endomorphic, mesomorphic and ectomorphic.

"Type" theories, however, tend to assume discrete, discontinuous categories, yet it is virtually impossible to classify individual persons into one or another clear-cut category. There seem to be overlaps between an indeterminate number of polar-continuum type personality dimensions. This encouraged certain theorists to develop the idea of personality "traits" which include such dimensions as aggressiveness and dependency.

Guilford (1959, p. 6) defined a trait as "any distinguishable, relatively enduring way in which one individual

varies from another": Allport (1937) defined traits as "determining tendencies" or "predispositions to respond" in an individual, that account for the consistency of his behaviour. He states that a trait is a "generalised and focalised neuropsychic system (peculiar to the individual) with the capacity to render many stimuli functionally equivalent, and to initiate and guide consistent (equivalent) forms of adaptive and expressive behaviour" (Allport, 1937, p. 295). Adaptive behaviour is coping behaviour - the way in which an individual reaches his goals and completes his tasks. Expressive behaviour includes body movements, activity level, and possibly response to stimulation. These may be recorded in such activities as artistic productions and handwriting.

Although Allport emphasises the structure of personality as determining behaviour, he also includes environmental influences. "One person may owe a given trait primarily to inheritance, another person primarily to learning. One person may be reclusive and retiring chiefly because of his temperament, another because of conflict with his environment" (Allport, 1965, p. 69).

Environment, or culture, as Allport uses it, is in part a set of inventions that have arisen in various parts of the world (or with subgroups of population) to make life efficient and intelligible for individuals who have to struggle with the same basic problems of life: birth, growth, and death. The solutions are passed on from one generation to another. Handwriting is a good example of the compromise we all reach between personality structure and the effects

of culture. Traditional letter forms are learned but are adapted to suit the temperament of the individual. No two people have identical handwriting as no two people have identical personalities. However, there appear to be generalised similarities in handwriting, such as size and slope, which would suggest some generalised personality dimensions.

A common trait is, according to Allport (1965, p. 349), "a category for classifying functionally equivalent forms of behaviour in a general population of people. Though influenced by nominal and artifactual considerations, a common trait, to some extent, reflects veridical and comparable dispositions in many personalities, who, because of a common human nature and common culture, develop similar modes of adjusting to their environment, though in varying degrees".

For Cattell (1965) the trait is also a basic unit of personality which is inferred from behaviour, and accounts for behavioural regularity and consistency. He emphasises source traits, or underlying dimensions, that affect variations in behaviour, and he distinguishes between "environmental-mold" traits, which reflect environmental conditions, and "constitutional" traits which reflect constitutional factors.

Eysenck (1947, 1957, 1967) has carried this search for personality dimensions further, to include the area of abnormal behaviour, and has also studied the associations between a person's status on certain personality dimensions and his scores on a variety of other personality and intellectual measures.

In spite of disagreement about basic dimensions, there is some overlap in the findings of different trait theorists.

The two dimensions that seem to be found most consistently involve extraversion-introversion and adjustment and integration as opposed to disorganisation and anxiety (Vernon, 1964). For example, Eysenck puts forward a personality theory that is based on two orthogonal dimensions: Extraversion and Neuroticism, Cattell (Cattell and Scheirer, 1961) has Invia-Exvia as one of his second-order state factors. This appears similar to Extraversion-Introversion and, although Cattell feels that it does not vary in a person over time and from occasion to occasion, a good deal of the interpersonal variability is constitutional.

Trait theories, therefore, fulfill the need for some structure on which to base personality. A structure which gives account of the relative stability of an individual's personality over time in different situational fields. It also indicates a basis for common personality dimensions throughout a general population or culture.