

Measuring intelligence:

Intelligence testing: Galton = forefather of intelligence testing; explored differences in intelligence, Binet invented the first intelligence test with Simon (Binet-Simon intelligence test) – Terman recognised need for standardised testing. Stern developed idea of intelligence quotient (IQ), Yerkes = group intelligence testing (used in army). Wechsler = Wechsler Adult Intelligence Scale (WAIS) and Wechsler Intelligence Scale for Children (WISC). Cattell suggests (g) comprises of two related but distinct components; crystallised and fluid intelligence. Multiple intelligence theory: 9 distinct intelligences.

Two factor theory of intelligence: Spearman. 1. Specific ability (s) and 2. General ability (g). Specific abilities: maths, vocabulary, special awareness. Tests associated with Spearman's two factor theory: Wechsler tests and Raven's matrices.

Wechsler tests: WAIS (Adult Intelligence Scale) and WISC (Intelligence Scale for Children) testing verbal and performance measurement of 'g'; tasks including arithmetic, comprehension, block design, picture arrangement, similarities etc.

Raven's matrices: non-verbal measurement of 'g' emphasising theoretical thought and abstract reasoning – progressive patterns.

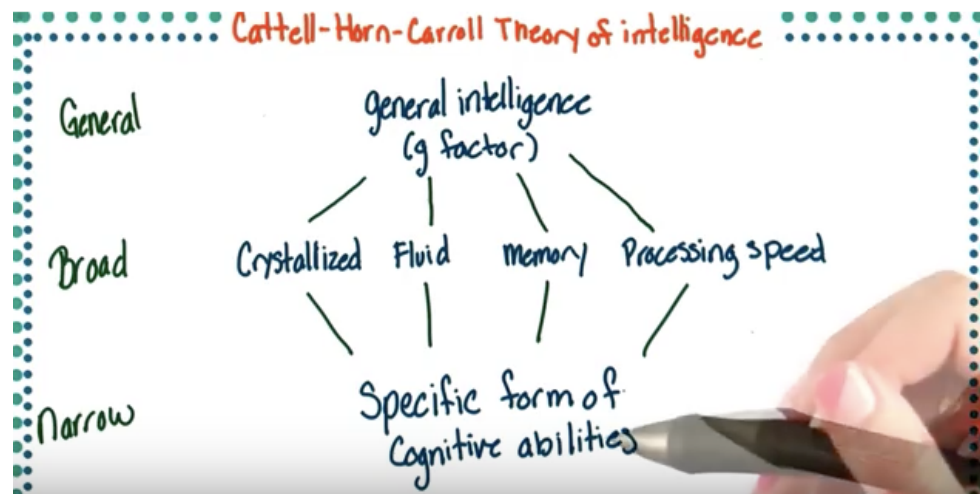
Structure of intellect theory: Guilford – disagreed with Spearman – argued there were 150 different intellectual abilities and divided into 3 groups: 1. operations (cognition, memory, evaluation), 2. contents (visual, auditory, behavioural), 3. products (units, classes, systems).

Hierarchical theory of intelligence: Vernon, Carroll – 1: specific levels of intelligence 2: 8 broad factors stemming from abilities, 3: general level of intelligence

Cattell, Horn and Carroll (CHC) theory: Integration of Cattell and Horn's Gf-Gc theory of fluid and crystallised intelligence with Carroll's three stratum theory. Best known compromise between singular and multiple theory of intelligence. Tests associated with CHC theory: Woodcock-Johnson test.

Woodcock-Johnson test: 21 subtests encompassing 7 broad abilities: auditory, visual, comprehension, processing speed, memory etc.

SIDENOTE: fluid intelligence: free from cultural influence, processing power... crystallised intelligence: reflects what learn from environment and experiences



Multiple Intelligence theory: Gardner disagreed with traditional intelligence testing and suggests 9 distinct intelligences – challenges 'g' theory.