Psychometrics tools and Axiometrics - benefits and applications

Prepared by Learning and Development Team, NHS Trust

	Summary of the tool	Aim of the tool	Characteristics
MBTI (Meyers-Briggs Type Inventory)	An introspective self-report questionnaire with the purpose of indicating differing psychological preferences in how people perceive the world around them and make decisions.	It is based on the conceptual theory proposed by Carl Jung, who had speculated that humans experience the world using four principal psychological functions – sensation, intuition, feeling, and thinking – and that one of these four functions is dominant for a person most of the time.	The MBTI exhibits significant psychometric deficiencies, notably including poor validity (i.e. not measuring what it purports to measure) and poor reliability (giving different results for the same person on different occasions). The limits of self report assessment are clear in such suggestions as that found in the MBTI manual stating that if you don't agree with the results, read other descriptions and see if one of the other descriptions better describes you. The four scales used in the MBTI have some correlation with four of the Big Five personality traits, which are a more commonly accepted framework.
SDI (Strength Deployment Inventory)	It's a self-scoring motivational assessment tool that provides an understanding of what drives you and what drives others — an understanding that empowers you to communicate in a way that achieves the results you desire.	The SDI helps people relate to one of seven Motivational Value Systems (MVS) and one of thirteen Conflict Sequences. Each individual's MVS is represented by a dot on a colour-coded triangle, and their Conflict Sequence is represented by an arrowhead that shows how their motives typically change during the stages of conflict. And people who work together can see their results plotted in the context of their group.	Because SDI is based on whole life experience, the results are deemed to be permanent and do not take into account situational, organisational or relationship-based changes. It is therefore not an accurate predictor or analysis if what is going on for an individual 'here and now'. SDI can be useful as: 1) A broad-brushed tool to help teams understand each other 2) A broad-brushed tool to help individuals understand what is important to them and potential sources of conflict and stress in life. It is hugely dependent on the self-awareness, honesty and focus of the individual taking the test.
Insights	Based on personality theory and derived through a self-reporting questionnaire. It provides insight into 'which colour you are' to deepen self-awareness of personal preferences.	To identify personality preferences across 4 types to help raise awarenss of self and others.	It is behavioural model – it is about preference, not capability. It is not a measure of skill or intelligence. It describes but does not define. It is reliant on accurate self-reporting. The results are deemed to be permanent and do not take into account situational, organisational or relationship-based changes.
Spiral Dynamics	Based on the thinking of Dr. Clare W. Graves reveals the hidden codes that shape human nature, create global diversities, and drive evolutionary change.	To provide insight into people's values, convictions and drives that form the basis for how we think, decide and act. By means of a questionnaire, it determines which Value Systems (1 of 8) a person favours (accepts) or rejects.	This model evokes lots of debate. Some critics dispute the universality of the deeper linear/emergent transitions proposed due to the high degree of variation among the surface expressions of human cultures over time. The claim humans changed systematically on psycho- social dimensions e.g self concept/human propensity and reasons for self sacrifice over the period proposed in Spiral Dynamics is not presently supported by mainstream anthropology, the social sciences or evolutionary biology.
360 feedback	Information solicited in a 360-degree feedback process will include feedback from an employee's subordinates, peers (colleagues), and supervisor(s), as well as a self-evaluation by the employee him or herself.	To provide insight into people's values, convictions and drives that form the basis for how we think, decide and act. By means of a questionnaire, it determines which Value Systems (1 of 8) a person favours (accepts) or rejects.	There is a great deal of debate as to whether 360-degree feedback should be used exclusively for development purposes[1] or for evaluation purposes as well.[2] This is due primarily to feedback providers' subjectivity and motivations, inter-rater variations, and whether feedback providers have the ability to fairly evaluate attainment of work and organizational objectives. While these issues exist when 360-degree feedback is used for development, they are more prominent when employers use them for performance evaluation purposes, as they can unfairly influence employment decisions, and even lead to legal liability.
The Big 5 - this includes DISC as it is based on the Likert Scale	Personality theory - based on 5 factors of personality and rooted in psychology. Tools are typically self-reporting using either the Likert Scale ('Strongly Agree' or 'Disagree') or are Ipsative.	To provide feedback to individuals on their performance and impact by identifying behaviours that have a postitive impact and behaviours that have an negative or unuseful impact.	"Big Five" assessments are typically self-reporting so reveal the same lack of certainty associated with MBTI. One of the manuals states clearly: "Because we are using limited number of items, sampled from a broad domain of items, your scores will be sensitive to errors of measurement and will not necessarily agree with measures of the same traits using other items. If people who know you well disagree with the results of the inventory, then the inventory results are probably wrong. If you answer the items carelessly or intentionally try to distort the results, then the results will be incorrect".
Belbin	Developed by Meredith Belbin and using self-reporting questionnaires. The Belbin Team Inventory is a behavioural test, also called the Belbin Self-Perception Inventory, Belbin Team Role Inventory, BSPI or BTRI.	To provide insight into the five personlaity traits of: extroversion, agreeableness, conscientiousness, neuroticism and openness to experience.	Belbin is a self-reporting questionnaire. Belbin's "team roles" are based on observed behavior and self reporting of interpersonal styles. The model suggests that people tend to adopt a particular team role, however does not account for how behaviour or style may differ dependent on situation. The dynamism of the model is questioned as participants are likely to behave and interact quite differently in different teams or when the membership or work of the team changes.
Axiometrics	Developed by Wayne Carpenter and based on the work of Dr Robert S Hartman into values science. Has its roots in Mathematics and Philosophy.	To provide insight into value thinking patterns across 3 dimensions of value for World and Self in a specific time and environment and the impact of these on decision-making, actions and ability to do a good job and create a successful working environment.	Objective - is not dependent on self-reporting.

Applications	Recruitment	On-boarding	Personal Development	Personal Coaching	Performance Management	Talent Management	Team Performance	Team Coaching	Define Current or Desired Culture	Culture Risk	Rogue Behaviour	Insider Risk
MBTI (Meyers-Briggs Type Inventory)	✓		✓	✓			✓	✓				
SDI (Strength Deployment Inventory)			✓	✓								
Insights			✓	✓			✓	✓				
Spiral Dynamics			✓	✓			✓	✓				
360 feedback			✓	✓	✓							
The Big 5	✓		✓	✓		✓						
Belbin			✓	✓			✓	✓				
Axiometrics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓