PYSC 333 PSYCHOLOGY OF PERSONALITY

Session 4– Trait Theory of Personality- Part 2

Lecturer: Dr. Margaret Amankwah-Poku, Dept. of Psychology
Contact Information: mamankwah-poku@ug.edu.gh
Session Overview

- Raymond Cattell and Hans Eysenck are also trait theorists who presented their views of personality
- Cattell used factor analysis to arrive at his 16 Personality Factor Test
- Eysenck proposed fewer dimensions of personality, than Cattell did
- Much later, some contemporary theorists developed the Big Five Model which also based on personality traits
- The Five-factor model attempts to find a middle ground between Cattell’s 16 Personality Factor Test and Eysenck’s dimensions (which were too few)
Session Goals and Objectives

At the end of this session, you should be able to

• Discuss Cattell’s use of factor analysis in his study of personality
• Discuss Cattell’s classification of traits
• Describe Cattell’s 16 Personality Factor Questionnaire which represents the basic dimensions of personality
• Describe Eysenck’s dimensions of personality
• Describe the Five-factor Model of personality
• Evaluate Cattell’s and Eysenck’s theories of personality
• Evaluate the trait theory of personality
The key topics to be covered in the session are as follows:

• Raymond B. Cattell (1905-1998)
• Hans Eysenck
• Five Factor Model
• Carducci, B. J. (2009). The Psychology of personality (2nd ed.). Chichester: John Riley & Sons Ltd (Ch 7)
Topic One

RAYMOND B. CATTELL (1905-1998)
Raymond B. Cattell (1905-1998)

• Cattell favoured a “data-base” approach to defining personality and how it works
• He preferred to base his study of personality on empirical observations of behaviour
• His interest was in using empirical measures to predict individuals’ behaviour (Carducci, 2009)
• Cattell’s aim was to predict how an individual will behave in a given situation
Raymond B. Cattell (1905-1998)

- Cattell conducted a number of researches
- Concluded that 1/3 of one’s personality is genetic while 2/3 is social and environmental influences
Defining personality

• Cattell defined personality as

• “that which permits a prediction of what a person will do in a given situation” (Cattell, 1950, p.2)
Cattell’s viewpoint of personality

• According to Barone & Kominars, 1998) (in Carducci, 2009), Cattell is credited with developing the first compressive trait theory of personality

• Solely based on using empirical data to assess and quantify traits

• Cattell used 3 sources of data in his study of personality
Cattell’s viewpoint of personality

1. L-data– records of life events such as school transcripts, diaries or contents of personal files
2. Q-data– self-ratings on questionnaires or personality tests
3. T-data– observations in situations that assess some aspect of personality
Cattell’s categorisation of traits

- Cattell identified different categories of traits to demonstrate the diverse nature of people’s personalities
- First were surface and source traits - accounted for individual uniqueness
Cattell’s categorisation of traits.

- **Surface traits** – visible traits which describe clusters of behaviour that tend to go together
- One’s outward actions
- They are controlled by underlying source traits
- Example, showing up early for work, or at social functions, etc. reflects the surface trait *punctuality*
Cattell’s categorisation of traits.

• **Source traits** - these are responsible for diversity in personalities

• They are underlying trait which surface traits are built on (Lahey, 2001)

• E.g.- differences in *punctuality* or *perseverance* show the degree to which people possess the underlying source trait ambitiousness
Cattell’s categorisation of traits.

- Cattell further categorized common and unique traits
- **Common traits** – These are possessed in some degree by everyone
- E.g. intelligence or anxiety, sociability
Cattell’s categorisation of traits.

- **Unique traits** – these traits are specific to individuals
- They are seen in one’s interest, beliefs and attitude
- E.g. someone with a passion for history or a like for politics or an interest in sports
• Other traits that Cattell identified are:

• **Ability traits**— *reflects a person’s skill in dealing with complex problem solving situations such as being insightful* (Carducci, 2009, p. 273)

• One’s level of intelligence will determine the way he/ she strives for goals (Schultz & Schultz, 2005)
Cattell’s categorisation of traits.

- **Temperament traits**— the general manner or emotional tone of an individual’s behaviour (Carducci, 2009, p. 273)
- E.g.- being intense or relaxed or irritable
- Affects how a person acts and reacts to situations
Cattell’s categorisation of traits.

- **Dynamic traits** - relates to motivation, as they are the driving forces of a person’s behaviour (Carducci, 2009)

- E.g. expressing a desire to learn or being an underachiever (Carducci, 2009)
Cattell’s categorisation of traits.

- Cattell also identified constitutional and environmental-mold traits
- **Constitutional traits**: - mainly dependant on biological factors (Carducci, 2009) but not necessarily innate
- **Environmental-mold traits**: derive from or are influenced by a person’s social and physical environment
Cattell’s factor analysis

- Cattell used factor analysis to reveal sixteen source traits which represents the basic dimensions of personality.
- He used these sources to develop the Sixteen Personality Factor questionnaire or 16 PF.
### Example of factor analysis

#### 6. Dewałyd fođ suDDesš

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I must not eat anything that will increase my blood sugar level.</td>
<td>.743</td>
</tr>
<tr>
<td>5. I must not eat anything that will increase my weight.</td>
<td>.750</td>
</tr>
<tr>
<td>8. I must get my diet right all the time if not my diabetes control will be a disaster.</td>
<td>.675</td>
</tr>
<tr>
<td>9. I must always resist foods that can affect my diabetes.</td>
<td>.761</td>
</tr>
<tr>
<td>11. I must always have the willpower to resist foods that can affect my diabetes.</td>
<td>.751</td>
</tr>
<tr>
<td>17. I must always stick to my diet if not, it would be awful.</td>
<td>.606</td>
</tr>
</tbody>
</table>

#### 13. Dešife fođ suDDesš

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. I would prefer to avoid foods that will increase my blood sugar level.</td>
<td>.354</td>
</tr>
<tr>
<td>15. I would prefer to be able to resist foods that can affect my diabetes.</td>
<td>.202</td>
</tr>
<tr>
<td>18. I would really love to have the willpower to resist foods that can affect my diabetes.</td>
<td>.111</td>
</tr>
</tbody>
</table>
Cattell’s factor analysis

- Cattell expressed traits in bipolar form such as relaxed or tensed, reserved or outgoing, impulsive or restrained, insecure or self-confident etc.
- The 16 PF can be used to produce a “trait profile” according to the individual scores on each trait
Cattell’s factor analysis

Diagram showing personality profiles for three groups of subjects: writers, creative artists, and airline pilots.
Cattell’s stages of personality development

<table>
<thead>
<tr>
<th>Stage</th>
<th>Age</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy</td>
<td>Birth - 6</td>
<td>Weaning; toilet training; formation of ego, superego, and social attitudes</td>
</tr>
<tr>
<td>Childhood</td>
<td>6–14</td>
<td>Independence from parents and identification with peers</td>
</tr>
<tr>
<td>Adolescence</td>
<td>14–23</td>
<td>Conflicts about independence, self-assertion, and sex</td>
</tr>
<tr>
<td>Maturity</td>
<td>23–50</td>
<td>Satisfaction with career, marriage, and family</td>
</tr>
<tr>
<td>Late maturity</td>
<td>50–65</td>
<td>Personality changes in response to physical and social circumstances</td>
</tr>
<tr>
<td>Old age</td>
<td>65+</td>
<td>Adjustment to loss of friends, career, and status</td>
</tr>
</tbody>
</table>
Evaluation of Cattell’s Viewpoint

Strengths

1. Cattell used the quantitative approach and studied personality objectively using factor analysis

2. He conducted rigorous research and earned the label “scientist” (Carducci, 2009)
Evaluation of Cattell’s Viewpoint

Weaknesses

• 1. Cattell is criticized for being too technical and complicated with his method.

• 2. He seems to lose sight of the uniqueness of personality as he emphasises the identification of universal personality (Carducci, 2009)
Topic Two

HANS EYSENCK
Hans Eysenck (1916-1997)

- Eysenck studied both normal and abnormal personalities
- He describes the hierarchical nature of traits from specific actions to general types (Carducci, 2009)
  - 1. Specific response level
  - 2. Habitual response level
  - 3. Trait level
  - 4. Type level
Hans Eysenck (1916-1997)

- Eysenck started with the basic idea that personality was on two dimensions
  - Extraversion- Introversion- and Neuroticism
  - Extraverts- more interested in their external environment thus, oriented toward things and other people in the world outside of themselves
• Introverts are oriented inward, exploring feelings and experiences

• Neuroticism-stability: this involves emotional stability, moodiness, even-temperedness etc,

• Later concluded with 3 major dimensions-
  – Extraversion, Neuroticism, Psychoticism
Hans Eysenck (1916-1997)

• Where an individual falls along these three dimension will determine his/ her personality

• Cross-cultural research showed that Eysenck’s three personality dimensions was found consistently over 35 nations
Hans Eysenck (1916-1997)

- 1. Extraversion - sociable, impulsive, adventurous, assertive and dominant
- 2. Neuroticism – neurotics are characterized as anxious, depressed, tensed, irrational, and moody
- 3. Psychoticism - aggressive, antisocial, tough-minded, cold, and egocentric
Hans Eysenck (1916-1997)

- Eysenck combined extraversion and neuroticism to form a description of personality
- Example, an individual scoring more in the direction of introverted, emotional-stability may have the traits of being moody, anxious, rigid etc.
14.3 Major Dimensions

Eysenck, varying degrees of introversion to produce patterns. For example, a stable person is likely reliable, whereas an emotional person is likely sensitive. Note that the quadrants created personality thoroughly to movements.
Hans Eysenck (1916-1997)

- He believed that inherited differences in the brain accounted for variations in personality characteristics (Coon 2000)

- Example- a person with a low level of arousal will be less sensitive to the effects of reward and punishment

- People with excessive arousal levels in the nervous system will be affected by reward and punishments
Topic Three

FIVE FACTOR MODEL
The Five-Factor Model

• Some personality researchers felt Eysenck had too few dimensions while Cattell had too many factors.

• Thus, more contemporary personality research have yielded five broad personality factors (e.g. Digman 1990; Goldberg, 1990; Wiggins & Trap Nell 1997).
The Five-Factor Model

- These are Openness, Conscientious, Extraversion, Agreeableness and Neuroticism (OCEAN)
- Two of Eysenck’s personality dimensions neuroticism and extraversion form part of the big-five
- The Five Factor Model (FFM) is used to analyse and classify terms people use to describe themselves and others (Carducci, 2009)
The Five-Factor Model

• Robert McCrae & Paul Costa did extensive research and identified the Five factors (McCrae & Costa, 1985b, 1987)

• These factors were confirmed through a variety of assessment techniques

• McCrae & Costa (1985, 1992) then developed a personality test called the NEO Personality Inventory (NEO-PI), to measure five major dimensions of personality
The Five-Factor Model

Factor I: Extraversion

- **High (Extraversion)**
  - Talkative
  - Outgoing
  - Assertive
  - Sociable
  - Energetic
  - Adventurous
  - Enthusiastic

- **Low (Introversion)**
  - Quiet
  - Reserved
  - Timid
  - Shy

Dr. Margaret Amankwah-Poku
The Five-Factor Model

Factor II: Agreeableness

- **High (Agreeableness)**
  - Good-natured
  - Forgiving
  - Kind
  - Soft-hearted
  - Courteous
  - Co-operative
  - Trusting
  - Sympathetic

- **Low (Antagonism)**
  - Unfriendly
  - Quarrelsome
  - Cold
The Five-Factor Model

Factor III: Conscientiousness

- **High** (Conscientiousness)  **Low** (lack of direction)

- Organized
- Thorough
- Deliberate
- Responsible
- Precise
- Persistent
- Dependable

Careless  Disorderly  Frivolous  Inconsistent
## The Five-Factor Model

### Factor IV: Neuroticism

<table>
<thead>
<tr>
<th>High (Neuroticism)</th>
<th>Low (emotional stability)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous</td>
<td>Calm</td>
</tr>
<tr>
<td>Tense</td>
<td>Self-confident</td>
</tr>
<tr>
<td>Moody</td>
<td>Contented</td>
</tr>
<tr>
<td>Anxious</td>
<td>Stable Secure</td>
</tr>
<tr>
<td>Insecure</td>
<td></td>
</tr>
<tr>
<td>Touchy</td>
<td></td>
</tr>
<tr>
<td>Depressed</td>
<td></td>
</tr>
</tbody>
</table>

Calm
Self-confident
Contented
Stable Secure
The Five-Factor Model

Factor V: Openness to experience

- **High** (Openness)
  - Curious
  - Imaginative
  - Wide interests
  - Creative
  - Original
  - Intelligent
  - Daring

- **Low** (Closedness)
  - Shallow
  - Simple
  - Narrow interests
  - Practical

Dr. Margaret Amankwah-Poku
The Five-Factor Model

- The FFM has correlated with several other variable (variables)
- Conscientiousness has been associated with better eating habits and less alcohol and drug use and less unsafe driving tendencies (e.g. Boggs & Roberts, 2004; Kersting, 2003)
- Agreeableness has been associated with safe driving tendencies
The Five-Factor Model

• Agreeableness, Extraversion and Conscientiousness has been associated with happiness (e.g. Peterson, 2006)

• People high on Extraversion are likely to start their own business (Baron & Markman, 2003)

• Marital satisfaction has been associated with people low on Neuroticism, and people high on Agreeableness and Conscientiousness (Mcae, Stone, Fagan & Costa, 1989)
Read this paper-


• The paper proposed a sixth factor of personality, Honesty-Humility
Evaluation of Eysenck’s viewpoint

Strengths

• 1. Eysenck developed the scientific perspective of personality psychology by using empirical data

• 2. His thinking style was eclectic- he studied a combination of genetic, biological and physiological processes, learning theory as well as social and cultural factors
Evaluation of Eysenck’s viewpoint

Weakness

• 1. Eysenck’s emphasis on just three dimensions of personality was criticised (Carducci, 2009)

• 2. The validity of the Extraversion–Introversion dimension as a single personality dimension is also criticised
Trait Theory

- **Conclusion**
- 1. In general trait theories are *quiet (quite)* straightforward to understand and easy to implement with patients
- 2. It is objective- theorists used hard data and statistical analysis to draw their conclusions
Trait Theory

• **Conclusion**
• 3. Unfortunately, they did not delve into how or why traits developed
• Their only interest was in describing traits rather than explaining their origin
END OF SESSION 4 Part 2
References

- Carducci, B. J. (2009). *The Psychology of personality* (2nd ed.). Chichester: John Riley & Sons Ltd