To diagnose or not to diagnose: That is the question

Diagnosing PD in adolescence: Current status and future directions
Michaela A Swales PhD
Senior Lecturer, Bangor University, UK
Overview

# What is personality?

# Current diagnostic systems

# Usage of current systems

# To diagnose or not to diagnose: Reliability, stability & validity of PD diagnosis and personality traits in adolescence

# Future directions

# DSM 5

# ICD-11
What is personality?

- Patterns of (intra-personal) behaviour
  - Overt
  - Covert – thoughts, emotions, sensations
- Sense of self, goal directedness, coherence
- Repertoires / strategies of interpersonal behaviour
- Habitual
- Across contexts – certainly in adults
- Across time
- Resistant (in part) to transient environmental events
Personality Development

- Personality develops in the crucible of:
  - Genetics (McGuffin & Thapar, 1992)
  - Early temperament (Rothbart, Ahadi & Evans, 2000)
  - Attachment (Bartholomew, Kwong & Hart, 2001)
  - Life experiences / adversity (Hegeland & Torgersen, 2004; Zanarini, 2004)
Personality Development

- Early attachment / environmental experiences shape infant behaviour & neurobiology
- Infants make an early contribution to environmental responses (Rothbart & Ahadi, 1994; van den Boom, 1989; 1994)
- Models of early temperament distil into 4 factors: Emotionality, Extraversion, Activity, Persistence (Mervielde et al, 2005)
- Over time, transaction between child and the environment amplifies some traits and attenuates others
Personality Traits

- Personality traits have their origin in temperament (Caspi, 2000; Caspi et al, 2003)

- Personality and temperament share similar traits and have a similar structure (Shiner, 2005)
  - Big 5 (Costa & McCrae, 1992) structure (Extraversion, Neuroticism, Conscientiousness, Agreeableness, Openness to experience) can be used to represent individual differences in children aged 3-12

- Relationship between the FFM and personality disorders is similar in adolescents and adults (Mervielde et al, 2005)
Stability of Personality Traits

- Included studies from birth to old-age that reported trait measures made at least one year apart

Estimated population cross-time correlations as follows:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2.9 years</td>
<td>0.35</td>
</tr>
<tr>
<td>3-5.9 years</td>
<td>0.52</td>
</tr>
<tr>
<td>6-11.9 years</td>
<td>0.45</td>
</tr>
<tr>
<td>12-17.9 years</td>
<td>0.47</td>
</tr>
<tr>
<td>18-21.9 years</td>
<td>0.51</td>
</tr>
<tr>
<td>22-29 years</td>
<td>0.57</td>
</tr>
<tr>
<td>30-39 years</td>
<td>0.62</td>
</tr>
<tr>
<td>40-49 years</td>
<td>0.59</td>
</tr>
<tr>
<td>50-59 years</td>
<td>0.75</td>
</tr>
<tr>
<td>60-73 years</td>
<td>0.72</td>
</tr>
</tbody>
</table>
Personality Research

- Studies of personality are trait based and are DIMENSIONAL.
- In the clinical field the study of personality is CATEGORICAL identifying thresholds for personality disorder.
Personality Disorder
Current diagnostic systems
<table>
<thead>
<tr>
<th><strong>DSM-IV</strong></th>
<th><strong>ICD 10</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A ...... pattern of inner experience and behaviour that deviates markedly from the expectation of the individual’s culture in two or more of the following areas: #Cognition #Affectivity #Interpersonal functioning #Impulse control</td>
<td>Markedly disharmonious attitudes and behaviour involving usually several areas of functioning e.g. #Ways of perceiving and thinking #Affectivity #Style of relating to others #Impulse control #Arousal</td>
</tr>
<tr>
<td>Enduring pattern is inflexible and pervasive across a broad range of personal and social situations</td>
<td>Behaviour pattern is enduring... pervasive and clearly maladaptive to a broad range of personal and social situations</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>ICD 10</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Pattern is stable and of long duration.</td>
<td>Behaviour pattern is of long standing</td>
</tr>
<tr>
<td>Not better accounted for as a manifestation</td>
<td>Not limited to episodes of mental illness</td>
</tr>
<tr>
<td>or consequence of another mental disorder</td>
<td>Not secondary to another mental disorder or</td>
</tr>
<tr>
<td>Not due to the direct physiological effects</td>
<td>brain disease</td>
</tr>
<tr>
<td>of a substance or a general medical</td>
<td></td>
</tr>
<tr>
<td>condition</td>
<td></td>
</tr>
<tr>
<td>Onset can be traced back to adolescence or</td>
<td>Behaviour patterns always emerge in childhood</td>
</tr>
<tr>
<td>early adulthood</td>
<td>and continue into adulthood</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>ICD-10</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| PD diagnosis may be applied to adolescents in those *relatively unusual* instances in which the individual’s particular maladaptive personality traits appear to be pervasive, persistent and unlikely to be limited to a particular developmental stage or episode of an Axis I disorder  
*ASPD cannot be diagnosed in adolescence* | Unlikely that the diagnosis of PD will be appropriate before the age of 16 or 17 years |
| Features must have been present for over a year                       |                                                                       |
Usage of diagnosis

Data obtained from
European Hospital Morbidity Database, WHO EUR
National Hospital Morbidity Database, Australia
## Admissions per 100,000 population (2007)

<table>
<thead>
<tr>
<th>Country</th>
<th>F60 Males</th>
<th>F60 Females</th>
<th>F61 Males</th>
<th>F61 Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>0.044</td>
<td>0.166</td>
<td>&lt;0.001</td>
<td>0.003</td>
</tr>
<tr>
<td>Austria</td>
<td>0.459</td>
<td>1.265</td>
<td>0.058</td>
<td>0.048</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.140</td>
<td>0.468</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.185</td>
<td>0.274</td>
<td>0.112</td>
<td>0.071</td>
</tr>
<tr>
<td>Finland</td>
<td>0.186</td>
<td>0.576</td>
<td>0.070</td>
<td>0.036</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.225</td>
<td>0.695</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Norway</td>
<td>0</td>
<td>0.045</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poland</td>
<td>0.010</td>
<td>0.011</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.155</td>
<td>0.087</td>
<td>0.052</td>
<td>0.023</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.341</td>
<td>0.212</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.518</td>
<td>1.735</td>
<td>0.071</td>
<td>0.059</td>
</tr>
</tbody>
</table>
Sweden
Children and Adolescents
2008
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Code</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.13%</td>
<td>F60.3</td>
<td>Emotionally unstable personality disorder</td>
</tr>
<tr>
<td>17.11%</td>
<td>F63.9</td>
<td>Habit and impulse disorder, unspecified</td>
</tr>
<tr>
<td>16.04%</td>
<td>F69.9</td>
<td>Unspecified disorder of adult personality and behaviour NOS</td>
</tr>
<tr>
<td>6.95%</td>
<td>F64.0</td>
<td>Transsexualism</td>
</tr>
<tr>
<td>5.88%</td>
<td>F63.1</td>
<td>Pathological fire-setting</td>
</tr>
<tr>
<td>4.81%</td>
<td>F63.3</td>
<td>Trichotillomania</td>
</tr>
<tr>
<td>4.28%</td>
<td>F63.8</td>
<td>Other habit and impulse disorders</td>
</tr>
<tr>
<td>3.74%</td>
<td>F60.31</td>
<td>Emotionally unstable personality disorder subtype</td>
</tr>
<tr>
<td>3.74%</td>
<td>F60.8</td>
<td>Other specific personality disorders</td>
</tr>
<tr>
<td>2.14%</td>
<td>F64.9</td>
<td>Gender identity disorder, unspecified</td>
</tr>
<tr>
<td>1.60%</td>
<td>F60.6</td>
<td>Anxious [avoidant] personality disorder</td>
</tr>
<tr>
<td>1.60%</td>
<td>F60.9</td>
<td>Personality disorder, unspecified</td>
</tr>
<tr>
<td>1.60%</td>
<td>F62.9</td>
<td>Enduring personality change, unspecified</td>
</tr>
<tr>
<td>1.60%</td>
<td>F63.0</td>
<td>Pathological gambling</td>
</tr>
<tr>
<td>1.07%</td>
<td>F60.1</td>
<td>Schizoid personality disorder</td>
</tr>
<tr>
<td>0.53%</td>
<td>F60.0</td>
<td>Paranoid personality disorder</td>
</tr>
<tr>
<td>0.53%</td>
<td>F60.5</td>
<td>Anankastic personality disorder</td>
</tr>
<tr>
<td>0.53%</td>
<td>F61.9</td>
<td>Mixed and other personality disorders</td>
</tr>
<tr>
<td>0.53%</td>
<td>F63.2</td>
<td>Pathological stealing</td>
</tr>
<tr>
<td>0.53%</td>
<td>F68.1</td>
<td>Intentional production or feigning of symptoms or disabilities, either physical or psychological [factitious disorder]</td>
</tr>
</tbody>
</table>
Australia Spec. Psych, 1998-2007, n=18,873,368

Australia SpecPsych, 1998-2007, n = 420,800

% Total F codes

% F60-F69 codes
Prevalence of BPD

- Community populations < 18 years: 0.9-3% (Lewinsohn, et al, 1997; Bernstein et al, 1993)
- Out-patient populations: 11-22% (Chanen et al, 2004; 2008)
- Inpatient populations: 49% (Grilo et al, 2001)
Helsedirektoratet Figures

# F60 diagnosis in the 0-18 age range

# 1998 0.2%
# 2008 0.3%
# 2009 1.0%
Diagnosis – the paradox

- Both diagnostic systems in use allow diagnosis
- Both describe onset in adolescence
- Both discourage diagnosis in adolescence and diagnosis is less frequent in adolescence
- Clinicians do diagnose: reluctantly, rarely, based on prototypes??
Reasons not to diagnose

- Adolescence is a time of developmental flux – symptom pattern may change
  - i.e. is the diagnosis reliable?
  - i.e. is the diagnosis stable?
- Some features of PD resemble normal adolescent functioning
  - i.e. is the diagnosis valid?
- Diagnosis is stigmatising
  - i.e. is diagnosis harmful?
- Diagnosis has no treatment implications
  - i.e. is diagnosis useful?
Reliability

- Most of work conducted on BPD: generalisability to other PDs unknown

- Using structured diagnostic interviews based on DSM criteria, research clinicians report adequate inter-rater reliabilities
  - Becker et al, 1999; Blais et al, 1999; Garnet et al, 1994

- Factor analytic studies demonstrate that structure of the diagnosis (BPD) can be replicated across samples
  - Becker et al, 2006; Chabrol et al, 2004
Stability

- Research primarily in community samples indicates that persistence of the diagnosis is relatively unstable.
- Bernstein et al (1993): moderate PD diagnosis 29% stability, severe PD stability 24%. Diagnosis remained for clinically significant number and sub-clinical symptoms did remain in others.
Stability

# Research in clinical samples:
  # Meijer et al (1998): inpatient sample 17/54 met criteria at index hospitalization. At 3 year follow-up only 2/14 still met criteria
  # Garnet et al 1994: 33% of adolescent inpatients (n=21) diagnosed with BPD met criteria 2 years later although specific symptom profiles had changed
  # Chanen 2004: sample of 101 out-patients. At baseline 11 met criteria for BPD. Persistence at 2 years 40%.

# Low temporal stability generally but subset of adolescents for whom stability of diagnosis remains.
Summary Stability

- Studies small
- Confounding effects of treatment in most studies
- Some commentators use data to argue for instability (Becker et al, 2002)
- Some commentators use same data to argue for stability (Bradley et al, 2005)
- Stability in adult samples similar to the rates in adolescence (Zanarini & colleagues, 2003; 2006; 40% remit in 2 years; 88% in 10 years)
Validity

- Many of PD symptoms (especially BPD) resemble ‘normal’ adolescent behaviours
- No clear diagnostic descriptions to differentiate ‘normal’ from ‘abnormal’ development
- Diagnosis relies on severity, persistence of behaviours and interference with normal functioning
- Potentially clinicians make idiosyncratic decisions about what constitutes threshold
Validity

# Adolescents with diagnosis of BPD more functionally impaired at time of diagnosis and at follow-up (Levy et al, 1999; Bernstein et al, 1993)

# Construct validity:
  # BPD associated in the literature with range of comorbidities; depression, substance abuse, PTSD and conduct disorder
  # Some studies support differentiation from Axis I disorders, e.g. Wixom et al 1993: Depressed adolescents with and without BPD differ on a number of variables such as history of abuse, family instability, dissociative symptoms
Validity

# Predictive validity

- Kasen et al (1999): Children in the Community Study. Odds of a PD in early adulthood increased given an adolescent PD in the same cluster. Comorbid Axis I and Axis II disorders increased the odds of a PD in adulthood relative to the odds of a disorder on a single axis.

- Identity disturbance, affective instability, inappropriate, intense anger greatest predictive power for BPD in adolescents. Positive predictive power of these symptoms almost same as in adults (Becker et al, 2002)
Stigmatising

- No more so than in adults ... but communicates a hopelessness about change early
- Would changing the name help?
- Possibly but stigma arises from:
  - Nature of the presenting behaviours
  - Clinicians' find presentation challenging
  - Historically negative prognosis ... although this is changing
Reasons to diagnose

- Increase research attention to development of personality and personality difficulties in adolescence

- Personality key inter-personal & intra-personal context for therapeutic interventions – yet frequently personality is ignored

- Development and application of
  - Early / preventative interventions
  - Appropriate treatments
Reasons to diagnose

- Prevention of iatrogenic harm by application of inappropriate treatment
- In adults PD diagnosis impacts treatment outcome – is the same true in adolescents? Current adaptations of treatments for clients with comorbid PD
- In UK specific treatments recommended for BPD in adults (NICE, 2009) with specific characteristics: intensive (multi-modal and / or 2 – 3X a week; team based; shared model; integral supervision)
- Management of risk: hospitalisation often contra-indicated in adults

- What about adolescents?
Future Directions
Reconceptualizing PD

- General PD diagnostic criteria
- Levels of functioning
- PD types
- Proposed set of PD traits
Impairments in identity and sense of self (self-direction) and in the capacity for effective interpersonal functioning (empathy & intimacy)

A rating of mild impairment or greater in self and interpersonal functioning
Five Levels of Functioning

# 0  No impairment
# 1  Mild impairment
# 2  Moderate impairment
# 3  Serious impairment
# 4  Extreme impairment
Impairments in identity and sense of self (self-direction) and in the capacity for effective interpersonal functioning (empathy & intimacy)

A rating of mild impairment or greater in self and interpersonal functioning

Associated with a ‘good match’ or ‘very good match’ to a PD type OR with a rating of ‘quite a bit like the trait’ or ‘extremely like the trait’ on one or more of the personality trait domains
PD Types

- Five proposed
  - Anti-social / psychopathy type
  - Avoidant type
  - Borderline type
  - Obsessive-Compulsive type
  - Schizotypal type
Trait Domains Being Tested

- Neg. Emotionality
- Detachment
- Antagonism
- Disinhibition
- Compulsivity
- Schizotypy
## Facets of Negative Emotionality

<table>
<thead>
<tr>
<th>Facets</th>
<th>Content type</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emotional lability</td>
<td>Affective</td>
</tr>
<tr>
<td>• Anxiousness</td>
<td>Affective</td>
</tr>
<tr>
<td>• Suspiciousness</td>
<td>Interpersonal</td>
</tr>
<tr>
<td>• Submissiveness</td>
<td>Interpersonal</td>
</tr>
<tr>
<td>• Separation insecurity</td>
<td>Interpersonal</td>
</tr>
<tr>
<td>• Pessimism</td>
<td>Cognitive / Affective</td>
</tr>
<tr>
<td>• Self-harm</td>
<td>Cognitive / Behavioral</td>
</tr>
</tbody>
</table>
Proposed Borderline Type

- **Negative Emotionality**
  - Anxiousness, Emotional lability, Depressivity, Low self-esteem, Self-harm, Separation insecurity

- **Antagonism**
  - Hostility, Aggression

- **Disinhibition**
  - Impulsivity

- **Schizotypy**
  - Dissociation proneness
Usual qualifiers

# Relatively stable across time and consistent across situations
# Not better understood as a norm within an individual’s dominant culture
# Not solely due to the direct physiological effects of a substance (e.g. drug abuse, medication) or a general medical condition
ICD-11

Disclaimer
Proposed Changes

Tyrer, Crawford & Mulder, Lancet, 2011

- Persistent interpersonal dysfunction at the heart of the diagnosis
- Primary classification into four or five levels of personality pathology with severity as the main discriminator
- Identification of sub threshold level of personality difficulty (Z codes)
- Secondary classification of five domains of personality disturbance: asocial / schizoid; dyssocial / antisocial; obsessional / anankastic; anxious / dependent; emotionally unstable
- Monothetic criteria for inclusion
Diagnosis in adolescence

- Removal of age limits in both ICD-11 and DSM-5
- Would you want to qualify the diagnosis in adolescents?
- If so, in what way or ways?
Future Directions

- Developments in DSM and ICD may help with the diagnostic dilemma in adolescents:
  - Traits / types / domains
  - More clearly linked to research
  - Based on severity
  - Identification of personality difficulty
  - Potentially less reified

- Promote consideration of personality issues in adolescents by clinicians

- Drive the research agenda to thoroughly evaluate the impact of personality traits / diagnosis on treatment outcome
Thanks

# Peter Tyrer, Mike Crawford, Roger Blashfield & Roger Mulder and members of the ICD-11 PD Working Group

# Lee-Anna Clark DSM-5 liaison

# Simon Wilkinson