

Personality pathology grows up: The role of mentalizing

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Menninger®

DSM-5 Section III Criterion A: Level of Personality Functioning

Self

1. Identity: Experience of oneself as unique with clear boundaries between self and others' stability of self-esteem and accuracy of self-appraisal; capacity for, and ability to regulate, a range of emotional experience.
2. Self-direction: Pursuit of coherent and meaningful short-term goals and life goals; utilization of constructive and prosocial internal standards of behavior; ability to self-reflect productively.

Interpersonal

1. Empathy: Comprehension and appreciation of others' experiences and motivations; tolerance of differing perspectives; understanding the effects of one's own behavior on others.
2. Intimacy: Depth and duration of connection with others; desire and capacity for closeness; mutuality of regard reflected in interpersonal behavior.

Section II BPD

A pervasive pattern of instability of **interpersonal relationships, self-image**, and affects and marked impulsivity beginning by early adulthood and present in a variety of contexts as indicated by five (or more) of the following:

- 1) Frantic efforts to avoid real or imagined **abandonment**
- 2) A pattern of **unstable and intense interpersonal relationships** characterized by alternating between extremes of idealization and devaluation
- 3) **Identity disturbance** markedly and persistently unstable self-image or sense of self
- 4) Impulsivity in at least two areas that are potentially self-damaging (e.g. spending, sex, substance abuse, reckless driving, binge eating)
- 5) Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior
- 6) Affective instability due to a marked reactivity of mood (e.g. intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days)
- 7) **Chronic feelings of emptiness**
- 8) Inappropriate, intense anger or difficulty controlling anger (e.g.) frequent displays of temper, constant anger, recurrent physical fights)
- 9) Transient, stress-related **paranoid ideation** or severe dissociative symptoms

ICD-11 severity criterion*

If general guidelines for a PD are met, a level of severity is provided and is based upon the following:

- A) Degree and pervasiveness of **self-dysfunction**, as in identity, self-worth, and self-regulation.
- B) Degree and pervasiveness of **interpersonal dysfunction** across various contexts (e.g. romantic relationships, school/work, parent-child, family, friendships, peer contexts).
- C) Pervasiveness, severity, and chronicity of emotional, cognitive, and behavioral manifestations of the personality dysfunction.
- D) Extent to which these dysfunctions cause personal suffering and psychosocial impairment.

Personality and Mental Health
2: 35–41 (2008)
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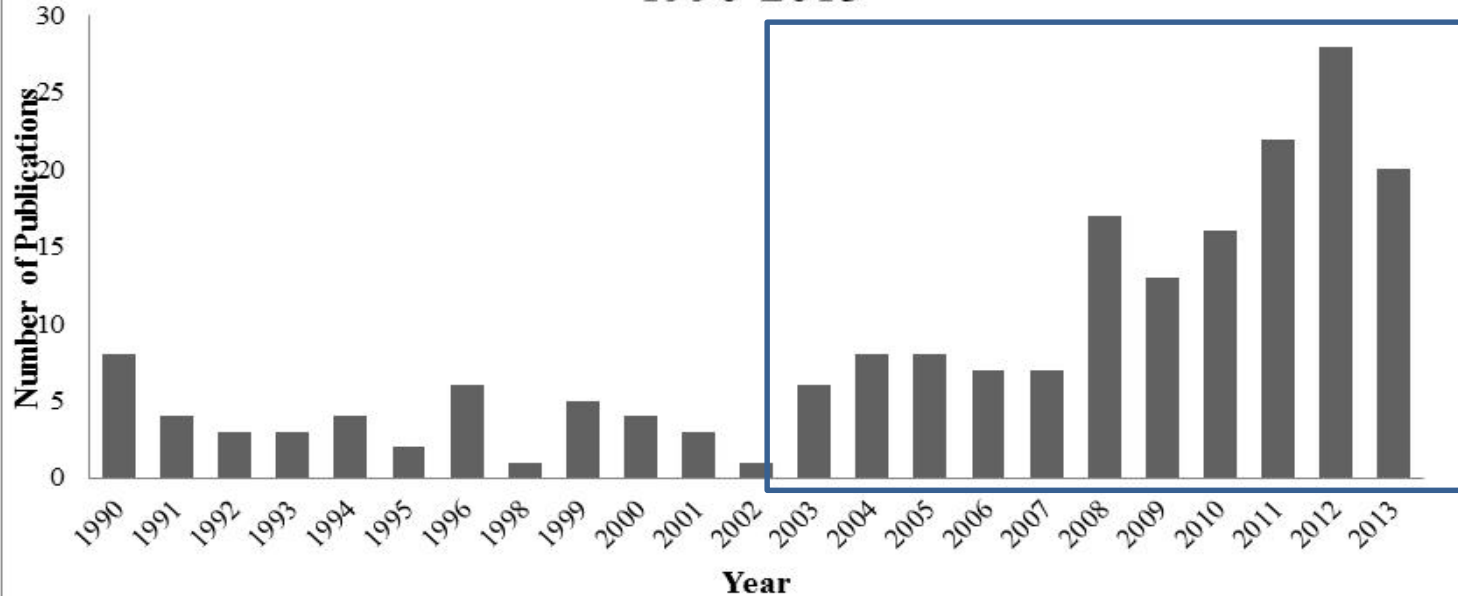
Complex Case

Personality disorder in adolescence:

The diagnosis that dare not speak its name

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Published Research Articles on BPD in Youth* 1990-2013



*Literature searches conducted via *PSYCIInfo* and *Web of Science* with search terms of Borderline Personality (Disorder, Pathology) or BPD and Adolescent(s), Child(ren), Youth(s), Juvenile(s) Girl(s), or Boys(s). Search results yielded 196 published empirical articles from 1990 to 2013.

Sharp & Tackett (2013), *BPD in children and adolescents*, Springer
Chanen, Sharp, Hoffman & GAP (2017), *World Psychiatry*

Reluctance continues

- Westen et al. (2003)
 - Only 28.4% received PD diagnosis (most common BPD) although 75.3% of patients met criteria based on clinician's report of PD symptoms.
- Laurensen et al. (2013)
 - 57.8% agreed that PDs can be diagnosed in adolescents; however, only 8.7% reported that they diagnose PDs and only 6.5% offered specialized treatment
- Griffiths et al. (2011)
 - 23% used the diagnosis in regular clinical practice; and of those only 60% feed back the diagnosis to young people and families

Biases (myths)

1. **Psychiatric nomenclature** does not allow the diagnosis of PD in adolescence.
2. Certain features of BPD are **normative** and not particularly symptomatic of personality disturbance.
3. The symptoms of BPD are better explained by **traditional Axis I** disorders.
4. Adolescents' personalities are **still developing** and therefore too unstable to warrant a PD diagnosis.
5. Because PD is long-lasting, treatment-resistant and unpopular to treat, it would be **stigmatizing** to label an adolescent with BPD.

Agenda

- Five key findings
 - Dispel myths
 - Point to adolescence as a sensitive period
 - Point to the role of mentalizing as a key developmental mechanism for the development of typical and atypical personality development

Five key findings

Finding #1:

Personality pathology onsets in adolescence

Finding #2:

Personality pathology is as stable in adolescence as in adulthood

Finding #3:

Personality pathology is preceded by internalizing and externalizing disorders

Finding #4:

Personality pathology remains comorbid with internalizing and externalizing pathology throughout development

Finding #5:

Mentalizing is a key developmental mechanism for healthy personality development in adolescents

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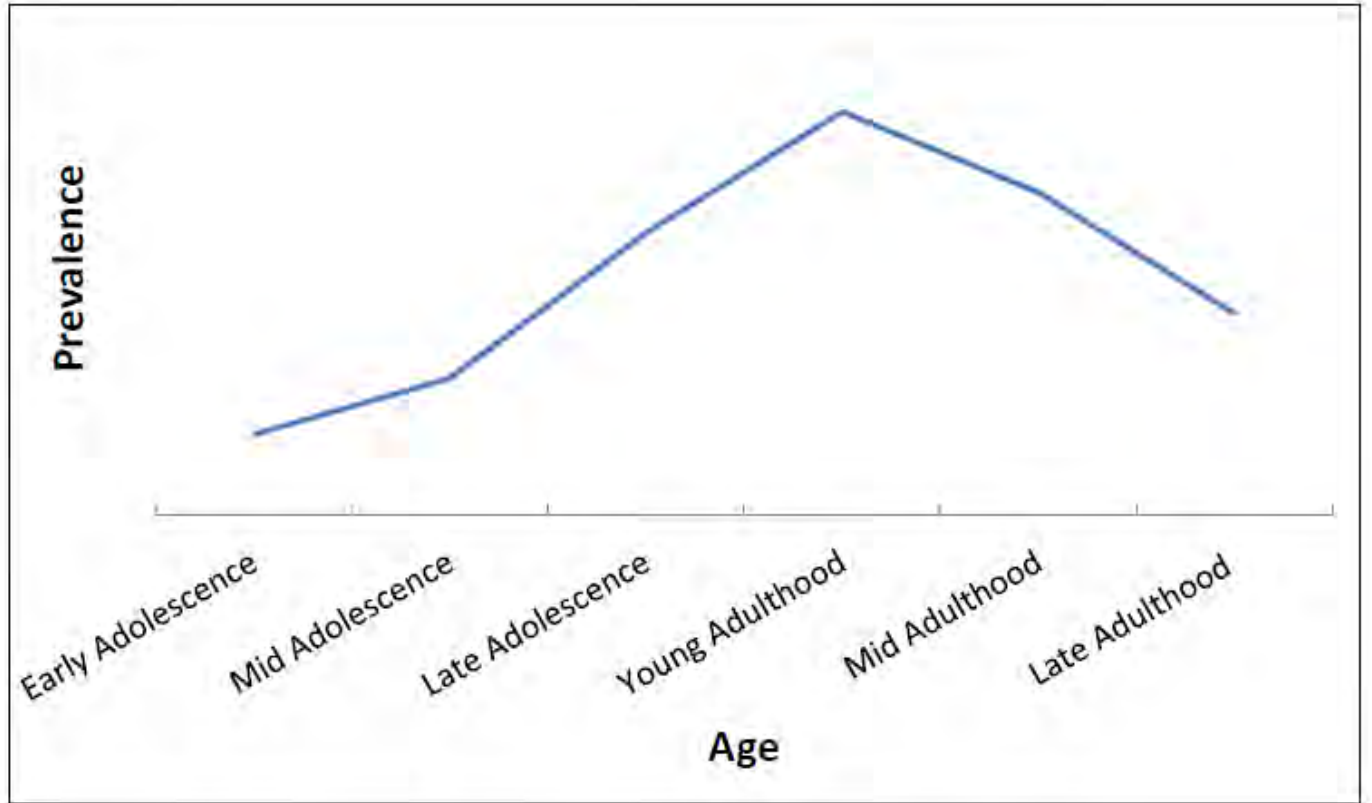
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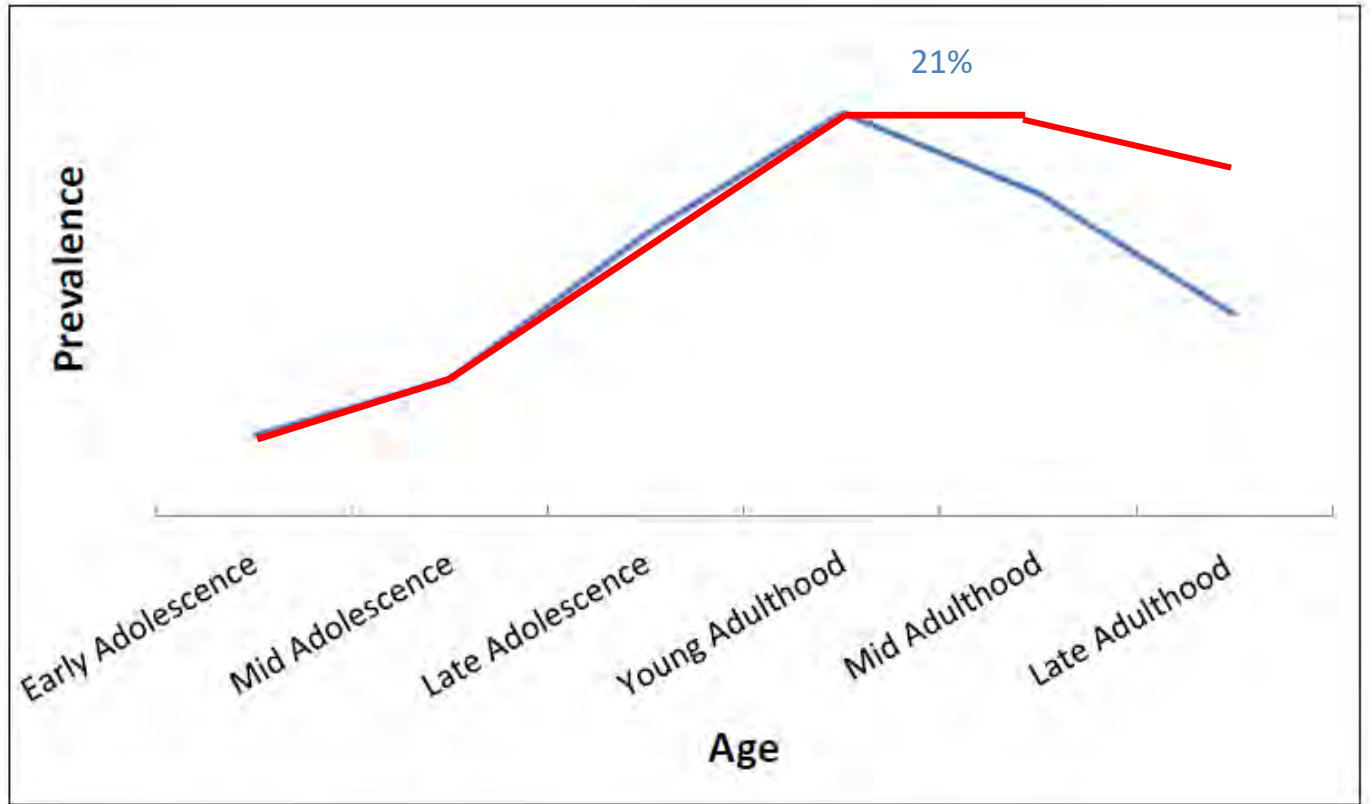
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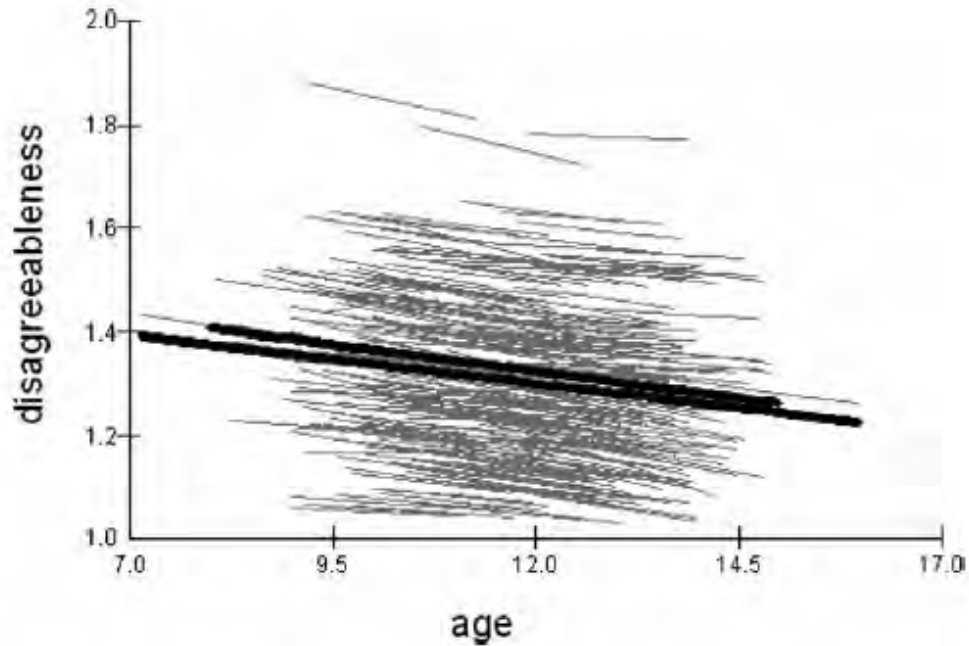
Mentalizing is a key developmental mechanism for healthy personality development in adolescents

N = 800
T1 = age 9
T2 = 14
T3 = 16
T4 = 22



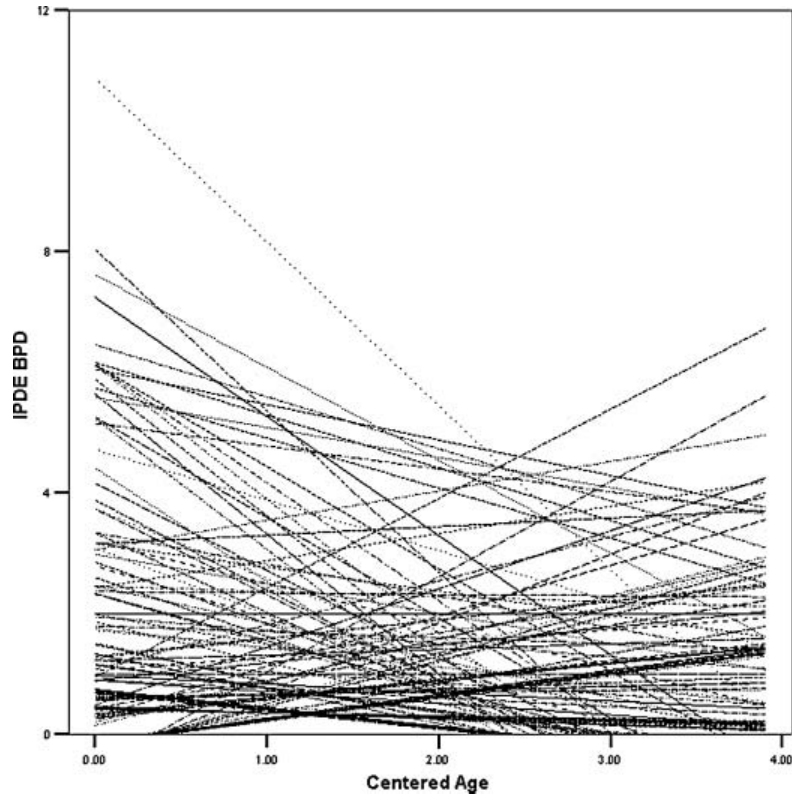
N = 800
T1 = age 9
T2 = 14
T3 = 16
T4 = 22





N = 477
 $m_{\text{age}} = 10.67$ years
DIPSI
2 yr follow-up

Figure 1. Individual growth trajectories for disagreeableness in 314 subjects across a 2-year interval, based on the results of the multilevel analysis (performed with MLwiN software), as well as the overall expected trajectory for boys (highest curve) and for girls. Age is expressed in years.



250 subjects ($m_{\text{initialage}} = 18.88$ years)

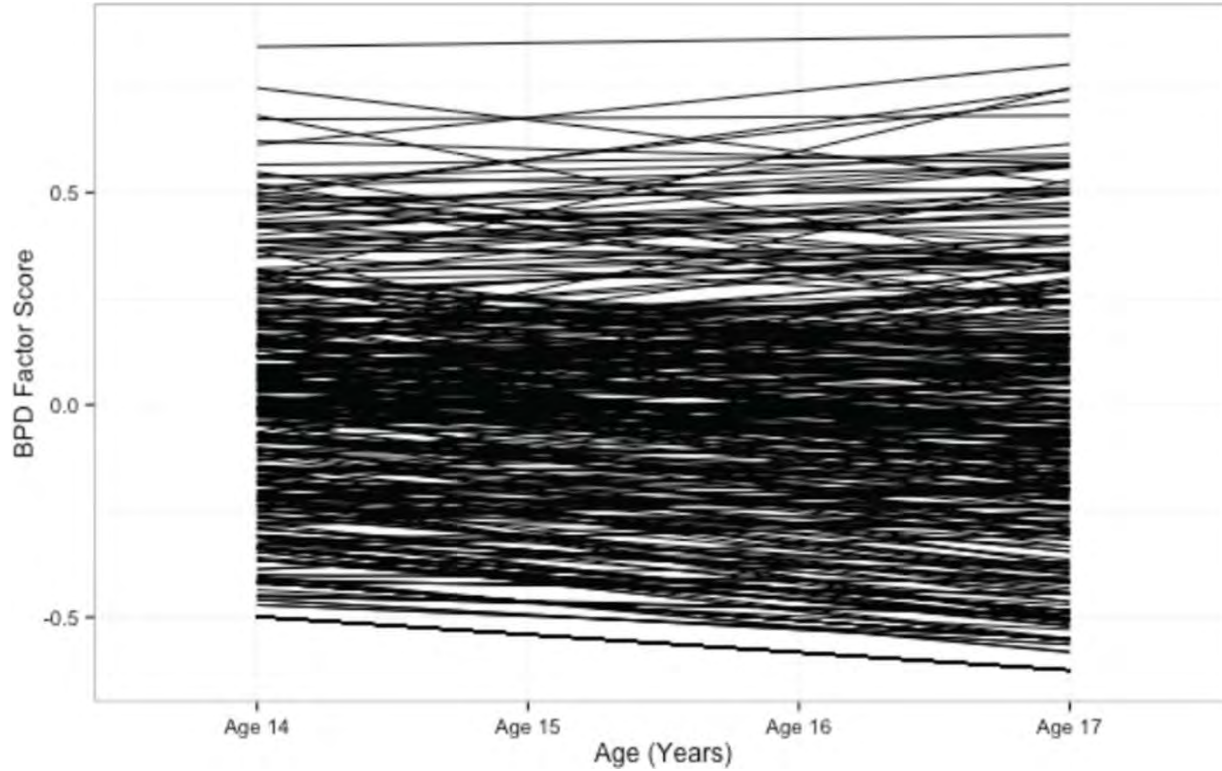
Follow-up: 4 years

Revised Interpersonal Adjectives Scale-Big 5

International Personality Disorder Examination

Adaptive personality traits such as affiliation, conscientiousness and openness, + decrease in neuroticism = a decrease in PD symptoms.

As PD's developed, the development of adaptive personality traits ceased or even regressed.



Summary of studies of course

- BPD **onsets** in adolescence.
- General **normative decline** in personality pathology and an increase in adaptive personality traits, across adolescence, as youth enter young adulthood.
- However, within these samples there also appears to be a **subset** of adolescents who diverge from the norm and whose personality pathology persists or increases into adulthood.
- The question then arises whether this subset of adolescents, whose pathology persists, **meet threshold** for a DSM defined personality disorder.

| Measure | Internal consistency | Inter-rater reliability | Factor structure | Construct validity |
|--|----------------------|-------------------------|------------------|---|
| CI-BPD Zanarini (2003) | .81 | .65-.93 | Not reported | |
| Sharp et al. (2012) | .80 | .89 | Unidimensional | Associates with PAI-BOR, clinician diagnosis, BPFS-C, BPFS-P, internalizing and externalizing problems |
| Michonski et al. (2013) | .78 | Not reported | Unidimensional | N/A |
| SWAP-A-II Westen et al. (2005) | Not reported | .60 | Not reported | r = .68 with DSM-5 symptom count AUC = .84 |
| PAI-A BOR Morey (2007) | .85-.87 | N/A | Four-factor | Associated with range of other BPD relevant pathology |
| BPFS-C Crick et al. (2005) | .76 | N/A | Not reported | Associates with relational aggression, cognitive sensitivity, emotional sensitivity, friend exclusivity over time |
| Chang et al. (2011) | .88 | N/A | Not reported | Sensitivity .85 Specificity .84 |
| BPFS-P Sharp et al. (2013) | .90 | N/A | Not reported | Correlates with BPFS-C, internalizing and externalizing problems |
| BPFC-11 Sharp et al. (2014) | .85 | N/A | Unidimensional | Sensitivity .740 Specificity .714 |

| Measure | Internal consistency | Inter-rater reliability | Factor structure | External validity |
|--|------------------------------------|-------------------------|--|---|
| MSI-BPD Chanen et al. (2008) | .78 | N/A | Not reported | Sensitivity .68 Specificity .75 |
| BPQ Chanen et al. (2008) | .92 | N/A | Not reported | Sensitivity .68 Specificity .90 |
| Minnesota BPD scale Bornavolova et al., 2009 | .81 | NA | Not reported | Correlates with PAI-BOR Mean difference for clinical vs. community sample |
| DIPSI DeClercq et al., 2006 | Not reported | NA | 27 facets ordered into 4- factor structure | Resembles factor structure of adult personality pathology; cross-sectional and prospectively predictive of key outcomes. |
| MMPI-adolescent version Archer, et al., 1995 | .43 (5) .90 (F) | NA | 14 factors (item level); 8 factors (scale level) | Good congruence between MMPI and MMI-A code types; minimal support for diagnostic BPD profile, but useful for differential diagnosis. |
| PID-5 DeClercq et al., 2012 | >.80 for 16 out of 25 facets | NA | 25 facets; 5 factor | Fair similarity between this and PID-5 factor structure observed in US adult sample as well as US and Flemish students; Correlates with DIPSI |

Prevalence rates

- Clinical
 - 11% in outpatients (Chanen et al., 2004).
 - 33% (Ha et al., 2014) in inpatients.
 - 43-49% (Levi et al., 1999) in inpatients.
- Epidemiological
 - 3% in the UK (Zanarini et al., 2011)
 - 1% in the USA (Lewinsohn et al., 1997)
 - 2% in China (Leung et al., 2009),
 - cumulative prevalence rate of 3% (Johnson et al., 2008)

Identity disturbance



Yeah. (what's that like?) Well [inaudible] everyone different but um how like I don't know, what you grew up with. Like your friends, they have taught you this and that and your parents taught you this and that, I don't know, I don't know which road to take should I be more like my friends, should I do things for my friends or should I do more things for my parents? (okay) That's how I feel. (um Is that more in the area of going to college and deciding on a career and things like that or?) No I know what career. (okay so you know that?) I know I'm following that path but I mean that was over two years it took me until now to college to find out what direction I'm heading to and what person I'm going to be in life.

I feel a little bit like I have no identity sometimes, yeah. I feel like I often, when I like first meet people, I only act like a chunk of who I am. Like I don't know to like, I don't know how to do it, and like, it becomes really confusing, enough to really know which me is really me. (Why is it confusing?) Because I feel sometimes like a blank canvas a little bit, but sometimes I feel like, a lot of times I find myself doing like, with my actions or with my words, kind of making so that it's not maybe what would be the best for me, but more like what would be the most dramatic.

Sharp et al. (in prep)

Five key findings

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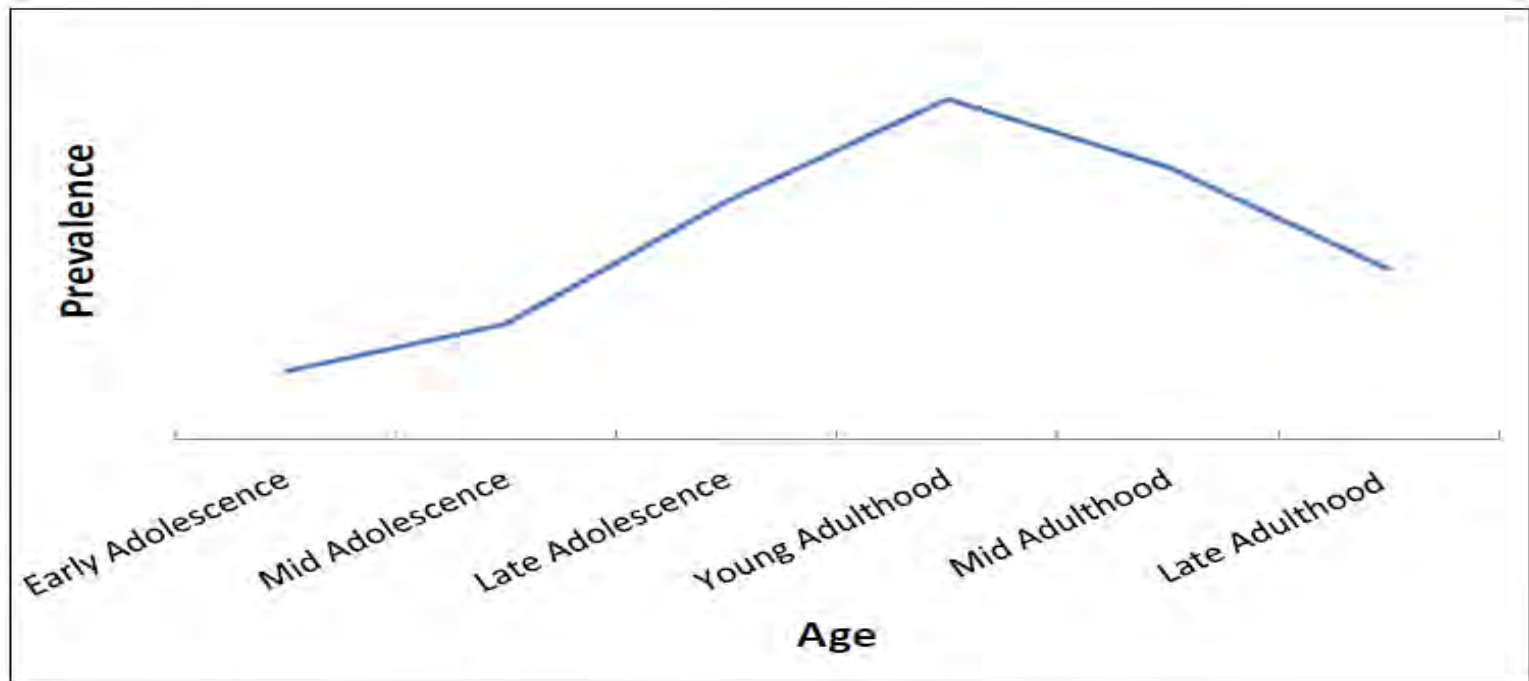
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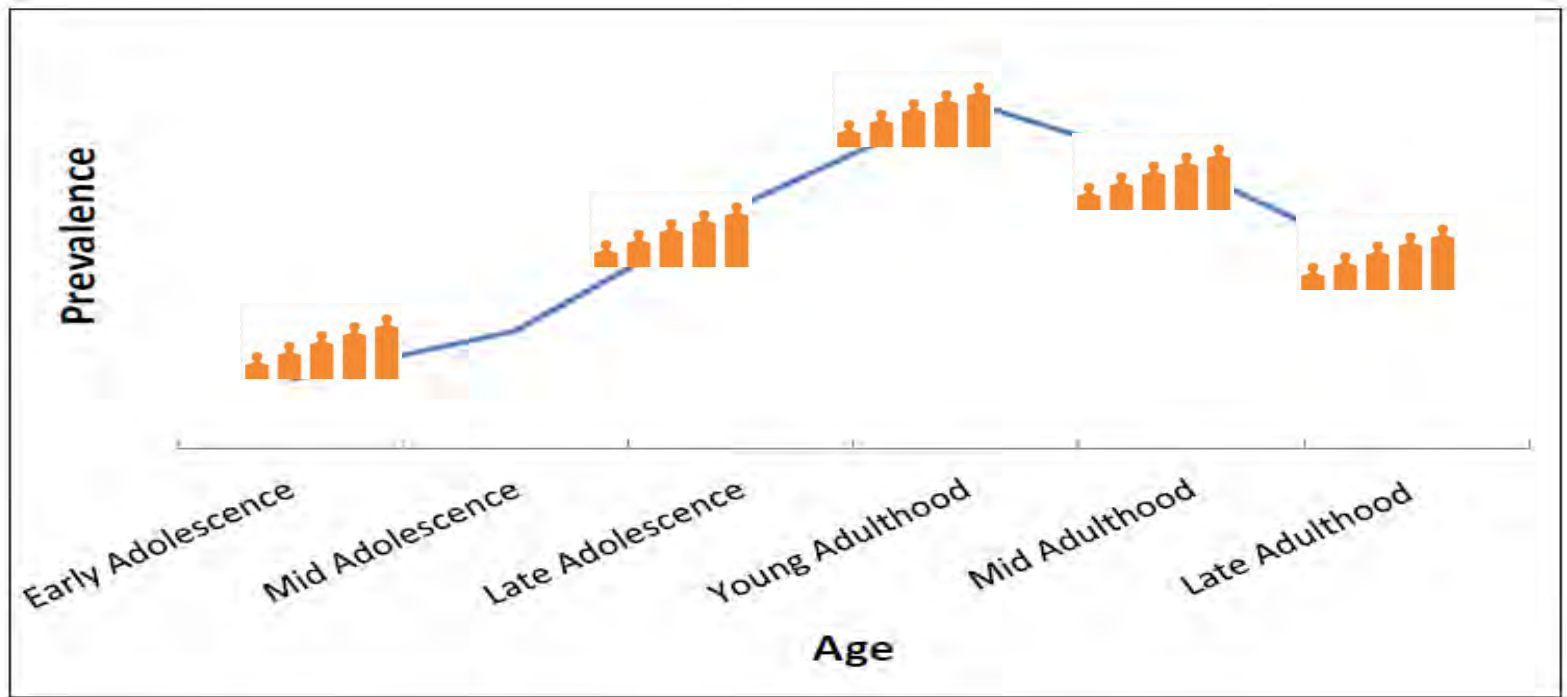
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Rank-order stability for PD symptoms in the range of .40-.65
(Bornavola et al., 2013)



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(Bornavola et al., 2013)

Table 3. Rank-order stability for the DIPSI dimensions across 1 and 2 years

| | Time 1 | | | |
|-----------------------|---------------|---------------|---------------|---------------|
| | DIS | INS | ITR | COM |
| Time 2 | | | | |
| Disagreeableness | .71*** | .42*** | .40*** | .09 |
| Emotional instability | .45*** | .71*** | .62*** | .29*** |
| Introversion | .31*** | .51*** | .69*** | .16** |
| Compulsivity | .16** | .27*** | .29*** | .72*** |
| Time 3 | | | | |
| Disagreeableness | .68*** | .46*** | .41*** | .09 |
| Emotional instability | .49*** | .65*** | .55*** | .14* |
| Introversion | .34*** | .47*** | .64*** | .12* |
| Compulsivity | .24*** | .25*** | .24*** | .67*** |

Note: DIPSI, Dimensional Personality Symptom Item Pool (De Clercq et al., 2003); DIS, disagreeableness; INS, emotional instability; ITR, introversion; COM, compulsivity; $N = 307$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

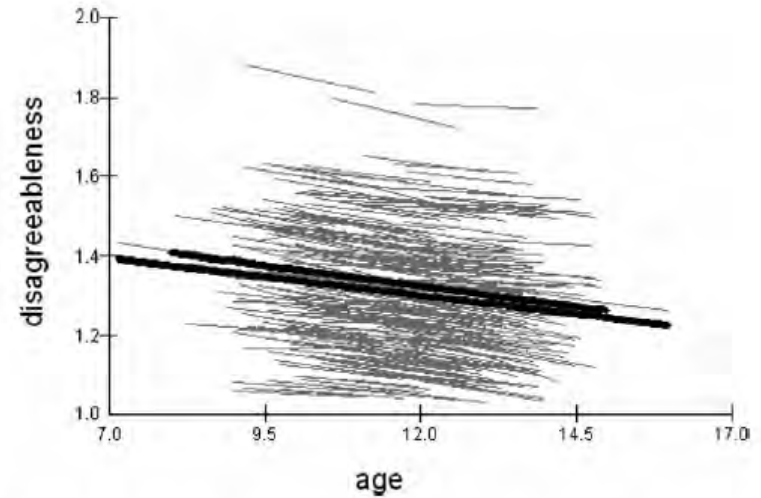


Figure 1. Individual growth trajectories for disagreeableness in 314 subjects across a 2-year interval, based on the results of the multilevel analysis (performed with MLwiN software), as well as the overall expected trajectory for boys (highest curve) and for girls. Age is expressed in years.

More rank-order stability studies

- **CIC**
 - .4-.7 (Cohen et al., 2005)
 - Cluster B personality pathology (borderline, narcissistic and histrionic PD), over the course of 9 years: .63 for boys and .69 for girls.
- **Minnesota Twin Family Study** rank-order stability of .53-.73 in adolescent female twins, assessed over a period of 10 years from ages 17-24 (Bornovalova, et al., 2009).
- **HYPE** (Chanen et al., 2004), stability index of .54 over the course of 2 years in a sample of 101 adolescents, aged 15-18.
- Similar to ranges reported for normal personality traits in both **adults** and children

Moderate, but more problematic

- More stable:
 - CIC: Cluster B more stable than internalizing and externalizing.
 - May be more enduring and long-lasting than internalizing and externalizing psychopathology, despite moderate stability.
 - DeClercq et al (2009): Externalizing symptoms show steeper and continued decline beyond that of personality traits → developmental maturation processes/"grow out" of externalizing behaviors
- More dysfunction:
 - Wright et al (2016): N = 2,450

Latent Growth Curve Factor Correlations with BPD Symptoms

| Domain of Functioning | Intercept | | | Slope | | |
|-------------------------------|-----------|---------|----------|--------|----------|----------|
| | Coeff. | 95% CI | <i>p</i> | Coeff. | 95% CI | <i>p</i> |
| Academic Performance | .29 | .14–.33 | < .001 | .04 | –.02–.02 | .875 |
| Extracurricular Activities | .12 | .03–.22 | .012 | .19 | –.11–.49 | .213 |
| Mental Health Treatment | .35 | .23–.47 | < .001 | .05 | –.45–.55 | .836 |
| Global Functioning | .31 | .22–.39 | < .001 | .07 | –.24–.39 | .455 |
| Self Perception | .32 | .23–.40 | < .001 | .36 | .15–.58 | .001 |
| Social Skills (Child report) | .38 | .28–.48 | < .001 | .39 | .02–.76 | .039 |
| Social Skills (Parent report) | .30 | .21–.38 | < .001 | .05 | –.30–.41 | .766 |
| Sexual Activity | .54 | .40–.68 | < .001 | .65 | .29–1.00 | < .001 |

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|-------------------------------|-----------|---------|----------|--------|----------|----------|
| | Coeff. | 95% CI | <i>p</i> | Coeff. | 95% CI | <i>p</i> |
| Academic Performance | .29 | .14–.33 | < .001 | .04 | –.02–.02 | .875 |
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| Sexual Activity | .54 | .40–.68 | < .001 | .65 | .29–1.00 | < .001 |

Criterion A

Incremental value of BPD

Sharp et al (2012)

- 156 consecutive admissions (55.1% female; age = 15.47; $SD = 1.41$).
- A diagnosis of MDD or BPD independently increased the odds for thinking about death by nearly 2.5 times, MDD, $B = -.91$; $SE = .36$; Wald statistic (1) = 6.56; $p = .01$, $OR = 2.48$; BPD, $B = -.88$; $SE = .44$; Wald statistic (1) = 4.02; $df = 1$, $p < .05$, $OR = 2.42$,
- The addition of BPD to the model robustly improved correct classification of those wishing to die from 29% to 41%.
- Being female similarly increased risk for thinking about death, $B = -.86$; $SE = .36$; Wald statistic (1) = 5.64; $df = 1$, $p = .02$, $OR = 2.36$.

Chanen et al (2006)

- BPD significantly predicted general psychopathology as measured by the Youth Self-Report (YSR; Achenbach, 1991) and the Young Adult Self-Report (YASR; Achenbach, 1997), functioning, peer relationships, self-care, and family and relationship functioning, above and beyond other PD's or Axis I disorders.

Five key findings

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Personality pathology onsets in adolescence

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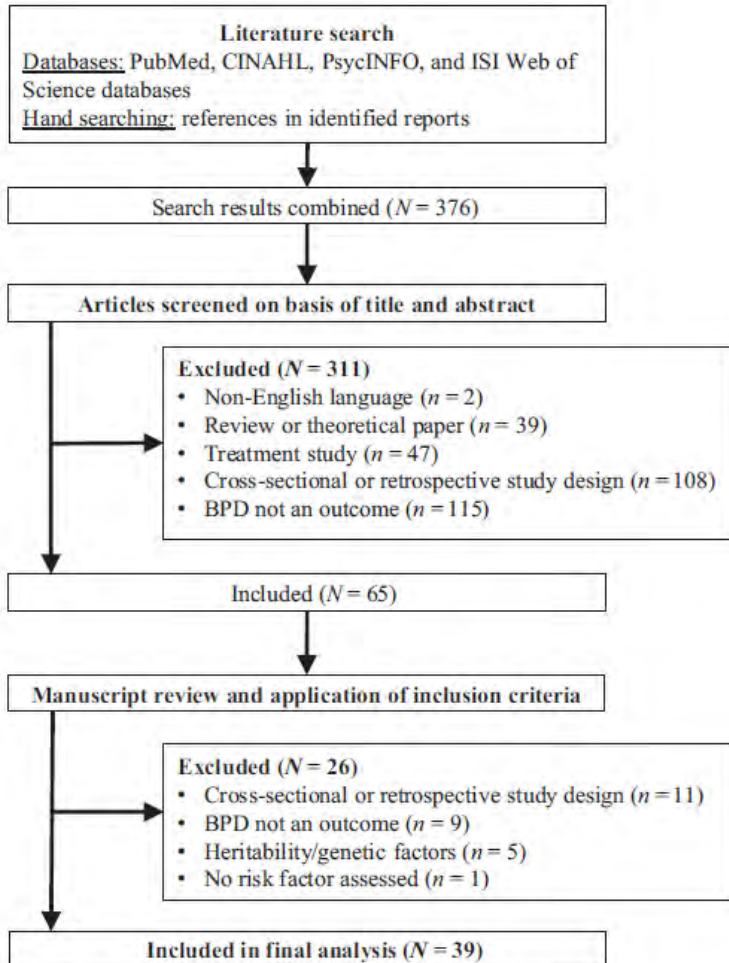
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- Half examine internalizing and externalizing as predictor of subsequent BPD
- Belsky et al. (2012)
 - Traits at age 12 more common in those with EBD at age 5
- Bornovalova et al. (2013)
 - Inherited vulnerability for int/ext → BPD
- Krabbendam et al. (2015)
 - PTSD, depr, diss → BPD
- Stepp et al. (2013)
 - SUD and internalizing
- Burke & Stepp (2012)
- Stepp et al. (2013)
 - ADHD and ODD
- Sharp et al. (2015)
 - EA → borderline features
- Rey et al. (1995)
 - 40% vs. 12% for ext vs. int disorders and later BPD features

Int/Ext *not* preceded by BPD

| | | |
|---|--|--|
| Lazarus et al., 2017 | Measured BPD and INT/EXT annually from age 14-17 (PGS) | Tested hypothesis whether BPD and SU are developmental precursors to each other; found that after accounting for cross-sectional relations and temporal stability of each construct, BPD is not a causal antecedent for SU |
| Bornovalova, Hicks, Iacono, & McGue, 2013 | BPD & Substance Use measured at age 14 and 18; Used a cross-lagged model to examine whether BPD (age 14) had a causal effect on SU (age 18) and vice versa | Tested hypothesis whether BPD and SU are developmental precursors to each other; found that after accounting for cross-sectional relations and temporal stability of each construct, BPD is not a causal antecedent |

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James & Taylor (2008)

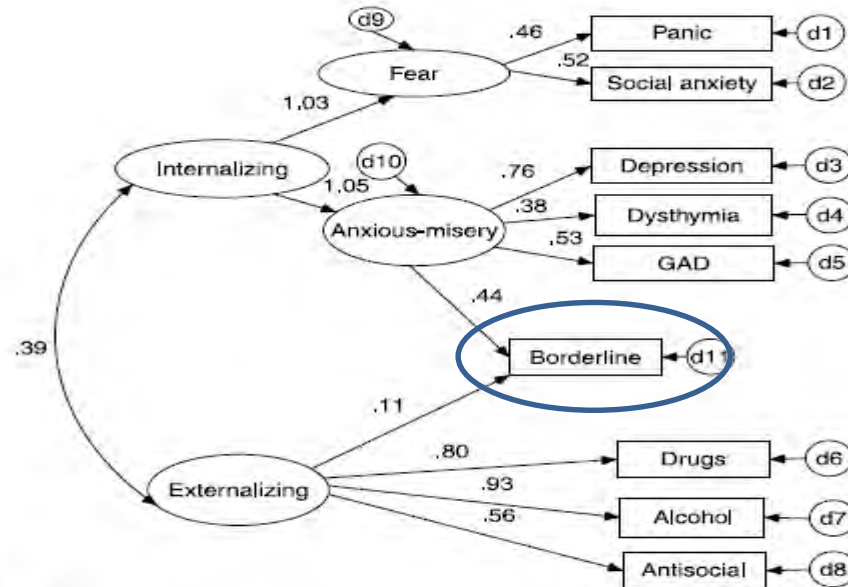


Figure 1. Best-fitting model for the whole sample. A model in which borderline personality disorder is an indicator of both anxious-misery and externalizing latent dimensions. All parameter estimates are standardized and significant at $p < .001$. Antisocial, antisocial personality disorder; Alcohol, alcohol use disorder; Drugs, illicit drug use disorder; Borderline, borderline personality disorder; GAD, generalized anxiety disorder.

Eaton et al. (2011)

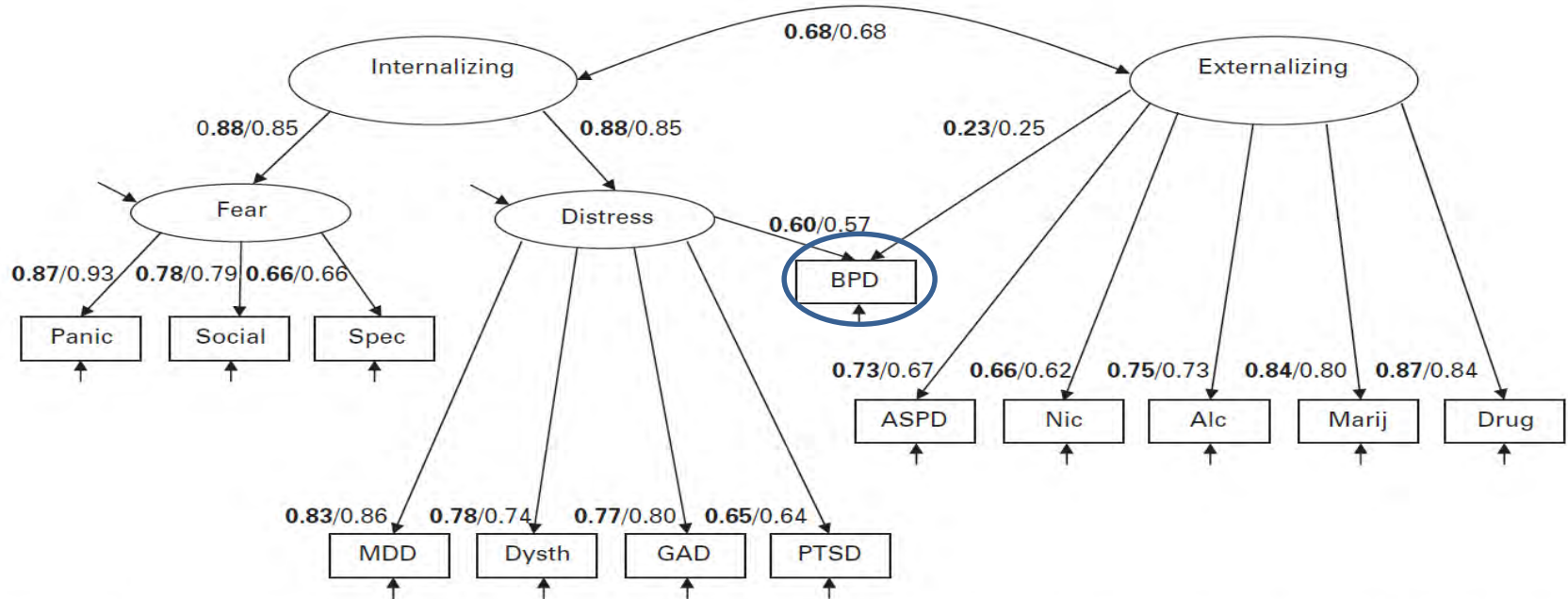
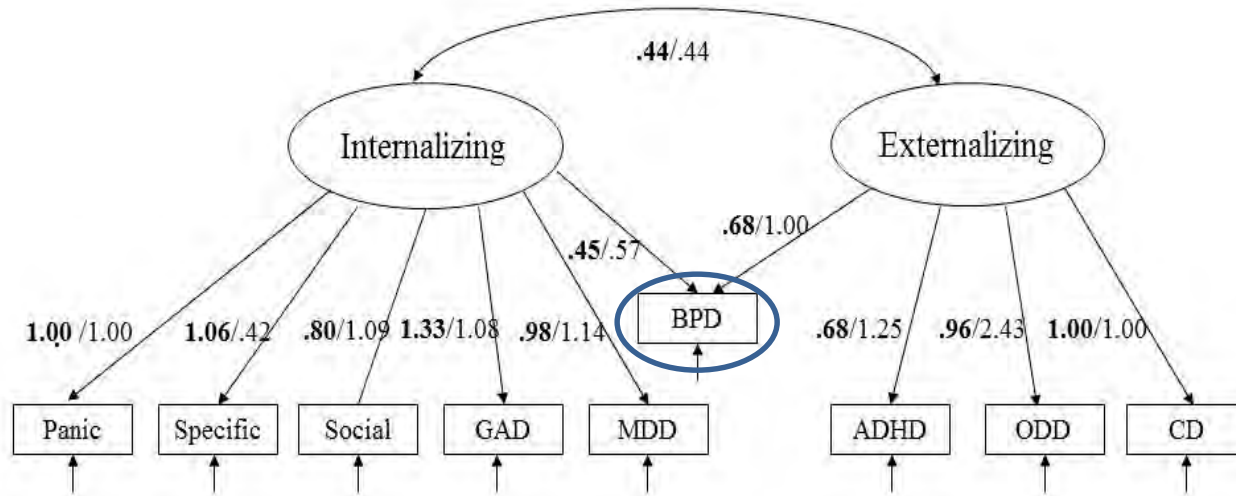


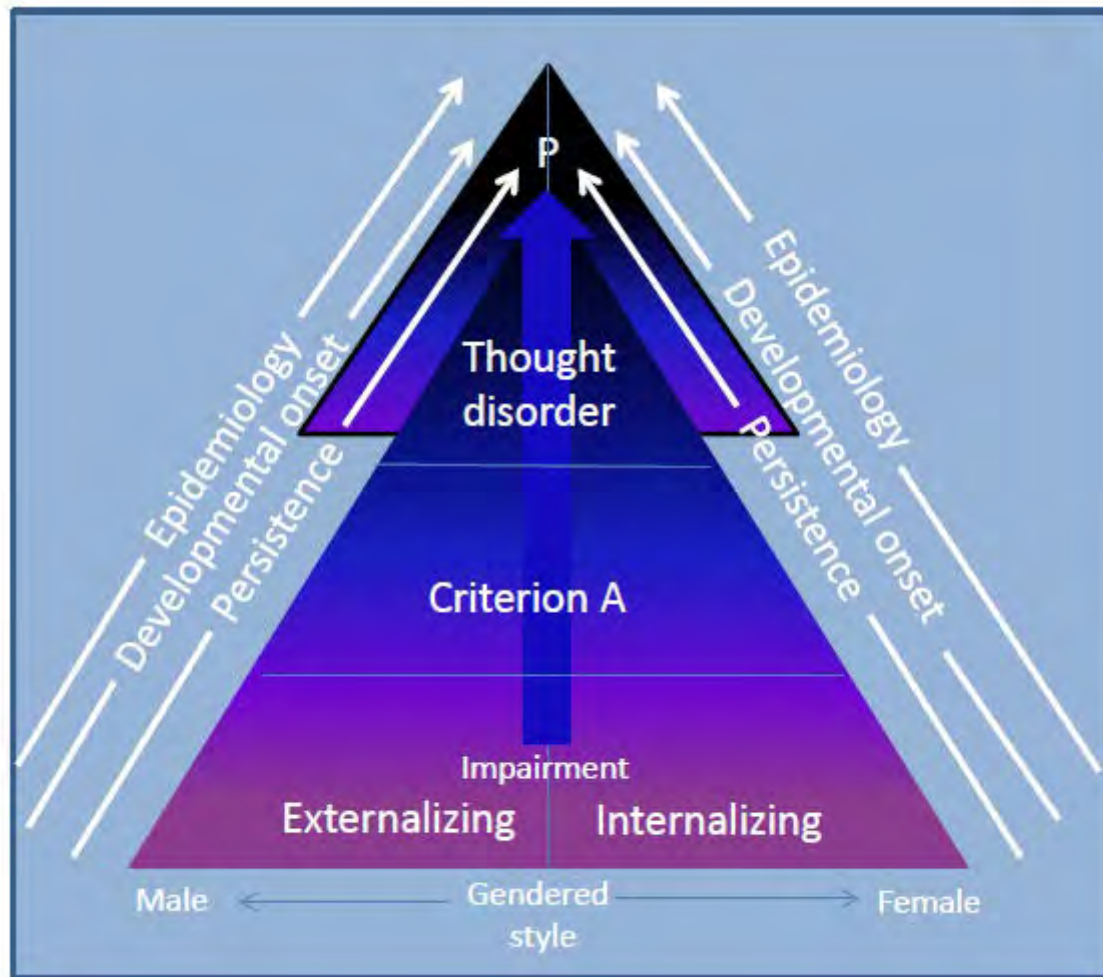
Fig. 1. The best-fitting model in women and men. Values are standardized factor loadings (all significant $p < 0.001$). Bold values are for women; non-bold values are for men. Panic, panic disorder with agoraphobia; Social, social phobia; Spec, specific phobia; MDD, major depressive disorder; Dysth, dysthymic disorder; GAD, generalized anxiety disorder; PTSD, post-traumatic stress disorder; BPD, borderline personality disorder; ASPD, antisocial personality disorder; Nic, nicotine dependence; Alc, alcohol dependence; Marij, marijuana dependence; Drug, other drug dependence. Arrows without numbers indicate unique variances, including error.

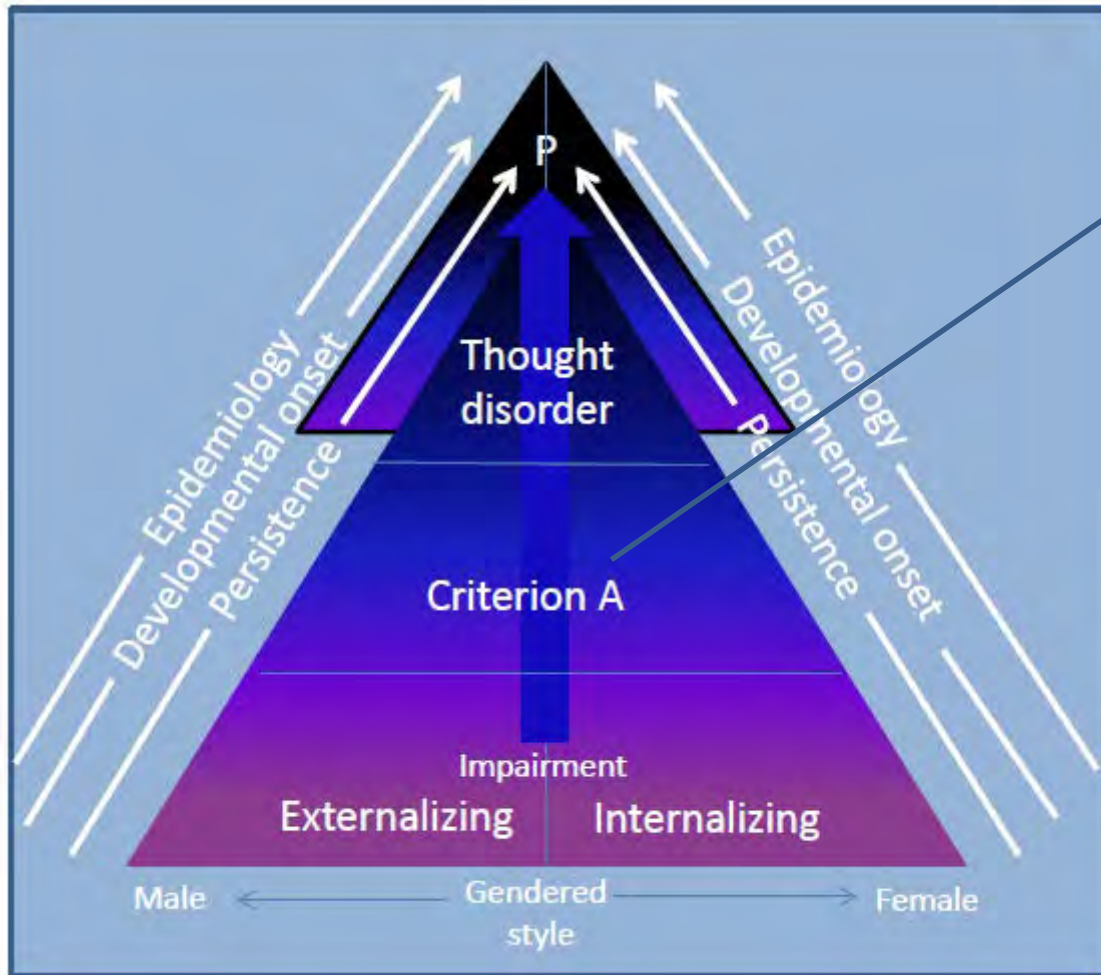
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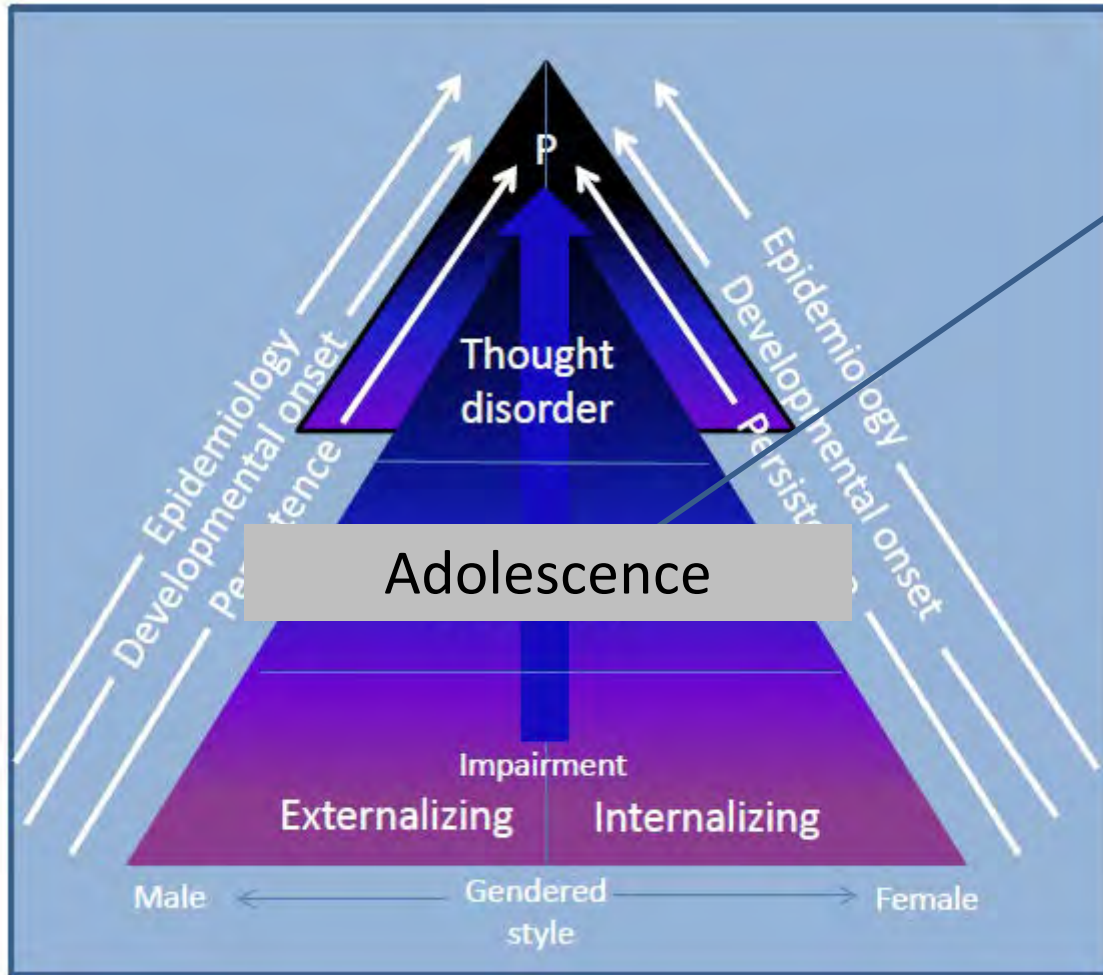
Summary of 4 key findings

- BPD onsets in adolescence. While some adolescents adhere to the normative decline in personality pathology through early adulthood, a proportion of adolescents' symptoms increase or stagnate. These are the adolescents who may meet clinical threshold for personality disorder categorically defined.
- Personality pathology, like adult personality pathology is moderately stable, and more stable than internalizing and externalizing pathology. Even when personality disorder remits, maladaptive self-perception and social function may persist.
- Such maladaptive function in self-other relatedness appears to be specific to personality pathology and independent of internalizing and externalizing pathology.
- Internalizing and externalizing pathology are antecedents of personality pathology and are subsumed in personality pathology as adolescents with high levels of personality pathology mature, such that high levels of comorbidity and shared risk factors are maintained throughout development.





Maladaptive self-and other relatedness



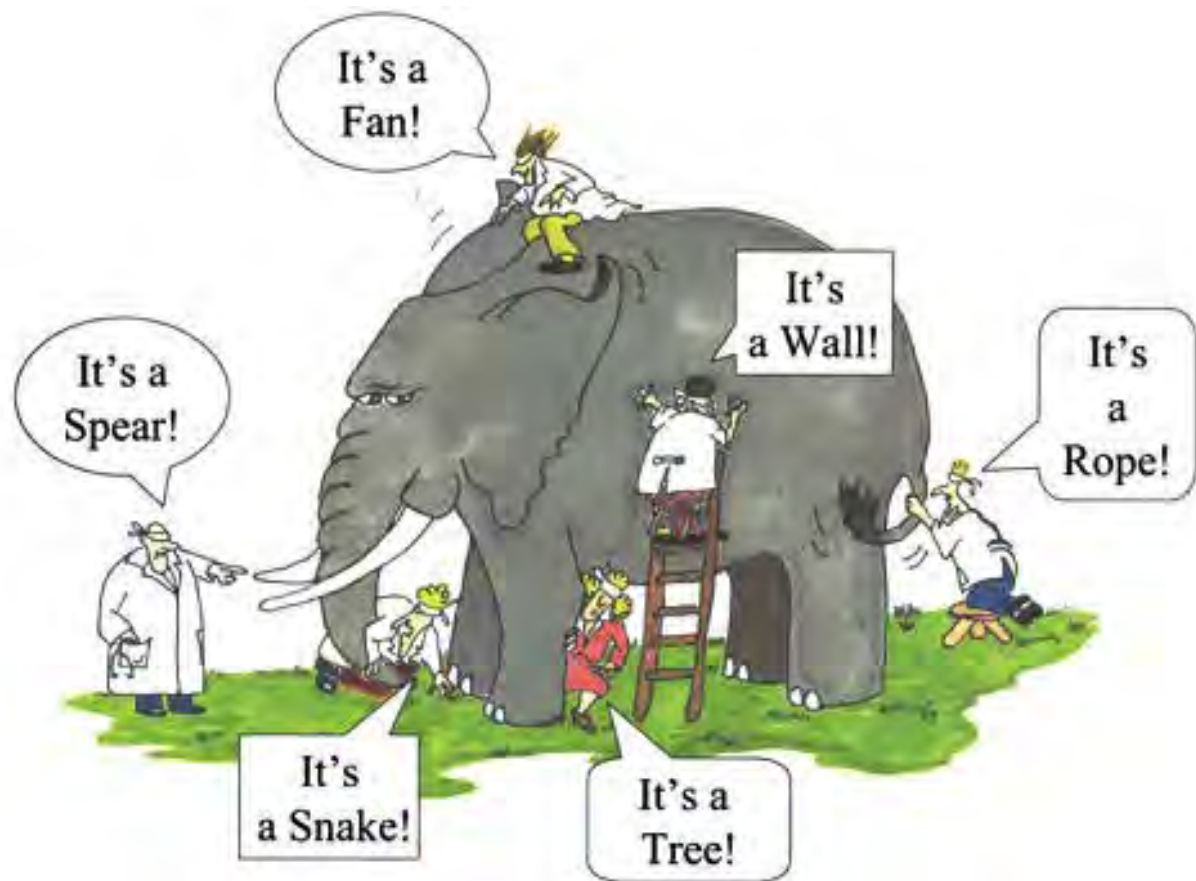
Maladaptive self-and other relatedness

“Adolescere”: “to ripen” or “to grow up” -- SELF

- Identity development a key developmental task.
- Agentic, self-determining author of the self emerges in adolescence.
- Pre-adolescence: organization and structure of self constrained by cognitive development.
- The move from self-concept (pre-adolescence) to identity (adolescence) necessitates **meaning making** of self-concepts – **integration of autobiographical past with imagined future in a coherent way.**

“Adolescere”: “to ripen” or “to grow up” -- OTHER

- Social reorientation
- Social awareness and concern about others’ perspectives (“imaginary audience”)
- Shared reflection with peers.
- Shared reflection with parents.
- Multiple self-hypotheses.
- Late adolescence: integration.



What makes them see the elephant?

What makes them see the elephant?

Mentalizing!

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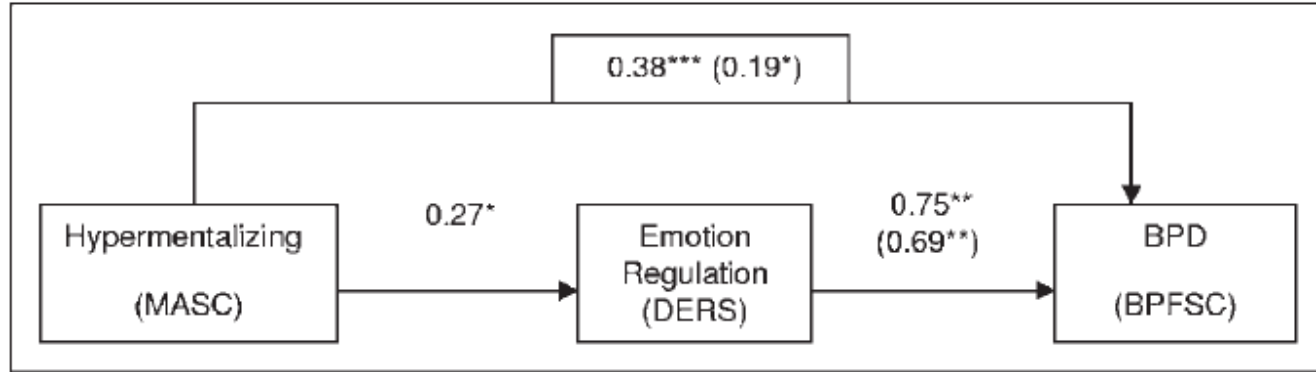
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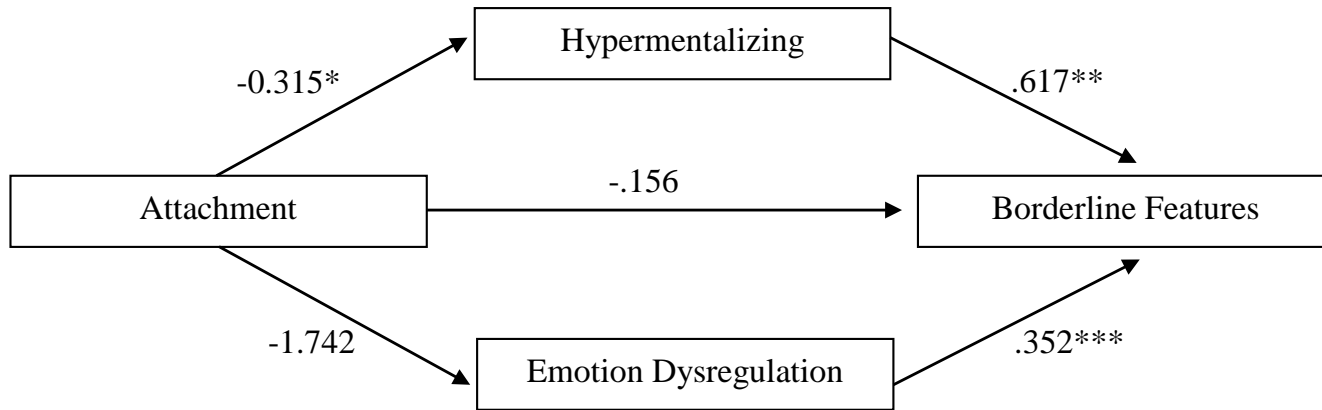
A definition of mentalization

Mentalizing is the process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes.

Adolescents with BPD hypermentalize



HyperMZ mediates the relation between attachment and BPD features

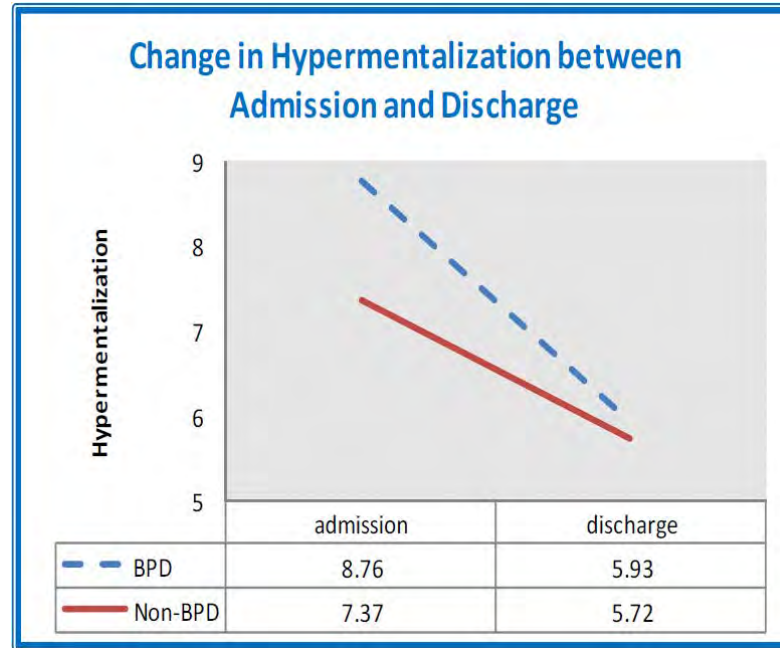


N = 259 (mean age 15.42, SD = 1.43)

63.1% females

CAI, MASC, DERS, BPFSC

Change in hyperMZ correlates with change in borderline symptoms

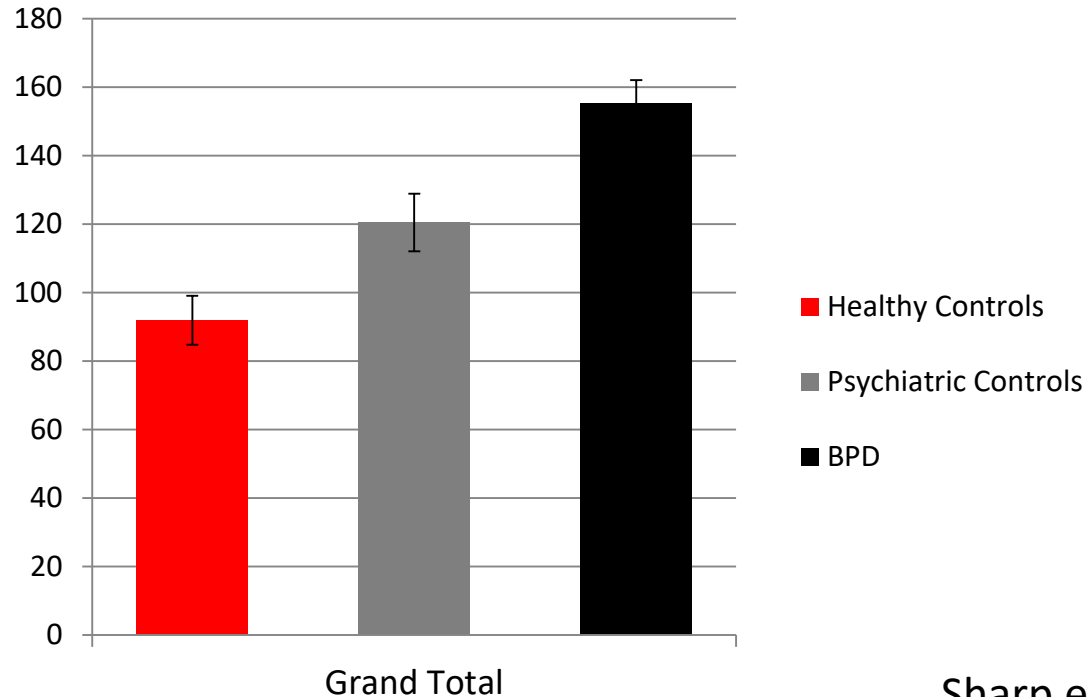


MZ: $F = 76.11$; $p < .001$

BPD*MZ: $F = 5.30$; $p = .02$

Sharp et al. (2013), *JPD*

HyperMZ distinguishes BPD, psychiatric and healthy controls



Sharp et al. (in prep)

Mz-based group therapy affects change

| Clinical measures (<i>N</i> = 25) | Baseline <i>M</i> (<i>SD</i>) | EOT <i>M</i> (<i>SD</i>) | <i>t</i> (24) | <i>p</i> | Difference* (95% CI) | A <i>n</i> (%) | B <i>n</i> (%) |
|---------------------------------------|------------------------------------|-------------------------------|---------------|----------|-------------------------|-------------------|-------------------|
| BPFS-C | | | | | | | |
| Total | 84.5 (11.4) | 64.6 (14.4) | 6.99 | <.001 | 19.9 (14.0 to 25.8) | 10 (40%) | 22 (88%) |
| YSR | | | | | | | |
| Total | 110.6 (18.7) | 89.6 (29.6) | 3.16 | .004 | 21.0 (7.3 to 34.8) | | |
| Externalizing | 28.8 (10.1) | 26.0 (8.6) | 1.06 | .302 | 2.8 (-2.6 to 8.2) | | |
| Internalizing | 38.0 (9.7) | 26.5 (9.6) | 3.93 | <.001 | 11.5 (5.5 to 17.6) | | |
| RFQ-Y | 6.8 (.6) | 9.5 (1.4) | -8.51 | <.001 | 2.7 (2.0 to 3.3) | 21 (84%) | 23 (92%) |
| IPPA | | | | | | | |
| Peer total | 52.5 (6.4) | 39.2 (5.3) | 7.52 | <.001 | 13.3 (9.6 to 16.9) | | |
| Peer trust | 22.3 (3.9) | 13.6 (3.4) | 7.22 | <.001 | 8.7 (6.2 to 11.2) | 20 (80%) | 23 (92%) |
| Parent total | 55.7 (8.2) | 45.3 (4.7) | 5.68 | <.001 | 10.4 (6.7 to 14.2) | | |
| Parent trust | 20.4 (3.1) | 13.6 (2.7) | 7.05 | <.001 | 6.7 (4.8 to 8.7) | 13 (52%) | 23 (92%) |
| RTSHI-A | | | | | | | |
| Total | 68.8 (10.2) | 67.5 (10.7) | 1.27 | .216 | 1.3 (-.8 to 3.4) | | |
| Risk taking | 21.7 (6.3) | 20.4 (7.3) | 1.36 | .188 | 1.3 (-.7 to 3.3) | | |
| Self-harm | 47.2 (8.3) | 39.6 (11.1) | 3.13 | .005 | 7.6 (2.6 to 12.6) | | |
| BDI-Y | 58.4 (9.5) | 47.5 (8.2) | 6.13 | <.001 | 10.9 (7.1 to 14.3) | | |

Reduced mz predicts increase in BPD features over 1 yr FU

- N = 964; 730 1-year follow up; 55.9% female (n = 539)
- Regression with BPD features, depression, anxiety, age, and gender as IVs and one-year follow-up BPD features as DV:
 - AFQ-Y ($\beta = .23; p < .001$)
 - BPFSC-C baseline scores ($\beta = .08; p = .02$)
 - Depression ($\beta = .16; p < .001$)
 - Anxiety ($\beta = .11; p = .007$)

Five key findings

Finding #1:

Personality pathology onsets in adolescence

Finding #2:

Personality pathology is as stable in adolescence as in adulthood

Finding #3:

Personality pathology is preceded by internalizing and externalizing disorders

Finding #4:

Personality pathology remains comorbid with internalizing and externalizing pathology throughout development

Finding #5:

Mentalizing is a key developmental mechanism for healthy personality development in adolescents

Future work

- Link mentalizing impairment and identity development in both typical and atypically developing adolescents.
- Prospective follow-up.
- Evaluate mentalizing-identity development link in the context of comorbidity between psychiatric problems

Agenda

- Five key findings
 - Dispel myths
 - Point to adolescence as a sensitive period
 - Point to the role of mentalizing as a key developmental mechanism for the development of typical and atypical personality development

Many thanks

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