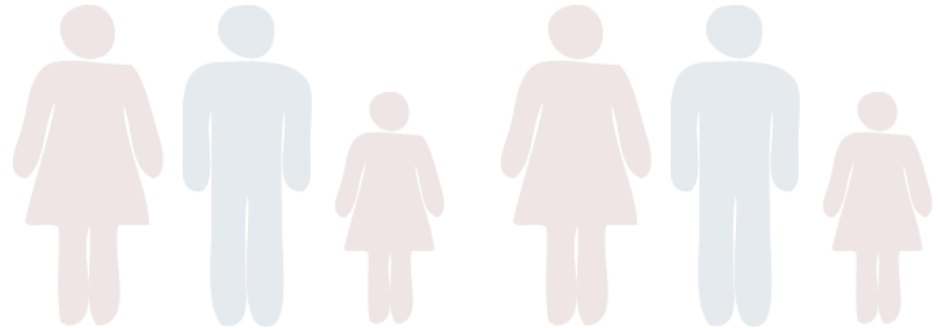


Trajectories To Borderline Personality Disorder In Females & Males

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National Education Alliance
March 2, 2013

Survey Findings

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OBJECTIVES

We were interested in obtaining parents' opinions regarding their...



Male and female children with BPD



and male and female unaffected siblings.



We aimed to:

- A. Describe the developmental trajectory of BPD in males and females
- B. Contrast the male trajectory with that of females who develop BPD
- C. Identify “at-risk” children and adolescents of both genders
- D. Identify features that may be targeted for preventive treatment

What do we know about **developmental precursors** to BPD?

Surprisingly little

is known about the childhood and adolescent antecedents of adult BPD, especially for males.

Most studies have focused on risk factors pertaining to trauma, neglect and deficient parenting (e.g., Herman et al., 1989; Zanarini et al., 1989; Helgeland and Torgersen, 2004). Sexual abuse histories may be more prevalent in females.

Helgeland and Torgersen (2004) noted “protective factors” such as artistic talents, superior school performance and above-average intellectual skills decreased the risk.

Crick et al. (2005), a developmental psychologist, proposes a theoretical model of childhood features of BPD. Included are five childhood indicators of BPD:

Hostile, paranoid world view

Intense, unstable, inappropriate emotion

Overly close relationships

Impulsivity

Lack of sense of self

What do we know about **developmental precursors** to MALE BPD?

- Adolescent patients of both genders were described using the Shedler-Westen Assessment Procedure (SWAP-200-A) to identify profiles for individuals who met BPD. Boys with BPD were found to be more aggressive, disruptive and antisocial, but more detailed analysis was not possible due to the small number of BPD adolescent males (Bradley et al, 2005).

- DSM-IV BPD criteria of affective instability and impulsivity were found to differ across gender and age. Males reported more impulsivity and less affective instability than females (Aggen et al, 2009).

- Data from the Collaborative Longitudinal Personality Disorder Study (CLPS) of childhood trauma history, temperament and co-morbid psychiatric disorders suggested “women and men with BPD display more similarities than differences” (Johnson et al, 2003).

Why solicit parental viewpoints?

Parental views eliminate the problem of the “negative halo” recall bias (Paris 2000), particularly prevalent in individuals with BPD.

Parents can provide important details about early development.

Limitations may exist in the ability of parents to assess more internal experiences such as sense of emptiness.

They have a longitudinal view of their offspring and can provide information about unaffected siblings.

NEA-BPD WEBSITE & SURVEY

www.borderlinepersonalitydisorder.com

NEA FOR BPD NATIONAL EDUCATION ALLIANCE FOR BORDERLINE PERSONALITY DISORDER

For Families | Professionals | Upcoming Events | Publications | Resources | About Us | Home

What is Borderline Personality Disorder?
Borderline Personality Disorder (BPD) is a serious mental illness characterized by pervasive instability in moods, interpersonal relationships, self-image, and behavior.
This instability often disrupts family and work life, long-term planning, and the individual's sense of self-identity. While less known than schizophrenia or bipolar disorder (manic-depressive illness), BPD is more common, affecting 2% of adults, mostly young women.

Our Mission...
The Mission of the National Education Alliance for Borderline Personality Disorder (NEA-BPD) is to raise public awareness, provide education, promote research on borderline personality disorder, and enhance the quality of life for those affected by this serious

Inside our Site...

- **2007 Young Investigator Award (YIA) winners are announced.** Click [HERE](#) for full story.
- **A BPD Brief** is now available in French as [Le TPL... en bref!](#)
- **BPD Gaining Congressional Interest** - Congressman Tom Davis (R-VA) has requested the Government Accountability Office (GAO) conduct a BPD Impact Study. Click [here](#) for his letter.
- **Congressional Briefing on BPD held May 8.** Read summary [here](#) or click [here](#) to watch the video. (Windows Media Player required. Click [here](#) to download.)
- **Research Participants Sought at Boston University.** Click [here](#) for more information.
- **Association for Research on Personality Disorders (ARPD) Announces Student Research Award.** Click [here](#) for more information.
- **Share your experience.** Family members are asked to [complete a survey](#) exploring early symptoms of BPD and family impact.

Borderline Personality Disorder CONFERENCES

Register Now

Sat/Sun, Oct. 20-21
Mt. Sinai Medical Center
New York, NY
INSIGHTS INTO BORDERLINE PERSONALITY DISORDER:
Neurobiological Research and Clinical Interventions
Click [HERE](#) for more information.

Borderline Personality Disorder Resources

Presentation Videos

To view any of the videos in our growing library, click on the links below. (Windows Media Player is required. Click [here](#) to download a free copy.)

[Videos Indexed by Topic](#)

From Recent NEA-BPD Conferences

Parent Section

Background

Mission

Survey

Latest News

Events

Resources

SURVEY DESIGN

Approved by IRB
Anonymous
200 Questions
45-60 Minutes

MSI-BPD Screen

Demographics

Child

Parent

Epochs

Infancy/Toddlerhood

Childhood

Adolescence

Adverse Life Events

Family Burden

Evaluation

Diagnosis

Treatment

Infancy/Toddlerhood

Colic
Excessive Separation Anxiety
Absence of Separation Anxiety
Inconsolable
Inability to Self-soothe
Sensory Problems
Eating Issues
Unusual Sensitivity
Moodiness
Sleep Issues
Motor Delay
Cognitive Delay
Social Delay
Verbal Delay
Physical Abuse
Sexual Abuse

Childhood

Unusual Sensitivity
Moodiness
Impulsivity
Difficulty Making Friends
Conflict with Authority
Lying
Suspension/Expulsion
Bully Victim
Bully Perpetrator
Poor Grades
Special Education
Body Image Issues
Emptiness
Boredom
Verbal Outbursts
Alcohol Abuse
Substance Abuse
Physical Abuse
Sexual Abuse

Adolescence

Moodiness
Sensitivity
Impulsivity
Destruction
Arrests
Alcohol Abuse
Substance Abuse
Anorexia
Bulimia
Body Image Issues
Emptiness
Delusions
Paranoia
Odd Thinking
Physical Abuse
Sexual Abuse
Violence Victim
Lying
Difficulty Making Friends
Promiscuity
Fighting

SURVEY DESIGN - SAMPLES



Parental Viewpoints on Borderline Personality Disorder

You are being asked to complete an **anonymous** survey as the parent of a son or daughter with borderline personality disorder (BPD). We anticipate that this research will contribute to the mental health community's understanding of BPD, and that patients with BPD and their family members will benefit as a result. If you have questions or comments, please

The researchers will not be providing information about you. The study includes boredom, fatigue, and emotions by virtue of being a part of the child's history. Refusal to participate will not affect your child's

This column refers to the child with BPD.

Did you notice anything unusual in infancy or toddlerhood?

- Colic
- Excessive Separation Anxiety
- Inability to be Consoled
- Inability to Self-Soothe
- Sensory Problems
- Picky Eating
- Poor Temperament

This column refers to the child with BPD.

Have any of this child's closest relationships troubled by a lot of arguments or repeated

- No
- Yes

Has this child deliberately hurt him/herself (e.g., punched, cut or burned him/herself)?

- No
- Yes

How about made a suicide attempt?

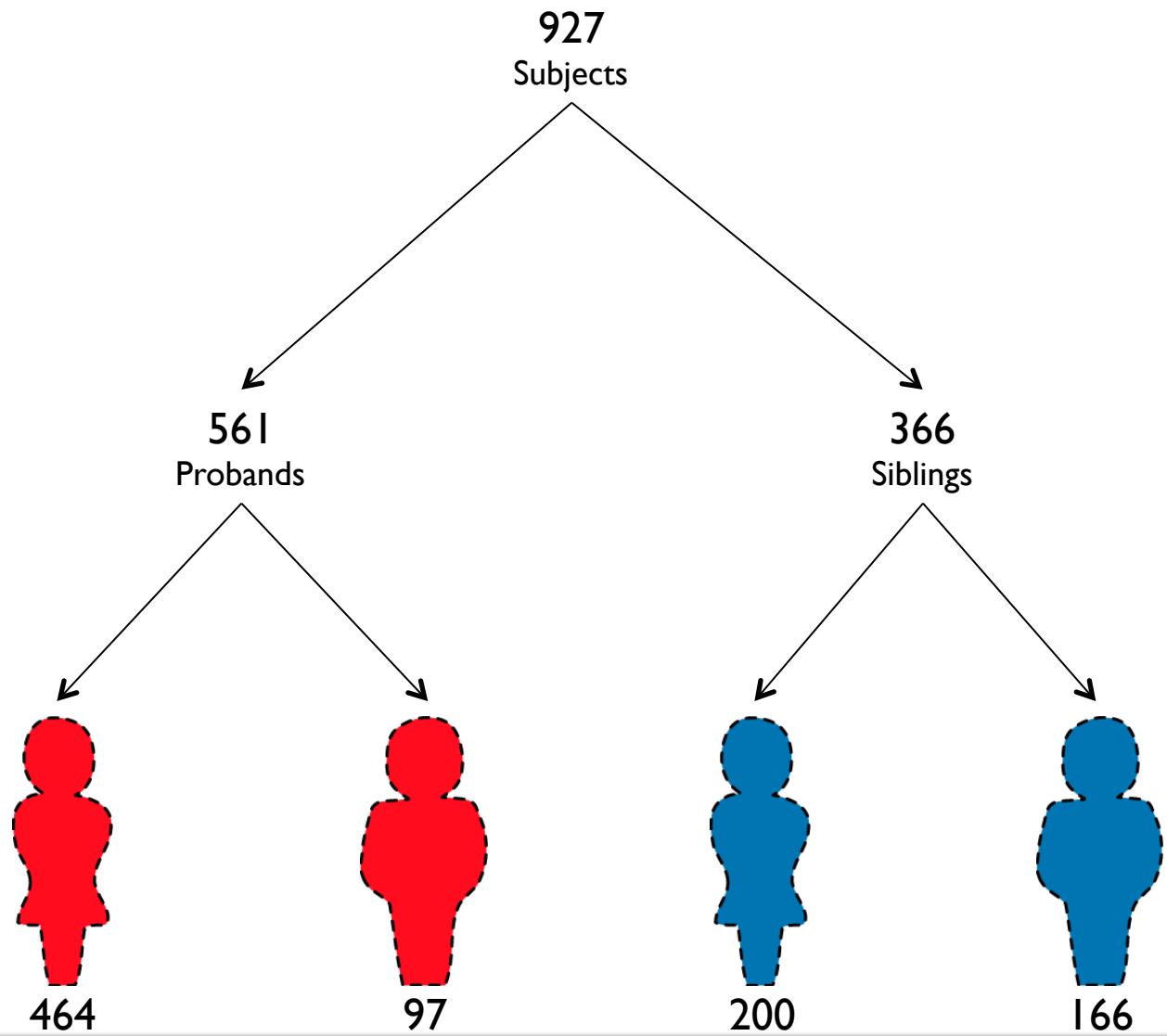
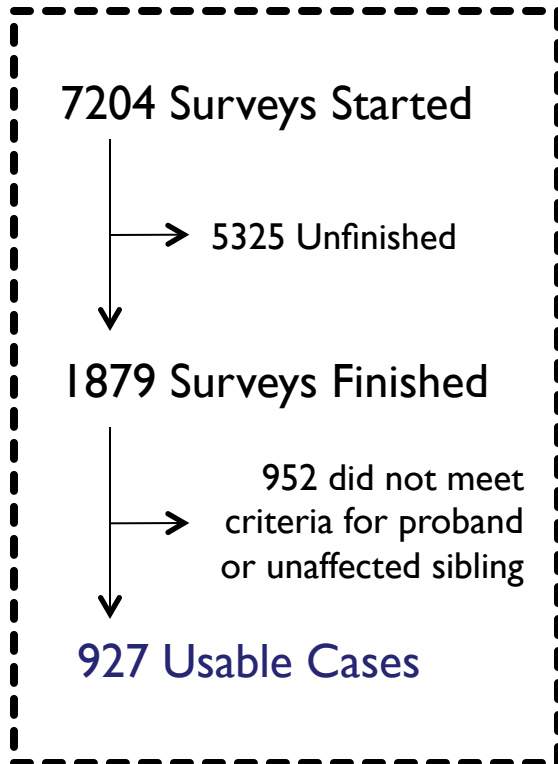
This section inquires on any **medical and psychiatric history.**

At what age was this child diagnosed with BPD?

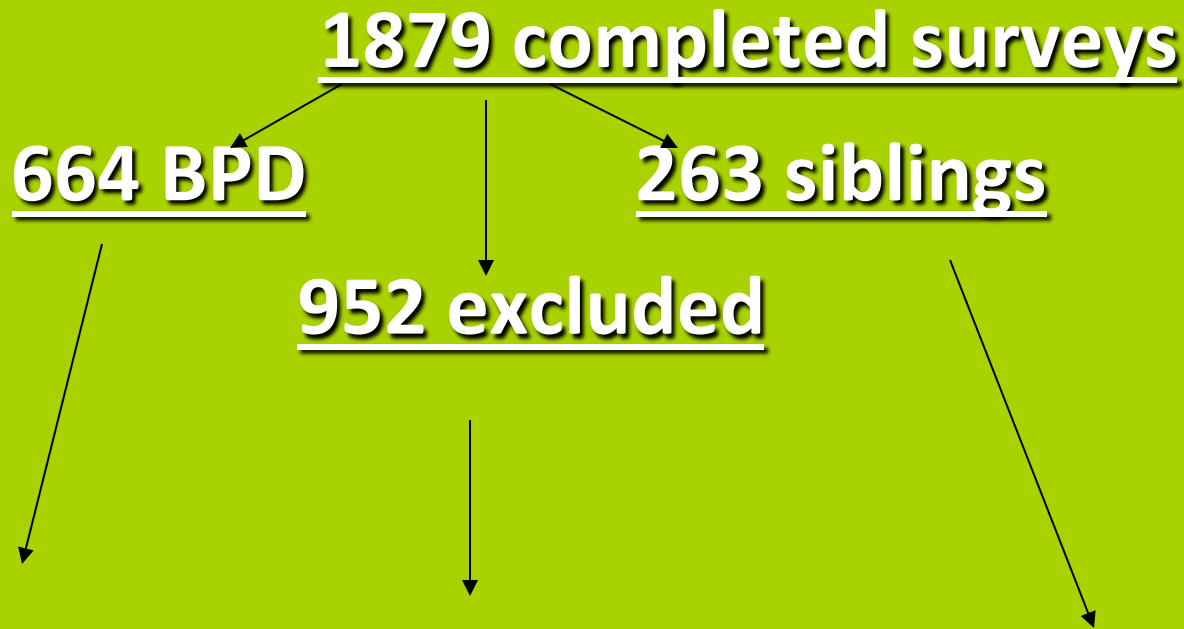
Who gave the official BPD diagnosis?

- Psychiatrist (M.D.)
- Pediatrician (M.D.)

SAMPLING



Completed Surveys



BPD offspring

- 1) MSI-BPD score >7
(scale embedded in
the survey)
AND
- 2) BPD dx given by a
professional

Not analyzed

- 1) sibling w/ MSI-BPD
≥7
- 2) BPD offspring with
MSI-BPD <7
- 3) BPD offspring
without formal

Unaffected Offspring

- 1) MSI-BPD score of 7
or below
AND
- 2) NO BPD dx

PARENT DEMOGRAPHICS

Age (Mean [SD]) 54.2 [8.1] years old

Gender Female 94.5%

Race Caucasian 94.1%

Education

Some HS	2.8%
HS Grad	13.1%
Some University	26.2%
University Grad	26.8%
Graduate studies	8.5%
GS Grad	22.0%

Household Income Bracket	Percentage
<25k	9.4%
25-50k	20.9%
50-75k	22.1%
75-100k	17.4%
100-200k	20.3%
200-500k	8.0%
500k-1m	1.6%
>1m	.2%

Marital Status

Married	62.5%
Divorced	18.2%
Remarried	9.8%
Widowed	4.4%
Separated	2.3%

OFFSPRING DEMOGRAPHICS



	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Age	27.0 (8.2)	26.4 (8.2)	25.8 (7.3)	25.7 (8.2)
Age at BPD Dx	23.8 (6.4)		23.4 (6.0)	
MSI-BPD Criteria	8.9 (1.0)	1.1 (1.4)	8.8 (1.0)	1.3 (1.6)

PROBAND PSYCHIATRIC HISTORY

Family

Borderline Personality	27%
Major Depression	30%
Bipolar	16%
PTSD	16%
Anxiety spectrum	34%
Alc./Substance Abuse	35%



Child

	<u>male</u>	<u>female</u>
Major Depression	39%	77.8%
Bipolar	35%	56.8%
Psychotic spectrum	9%	7.7%
ADHD	46%	34.2%
Oppositional Defiant	10%	15.4%



Table 1a

Significant Differences between BPD Offspring and Unaffected Siblings

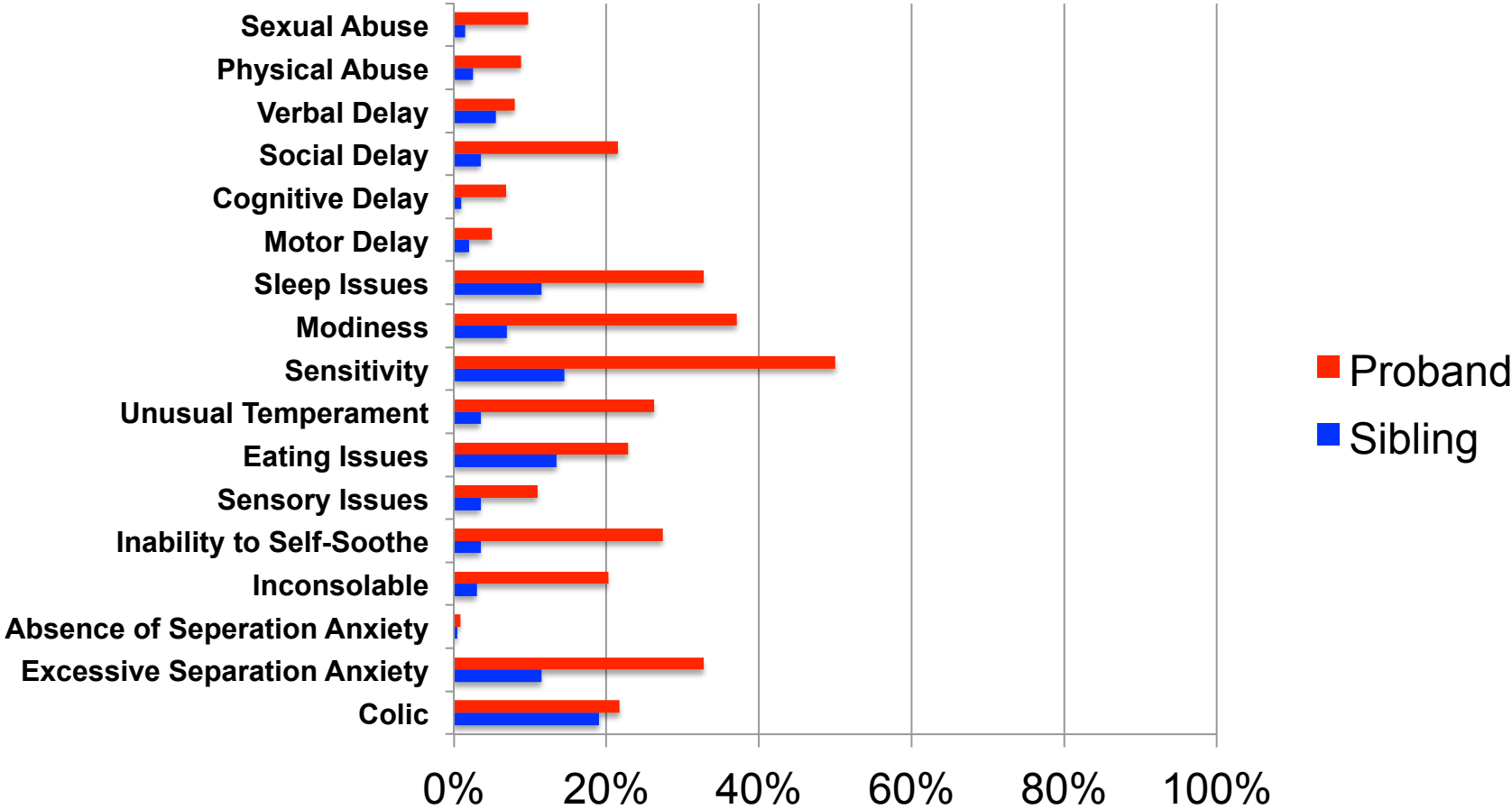
	Prevalence in BPD Offspring	Prevalence in Non-BPD Siblings	Chi-Square ^a	Significance ^b
Birth				
Difficult Pregnancy	27.01% (n=57)	26.76% (n=19)	.002	.967
Eventful Labor	29.24% (n=62)	33.33% (n=24)	.425	.514

Note ^a Pearson Chi-Square statistic

^b Asymp. Sig. 2-Sided

* Significant Difference (Holm-Bonferroni Correction applied within each variable group.)

Female Infancy & Toddlerhood



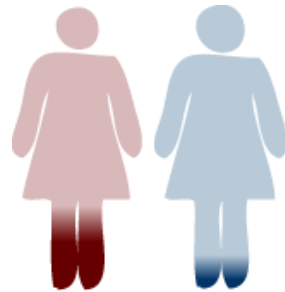
INFANCY & TODDLERHOOD - PREDICTORS OF FEMALE BPD

	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	.007	.049	.023	1	.880	1.007
Child Age	.005	.012	.140	1	.709	1.005
Inability to Self-Soothe	1.332	.432	9.502	1	.002	3.790
Unusual Temperament	1.148	.489	5.509	1	.019	3.151
Sensitivity	1.103	.248	19.703	1	.000	3.012
Moodiness	.836	.369	5.122	1	.024	2.307
Sleep Issues	.556	.280	3.945	1	.047	1.743
Social Delay	1.431	.427	11.254	1	.001	4.183
Sexual Abuse	1.714	.634	7.318	1	.007	5.554
Constant	-.415	.422	.965	1	.326	.661

INFANCY & TODDLERHOOD- FEMALES

Did you notice anything unusual during **infancy**?

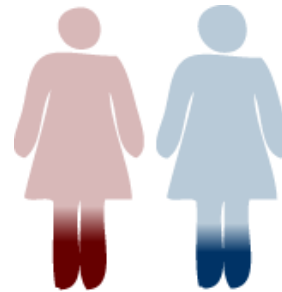
Inability to Self-Soothe



27%

4%

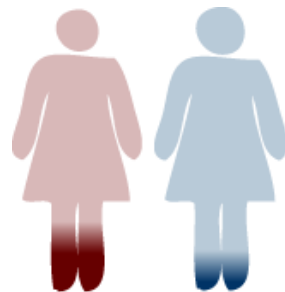
Sensitivity



50%

15%

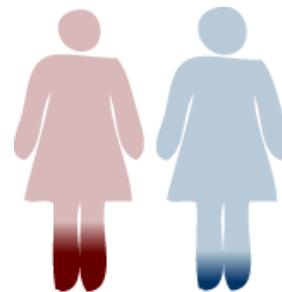
Excessive
Separation
Anxiety



33%

12%

Moodiness

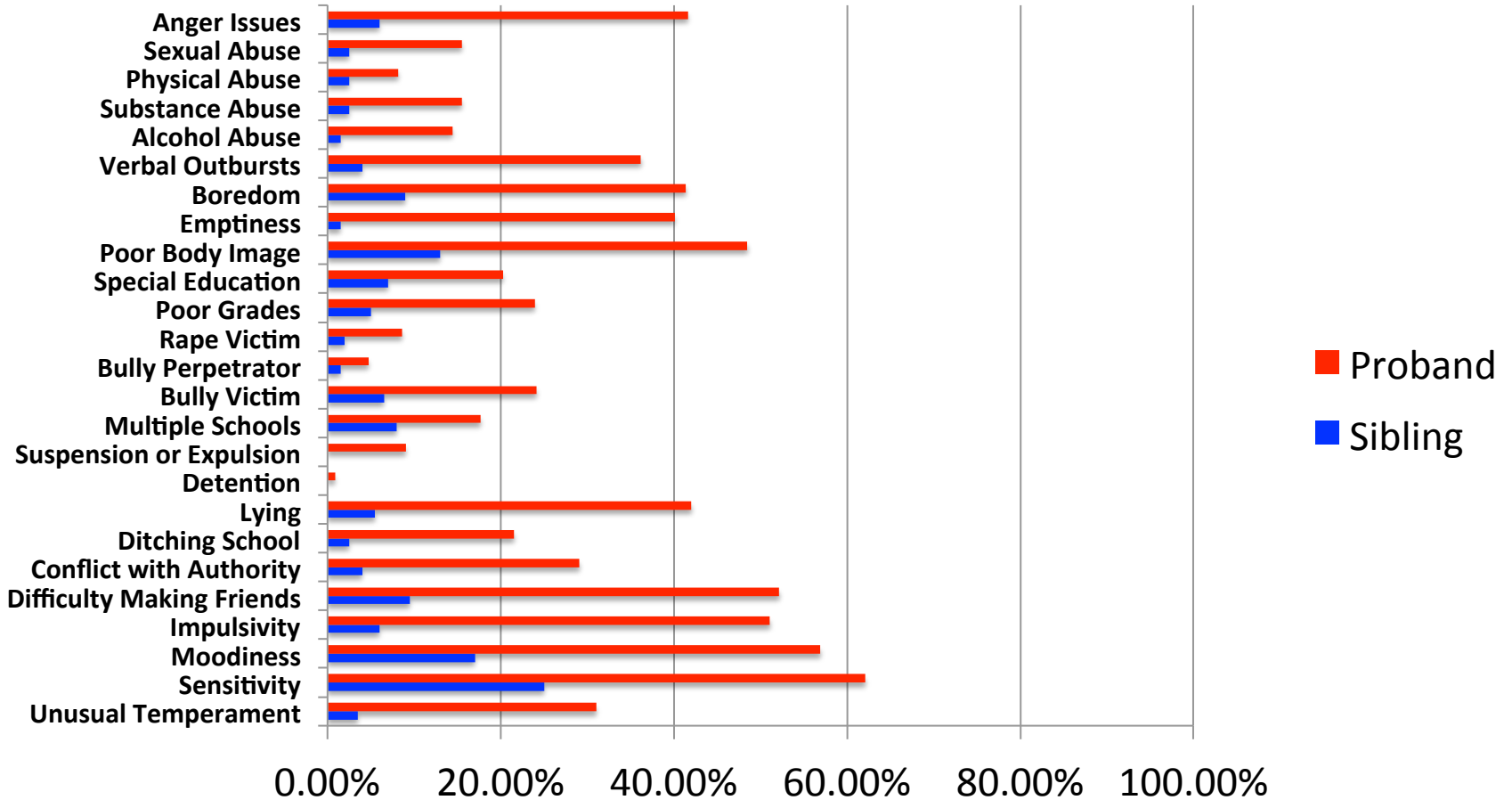


37%

7%

NEA-BPD

Female Childhood

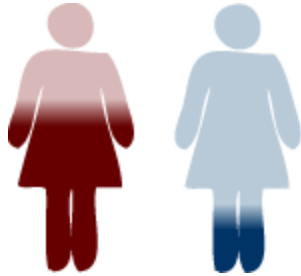


CHILDHOOD - PREDICTORS OF FEMALE BPD

	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	.003	.063	.003	1	.958	1.003
Child Age	.004	.016	.067	1	.796	1.004
Sensitivity	.774	.252	9.427	1	.002	2.168
Impulsivity	1.859	.372	24.925	1	.000	6.418
Difficulty with Friends	1.499	.315	22.584	1	.000	4.477
Lying	1.722	.387	19.797	1	.000	5.595
Body Image Issues	.946	.295	10.302	1	.001	2.575
Emptiness	2.544	.629	16.345	1	.000	12.730
Sexual Abuse	1.632	.607	7.224	1	.007	5.115
Anger	.798	.395	4.083	1	.043	2.220
Constant	-1.511	.536	7.960	1	.005	.221

Did you notice anything unusual during **childhood**?

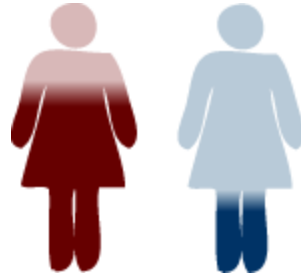
Difficulty Making Friends



52%

10%

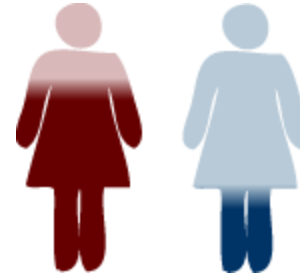
Sensitivity



62%

25%

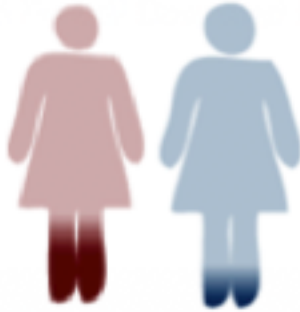
Impulsivity



51%

6%

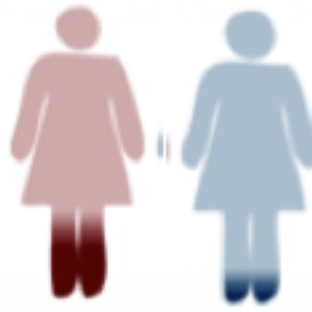
Lying



42%

6%

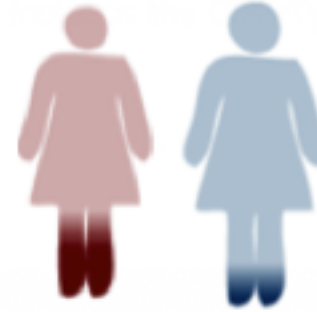
Emptiness



40%

2%

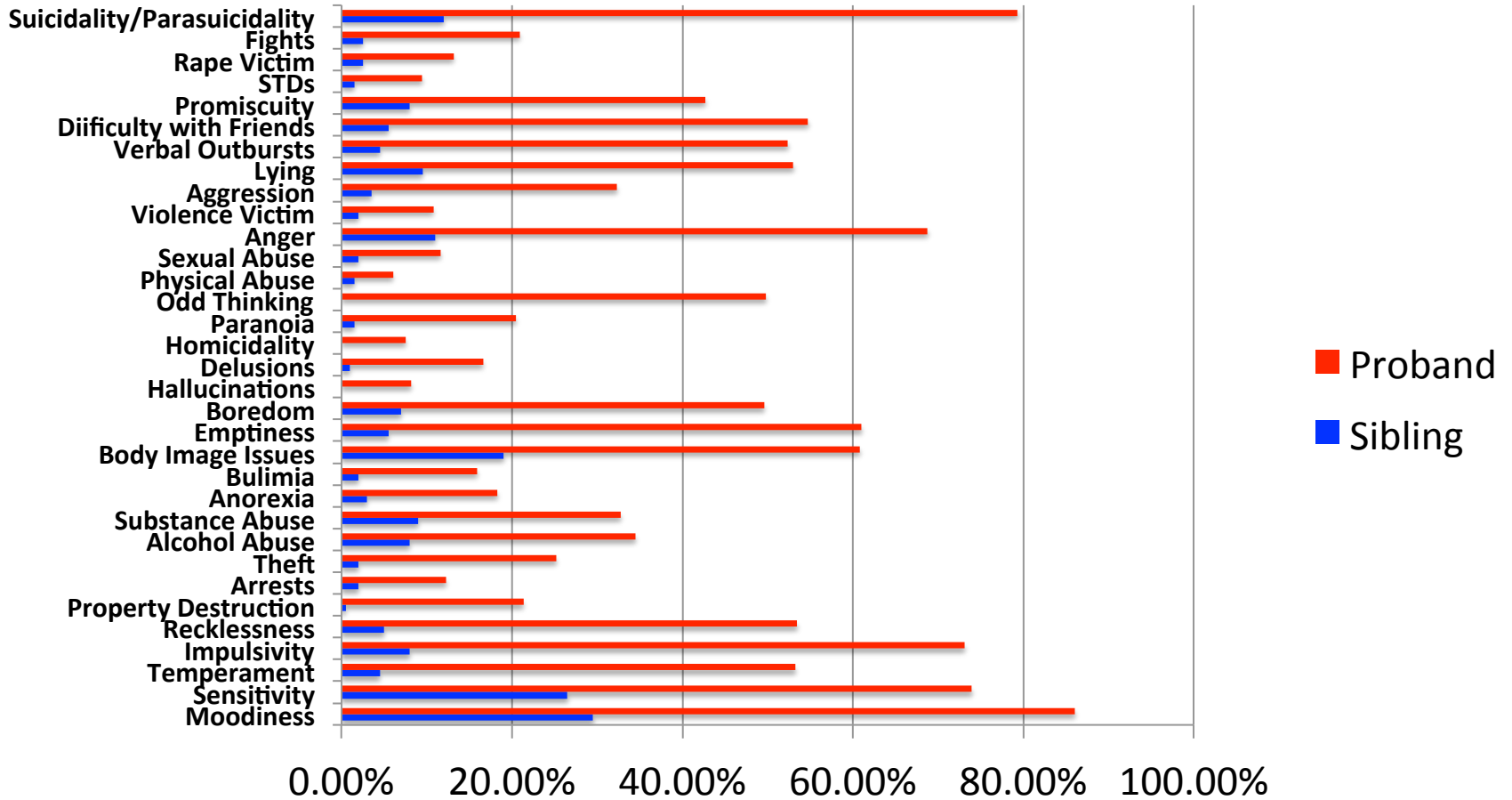
Body Image Concerns



49%

13%

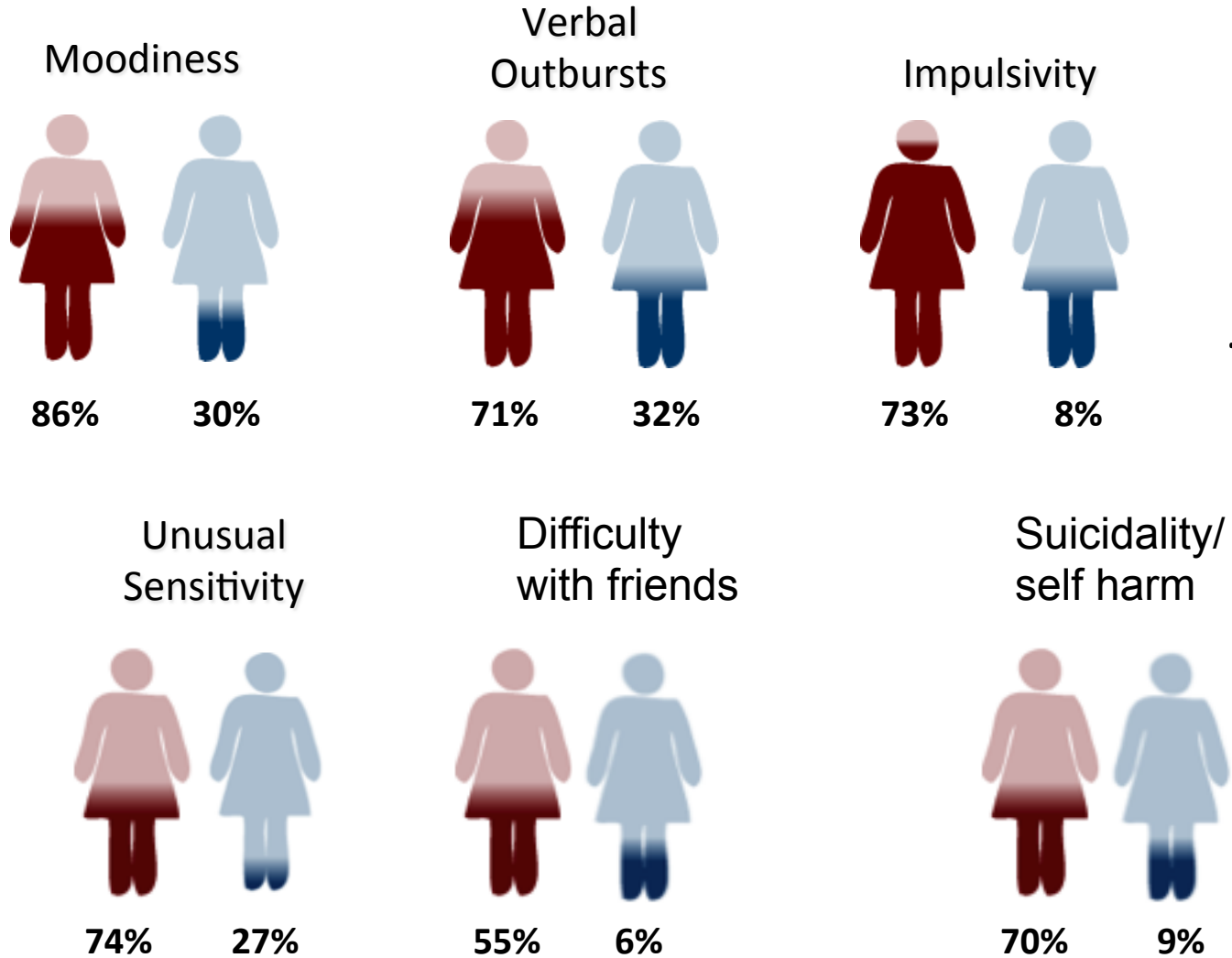
Female Adolescence



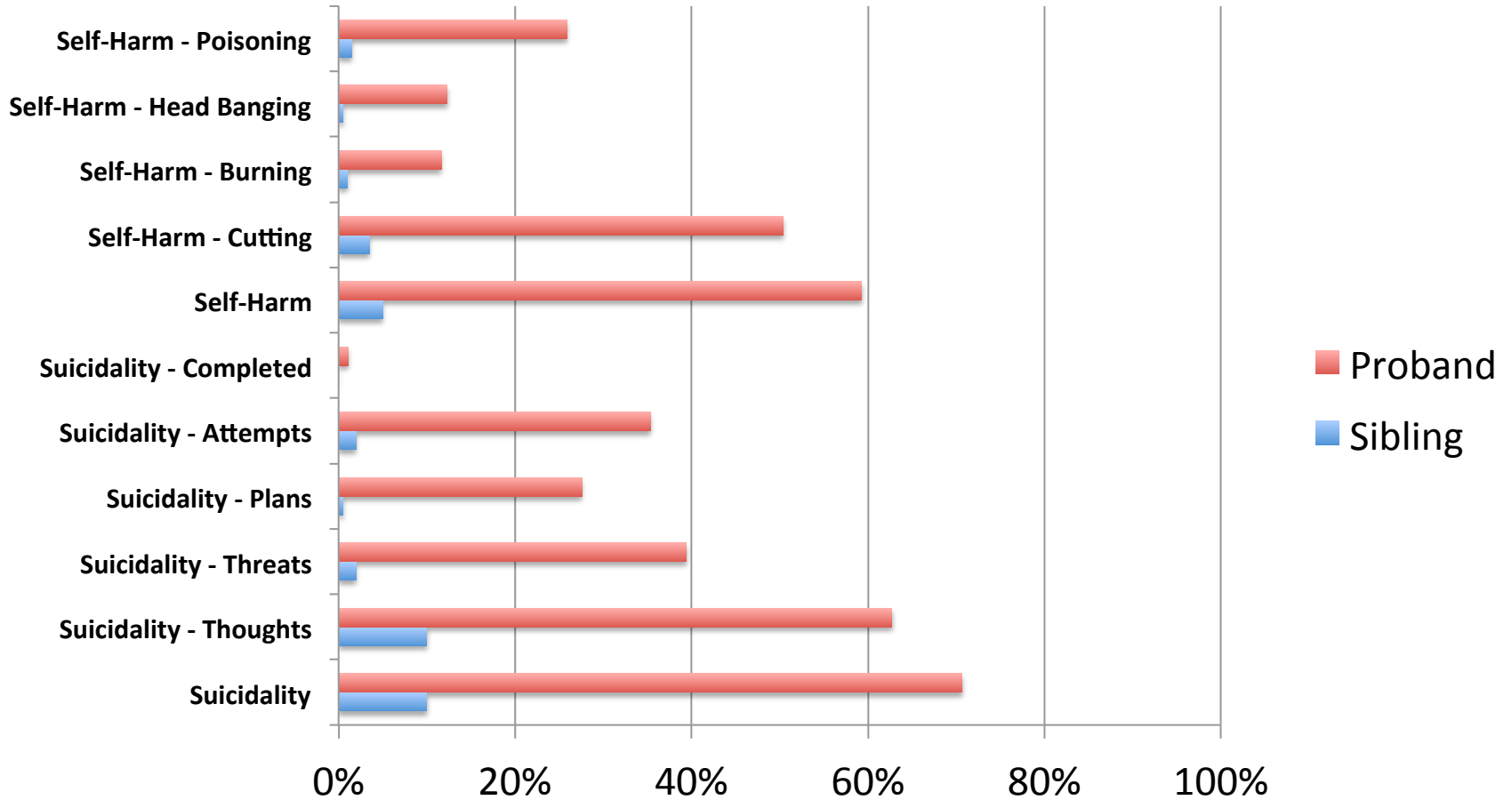
ADOLESCENCE - PREDICTORS OF FEMALE BPD

	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	-.076	.084	.814	1	.367	.927
Child Age	.041	.020	4.403	1	.036	1.042
Moodiness	.797	.341	5.475	1	.019	2.219
Sensitivity	.784	.336	5.446	1	.020	2.190
Impulsivity	1.789	.382	21.966	1	.000	5.985
Body Image Issues	.750	.350	4.600	1	.032	2.117
Verbal Outbursts	1.211	.487	6.195	1	.013	3.357
Difficulty with Friends	1.932	.420	21.212	1	.000	6.905
Suicidality / Self-Harm	1.934	.352	30.117	1	.000	6.919
Constant	-3.652	.746	23.983	1	.000	.026

Did you notice anything unusual during adolescence?



Female Suicide & Self-Harm



Female Omnibus Regression

	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	-.065	.086	.568	1	.451	.937
Child Age	.036	.021	3.007	1	.083	1.037
Infancy: Self-Soothe	1.332	.561	5.634	1	.018	3.789
Childhood: Lying	1.284	.507	6.418	1	.011	3.609
Childhood: Body Image	1.238	.385	10.347	1	.001	3.449
Childhood: Emptiness	2.283	.694	10.818	1	.001	9.808
Adolescence: Moodiness	1.004	.336	8.937	1	.003	2.729
Adolescence: Impulsivity	2.119	.379	31.240	1	.000	8.322
Adolescence: Outbursts	1.065	.469	5.143	1	.023	2.899
Adolescence: Difficulty with Friends	2.041	.423	23.311	1	.000	7.695
Adolescence: Suicidality	1.937	.364	28.299	1	.000	6.937
Constant	-3.652	.802	20.751	1	.000	.026

91.5% of cases predicted correctly.

R Square: Cox & Snell = .555; Nagelkerke = .784

Large Effect Size

Developmental Trajectory for Females

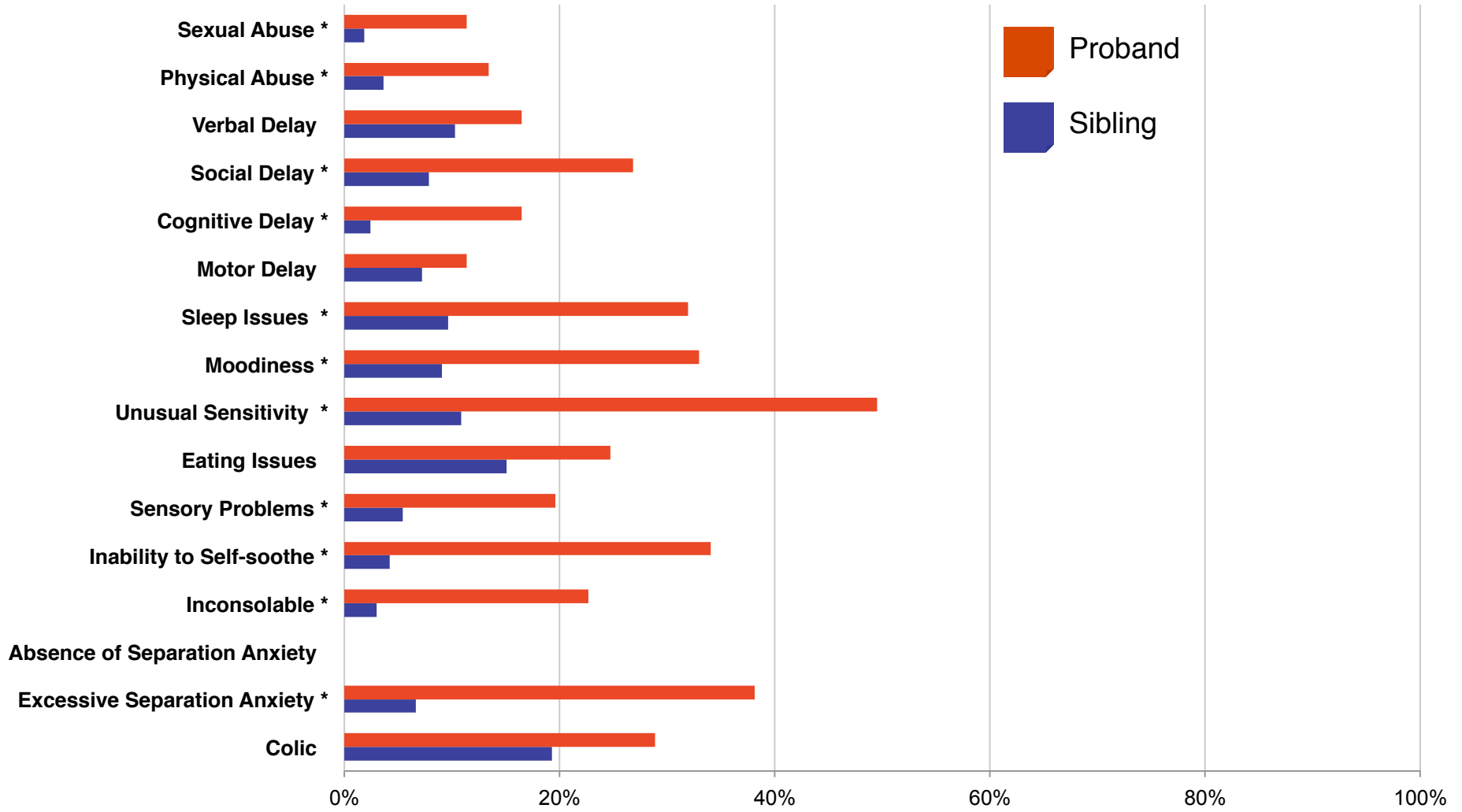
BPD prodromal features of affective **sensitivity** and **inability to self-soothe** can be identified as early as infancy.

BPD may be viewed as a **temperamental disturbance** in affect layered **identity concerns** manifesting in elementary school coupled with adolescent impulsivity and **behavioral dyscontrol**.

By adolescence, difficulties with **aggression, relationships** and **self-destructive behaviors** dominate the profile and the BPD trajectory is well defined by this epoch.

MALE BPD FINDINGS

INFANCY & TODDLERHOOD-MALES



INFANCY & TODDLERHOOD - PREDICTORS OF MALE BPD

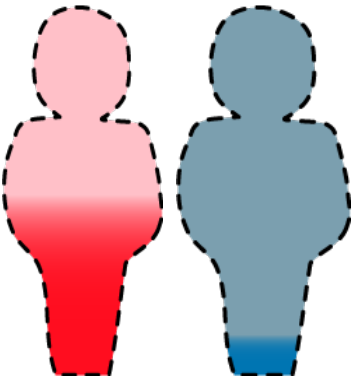
	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	-.034	.116	.085	1	.770	.967
Child's Age	.032	.023	1.977	1	.160	1.033
Excessive Separation Anxiety	1.495	.470	10.107	1	.001	4.460
Inability to Self-soothe	1.622	.511	10.072	1	.002	5.064
Unusual Sensitivity	1.719	.411	17.491	1	.000	5.577
Sexual Abuse	2.601	.849	9.384	1	.002	13.477
Constant	-2.473	.842	8.626	1	.003	.084

80% of cases correctly predicted with logistic stepwise regression model

Medium Effect Size
Cox & Snell R² .325
Nagelkerke R²

INFANCY & TODDLERHOOD - PREDICTORS OF BPD

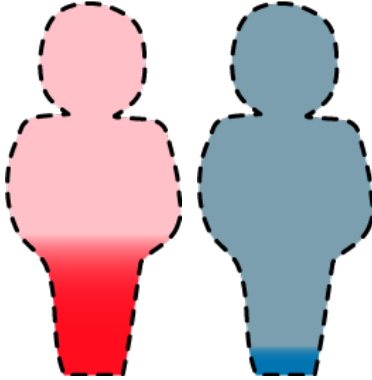
Unusual
Sensitivity



49%

11%

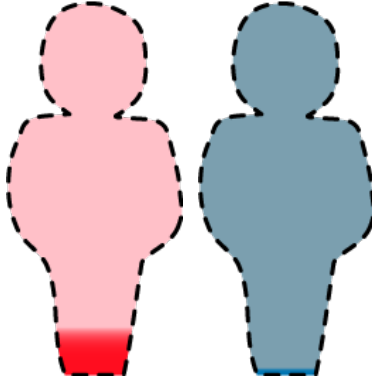
Excessive
Separation
Anxiety



38%

7%

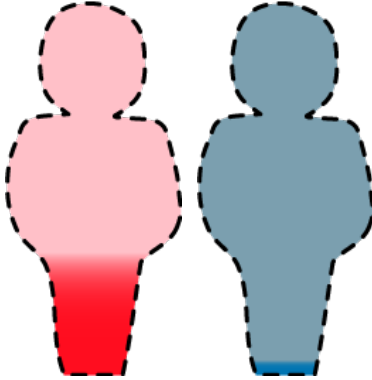
Sexual
Abuse



11%

2%

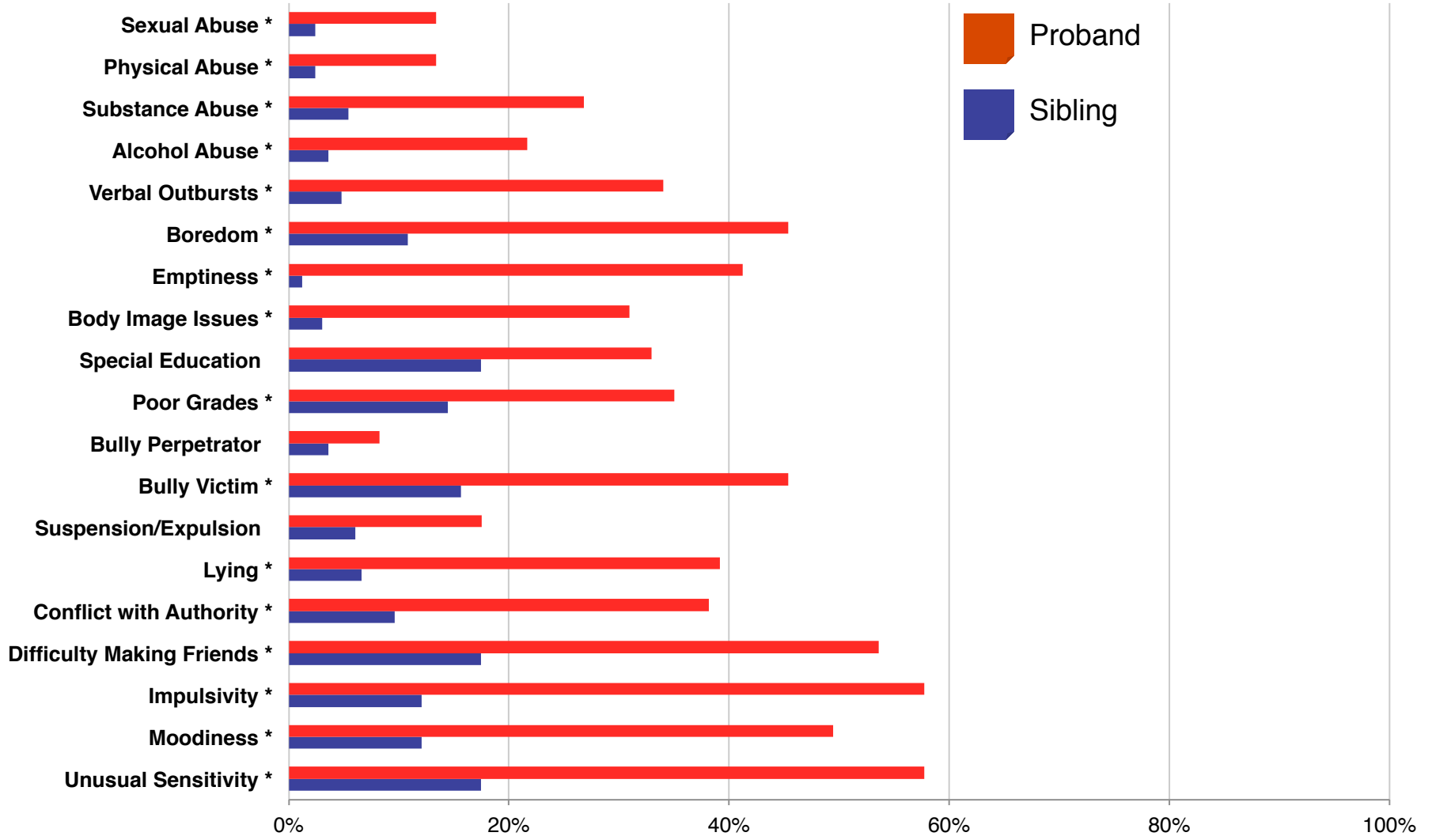
Inability to
Self-soothe



34%

4%

MALE CHILDHOOD



CHILDHOOD - PREDICTORS OF MALE BPD

	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	.018	.149	.014	1	.905	1.018
Child's Age	-.021	.028	.542	1	.461	.979
Unusual Sensitivity	1.411	.454	9.640	1	.002	4.100
Impulsivity	1.266	.472	7.199	1	.007	3.547
Lying	1.586	.600	6.996	1	.008	4.884
Body Image Issues	2.085	.803	6.736	1	.009	8.046
Emptiness	2.423	.836	8.401	1	.004	11.283
Substance Abuse	1.303	.678	3.688	1	.055	3.679
Physical Abuse	2.091	1.083	3.730	1	.053	8.092
Sexual Abuse	1.973	.932	4.484	1	.034	7.194
Constant	-2.236	.971	5.307	1	.021	.107

86% of cases correctly predicted with logistic stepwise regression model

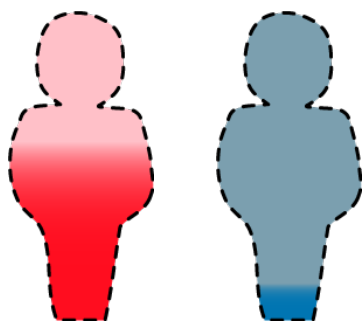
NEA-BPD

Large Effect Size
Cox & Snell R² .472
Nagelkerke R² .

32

CHILDHOOD - PREDICTORS OF BPD

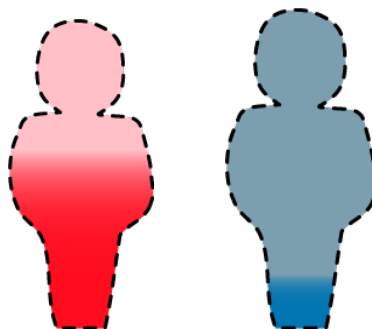
Impulsivity



58%

12%

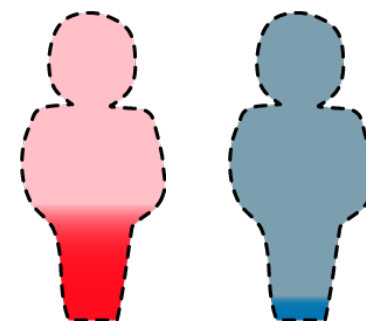
Unusual Sensitivity



58%

17%

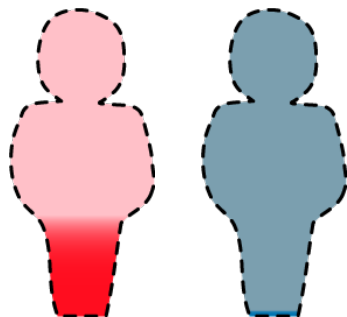
Lying



39%

7%

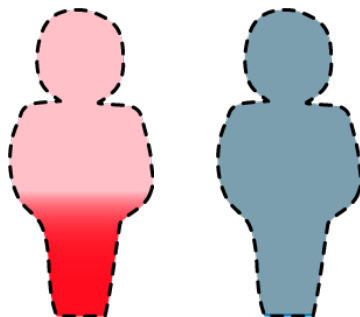
Body Image Issues



31%

3%

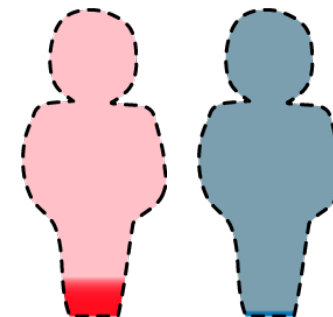
Emptiness



41%

1%

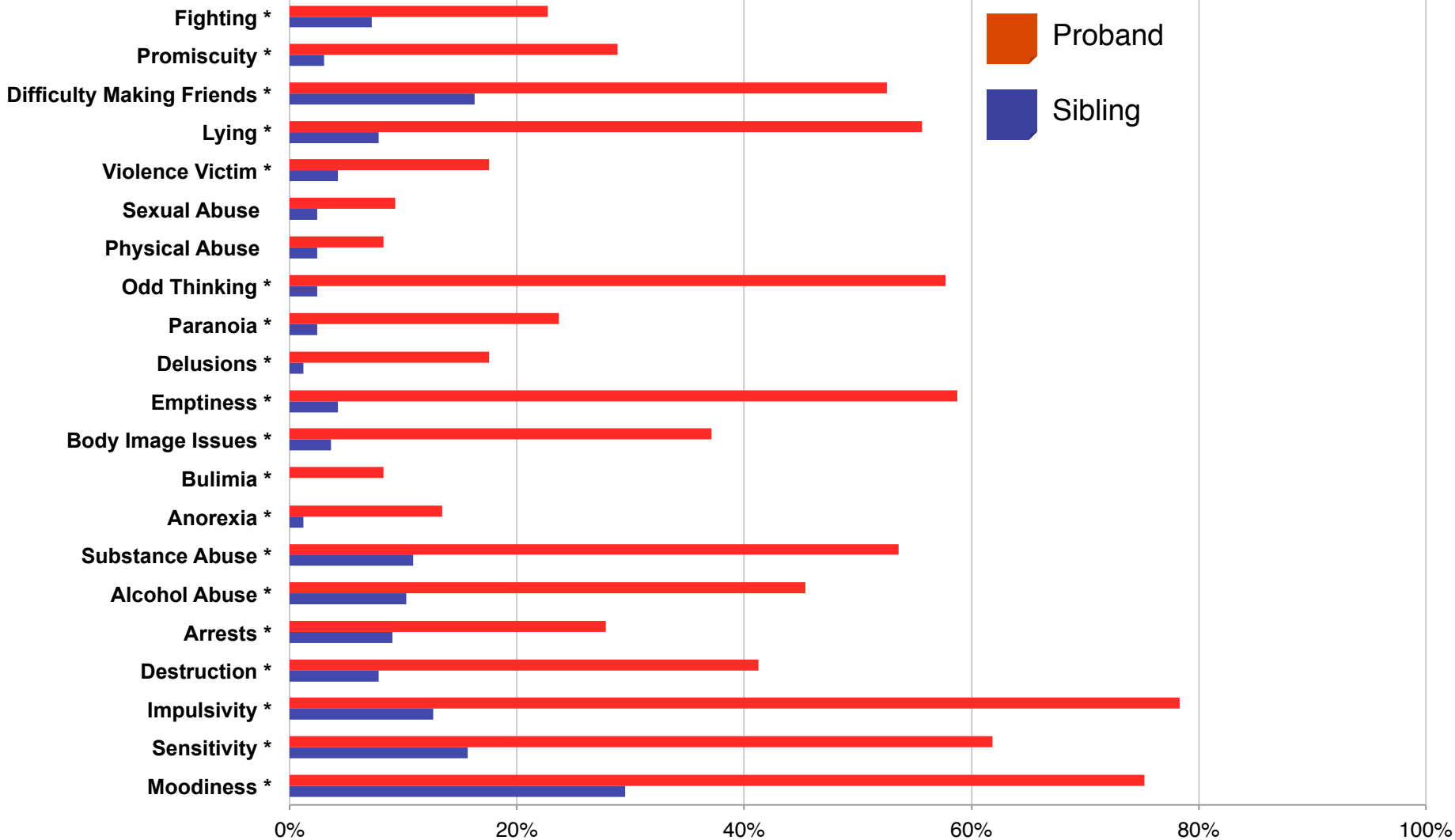
Sexual Abuse



13%

2%

ADOLESCENCE



ADOLESCENCE - PREDICTORS OF MALE BPD

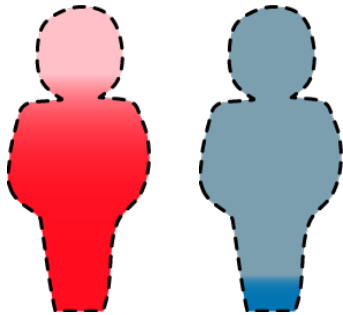
	B	S.E.	Wald	df	Sig.	Exp(B)
Income Bracket	-.127	.189	.452	1	.502	.881
Child's Age	-.013	.031	.187	1	.666	.987
Impulsivity	2.585	.576	20.110	1	.000	13.261
Body Image Issues	1.964	.848	5.367	1	.021	7.127
Emptiness	1.967	.778	6.388	1	.011	7.153
Odd/Unusual Thinking	2.032	.768	6.997	1	.008	7.630
Lying	2.060	.662	9.665	1	.002	7.842
Suicidality	1.376	.639	4.643	1	.031	3.959
Constant	-3.190	1.217	6.876	1	.009	.041

92% of cases correctly predicted with logistic stepwise regression model

Large Effect Size
Cox & Snell R² .591

ADOLESCENCE - PREDICTORS OF BPD

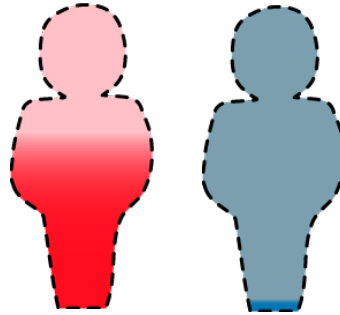
Impulsivity



78%

13%

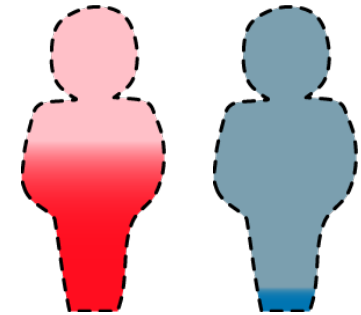
Emptiness



59%

4%

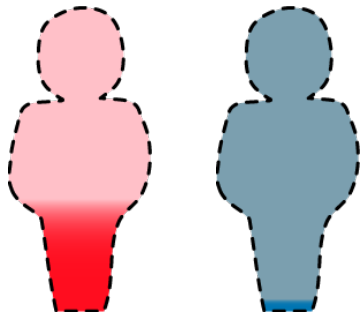
Frequent Lying



56%

8%

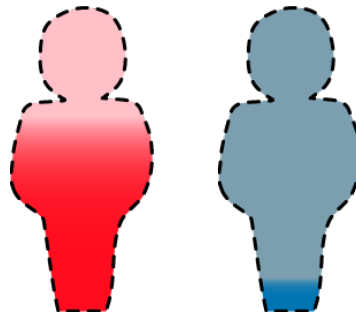
Body Image Issues



37%

4%

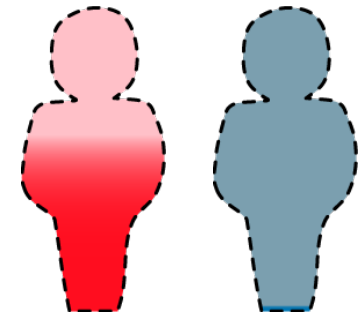
Suicidality



64%

11%

Odd Thinking

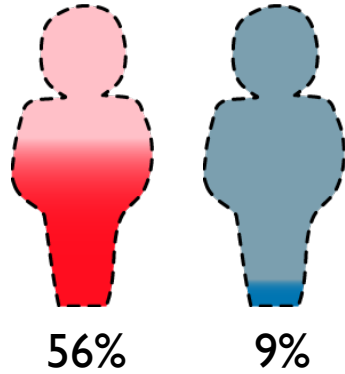


58%

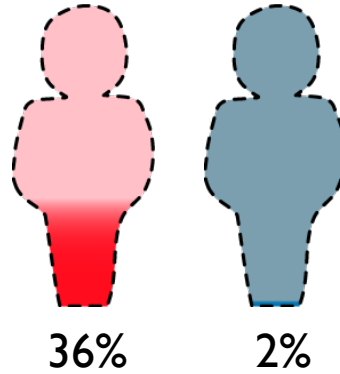
2%

ADOLESCENCE - SUICIDALITY & DELIBERATE SELF-HARM

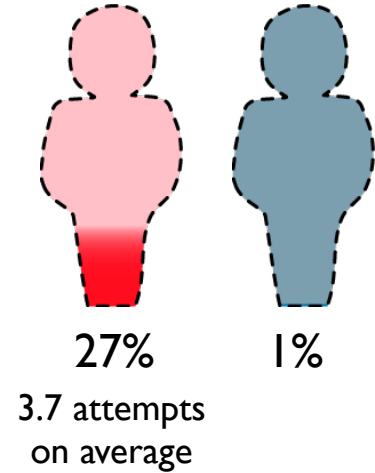
Suicidal Thoughts



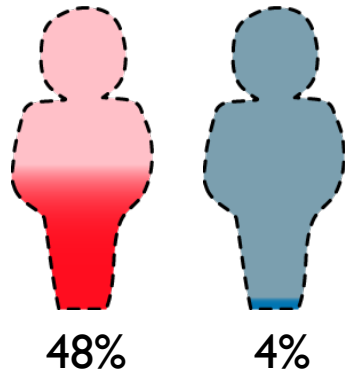
Suicidal Threats



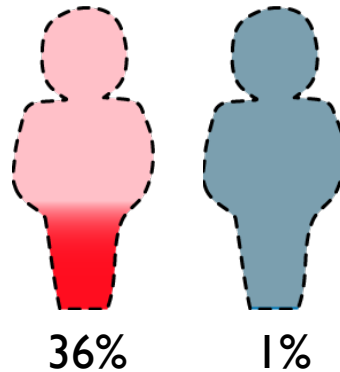
Suicide Attempts



Deliberate Self-harm



Cutting



Burning



MALE BPD DEVELOPMENTAL TRAJECTORIES- SUMMARY OF FINDINGS

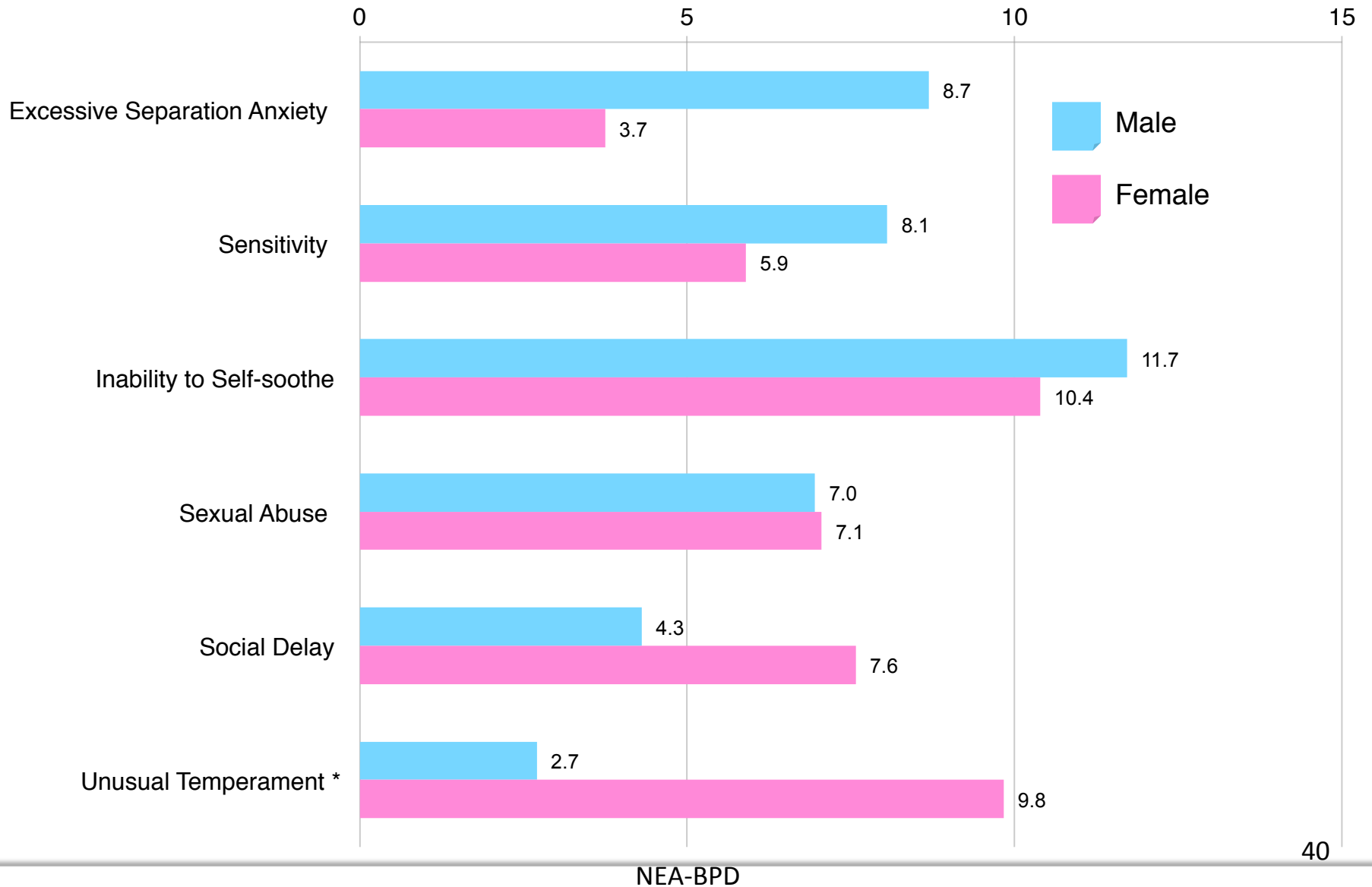
- 1) Little is known about the developmental trajectories to BPD in males.
- 2) Our parental survey of Male BPD offspring suggests:
 - a) Male BPD prodromal features in of unusual sensitivity, separation anxiety and inability to self-sooth can be identified as early as infancy.
 - b) BPD in males may be viewed as an early temperamental disturbance in sensitivity and anxiety, with impulsivity and problems of self manifesting in elementary school coupled with odd and unusual thinking and self harming behavior in adolescence.
 - c) Sexual abuse in all epochs are important predictors of BPD in males.

Important Question:

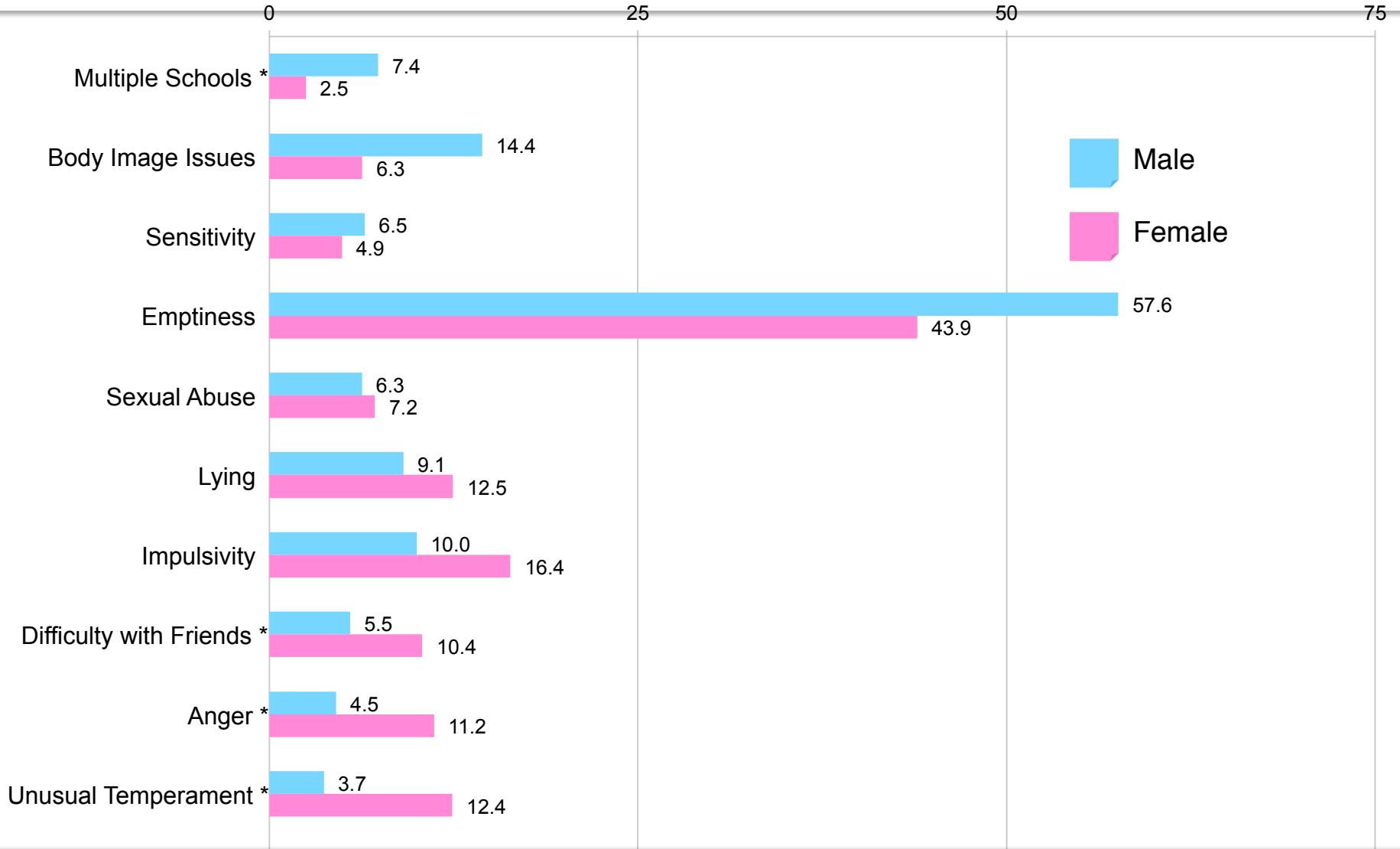
Do the Developmental Trajectories to BPD Differ Between Males and Females?



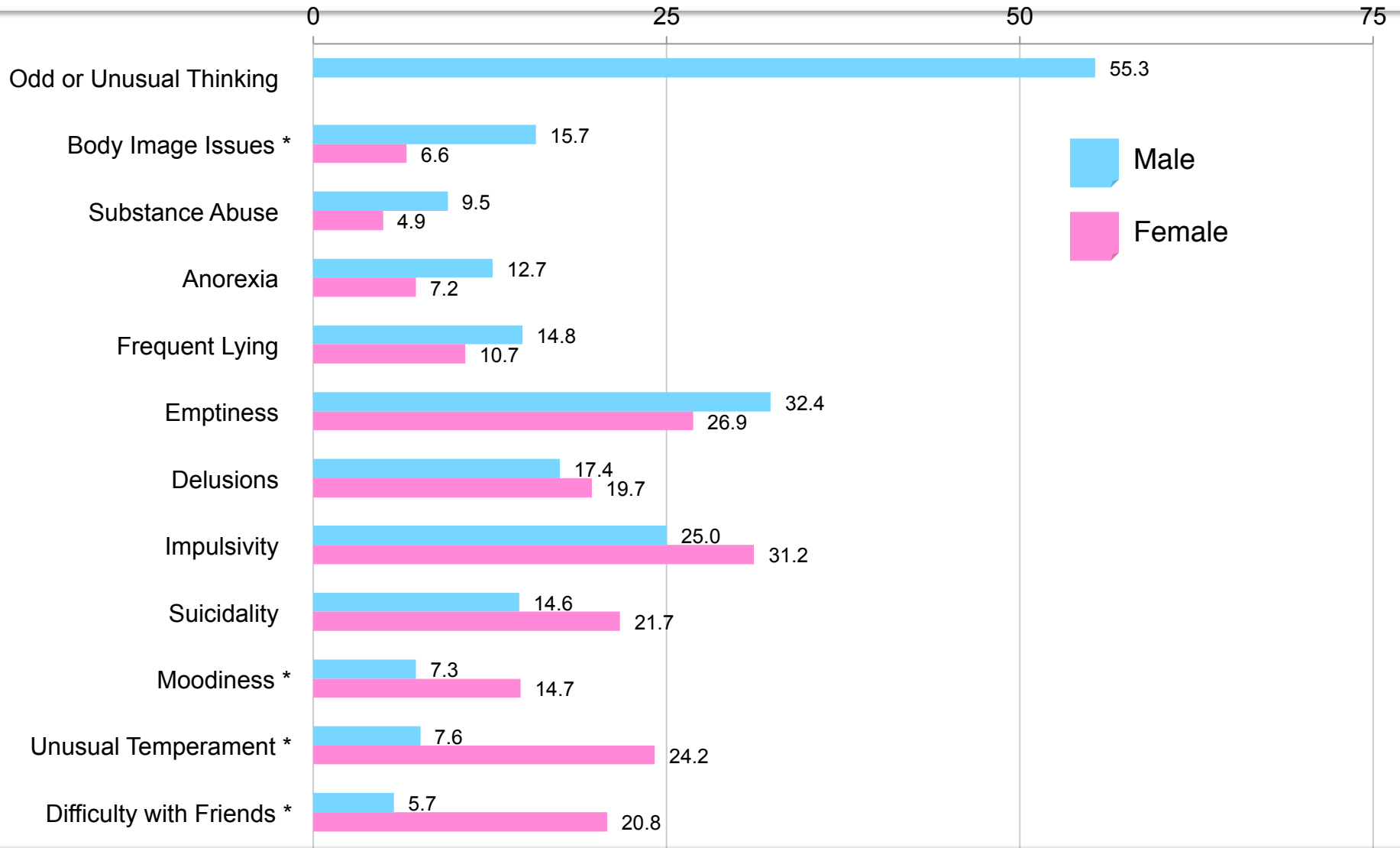
INFANCY & TODDLERHOOD – GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS



CHILDHOOD - GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS

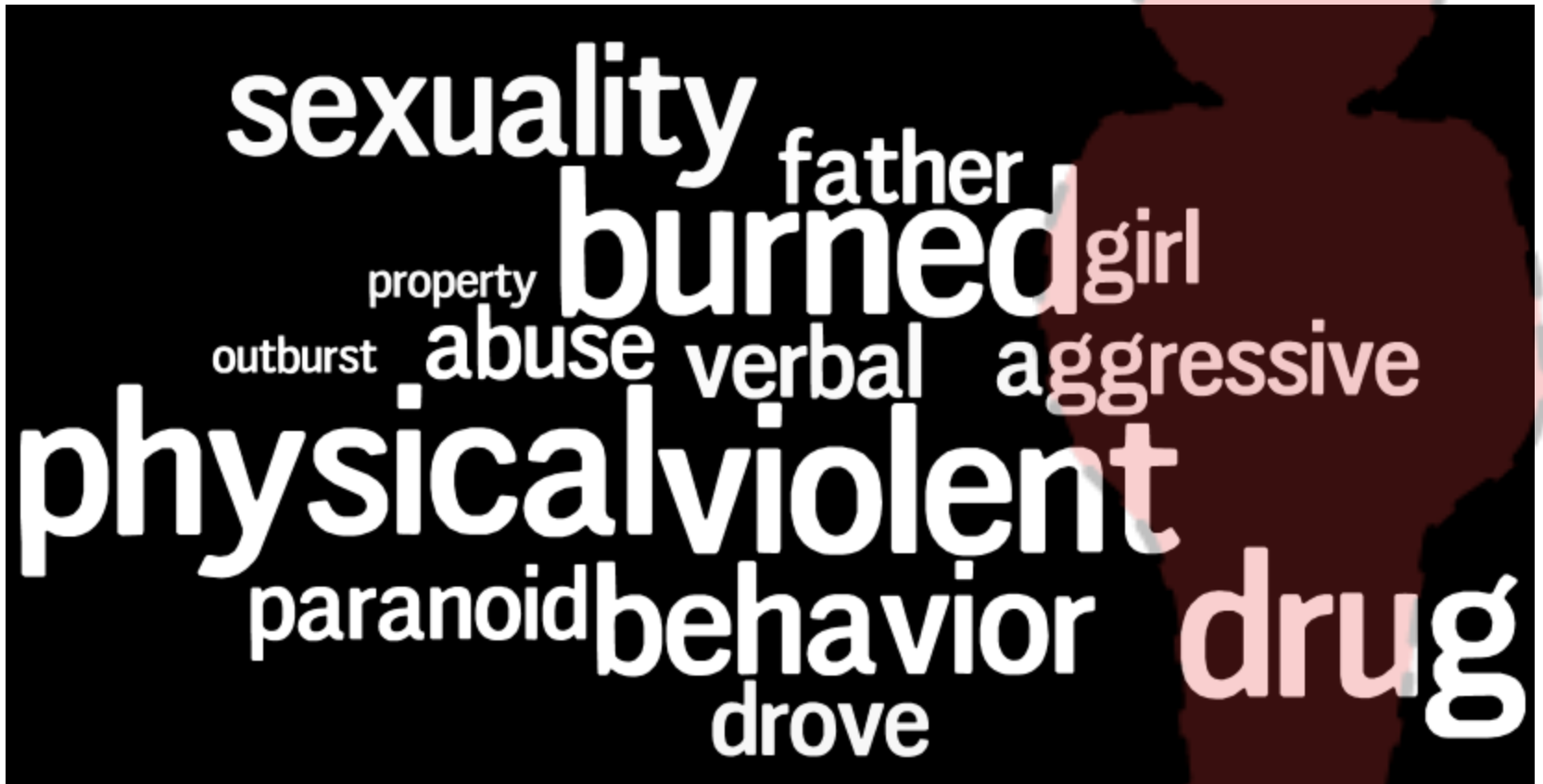


ADOLESCENCE - GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS



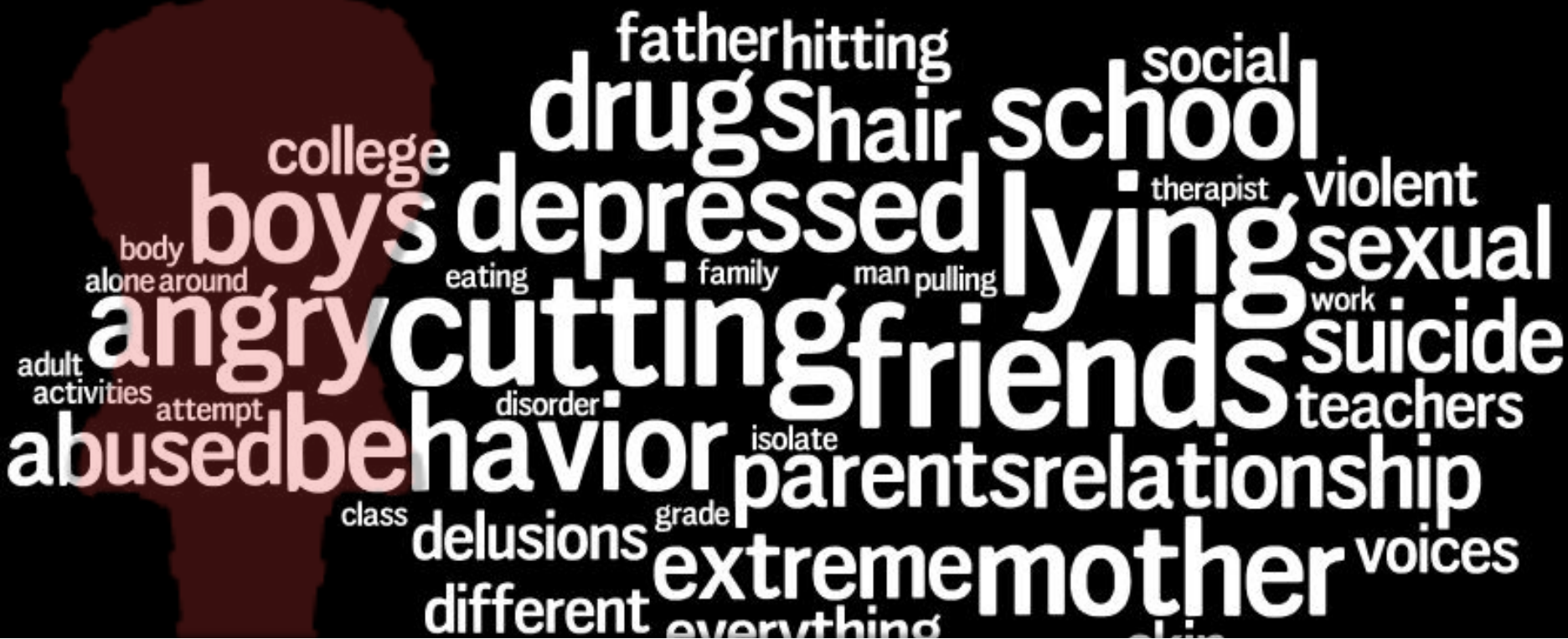


TAG CLOUD- MALES





TAG CLOUD- FEMALES



BPD DEVELOPMENTAL TRAJECTORIES- SUMMARY OF FINDINGS

1) The trajectory to BPD in males has similarities and differences from females who develop BPD. While the specific item predictors for the development of BPD are similar across gender



a) Females who develop BPD: prodromal affective instability, moodiness, interpersonal dysfunction and behavioral dyscontrol



b) For Males who develop BPD: odd thinking and body image concerns statistically differ from females who develop BPD.

2) Such data may help to identify at-risk children and adolescents who might be candidates for monitoring or early, potentially preventive, psychotherapeutic intervention.

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Uday Patil, M.A.

Lauren Steffel, M.A.

Joseph Triebwasser, M.D.



NEA-BPD for hosting the survey

And a special thanks to the parents who have filled out the survey

Publications from the NEA-BPD parent survey

- 1) Marianne Goodman, Uday Patil, Joseph Triebwasser, Elizabeth Diamond, Atara Hiller, Perry Hoffman, Shoshana Goldberg, Harold Koenigsberg, Larry Siever, and Antonia New (2010). Parental Viewpoints of Trajectories to Borderline Personality Disorder in Female Offspring. *Journal of Personality Disorders: Vol. 24, No. 2*, pp. 204-216. doi: 10.1521/pedi.2010.24.2.204
- 2) Marianne Goodman, Uday Patil, Joseph Triebwasser, Perry Hoffman, Zachary A. Weinstein, and Antonia New (2011). Parental Burden Associated with Borderline Personality Disorder in Female Offspring. *Journal of Personality Disorders: Vol. 25, No. 1*, pp. 59-74. doi: 10.1521/pedi.2011.25.1.59
- 3) Marianne Goodman, Uday Patil, Lauren Steffel, Jennifer Avedon, Scott Sasso, Joseph Triebwasser, Barbara Stanley (2010). Treatment utilization by gender in patients with borderline personality disorder. *J Psychiatr Pract.* May;16(3):155-63. doi: 10.1097/01.pra.0000375711.47337.27
- 4) Marianne Goodman, Uday Patil, Joseph Triebwasser, Perry Hoffman. Developmental Trajectories to Male Borderline Personality Disorder. *Journal of Personality Disorders. in press.*