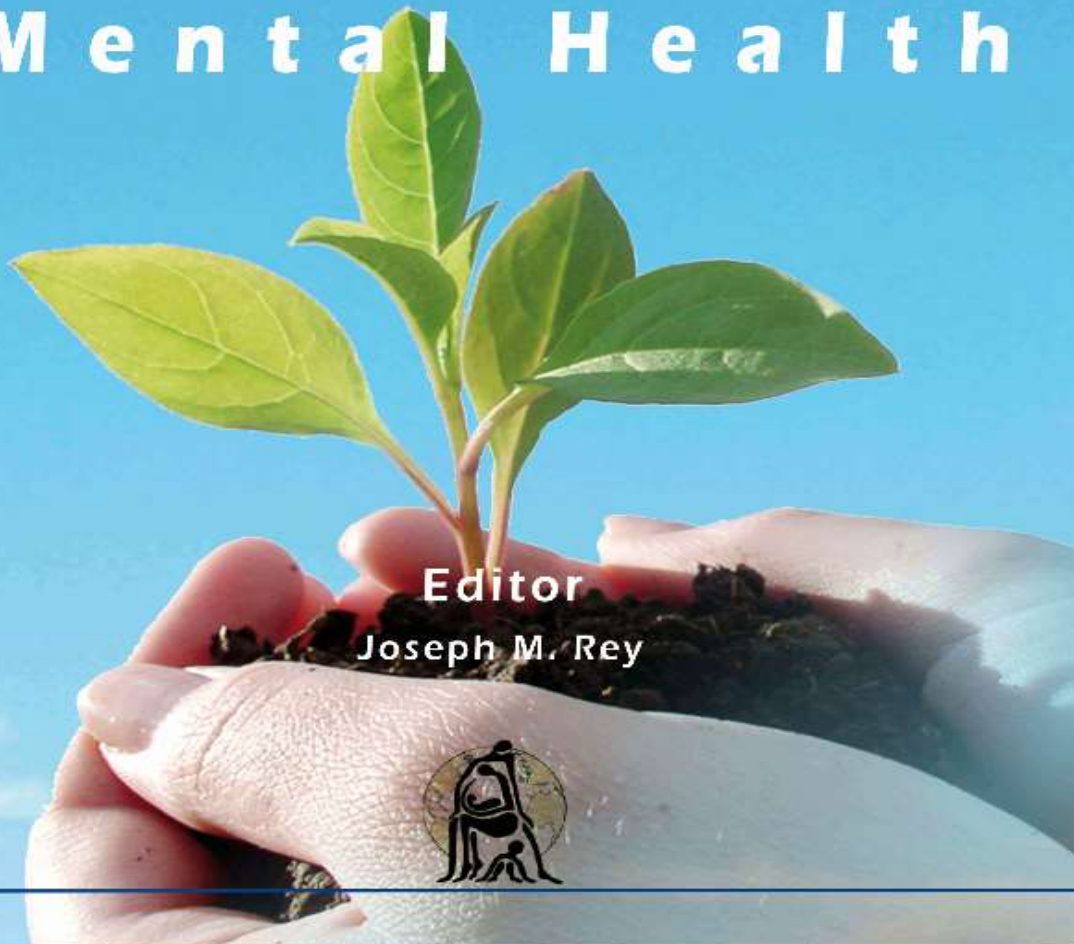


**IACAPAP Textbook  
of  
Child and Adolescent  
Mental Health**



**Editor**  
Joseph M. Rey



# Anxiety Disorders in Children and Adolescents

Ronald M Rapee

**Companion Powerpoint  
Presentation**

The “IACAPAP Textbook of Child and Adolescent Mental Health” is available at the IACAPAP website <http://iacapap.org/iacapap-textbook-of-child-and-adolescent-mental-health>

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**IACAPAP**

**International Association for  
Child and Adolescent Psychiatry  
and Allied Professions**

**...because every child matters**



# Outline

- The Basics
- Description and diagnosis
- Comorbidity
- Epidemiology
- Assessment
- Risk and maintaining factors
- Treatment
- Prevention and early intervention



Monsters, Inc.® Pixar



# The Basics

- “Internalizing” Disorders
- Once thought to be rare and low impact
- More studies recently
- Focus on:
  - Generalized Anxiety Disorder (GAD)
  - Social Anxiety Disorder
  - Specific Phobias



# Description and Diagnosis

- Avoidance = core feature
- Also: fearfulness, distress or shyness
- Expectation of threat
  - Worry
  - Rumination
  - Anxious anticipation
  - Negative thoughts
- Physical complaints
- Difficulty with sleep



# Comorbidity

- Much overlap between the various anxiety disorders
- Overlap between anxiety and depression
- 80-90% have more than one disorder
- 75% have more than one anxiety disorder
- 10-30% have additional mood disorder
- 25% of the younger children have an additional behavioral disorder
- Overlap with alcohol abuse appears later



# Epidemiology: Prevalence

- Variable across countries and studies
- ~5% in Western populations
- Prevalence:
  - Highest rates for specific phobias
  - Moderate for separation anxiety, generalized anxiety, social phobia
  - Lower for obsessive compulsive disorder
  - Lowest for post traumatic stress disorder



# Epidemiology: Gender distribution

- General Population:
  - females > males
  - As much as 1.5-2 x F > M
- Difference appears as young as 5 years of age
- In treatment seeking populations in Western societies M=F





## Age of Onset

- Some of the earliest disorders to appear
- Begin by mid childhood to mid adolescence
- Association with temperamental inhibition and fearfulness
- Average ages of onset:
  - Animal phobias ~ 6-7 yrs
  - Separation anxiety d ~7-8 yrs
  - GAD ~ 10-12 yrs
  - Social anxiety d ~ 11-13 yrs
  - OCD ~13-15 yrs
  - Panic d ~ 22-24 yrs



# Anxiety Disorders in Children and Adolescents

## Course

- Among the most stable
- Little spontaneous remission
- Increased risk in adolescence:
  - Anxiety and mood disorders
- Increased risk in adulthood:
  - Anxiety and mood disorders
  - Substance use
  - Suicide
- No association with family size, parental marital status, educational attainment, intelligence



## Assessment: General

- 3 Parts: Questionnaires, diagnostic interview, behavioral observation
- Use clinical judgment to combine information from various sources
  - Separate interview with children > 8yrs old
  - Anxious kids “fake good”
  - Anxious parents may exaggerate symptoms
- Identify motivation behind behaviors
- Determine primary disorder and treat first



# Assessment: Questionnaires

- [Spence Children's Anxiety Scale \(SCAS\)](#)
- [Screen for Child Anxiety Related Disorders \(SCARED\)](#)
- [Multidimensional Anxiety Scale for Children \(MASC 2\)](#)
- [Preschool Anxiety Scale Revised \(PASR\)](#)
- Revised Children's Manifest Anxiety Scale (RCMAS)
- State Trait Anxiety Inventory for Children (STAIC)
- Beck Anxiety Inventory for Youth
- Children's Moods, Fears and Worries
- [Fear Survey Schedule for Children Revised \(FSSC-R\)](#)
- Social Phobia and Anxiety Inventory for Children (SPAIC)
- Social Anxiety Scale for Children-Revised (SASC-R)
- Children's Anxiety Sensitivity Index (CASI)
- Children's Automatic Thoughts Scale (CATS)
- School Anxiety Scale-Teacher Report (SAS-TR)
- Children's Anxiety Life Interference Scale (CALIS)



# Assessment: Diagnostic Interview

- Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS)  
<http://www.psychiatry.pitt.edu/node/8233>
- Developmental and Wellbeing Assessment (DAWBA)  
<http://www.dawba.com>
- Diagnostic Interview Schedule for Children (DISC)
- Anxiety Disorders Interview Schedule for Children (ADIS-C)
- Preschool Age Psychiatric Assessment (PAPA)





# Risk and Maintaining Factors

## Family transmission:

- Anxiety and inhibited temperament runs in families
- 1<sup>st</sup> degree relatives at risk for anxiety and mood disorders
- Transmission of specific disorders have some specificity
- Genetic and environmental influences



# Risk and Maintaining Factors

## Genetic Factors:

- ~40% variance mediated by genetics
- Twin studies show 30-40% variance by heritability
- Especially high with general neuroticism
- Most studied is 5HTTLPR gene
- 2 short alleles on 5HTT gene increase environmental responsiveness



# Anxiety Disorders in Children and Adolescents

## Risk and Maintaining Factors

### Temperamental Factors:

- Best studied and most clearly established risk factor—>inhibition
  - Withdrawal in face of novelty
  - Lack of smiling
  - Lack of talk
  - Limited eye contact
  - Close proximity to attachment figure
  - Slowness to warm up to strangers or peers
  - Unwillingness to explore new situations
- Inhibited preschool kids 2-4x more likely to have anxiety by middle childhood



# Risk and Maintaining Factors

## Parent and family factors:

- Evidence difficult to obtain
- Data not consistent
- Parenting characteristics:
  - Overprotection
  - Intrusiveness
  - Negativity
- Parental modeling and communication of fear
- Sexual abuse, physical abuse, family violence



# Risk and Maintaining Factors

## Life Events:

- Increased negative life events
- Greatest difference on dependent events
- Bullying and teasing
- Neglect and rejection by peers





# Risk and Maintaining Factors

## Cognitive Biases:

- Heightened threat beliefs and expectations
- Specific to disorder type
- Decrease with successful treatment
- Bias in attention toward threat
- Bias to interpret ambiguous info as threat



# Treatment

## Psychopharmacology:

- Selective Serotonin Reuptake Inhibitors (SSRIs)
- Most studies focus on OCD
- Little difference between agents, except paroxetine not recommended
- Treatment generally 10-15 weeks
- 50-60% children respond vs 30% placebo
- Medication effects may level off after 8 weeks
- 7% anxious kids discontinue due to adverse side effects
- Monitor for suicidality



## Anxiety Disorders in Children and Adolescents

# Treatment

Skills-based programs:

- Psychoeducation
- Relaxation
- Exposure
- Contingency management
- Parent training
- Cognitive restructuring
- Social skills and assertiveness training



<http://www.adaa.org/resources-professionals/podcasts/what-parents-need-know-about-treatment-children-with-anxiety-disord>

Generally 8-15 weeks

1-2 hours/session

Group or individual



# Anxiety Disorders in Children and Adolescents

## Treatment: Skills-Based Programs

**Table F.1.2 Sessions and components of the *Cool Kids* program.**

Session	Coverage - Child	Coverage - Parents
1	Psychoeducation	Psychoeducation and treatment rationale
2	Cognitive restructuring	Cognitive restructuring for both parent and child
3	Cognitive restructuring practice	Cognitive restructuring practice Child management skills
4	In vivo exposure and development of hierarchies	In vivo exposure and development of hierarchies
5	Dealing with difficulties in exposure	Dealing with difficulties in exposure
6	Practice exposure and cognitive restructuring	Practice exposure, cognitive restructuring and child management
7	Introduce assertiveness and social skills	Ways to increase assertiveness and social skills
8	Teasing and bullying	Teasing and bullying
9	Practice and review	Practice and review
10	Practice, review and relapse prevention	Practice, review and relapse prevention



# Prevention and Early Intervention

- Universal programs
  - Broad emotional health
  - Small but meaningful effect sizes
- Selective programs
  - Increased risk but no diagnosis
  - Moderate effect sizes
- Indicated programs
  - High score on risk factors like temperament
  - Cool Little Kids for high parent anxiety



<https://www.youtube.com/watch?v=8pyanlgSJuw&feature=relmfu>





# Conclusion

Promising areas for growth:

- Longitudinal research for risk factors
- Gene-environment interactions
- Peer interactions
- Dissemination of treatments
- Evaluation of novel developments



Anxiety Disorders in Children and Adolescents

**Thank You!**

