

## Supplementary Material

**Article Title:** Risk-Sensitive Decision-Making and Self-Harm in Youth Bipolar Disorder

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**DOI Number:** <https://doi.org/10.4088/JCP.22m14693>

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## **Supplementary Materials**

### **Appendix 1:**

The following disorders are included in anxiety disorders: generalized anxiety disorder, separation anxiety disorder, agoraphobia, and anxiety disorder not otherwise specified. Eating disorders included anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified. Functioning was assessed using the Children's Global Assessment Scale (CGAS) for current (past month), highest past year, and lifetime most severe episode.<sup>38</sup> CGAS scores are rated from 0-100, with higher scores reflecting better functioning. Physical and sexual abuse history was obtained from a medical history parent-report containing items querying physical and sexual abuse and from the post-traumatic stress disorder screener within the K-SADS-PL.<sup>34</sup> Legal history includes any police contact or arrests. Family psychiatric history was obtained using the Family History Screen interview for all first- and second-degree relatives to ascertain family psychiatric history.<sup>39</sup> The Pubertal Developmental Scale self-report was used to collect pubertal status and reported as Tanner stage (1-5).<sup>40</sup>

**Supplementary Table 1.** Measurement scale for level of intent and the medical threat of suicidal behaviors.

<b>Intent</b>	
0	No information
1	Obviously no intent
2	Only minimal intent
3	Definite but still ambivalent
4	Serious
5	Very serious
6	Extreme (e.g., careful planning and every expectation of death)
<b>Medical Threat</b>	
0	No information
1	No danger (e.g. no effect – held pills in hand)
2	Minimal (e.g. scratch on wrist)
3	Mild (e.g. took ten aspirins – mild gastritis)
4	Moderate (e.g. took ten secobarbital sodium – briefly unconscious)
5	Severe (e.g. cut throat)
6	Extreme (e.g. respiratory arrest or prolonged coma)
7	Death

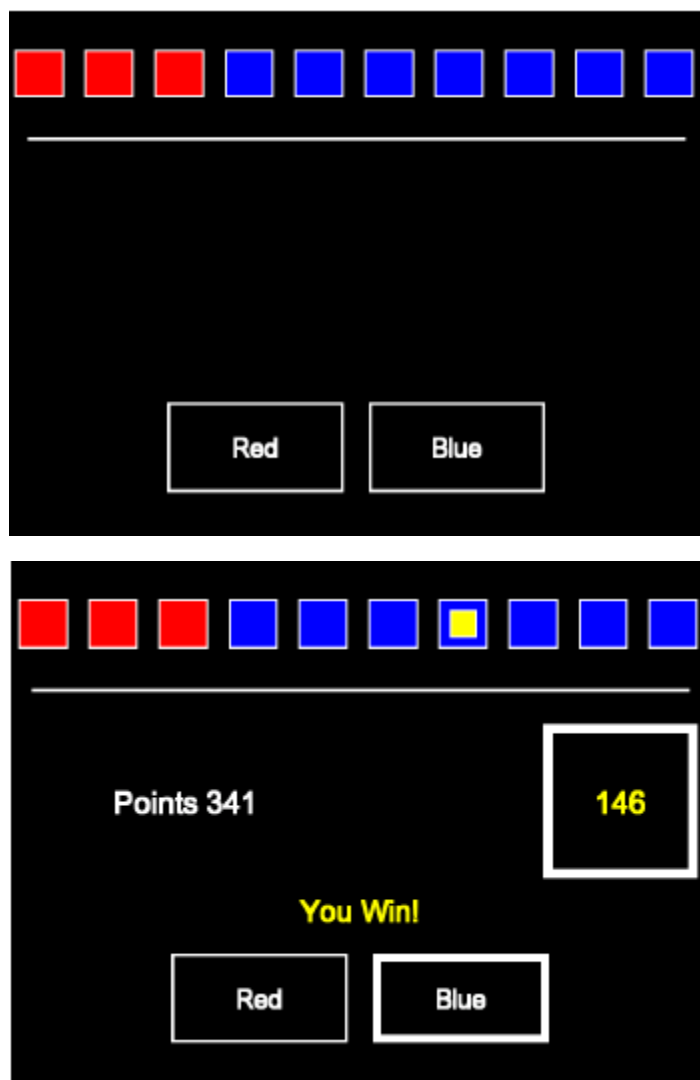
**Supplementary Table 2. Parameter Estimates for Covariates**

	<i>B</i>	Standard Error	<i>t</i>	<i>p</i> -value
<i>Overall Proportion Bet</i>				
Intercept	-0.60	1.22	-0.49	0.62
Age	<0.01	0.02	0.16	0.87
IQ	0.01	0.01	0.98	0.33
Sex	0.63	0.71	0.88	0.38
BD <sub>SH+</sub>	0.05	0.09	0.53	0.59
BD <sub>SH-</sub>	-0.28	0.11	-2.50	0.01
Controls <sup>a</sup>				
<i>Risk-taking</i>				
Intercept	-0.61	1.28	-0.48	0.63
Age	<0.01	0.02	0.16	0.88
IQ	0.01	0.01	1.12	0.26
Sex	0.71	0.74	0.96	0.34
BD <sub>SH+</sub>	0.03	0.10	0.26	0.80
BD <sub>SH-</sub>	-0.31	0.12	-2.63	0.01
Controls <sup>a</sup>				
<i>Deliberation Time</i>				
Intercept	3.95	0.31	12.76	<0.001
Age	<-0.01	<0.01	-0.80	0.43
IQ	<-0.01	<0.01	-2.04	0.04
Sex	-0.33	0.18	-1.81	0.07
BD <sub>SH+</sub>	0.05	0.02	1.95	0.05
BD <sub>SH-</sub>	0.08	0.03	2.63	0.01
Controls <sup>a</sup>				

## Risk-sensitive Decision-making and Self-harm

	<i>B</i>	Standard Error	<i>t</i>	<i>p</i> -value
<i>Delay Aversion</i>				
Intercept	0.92	0.54	1.70	0.09
Age	-0.02	0.01	-1.81	0.07
IQ	<-0.01	<0.01	-0.90	0.37
Sex	-0.14	0.32	-0.43	0.67
BD <sub>SH+</sub>	0.09	0.04	2.10	0.04
BD <sub>SH-</sub>	<0.01	0.05	0.166	0.88
Controls <sup>a</sup>				
<i>Quality of Decision-making</i>				
Intercept	4.39	3.55	1.24	0.22
Age	<0.01	0.07	0.13	0.90
IQ	-0.02	0.03	-0.57	0.57
Sex	-3.35	1.99	-1.68	0.09
BD <sub>SH+</sub>	-0.20	0.28	-0.70	0.48
BD <sub>SH-</sub>	<0.01	0.35	-0.02	0.98
Controls <sup>a</sup>				

**Note:** BD<sub>SH-</sub> = Youth with bipolar disorder and no history of self-harm; BD<sub>SH+</sub> = Youth with bipolar disorder and a history of self-harm; Beta values are unstandardized. <sup>a</sup>The control group was used as the reference category.



**Supplementary Figure 1. Cambridge Gambling Task.** Depiction of the Cambridge Gambling Task set up within the Cambridge Neuropsychological Test Automated Battery (CANTAB).

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