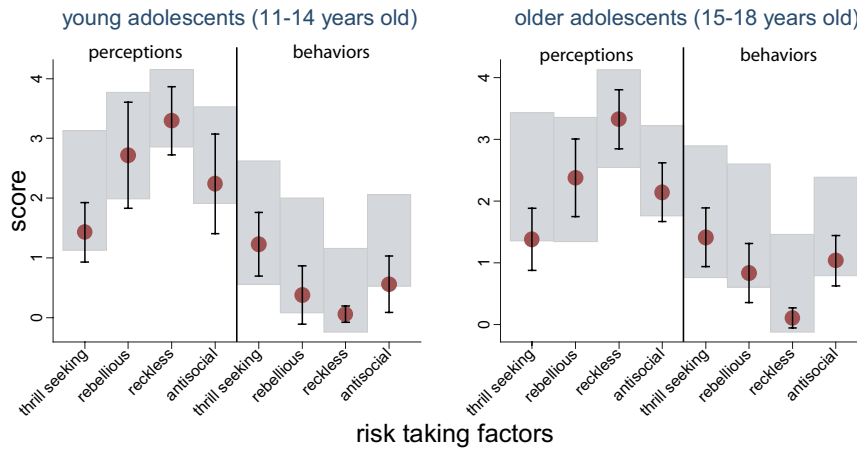


# Supporting Information

Tymula et al. 10.1073/pnas.1207144109



**Fig. S1.** Adolescent Risk-Taking Questionnaire scores. The red dots are the average scores of adolescents that participated in this study ( $\pm 1$  SD). The gray bars indicate the scores obtained by Gullone et al. (1) in a representative sample of adolescents (mean  $\pm 1$  SD).

1. Gullone E, Moore S, Moss S, Boyd C (2000) The Adolescent Risk-Taking Questionnaire: Development and psychometric evaluation. *J Adolesc Res* 15:231–250.

**Table S1. Analysis of risk and ambiguity attitudes, including behavioral inhibition scores (BIS) and behavioral approach scores (BAS) scores as covariates**

	$\alpha$	$\beta$	$\mu$
Adolescent	-0.165*	-0.417***	-0.113
	(-2.13)	(-4.42)	(-1.63)
Site	0.158	-0.079	0.082
	(1.88)	(-0.55)	(0.83)
BAS drive	-0.008	-0.033	0.008
	(-0.47)	(-1.07)	(0.51)
BAS fun	-0.002	0.009	-0.008
	(-0.10)	(0.20)	(-0.26)
BAS reward	-0.065	0.138*	0.025
	(-1.49)	(2.03)	(0.59)
BIS	0.027	-0.027	-0.094**
	(0.97)	(-0.71)	(-2.97)
Constant	0.879***	0.542	1.110***
	(3.31)	(0.93)	(4.30)
No. of observations		10,391	

Z statistics in parentheses. Robust SEs clustered on subject. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table S2. Analysis of risk and ambiguity attitudes, including impulsivity scores (B11) as covariates**

	$\alpha$	$\beta$	$\mu$
Adolescent	-0.317*** (-3.58)	-0.349* (-2.15)	0.061 (0.67)
Site	0.118 (1.19)	-0.107 (-0.54)	0.063 (0.69)
First-order B11 factors			
Attention	0.029 (0.85)	-0.083 (-1.07)	-0.055 (-1.60)
Motor	-0.016 (-0.36)	0.039 (0.70)	-0.073* (-2.01)
Self-control	0.039 (0.97)	0.092 (0.82)	0.026 (0.46)
Cognitive complexity	-0.051 (-1.70)	0.054 (1.06)	0.022 (0.90)
Perseverance	-0.007 (-0.14)	-0.046 (-0.35)	0.094 (1.43)
Cognitive instability	0.011 (0.37)	-0.019 (-0.35)	-0.031 (-1.05)
Second-order B11 factors			
Attentional	0.036 (1.28)	-0.010 (-0.17)	0.038 (1.12)
Motor	-0.124* (-2.22)	0.013 (0.13)	0.013 (0.20)
Nonplanning	0.019 (1.16)	-0.070 (-1.56)	-0.068** (-2.79)
Constant	1.042** (3.06)	0.875 (1.26)	1.085** (3.04)
No. of observations		10,391	

Z statistics in parentheses. Robust SEs clustered on subject. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table S3. Analysis of risk and ambiguity attitudes, including socioeconomic factors as covariates**

	$\alpha$	$\beta$	$\mu$
Adolescent	-0.153 (-1.46)	-0.406** (-3.10)	-0.088 (-0.93)
Site	0.136 (1.55)	0.010 (0.07)	0.216* (2.25)
Male	0.061 (0.76)	0.093 (0.69)	0.072 (1.03)
Household wealth	0.000 (0.11)	0.000 (-0.24)	0.000 (1.66)
No. of siblings	-0.021 (-0.45)	-0.002 (-0.02)	0.039 (0.83)
IQ score	0.002 (0.65)	0.004 (0.69)	-0.011** (-3.26)
Constant	0.456 (1.42)	0.211 (0.28)	1.711*** (3.89)
No. of observations		10,231	

Wealth is self-reported household wealth; for adolescents, this measure was obtained from a questionnaire completed by parents or legal guardians. Z statistics in parentheses. Robust SEs clustered on subject. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table S4. Model estimation using age as a continuous variable and age/sex interaction**

	Age and constant regressors only		Age/sex interaction	
	$\alpha$	$\beta$	$\alpha$	$\beta$
Age	0.005 (1.08)	0.017** (2.72)	0.066* (2.30)	0.080 (1.10)
Site			0.115 (1.37)	-0.300 (-1.70)
Male			0.899 (0.97)	-1.029 (-0.54)
Male* age			-0.052 (-0.81)	0.073 (0.57)
B11 motor			-0.034 (-0.80)	
BAS reward				0.259 (1.93)
Constant	0.524*** (5.32)	0.114 (0.73)	-0.318 (-0.80)	-1.900 (-1.46)
No. of observations	10,391		5,270	

We replicate all of the major findings of the paper using a continuous age variable instead of an age dummy variable. The table presents results of two separate estimation procedures. The right columns present a richer model, controlling for site effects and relevant psychological scores. We did not find any significant age/sex interactions, meaning that risk and ambiguity attitudes of female and male subjects in our sample change at the same pace as they age. Z statistics in parentheses. Robust SEs clustered on subject. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table S5. Analysis of risk and ambiguity attitudes of adolescents, including Adolescent Risk-Taking Questionnaire (ARQ) scores as covariates**

	Behavioral ARQ		Perceptual ARQ	
	$\alpha$	$\beta$	$\alpha$	$\beta$
Age	0.073* (1.98)	0.098 (1.02)	0.054 (1.74)	0.033 (0.38)
Site	0.240 (1.70)	-0.302 (-0.71)	0.152 (1.57)	-0.434* (-2.49)
ARQ thrill-seeking	0.067 (0.84)	0.020 (0.13)	-0.146 (-1.57)	0.169 (0.87)
ARQ rebellious	-0.028 (-0.29)	0.163 (1.07)	0.066 (0.70)	-0.381* (-2.53)
ARQ reckless	0.396 (1.43)	-1.004* (-2.11)	0.018 (0.17)	0.121 (0.56)
ARQ antisocial	-0.128 (-0.87)	0.425 (1.18)	-0.031 (-0.28)	0.014 (0.07)
B11 motor	-0.043 (-1.54)		-0.019 (-0.51)	
BAS reward		0.388** (3.13)		0.315** (2.70)
Constant	-0.354 (-0.70)	-3.247* (-2.28)	-0.124 (-0.24)	-1.110 (-0.63)
No. of observations	3,357		5,270	

Site is a dummy variable that indicates whether the subject participated in the study in New York City or in New Haven, CT (equal to 1 for participants in New York City). Z statistics in parentheses. Robust SEs clustered on subject. \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .