

Adolescent Out-Of-School Time Participation: Contextual Predictors and Developmental Differences

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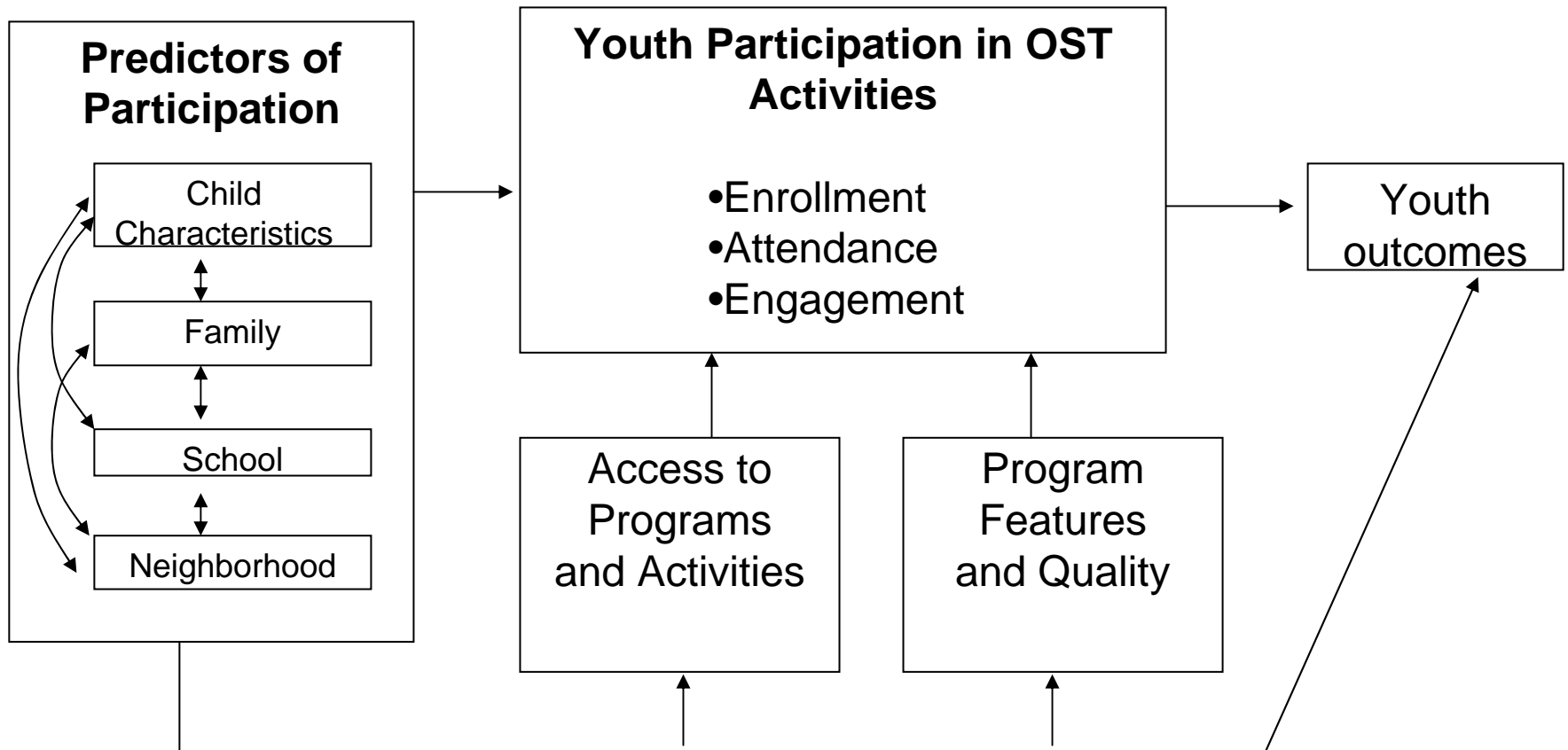


Rationale for the Study

- ❑ OST programs and activities can have important developmental and academic benefits for youth
- ❑ But: Participation is often problematic
(Kane & Granger)
- ❑ So, what factors predict getting kids “in the door?”



HFRP Conceptual Model of Participation



Rationale for the Study (Cont.)

- Little work has addressed
 - Predictors of OST participation using national recent data
 - Different contexts *simultaneously*
 - *Developmental differences in predictors*



Guiding questions

1. Above and beyond sociodemographic characteristics, does child, family, school, and/or neighborhood risk predict OST participation?
2. Does age moderate these relations?
3. What implications for policy and practice can be gleaned from these results?



Panel Study of Income Dynamics: Child Development Supplement

- Wave 1: 1997 & Wave II: 2002
- 2,907 participants (ages 5-18)
 - Includes three social age groupings:
 1. Elementary School (n = 1478)
 2. Middle (n = 588)
 3. High School (n = 762)
 - 49% female
 - 42% African-American, 46% European-American, 7% Latino, 2% Asian
 - 2000 Annual family income: M = \$61,576 (range = 0 - \$1,365,600)
 - Parent education: M = 13.19 years (range = 2 – 17 years)



Constructs and Measures

Construct

Measure

OST Activities

Primary Caregiver Report

Community Program

Was child a member of any groups or programs in the community in the last 12 months?

Athletics

Did child participate on an athletic team in the last 12 months?

Scouting

Did child participate in scouting in the last 12 months?

Lessons

Did child take lessons such as music, dance, or drama in the last 12 months?

School Activities

Did child participate in any school activities such as clubs or student government in the last 12 months?

Service Clubs

Did child participate in any voluntary service activities or service clubs in the last 12 months?

Any OST program or activity

Did child participate in ANY of the above in the past 12 months?



Constructs and Measures

Construct

Measure

Family Demographics

Family Income

Parent Education

Race/Ethnicity

Age

Primary Caregiver Report

Five-year average of annual income from all sources

Years of education for most highly educated caregiver

Dummy variables for Black, Hispanic, and Other Race

Child's age



Child Risk

1. **Low Reading Achievement**
2. **Low Math Achievement**
3. **Significant Health Problem**
4. **High Internalizing Problems**
5. **High Externalizing Problems**
6. **Low Positive Behaviors (autonomy, compliance, and social competence)**



Family Risk

1. **Low Family Involvement in the School**
2. **Low Emotional Support**
3. **Low Cognitive Stimulation**
4. **Low Social Support**
5. **Low Parental Self-Efficacy**
6. **High Family Financial Strain**
7. **High Parental Distress**
8. **Low Parent Community Involvement**



School Risk

1. Large School Size
2. High Poverty School
3. High Pupil to Teacher Ratio
4. Title I Eligibility
5. High Dropout Rate in the School District



Neighborhood Risk

1. High Socioeconomic Disadvantage
2. High Neighborhood Disorder
3. Low Collective Efficacy
4. Dangerous Neighborhood
5. Poor Place to Raise Children
6. Difficulty Distinguishing Strangers



Analytic Strategy

- First tested whether the contextual risk indices predicted OST participation
- Then interacted each contextual risk factor with developmental age groups (middle and high school vs. elementary)
- Then ran first set of models within developmental age groups to see the direction and patterns of predictors

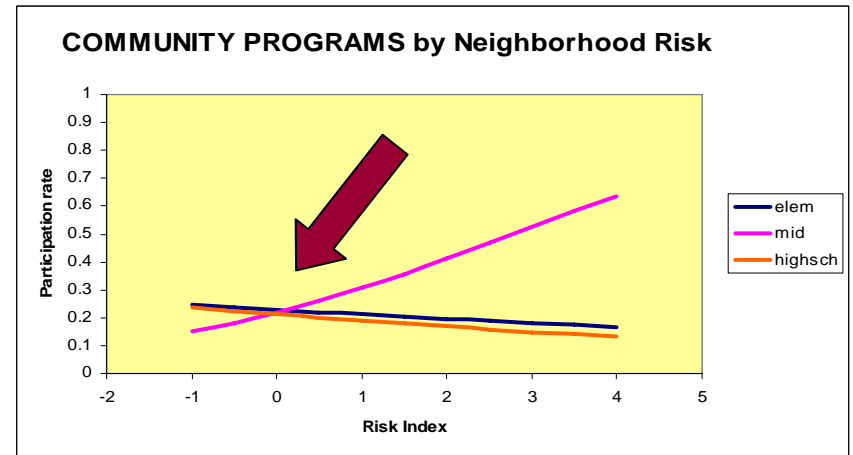
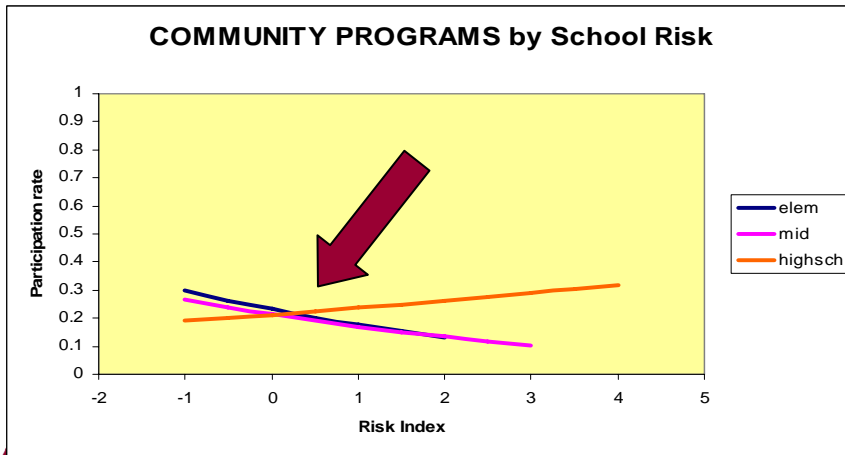
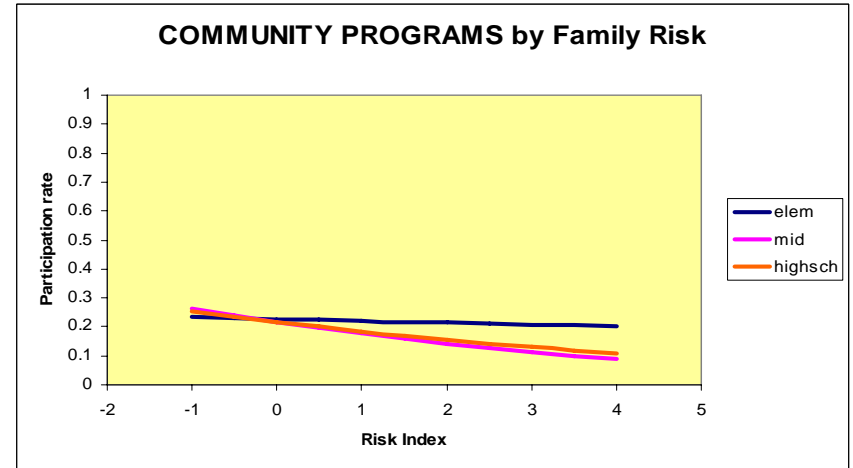
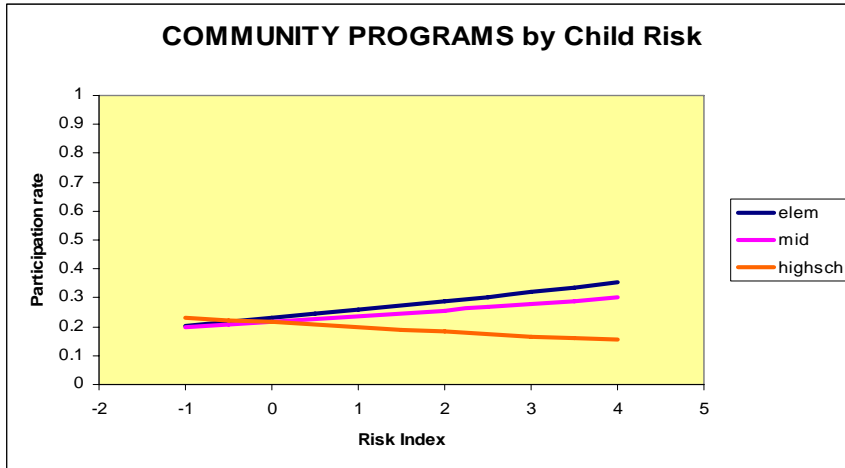


Results

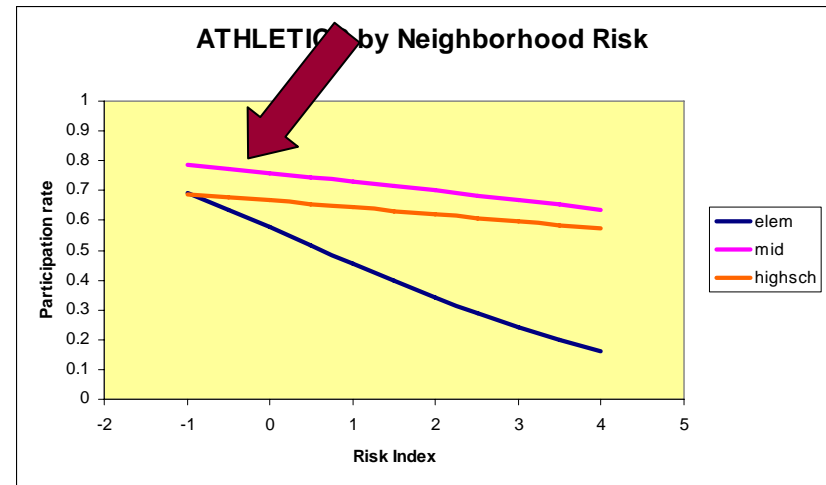
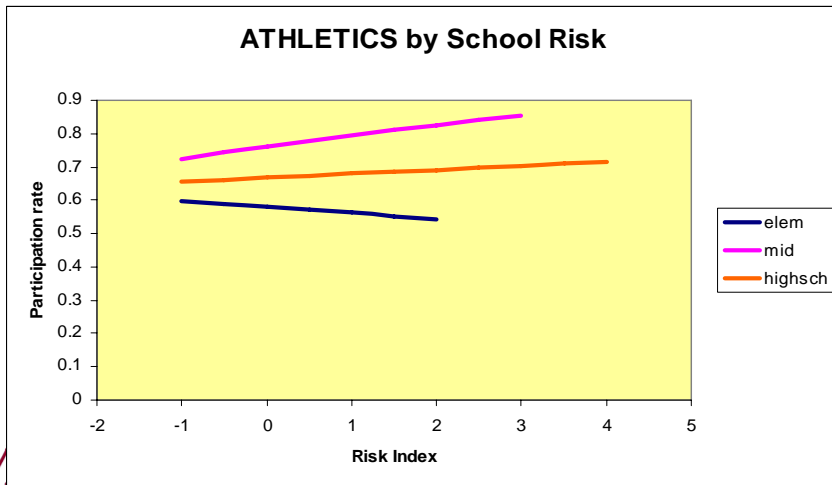
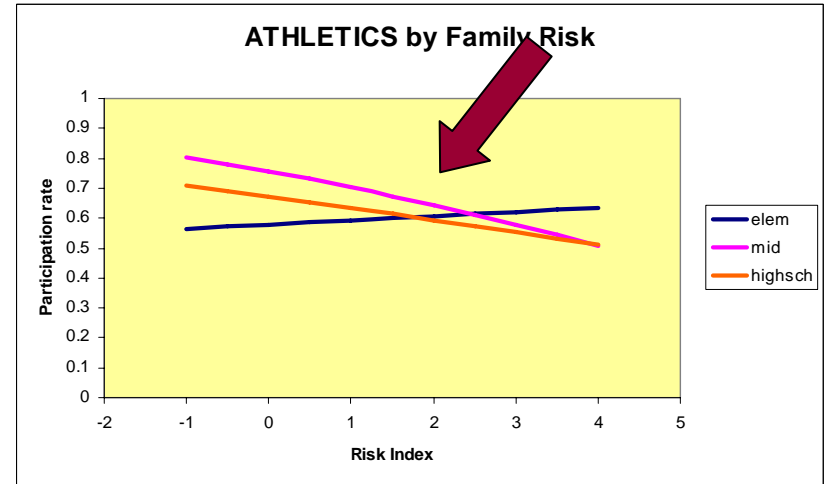
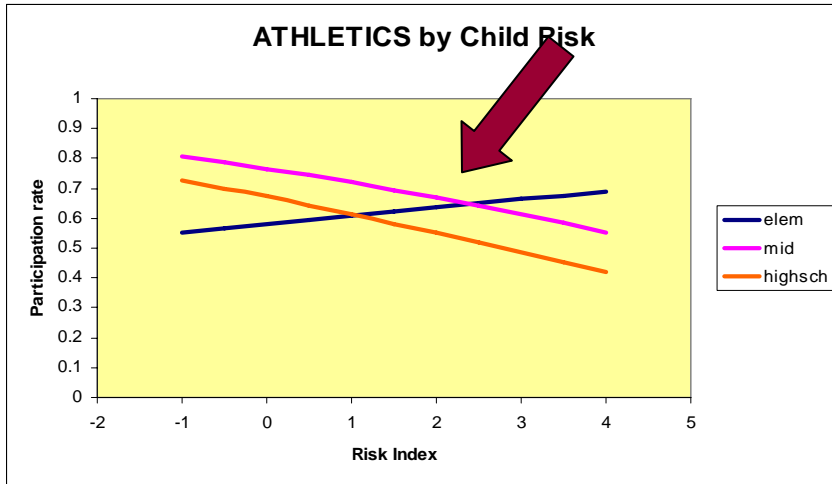
- Child Risk was most consistently linked with decreased odds of participating, but only amongst middle and high school youth.
- Family risk was next consistent predictor, but again, only amongst middle and high school youth.
 - These child and family effects were concentrated in athletics, lessons, school-based activities, and service clubs, not community programs.
- Neighborhood risk negatively predicted athletics and scouting, but positively predicted school activity participation (for high school youth) and community programs (for middle school youth)
- School risk was generally unrelated to participation with the exception of positively predicting school activities & service clubs for elementary youth.



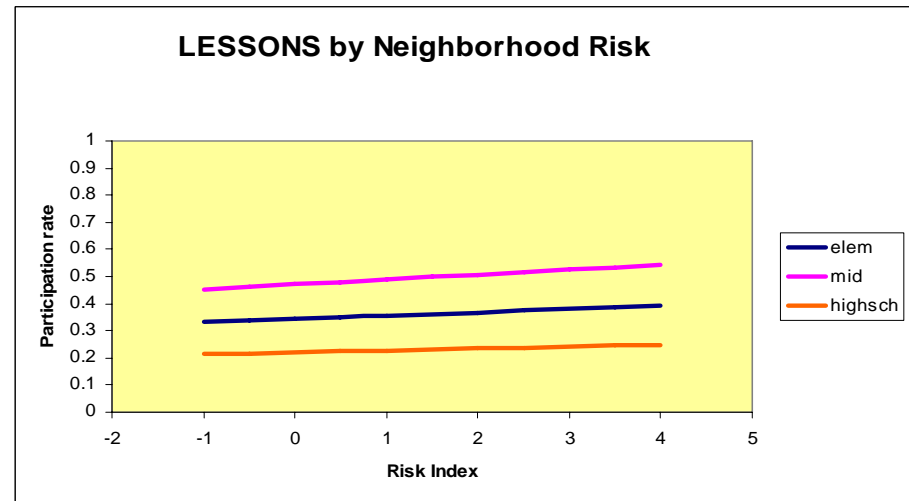
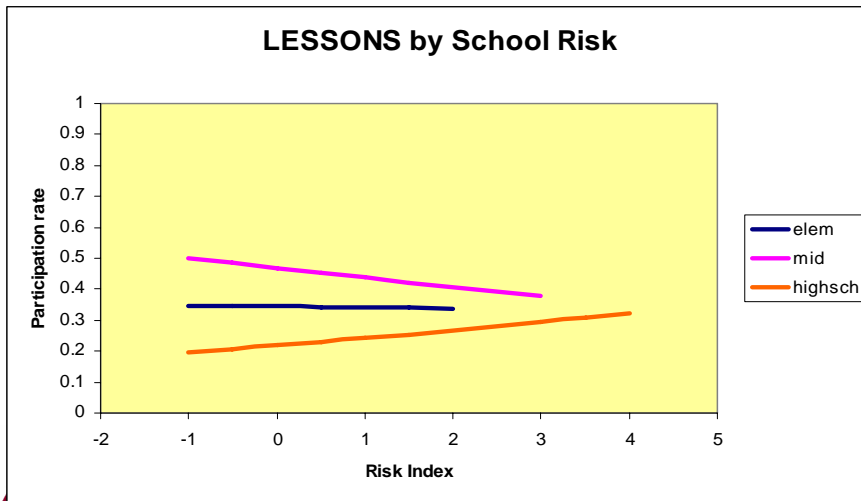
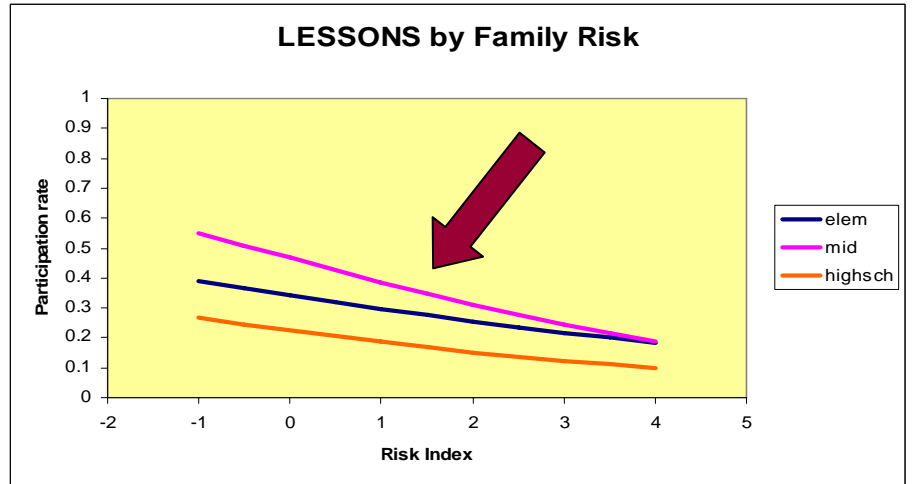
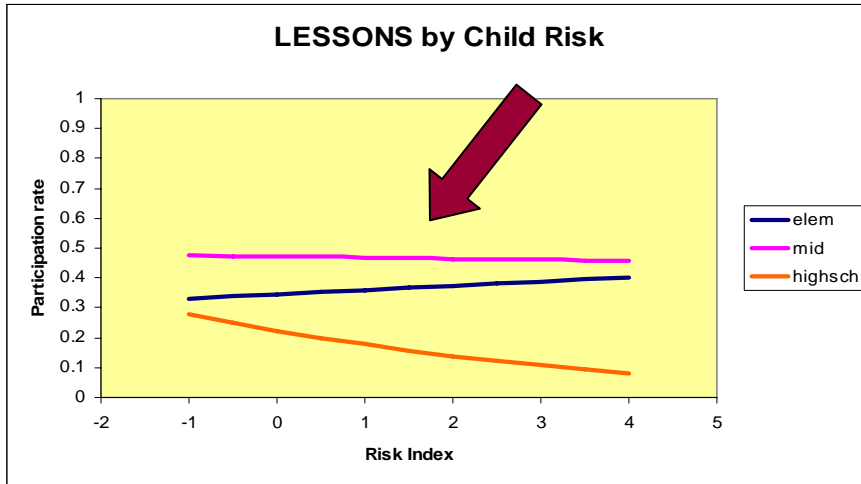
Community Programs



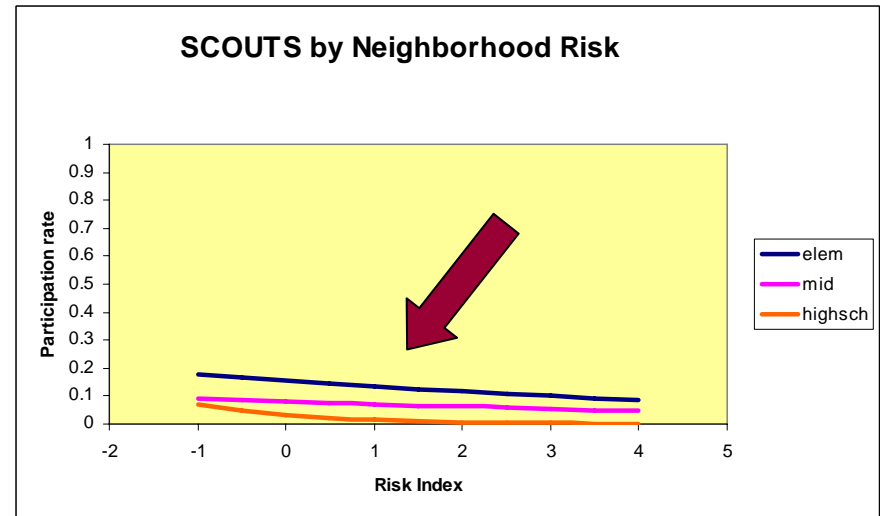
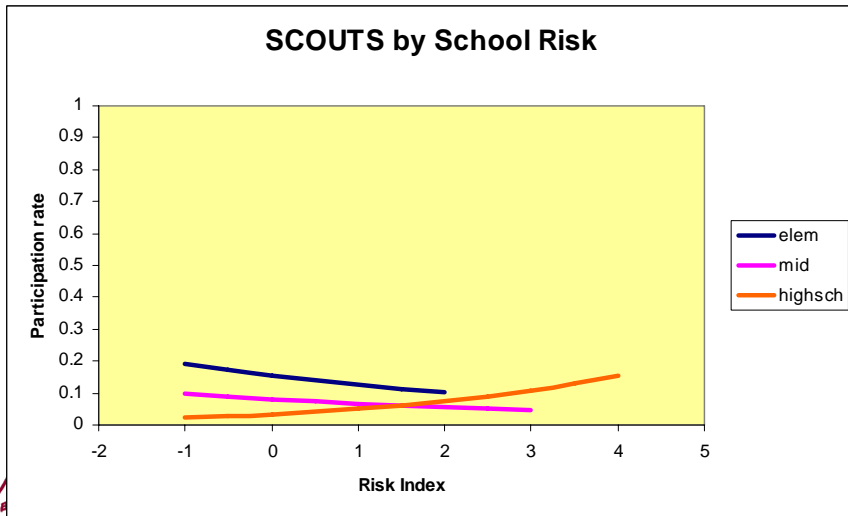
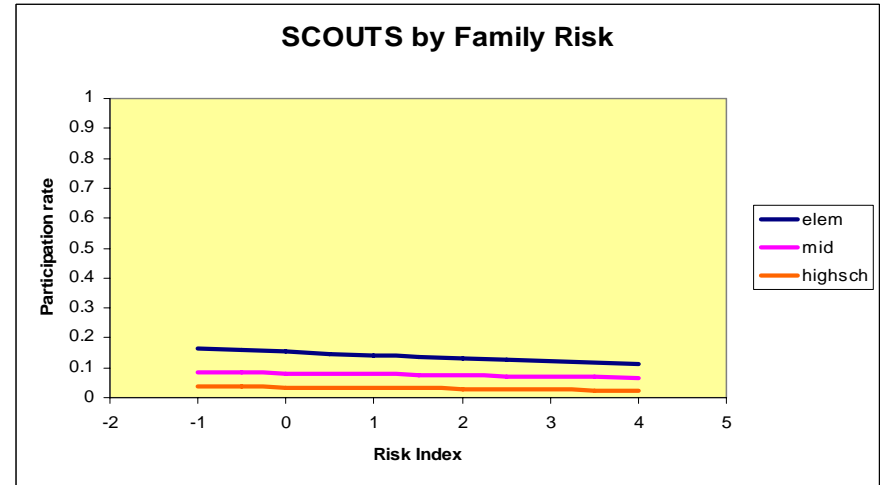
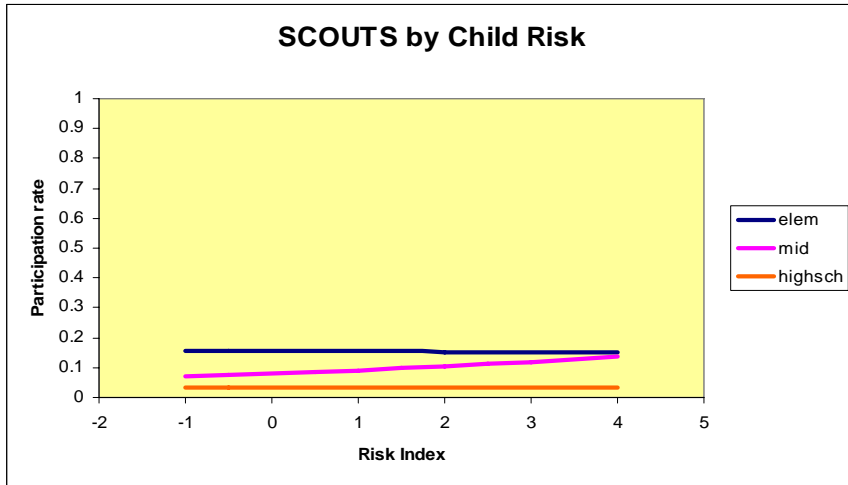
Athletics



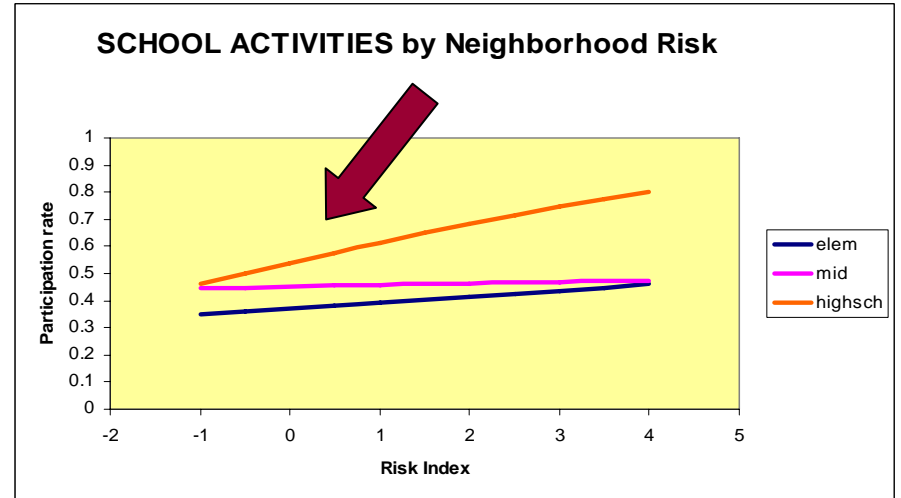
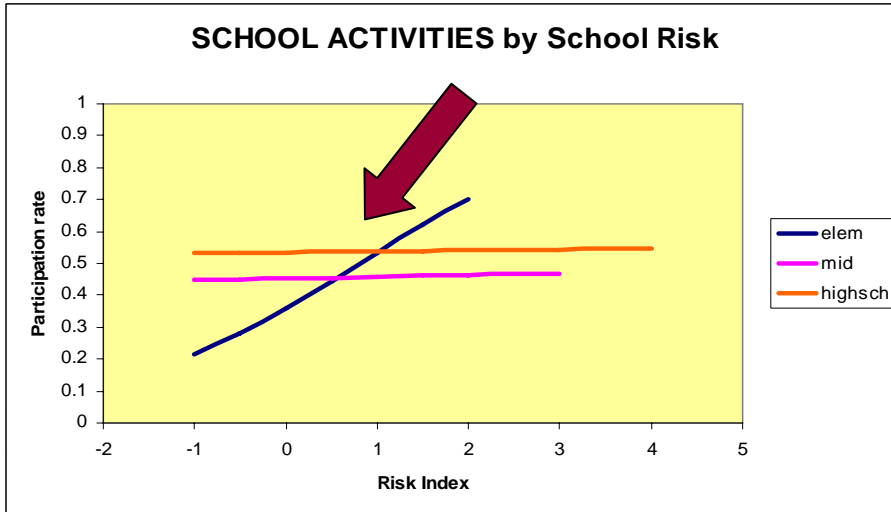
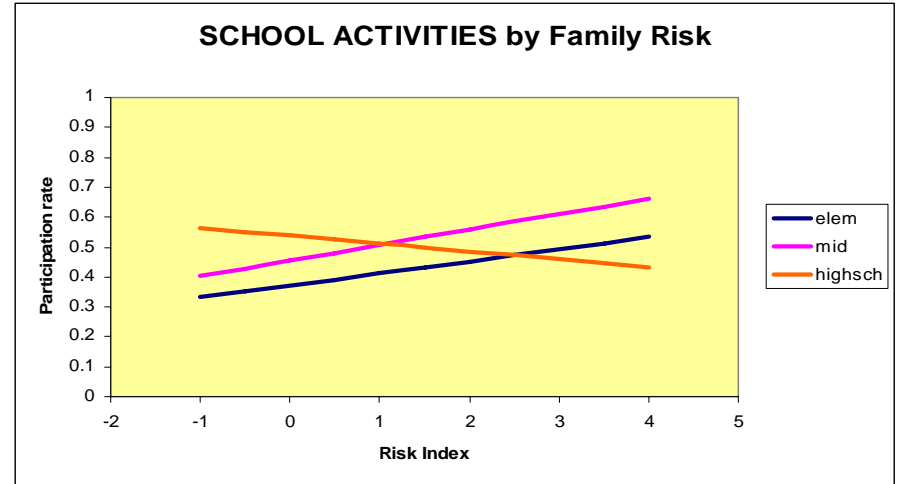
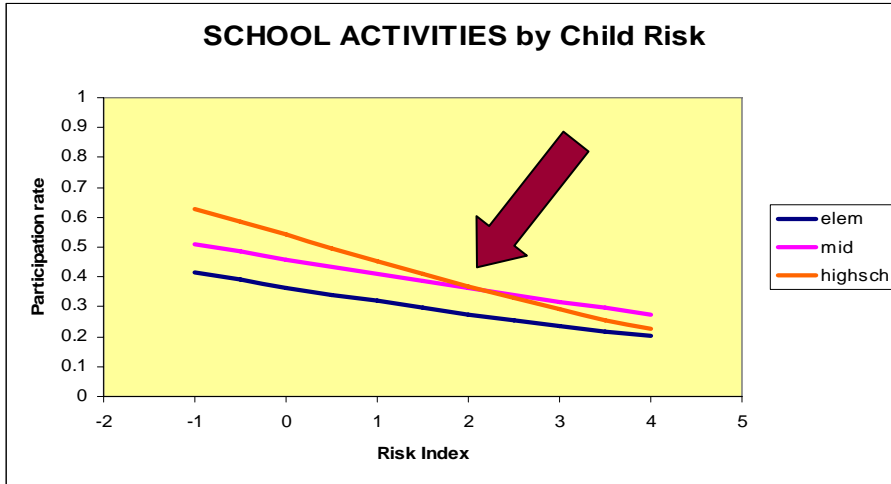
Lessons



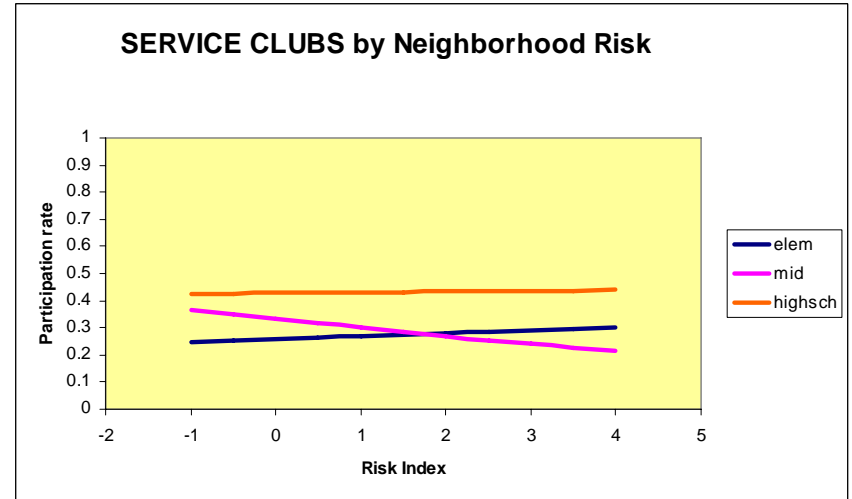
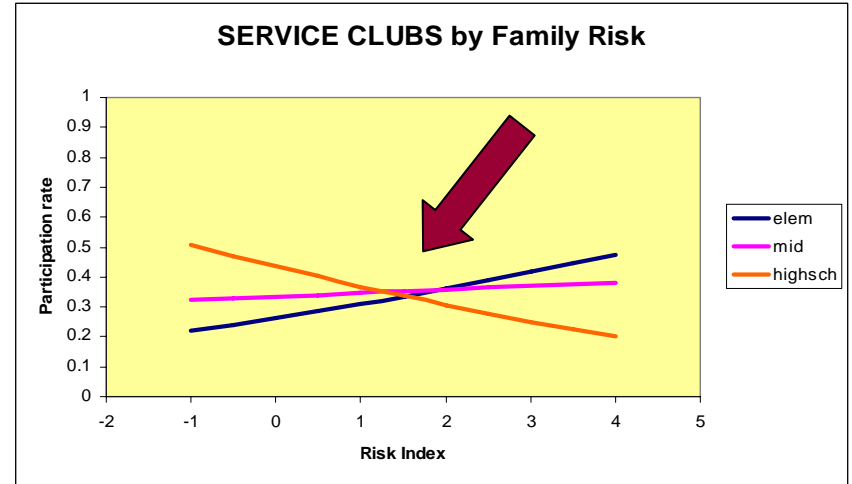
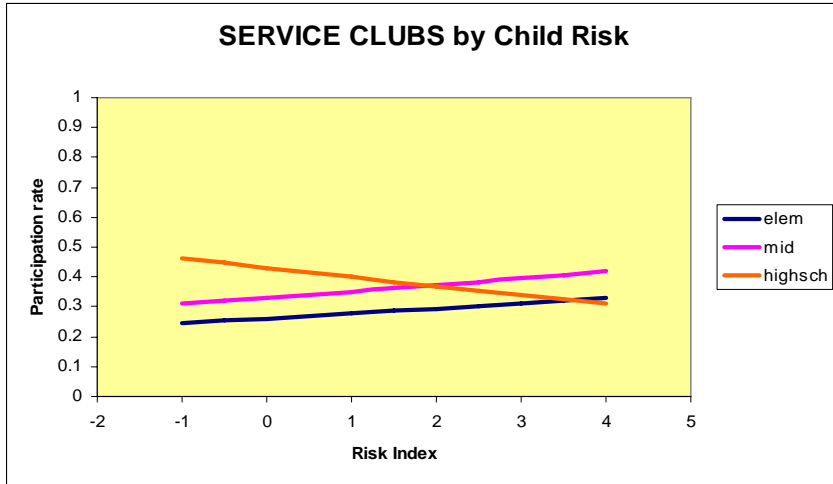
Scouting



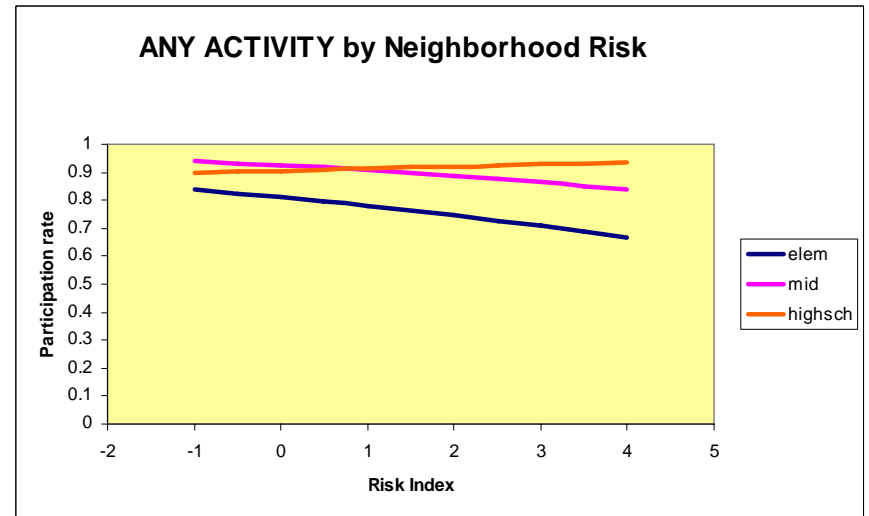
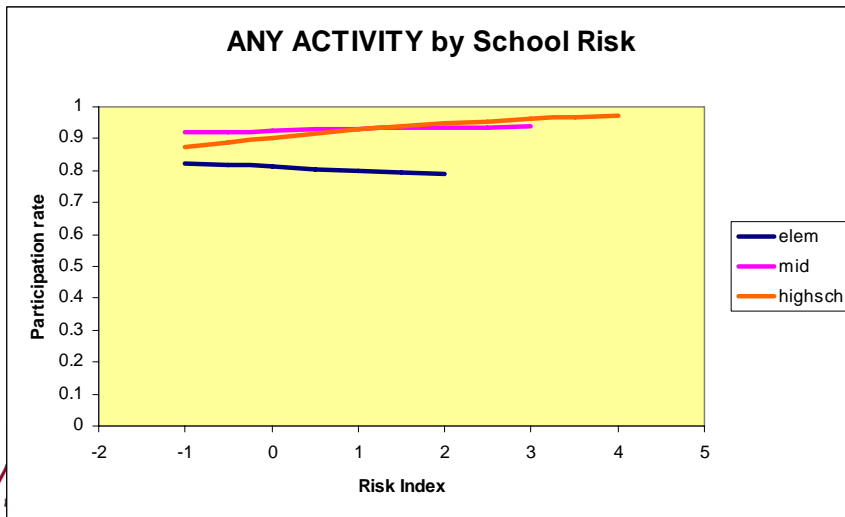
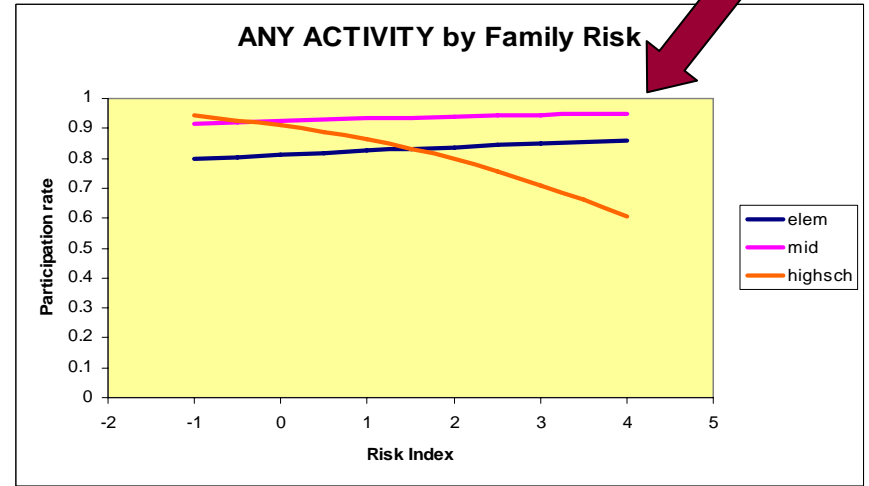
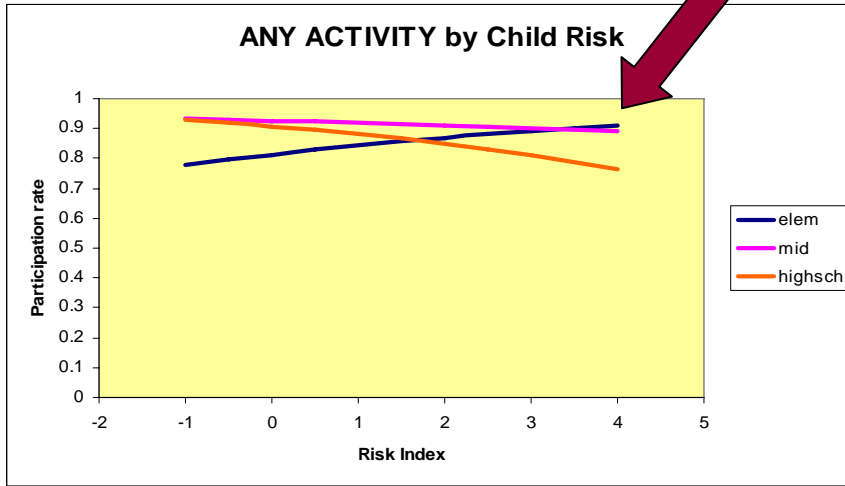
School Activities



Service Clubs



Any OST



Conclusions

- Need to engage high-risk older youth, which includes those behind behaviorally and academically and youth from high-risk families
- Older youth “vote with their feet” – and high risk older youth are often voting “No”
- Neighborhood and school boundaries seem to matter less for older youth, but more research is needed



Implications for Policy and Practice

- Focus on recruitment and retention of high risk youth
- Develop individualized relationships
- Hire staff with the ability to relate to these youth
- Have teachers and community agencies help identify high-risk youth
- Designate slots for at-risk youth
- Evaluate different innovations and strategies to recruit and retain high-risk youth



Table 1. The Odds Ratios (standard errors) of Youths' Participation in Community and Athletic Programs.

	Community Programs						Athletic Programs					
	Model 1		Model 2		Model 3		Model 1		Model 2	Model 3		
Middle School	0.84	(-0.15)	0.82	(-0.15)	0.87	(-0.18)	2.05***	(-0.32)	2.28***	(-0.37)	2.34***	(-0.39)
High School	0.90	(-0.16)	0.91	(-0.16)	0.90	(-0.20)	1.37**	(-0.19)	1.48***	(-0.21)	1.48***	(-0.22)
Male	0.73**	(-0.11)	0.74**	(-0.11)	0.73**	(-0.11)	1.50***	(-0.18)	1.57***	(-0.19)	1.57***	(-0.19)
Black	0.38***	(-0.07)	0.44***	(-0.09)	0.41***	(-0.08)	1.19	(-0.19)	1.35*	(-0.23)	1.28	(-0.22)
Hispanic	0.46**	(-0.16)	0.52*	(-0.18)	0.52**	(-0.17)	0.63**	(-0.14)	0.68*	(-0.15)	0.67*	(-0.15)
Other Race	0.54	(-0.21)	0.58	(-0.22)	0.57	(-0.22)	0.37***	(-0.10)	0.38***	(-0.10)	0.40***	(-0.11)
Income	0.89	(-0.11)	0.87	(-0.11)	0.87	(-0.11)	1.60***	(-0.17)	1.39***	(-0.15)	1.44***	(-0.16)
Parent Educ.	1.12***	(-0.05)	1.10**	(-0.05)	1.10**	(-0.05)	1.08***	(-0.03)	1.06**	(-0.03)	1.06**	(-0.03)
Neighborhood Risk			1.00	(-0.11)	0.91	(-0.16)			0.75***	(-0.06)	0.61***	(-0.07)
School Risk			0.86	(-0.09)	0.71**	(-0.10)			1.06	(-0.08)	0.93	(-0.10)
Family Risk			0.87	(-0.09)	0.96	(-0.12)			0.89	(-0.07)	1.06	(-0.12)
Child Risk			1.06	(-0.09)	1.16	(-0.15)			0.87**	(-0.06)	1.13	(-0.12)
Midd * Child Risk					0.96	(-0.20)					0.69**	(-0.11)
Midd * Family Risk					0.80	(-0.18)					0.71*	(-0.13)
Midd * School Risk					1.06	(-0.26)					1.31	(-0.24)
Midd * Neighborhood Risk					1.74**	(-0.46)					1.40*	(-0.26)
High * Child Risk					0.78	(-0.16)					0.68**	(-0.11)
High * Family Risk					0.84	(-0.23)					0.80	(-0.14)
High * School Risk					1.61**	(-0.36)					1.14	(-0.18)
High * Neighborhood Risk					0.95	(-0.24)					1.47**	(-0.27)

Note. A value above 1.00 indicates that youth are more likely to participate. A value below 1.00 indicates the likelihood that you will not participate.

* $p < .05$. ** $p < .01$. *** $p < .001$.



Table 2. The Odds Ratios (standard errors) of Youths' Participation in Scouting and Lessons.

	Scouting			Lessons		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Middle School	0.46*** (-0.10)	0.46*** (-0.10)	0.46*** (-0.12)	1.72*** (-0.26)	1.83*** (-0.28)	1.67*** (-0.28)
High School	0.20*** (-0.05)	0.21*** (-0.05)	0.18*** (-0.06)	0.54*** (-0.08)	0.59*** (-0.09)	0.56*** (-0.10)
Male	0.70** (-0.12)	0.70** (-0.12)	0.71** (-0.12)	0.35*** (-0.05)	0.37*** (-0.05)	0.36*** (-0.05)
Black	0.43*** (-0.10)	0.51*** (-0.12)	0.52*** (-0.13)	1.22 (-0.21)	1.32 (-0.25)	1.33 (-0.25)
Hispanic	0.52* (-0.19)	0.63 (-0.23)	0.60 (-0.21)	1.98*** (-0.46)	1.97*** (-0.48)	1.94*** (-0.47)
Other Race	0.23** (-0.14)	0.25** (-0.15)	0.24** (-0.15)	1.04 (-0.30)	1.04 (-0.30)	1.04 (-0.30)
Income	1.00 (-0.14)	0.94 (-0.13)	0.92 (-0.13)	1.61*** (-0.17)	1.51*** (-0.16)	1.53*** (-0.16)
Parent Educ.	1.12*** (-0.05)	1.10** (-0.05)	1.10** (-0.05)	1.13*** (-0.04)	1.11*** (-0.04)	1.11*** (-0.04)
Neighborhood Risk		0.80* (-0.10)	0.85 (-0.12)		1.04 (-0.09)	1.05 (-0.13)
School Risk		0.91 (-0.11)	0.78* (-0.11)		1.02 (-0.08)	0.99 (-0.12)
Family Risk		0.93 (-0.10)	0.92 (-0.12)		0.76*** (-0.07)	0.81 (-0.13)
Child Risk		1.04 (-0.10)	1.00 (-0.12)		0.94 (-0.06)	1.06 (-0.11)
Midd * Child Risk			1.16 (-0.24)			0.93 (-0.14)
Midd * Family Risk			1.03 (-0.22)			0.88 (-0.18)
Midd * School Risk			1.05 (-0.40)			0.89 (-0.16)
Midd * Neighborhood Risk			1.02 (-0.27)			1.02 (-0.22)
High * Child Risk			1.00 (-0.22)			0.70** (-0.13)
High * Family Risk			1.00 (-0.26)			0.97 (-0.21)
High * School Risk			1.93*** (-0.49)			1.16 (-0.19)
High * Neighborhood Risk			0.55 (-0.28)			0.99 (-0.20)

Note. A value above 1.00 indicates that youth are more likely to participate. A value below 1.00 indicates the likelihood that you will not participate.

* $p < .05$. ** $p < .01$. *** $p < .001$.



Table 3. The Odds Ratios (standard errors) of Youths' Participation in School Activities and Service Clubs.

	School Activities			Service Clubs		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Middle School	1.61** (-0.34)	1.59** (-0.34)	1.55** (-0.34)	1.52* (-0.34)	1.56** (-0.35)	1.45 (-0.34)
High School	2.28*** (-0.46)	2.17*** (-0.44)	2.19*** (-0.45)	2.35*** (-0.50)	2.41*** (-0.52)	2.28*** (-0.50)
Male	0.42*** (-0.06)	0.44*** (-0.06)	0.44*** (-0.06)	0.70** (-0.10)	0.70** (-0.10)	0.72** (-0.10)
Black	1.12 (-0.22)	0.94 (-0.20)	0.93 (-0.20)	0.71* (-0.14)	0.72 (-0.14)	0.69* (-0.14)
Hispanic	1.37 (-0.39)	1.03 (-0.30)	1.11 (-0.33)	0.53** (-0.17)	0.52** (-0.17)	0.56* (-0.18)
Other Race	0.64 (-0.21)	0.56* (-0.18)	0.59* (-0.19)	0.78 (-0.25)	0.78 (-0.25)	0.81 (-0.26)
Income	1.14 (-0.13)	1.16 (-0.14)	1.20 (-0.15)	1.15 (-0.13)	1.10 (-0.13)	1.14 (-0.14)
Parent Educ.	1.10*** (-0.04)	1.12*** (-0.04)	1.12*** (-0.04)	1.07* (-0.04)	1.06* (-0.04)	1.07* (-0.04)
Neighborhood Risk		1.16* (-0.10)	1.10 (-0.25)		0.94 (-0.09)	1.05 (-0.24)
School Risk		1.12 (-0.09)	2.05*** (-0.42)		1.08 (-0.09)	1.88*** (-0.39)
Family Risk		1.05 (-0.09)	1.18 (-0.23)		0.91 (-0.09)	1.26 (-0.27)
Child Risk		0.77*** (-0.06)	0.81 (-0.13)		1.00 (-0.07)	1.09 (-0.18)
Midd * Child Risk			1.01 (-0.20)			1.01 (-0.19)
Midd * Family Risk			1.05 (-0.25)			0.84 (-0.21)
Midd * School Risk			0.49*** (-0.12)			0.52** (-0.13)
Midd * Neighborhood Risk			0.93 (-0.25)			0.81 (-0.21)
High * Child Risk			0.87 (-0.17)			0.81 (-0.16)
High * Family Risk			0.76 (-0.17)			0.59** (-0.15)
High * School Risk			0.49*** (-0.11)			0.51*** (-0.12)
High * Neighborhood Risk			1.24 (-0.32)			0.96 (-0.25)

Note. A value above 1.00 indicates that youth are more likely to participate. A value below 1.00 indicates the likelihood that you will not participate.

* $p < .05$. ** $p < .01$. *** $p < .001$.



Table 4. The Odds Ratios (standard errors) of Youths' Participation in Any OST Activity.

	Model 1		Model 2		Model 3	
Middle School	2.73***	(-0.64)	2.96***	(-0.70)	2.87***	(-0.68)
High School	1.93***	(-0.36)	2.03***	(-0.37)	2.29***	(-0.46)
Male	0.69**	(-0.11)	0.70**	(-0.11)	0.70**	(-0.12)
Black	1.15	(-0.24)	1.18	(-0.26)	1.11	(-0.25)
Hispanic	0.76	(-0.20)	0.75	(-0.20)	0.75	(-0.20)
Other Race	0.41***	(-0.14)	0.42**	(-0.14)	0.45**	(-0.16)
Income	2.10***	(-0.28)	1.92***	(-0.26)	1.97***	(-0.27)
Parent Educ.	1.07**	(-0.04)	1.07*	(-0.04)	1.07**	(-0.04)
Neighborhood Risk			0.87	(-0.08)	0.83	(-0.10)
School Risk			1.13	(-0.10)	0.93	(-0.12)
Family Risk			0.91	(-0.09)	1.09	(-0.14)
Child Risk			0.94	(-0.08)	1.24	(-0.19)
Midd * Child Risk					0.73	(-0.15)
Midd * Family Risk					1.02	(-0.26)
Midd * School Risk					1.16	(-0.33)
Midd * Neighborhood Risk					0.97	(-0.25)
High * Child Risk					0.61**	(-0.12)
High * Family Risk					0.57***	(-0.11)
High * School Risk					1.48**	(-0.29)
High * Neighborhood Risk					1.34	(-0.28)

Note. A value above 1.00 indicates that youth are more likely to participate. A value below 1.00 indicates the likelihood that you will not participate.

* $p < .05$. ** $p < .01$. *** $p < .001$.



Correlations

- chrisk famrisk schrisk ngbrisk
-
- chrisk 1.0000
- famrisk 0.1515 1.0000
- schrisk 0.0538 0.2333 1.0000
- ngbrisk 0.0805 0.2978 0.2908



- Income Education Black Hispanic
-
- zchrisk | -0.1118 -0.0781 0.0678 -0.0515
- zfamrisk | -0.3983 -0.3675 0.2596 0.0613
- zschrisk | -0.3284 -0.3111 0.2899 0.1642
- zngbrisk | -0.4181 -0.3296 0.2502 0.1573



	Comm	Ath	Lesson	Scout	School	Service	Any
All							
Chfam	0	0	0	0	0	0	0
Chsch	0	+	0	0	0	0	+
Chngb	0	0	0	0	0	0	0
Famsch	0	+	0	0	0	0	+
Famngb	0	+	0	0	0	0	+
Schngb	0	+	+	0	0	0	0

	Comm	Ath	Lesson	Scout	School	Service	Any
Elem							
Chfam	0	+	0	0	0	0	+
Chsch	0	0	0	+	0	0	0
Chngb	0	0	0	+	0	0	0
Famsch	0	+	0	-	0	0	+
Famngb	0	0	0	0	0	0	+
Schngb	+	+	0	0	-	0	+

	Comm	Ath	Lesson	Scout	School	Service	Any
Middle							
Chfam	0	0	0	0	0	0	0
Chsch	0	0	0	-	0	-	+
Chngb	0	0	0	0	0	0	+
Famsch	0	0	0	-	0	0	0
Famngb	0	0	0	-	0	0	0
Schngb	-	0	0	0	0	0	+

	Comm	Ath	Lesson	Scout	School	Service	Any
High							
Chfam	0	0	0	0	0	0	0
Chsch	0	0	0	0	0	+	0
Chngb	0	0	0	0	0	0	0
Famsch	0	+	0	0	+	+	0
Famngb	0	+	0	0	0	0	0
Schngb	0	0	0	0	0	0	0



Child Risk

Activity	Comm	Athletic	Lesson	Scout	School	Service	Any
Overall	0	-	0	0	-	0	0
Elem	0	0	0	0	0	0	+
Midd	0	-	0	0	-	0	0
High	0	-	-	0	-	0	-

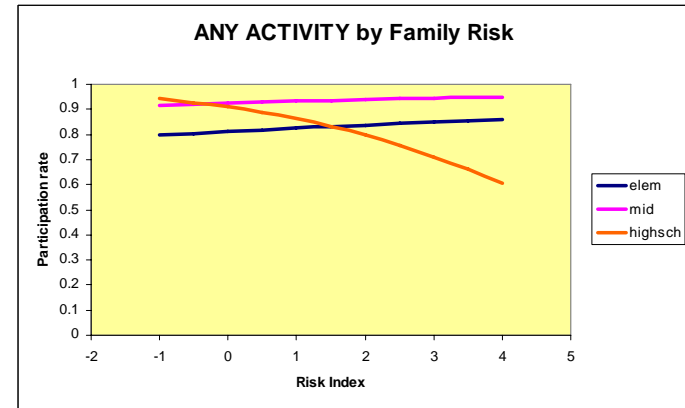
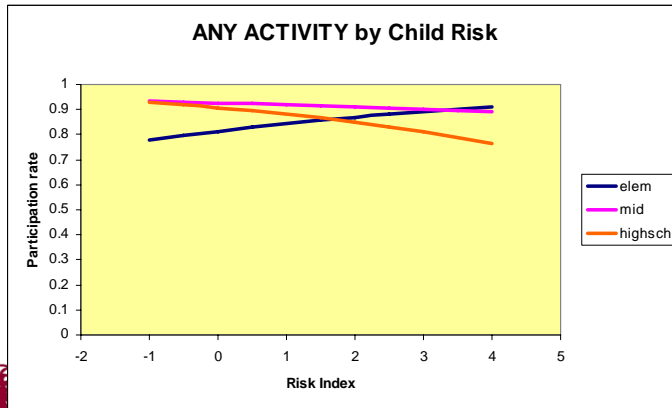
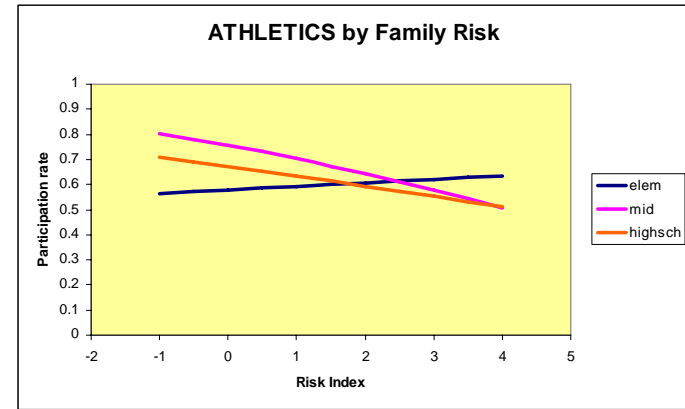
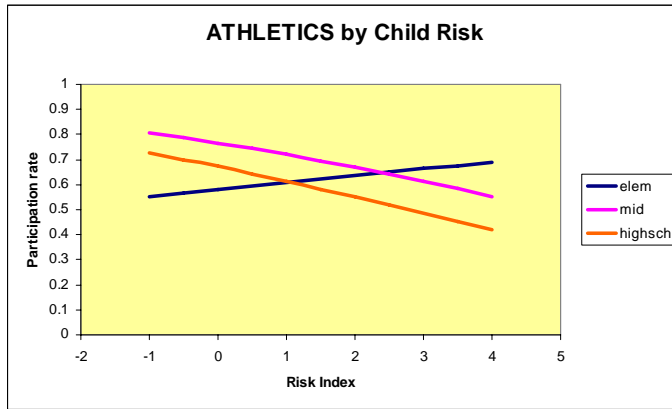


Family Risk

Activity	Comm	Athletic	Lesson	Scout	School	Service	Any
Overall	0	0	-	0	0	0	0
Elem	0	0	0	0	0	0	0
Midd	0	-	-	0	0	0	0
High	0	-	0	0	0	-	-



Child and Family Risk



School Risk

Activity	Comm	Athletic	Lesson	Scout	School	Service	Any
Overall	0	0	0	0	0	0	0
Elem	-	0	0	0	+	+	0
Midd	0	0	0	0	0	0	0
High	0	0	0	0	0	0	+



Neighborhood Risk

Activity	Comm	Athletic	Lesson	Scout	School	Service	Any
Overall	0	-	0	-	+	0	0
Elem	0	-	0	0	0	0	0
Midd	+	0	0	0	0	0	0
High	0	0	0	-	+	0	0



Neighborhood Risk

