SOCIAL CAPITAL AND COMMUNITY CONNECTIONS:
WHAT MATTERS IN THE LIVES OF YOUTH?

BY

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Chairperson

Committee members*

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Committee:

________________________________
Chairperson*

Date approved: April 29, 2009
Abstract: 

Social capital is seen as promoting youth success. This study analyzes all 115 counties in Missouri using correlation to determine if youth centered community connections (youth organizations, high school activities, and private schools) are related to Robert Putnam’s version of social capital in communities. Multiple variable regression is used to determine what forms of community connections are associated with youth success (lower dropout rates, increased college attendance, decreased juvenile delinquency, and lower teen fertility rates). This study finds that Putnam’s measure of social capital is significant in predicting teen fertility but not the other measures of youth success. High school activities was the only community connection variable associated with youth success in the form of lower dropout rates. Single parent families was the variable most associated with youth outcomes followed by median family income. Social capital and community connections do little to override family support systems and financial resources.
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Chapter 1 - Introduction

Social capital has been touted by Robert Putnam as a feature of happy and healthy communities and has been adopted into the lexicon of planners. Planners often look to build social capital in communities as a way to facilitate positive interventions. The view of many is that increased interaction among community members and increased community supports will build the trust and confidence necessary for successful individuals. This study looks at the ability of both general community levels of social capital and specific community supports for youth to improve youth outcomes. Social capital supports to youth include youth organizations, high school activities, and private schools. This study will evaluate whether social capital as described by researchers is helping foster successful youth outcomes or if different social capital measures for youth are needed.

In the research of Robert Putnam, he shows that youth in states with high social capital have more developmental success than youth in counties with low social capital (2000). Other researchers have used the social capital model to show that increased community connections and support for youth promotes youth success (Coleman 1988, Furstenberg and Hughes 1995, Teachman, Paasch, and Carver 1996). However, the way that social capital is measured in these studies varies.

Putnam looks at social capital primarily as the participation in community associations and civic life. Coleman looks at social capital as the immediate social supports available to youth including family, school, and neighborhood. Youth organizations, high school activities, and private high schools are also seen by
researchers as increasing social capital for youth by promoting connections between youth, families, schools, and communities. This study looks to see if these more youth centered social capital variables are associated with the wider community version of social capital described by Putnam and to determine which community connection variables are associated with youth success.

Pearson’s correlation is used to determine which “community connection variables” including social capital, youth organizations, high school activities, and private high schools are associated with youth success in the form of lower high school dropout rates, increased college attendance, lower juvenile delinquency, or lower teen fertility rates. The variables are also entered into a multiple variable regression equation controlling for single parent families and median family income to see which community connection variables remain significant. Pearson’s correlation is then used to determine if social capital, as described by Putnam, is associated with the other youth centered community connection variables.

It is important to know how community connections are associated with youth success, so we know what areas of investment will have the greatest chance at promoting youth success. There has been significant attention to the idea of social capital contributing to the well being of communities and youth. It is important to know more about what measures of social capital and community connections are most associated with youth success. It is also important to determine if social capital present in the adult community is associated with more youth centered community connections. If youth centered community connections are not associated with
countywide measures of social capital, it may be important to define youth social
capital more specifically and differently than how social capital is defined for adults.

Chapter 2 - Literature Review

In the research of Robert Putnam on social capital, he finds that states with
high social capital – states with citizens who trust other people, join organizations,
voluteer, vote, and socialize with friends – are the states that have the best outcomes
for children (Putnam 2000). Putnam compared his State Social Capital Index with the
Annie E. Casey, Kids Count Index on child welfare and found that states with high
social capital also ranked high on the Kids Count Index. The following measures
make up the Kids Count Index:

- Percent low-birth-weight babies
- Infant mortality rate
- Child death rate
- Teen birth rate
- Percent of teens who are high school dropouts
- Juvenile violent crime arrest rate
- Percent of children in poverty
- Percent of families with children headed by a single parent (Putnam
  2000).

In this study, the idea that social capital improves youth outcomes will be
explored. The youth outcomes used in this study will be borrowed from the measures
of the Kids Count Index and include high school dropout rate, college attendance, juvenile delinquency, and teen fertility rate. Other researchers have also shown a connection between social capital and increased youth success, however the way that social capital is measured is different in each study. Social capital describes the social structures, relationships, and community involvement that works as a resource for community members, just as do economic conditions and educational opportunities. Putnam says, “Social capital refers to features of social organization, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit” (1993, 35). In Putnam’s work he seems to focus on community based social capital such as participation in organizations and civic action.

The research of Rupsingha, Goetz and Freshwater work to operationalize Putnam’s definition of social capital into a Social Capital Index that can be measured at the county level (2006). The four variables included in their Social Capital Index include associational densities, the response rate for the Census Bureau’s decennial population and Housing Survey, the percentage of voters who voted in presidential elections, and per capita non-profit organizations obtained from the National Center for Charitable Statistics (Rupsingha, Goetz and Freshwater, 2006).

The Social Capital Index of Rupsingha, Goetz and Freshwater will be used in this study to represent Putnam’s idea of social capital and it will be compared with the youth outcome measures, high school dropout rate, college attendance, juvenile delinquency, and teen fertility rate, to see if similar results are attained at the county level. The focus of the Social Capital Index is adult community and civic
participation. Participation of youth and community connections for youth are not directly addressed.

Researchers such as James Coleman take a more direct look at what impact family, school, and community connections have on social capital available to youth (1988). Coleman defines in-family social capital as consisting of how parents support their children through their supervision, encouragement, and value transfers. In this study, how family based social capital impacts youth outcomes will also be considered as well as the wider community based definition of social capital. The availability of social capital is only one of three types of capital Coleman considers contributing to achievement of youth. Financial capital, approximately measured by a family’s wealth or income, and human capital, approximately measured by parent’s level of education, are the other variables considered by Coleman (1988).

Coleman looked at social capital outside the family as well focusing on the relationships among the parents and relationships the parents had with community institutions. Relationships among parents were especially important when they provided intergenerational closure, where the parents were friends with their children’s friends’ parents. These relationships create a climate of trust and reciprocity within the community. A community with a culture of reciprocity is more willing to help their neighbor because of the belief that if you do something for a neighbor that your efforts will be repaid even if it is by someone else in the community (Coleman 1988). These increased relationships among parents with their children, their children’s teachers, and their children’s friend’s parents were
especially strong in private Catholic high schools. The private school environment fostered more relationships because families at the private schools shared the same faith, value system, and church activities (Coleman 1988). Coleman than determined that these relationships increased social capital in private Catholic high schools, which translated into lower dropout rates and higher academic achievement for the students. Borrowing from Coleman’s research, in this study the variable private high schools per child will be used to see if the extra community connections available in private schools, as described by Coleman, is associated with the Social Capital Index and to see if private high schools function at the county level to improve youth outcomes.

Two other variables of interest that are also sometimes associated with social capital benefits for youth and that will be included in this study are youth organizations and high school activities. In Coleman’s discussion of social capital available to youth, he points to formal youth organizations as a possible source of social capital in the future. Youth organizations, today, take on many different forms. They can be private, non-profit, community based, or public sector institutions. They can provide before and after-school care, extracurricular activities, arts and sports activities, mentoring, tutoring, homework help, community service opportunities as well as an array of other activities. It has been found that youth involved in quality youth programs can improve youth outcomes, including lower dropout rates, better performance in school, decreases in juvenile delinquency, avoidance of sexual activity, and increased knowledge of safe sex (HFRP 2008). Research by the Harvard
Family Research Project has kept track of after school program evaluations for the past 10 years. Studies included in this set of evaluations included an experimental or quasiexperimental design to determine effects. There are limits with the Harvard Family study because few of the program evaluations contain true randomized experiments from which to draw conclusions. Most research on after school programs have a self-selection bias as the youth self-select into the programs. Of the evaluation studies in the set that showed the after school program made a difference in youth outcomes, the researchers looked at what conditions were necessary to achieve the positive results. Quality out-of-school time programs were determined by finding consistent conditions in out-of-school time programs producing positive results. Quality youth out-of-school time programs, as assessed by the Harvard Family Research Project, have the following characteristics:

- Access to and sustained participation in the program
- Quality programming, particularly:
  - Appropriate supervision and structure
  - Well-prepared staff
  - Intentional programming, and
- Partnerships with families, other community organizations and schools

(Little, Wimer and Weiss 2008).

The linkages and connections described by Little, Wimer and Weiss 2008 as being important for quality youth organizations are themselves a form of social capital. This study will determine if the presence of youth organizations in counties
is related to the wider form of community social capital in the Social Capital Index. This study will also look at whether the presence of more youth organizations per child is associated with youth success.

Some studies on youth organizations and out-of-school time programs have found that participation in programs has no impact on child functioning (National Institute of Child Health and Human Development, 2004) or participation results in increased negative behaviors such as increased violence among participants (Schneider-Munoz, Politz 2007). A study on the U.S. Department of Education's 21st Century Community Learning Environments (the government funded after-school program initiative) found that participation in their programs was associated with higher levels of negative behavior for youth as measured by an increase in discipline problems (James-Burdumy, Dynarski and Deke 2008). This study will determine if youth organizations present at the county level exhibit outcomes similar to the research on quality programs or the research done on the 21st Century Community Learning Environments.

Beckett Broh (2002) explores the reason why participation in extracurricular activities, especially interscholastic sports, is linked to academic success. He tests three hypotheses including the Developmental Model, The Leading-Crowd Hypothesis, and the Social Capital Model. The Developmental Model believes that extracurricular activities develops skills that are consistent with educational values and thus help students achieve. The Leading-Crowd Hypothesis is focused on participation in extracurricular activities potentially raising peer status and facilitates
membership in the academically oriented “leading crowd.” The Social Capital Model focuses on the notion that extracurricular activities provide opportunities for increased interaction between students, parents, and the school. Broh’s results indicate that the Developmental Model, the Social Capital model, and increased social ties among students, parents, and schools can explain student achievement.

Based on Broh’s research, high school activities will be looked at in this study as a form of increased community connections for youth. High school activities will be tested to see if they work to improve youth outcomes and to see if the social capital created by extracurricular activities is tied to the wider community level of social capital, the Social Capital Index.
Chapter 3 - Methods

The research questions explored in this study are as follows:

Q1. What community connections are important to youth success?

Q2. Do counties with high social capital have more community based connections (youth organizations, high school activities, and private schools) for youth?

The hypothesis to be tested are:

H1. Higher social capital, more youth organizations, more high school activities and more private schools will be associated youth success (lower dropout rate, higher college attendance, lower juvenile delinquency, and lower teen fertility) when controlling for median income and single parent families.

H2. Social Capital as measured by the social capital index will be correlated with the other youth centered measures of community connections.

In order to determine which community connections are significant for predicting youth outcomes the variables of interest or community variables Social Capital Index, Youth Organizations per Child, High School Activities per Child, and Private High Schools per Child are entered into a Correlation matrix with each dependent youth outcome variable (Dropout Rate, College Attendance, Juvenile Delinquency, and Teen Fertility). This test determines which community variables are significantly correlated with which youth outcomes. To further explore the significance of the community variables in predicting youth outcomes, the variables are entered into a multiple regression model controlling for the affects of other
variables measuring family support (Single Parent Families) and physical capital (Median Family Income). A separate model (four models total) using the variables previously described is created for each dependent youth outcome variable: Dropout Rate, College Attendance, Juvenile Delinquency, and Teen Fertility.

Other control variables, such as Race/Ethnicity and the percent of the population with a High School Diploma were included in the models. However, they were left out because of multi-collinearity concerns with the other variables.

To determine if the community based measure of social capital is correlated with the youth centered measures of community connections, a Pearson’s Correlation test is performed to find the correlation between the variables Social Capital, Youth Organizations per Child, High School Activities per Child and Private Schools per Child.

The research sample consisted of all 115 counties in the state of Missouri. How each of the independent and dependent variables were measured is described in the next section.

Variables of Interest - Community Connections

*Social capital.* The Social Capital Index was obtained from the work of Rupasingha, Goetz, and Freshwater (2006). The index is a compilation based on associational densities, census response rate, voter turnout, and per capita non-profit organizations.

*Youth organizations per child.* There is no one definition of youth organizations identified in the United States, which makes tracking them difficult.
Community based youth organizations can be private, non-profit, as well as public sector institutions. Many of these community based institutions have national bases such as the Boys and Girls Club, Boy Scouts, Girl Scouts and the YMCA. Others are grassroots organizations independent of national guidelines. There has been interest in creating state and national standards in order to ensure quality and track programs providing afterschool or out-of-school time care and services by the Missouri AfterSchool Network, but no such database currently exists.

This study used Reference USA (2008) to identify the number of youth organizations in each county. Reference USA compiles listings from the following sources: more than 5,600 Yellow Page and Business White Page telephone directories; annual reports, 10-Ks and other SEC information; Continuing Medical Education directories; federal, state, provincial and municipal government data; Chamber of Commerce information; leading business magazines, trade publications, newsletters, major newspapers, industry and specialty directories; and postal service information, including both US and Canadian National Change of Address updates (Reference USA, 2008).

Youth organizations were searched for in Reference USA by the National Industrial Classification Code 62411006. Organizations self select their NAICS code by determining their phonebook listing heading or by identifying themselves as Youth Organizations as their primary or secondary line of business. This limits the number of church based youth organizations counted in this study because the primary purpose of the church is as a religious center and the secondary purpose may
or may not include providing youth services. The organizations listed in Reference USA must also have a physical address in order to be listed. Limiting this study to organizations with physical addresses eliminates community-based organizations that have variable meeting places or use some other community facility. This may explain the low number of youth organizations found in rural counties. Youth organizations that provide mental health, foster-care or juvenile justice services were left out of the analysis.

*High school activities per child.* The number of high school activities was counted through the Missouri State High School Activities Association (MSHAA 2008). The number of activities that each high school participated in as listed by the MSHAA was summed with the number of activities of every other high school in each Missouri county and divided by the 2000 Census number of children between the ages of 6 and 18. High school activities included Baseball, Boys and Girls Basketball, Boys and Girls Cross Country, Field Hockey, 8-Man Football, 11-Man Football, Boys and Girls Golf, Lacrosse, Boys and Girls Soccer, Softball, Boys and Girls Swimming and Diving, Boys and Girls Tennis, Track and Field, Boys and Girls Volleyball, Water Polo, Wrestling, Academic Competition, Sideline Cheerleading, Dance/Pom Team, Music Activities, Speech and Debate, and Winter Guard. Morgan County did not report activity participation with the MHSAA.

*Private high schools per child.* The number of private high schools in each county was obtained from the National Center for Education Statistics (2008). Private schools providing at least two grades between ninth and twelfth were counted
as private high schools. The number of private high schools was then divided by the 2000 Census number of children between the ages of 6 and 18.

**Control Variables**

*Single parent families.* The number of single parent families in each county came from the U.S. Census (2000). The single parent families in each county included census categories: male householder, no wife present, with own children under 18 and female householder, no husband present, with own children under 18. The sum of these two categories was divided by the total number of families in the county and multiplied by 100 to calculate the percent of single parent families in each county.

*Median family income.* Median family income by county was obtained from the U.S. Census (2000).

**Dependent Variables**

*Dropout rate.* Dropout rate was obtained from the Missouri Department of Elementary and Secondary Education (2004). It was calculated by averaging the dropout rate (September enrollment plus transfers in minus transfers out minus dropouts added to total September enrollment then divided by two) for each public school district in each county.

*College attendance.* The percentage of graduating seniors in Missouri public schools going on to attend a two or four year college was obtained by Missouri Department of Elementary and Secondary Education (2004). A follow up of the
number of graduates attending a two or four-year college was given for each school district in each county. The total number of college attendees in each county was summed and divided by the total number of graduates in each district in the county.

_Teen fertility._ Teen fertility for each county was obtained from the Missouri Department of Health and Senior Services (2002 – 2006). A rate for each county was determined from the number of pregnancies for girls in each county under age 18.

_Juvenile delinquency._ The number of juvenile delinquency petition and non-petition cases by county was obtained from Stahl, Livsey, and Kang “Easy Access to State and County Juvenile Court Case Counts (2004). The total number of cases was then divided by the number reported in the 2000 Census for children between the ages of 6 and 18.
Chapter 4 - Results

The first hypothesis is as follows:

H1. Higher social capital, more youth organizations, more high school activities and more private schools will be associated youth success (lower dropout rate, higher college attendance, lower juvenile delinquency, and lower teen fertility) when controlling for median income and single parent families.

The correlations between the independent community connection variables and the youth outcome variables are presented in Table 1.

Table 1 - Youth Outcomes Correlations

<table>
<thead>
<tr>
<th></th>
<th>Dropout Rate</th>
<th>College Attendance</th>
<th>Kids per JV Case</th>
<th>Teen Fertility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital Index</td>
<td>-0.014</td>
<td>0.270 **</td>
<td>0.132</td>
<td>-0.357 **</td>
</tr>
<tr>
<td>Kids per Youth Organization</td>
<td>-0.009</td>
<td>-0.108</td>
<td>0.181 *</td>
<td>0.042</td>
</tr>
<tr>
<td>Kids per High School Activity</td>
<td>-0.439 **</td>
<td>-0.052</td>
<td>-0.170 *</td>
<td>-0.153</td>
</tr>
<tr>
<td>Kids per Private High Schools</td>
<td>0.154 *</td>
<td>0.095</td>
<td>-0.030</td>
<td>-0.048</td>
</tr>
</tbody>
</table>

*p<.10, **p<.05

Each of the community connection variables is significantly correlated with different youth outcome variables with no two community connection variables significantly correlated with the same youth outcome variables.

As hypothesized, the Social Capital Index is positively correlated with college attendance, \( r = 0.270, p < .05 \) indicating that counties with higher community social capital have a higher percentage of high school graduates going on to college. Also as hypothesized, the Social Capital Index is negatively correlated with teen fertility, \( r = -0.357, p < .05 \) (also as expected) indicating that counties with higher community
social capital also have lower teen fertility rates. However this study did not find a significant correlation between the Social Capital Index and dropout rate or the Social Capital Index and juvenile delinquency.

Contrary to the hypothesis, number of youth organizations per child is significantly positively correlated with Juvenile Delinquency, $r = 0.181, p < 0.10$. Though the correlation is weak, this positive correlation indicates that counties with more youth organizations per child also have higher juvenile delinquency. Also going against H1, youth organizations per child is not significantly correlated with any of the other youth outcome variables.

The correlation between high school activities per child and dropout rate is the strongest correlation between the community connection and youth outcome variables, $r = -0.439, p < .05$. This significant correlation supports H1 that more high school activities per child will be associated with the successful youth outcome of lower dropout rates. A weaker yet still significant correlation exists between high school activities per child and lower juvenile delinquency, $r = -0.170, p <.10$. This correlation is also as hypothesized, however against what was hypothesized, college attendance and teen fertility are not correlated with high school activities per child.

In this study, private high schools per child is significantly correlated only with dropout rate, $r = 0.154, p < .05$. This positive correlation indicates that more private schools per child is associated with higher dropout rates. This goes against the H1, which predicted that private high schools would be associated with the successful youth
outcome of lower dropout rates. Also going against the H1, private high schools per child is not correlated with any of the other youth success variables.

When the community connection variables are entered into a multiple variable regression model predicting dropout rate and controlling for single parent families and median income (Table 2) the model was able to predict 32 percent of the variation in dropout rate. High school activities per child was the most significant variable predicting dropout rate with a standardized coefficient of -.366. This confirms that more high school activities per child is significantly associated with lower dropout rates in Missouri Counties.

Table 2 - Multivariable Regression for Dropout Rate

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Standardized Coefficient</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.061</td>
<td>3.591</td>
<td>1.206 **</td>
</tr>
<tr>
<td>Social Capital</td>
<td>0.061</td>
<td>0.218</td>
<td>0.310</td>
</tr>
<tr>
<td>Youth Organizations per Child</td>
<td>-0.050</td>
<td>-223.214</td>
<td>366.217</td>
</tr>
<tr>
<td>High School Activities per Child</td>
<td>-0.366</td>
<td>-79.236</td>
<td>21.945 **</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>0.070</td>
<td>566.699</td>
<td>684.823</td>
</tr>
<tr>
<td>Single Parent Families</td>
<td>0.313</td>
<td>0.163</td>
<td>0.047 **</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>-0.172</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

N = 114  R Squared = 0.318
*p<.05,  **p<.01

The multivariable regression model created using the same variables in the prior model is repeated to predict college attendance. This regression model is able to predict 29 percent of the variation in college attendance. The only significant variable however is median family income. The Social Capital Index and the other
community connection variables are not significantly associated with higher college attendance when entered into the model (Table 3).

Table 3 - Multivariable Regression for College Attendance

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Standardized Coefficient</th>
<th>Standard Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>32.985</td>
<td>7.119 **</td>
<td></td>
</tr>
<tr>
<td>Social Capital</td>
<td>0.091</td>
<td>1.924</td>
<td>1.831</td>
</tr>
<tr>
<td>Youth Organizations per Child</td>
<td>-0.067</td>
<td>-1783.179</td>
<td>2162.040</td>
</tr>
<tr>
<td>High School Activities per Child</td>
<td>0.143</td>
<td>185.019</td>
<td>129.557</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>0.116</td>
<td>5578.479</td>
<td>4042.997</td>
</tr>
<tr>
<td>Single Parent Families</td>
<td>-0.033</td>
<td>-0.104</td>
<td>0.276</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>0.550</td>
<td>0.001</td>
<td>0.000 **</td>
</tr>
</tbody>
</table>

N = 114 R Squared = 0.292
*p<.05, **p<.01

The third multivariable regression model created using the same variables predicts juvenile delinquency. This model has an R squared of 0.143. It is the weakest of the youth success models used in this study. The only significant variable in this model is single parent families. So although youth organizations per child is significantly correlated with juvenile delinquency in the Pearson correlations, the addition of single parent families as a control variable overrides its impact in the multiple variable regression model.
The last multiple variable regression model created using the community connection variables and the two control variables models teen fertility. In this model both control variables, single parent families and median family income, as well as the Social Capital Index are significant at the .01 level. Counties with higher social capital are still associated with lower teen fertility rates. The other community connection variables, youth organizations per child, high school activities per child, and private schools per child are not significant variables in the model.

Table 4 - Multivariable Regression for Juvenile Delinquency

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Standardized Coefficient</th>
<th>Standard Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>0.013</td>
<td>0.017</td>
</tr>
<tr>
<td>Social Capital</td>
<td>0.166</td>
<td>0.008</td>
<td>0.004</td>
</tr>
<tr>
<td>Youth Organizations per Child</td>
<td>0.136</td>
<td>8.217</td>
<td>5.110</td>
</tr>
<tr>
<td>High School Activities per Child</td>
<td>-0.047</td>
<td>-0.138</td>
<td>0.306</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>-0.030</td>
<td>-3.197</td>
<td>9.556</td>
</tr>
<tr>
<td>Single Parent Families</td>
<td>0.435</td>
<td>0.003</td>
<td>0.001          **</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>-0.114</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

N = 114  \quad R^2 = 0.143
*p<.05,  **p<.01

Table 5 - Multivariable Regression Model for Teen Fertility

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Standardized Coefficient</th>
<th>Standard Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>19.769</td>
<td>6.604          **</td>
</tr>
<tr>
<td>Social Capital</td>
<td>-0.250</td>
<td>-5.927</td>
<td>1.699          **</td>
</tr>
<tr>
<td>Youth Organizations per Child</td>
<td>0.012</td>
<td>362.450</td>
<td>2005.431</td>
</tr>
<tr>
<td>High School Activities per Child</td>
<td>-0.044</td>
<td>-62.842</td>
<td>120.172</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>-0.023</td>
<td>-1242.740</td>
<td>3750.140</td>
</tr>
<tr>
<td>Single Parent Families</td>
<td>0.545</td>
<td>1.892</td>
<td>0.256          **</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>-0.332</td>
<td>0.000</td>
<td>0.000          **</td>
</tr>
</tbody>
</table>

N = 114  \quad R^2 = 0.511
*p<.05,  **p<.01
The only community connections variables that are significant in the youth success models is high school activities per child which significantly predicts high school dropout rate and the Social Capital Index which significantly predicts teen fertility.

The family connection variable, single parent families, is the variable most frequently significant in the four youth success models. It is significant in all the models except in the model predicting college attendance. The physical capital variable, median family income, is significant in two of the four youth success models including college attendance and teen fertility.

It was hypothesized that the existence of social capital as measured by the Social Capital Index would be correlated with the community connections available in the county.

H2. Social capital as measured by the Social Capital Index will be correlated with the other youth centered measures of community connections.

In this way the measures of youth connections would be associated with the wider availability of social capital in the county. The Pearson correlations between social capital and the measures of youth connections are presented in Table 6.
The measures of youth connections are not significantly correlated with the Social Capital Index. Since there is no connection between the Social Capital Index and the measures of youth connections, the other two independent variables are tested to see if the Social Capital Index is correlated with any of the other independent variables in the study. Only median family income is significantly correlated with the Social Capital Index.

Table 6 - Correlations Between Social Capital and Youth Connections

<table>
<thead>
<tr>
<th>Correlations with Social Capital Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Organizations per Child</td>
<td>0.072</td>
</tr>
<tr>
<td>High School Activities per Child</td>
<td>0.059</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>0.089</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>0.300 **</td>
</tr>
<tr>
<td>Single Parent Families</td>
<td>0.006</td>
</tr>
</tbody>
</table>

**p<.001
2-tailed
Chapter 5 - Discussion

Consistent with previous research, this study found that the variable most associated with youth success is the percentage of single parent families in the county. Two parent families likely have more time available to spend time with their children than do single parent families. Two parent families may also have less stress and more consistent rules and boundaries. The availability of family support seems essential to youth success. It may be important for future research to explore ways for community supports to improve family connections.

Median family income is the variable second most associated youth success. It is important for youth to have physical capital along with social capital. Income can provide opportunities for youth to participate in for pay activities and can provide educational materials such as books. Median family income is the only variable significant in predicting college attendance in the study. This indicates that of all the youth success variables, college attendance will be the most difficult to improve without removing the financial barriers that seem to dictate the ability of students to go on to college. Community connections are not currently sufficient to makeup for financial deficits in counties with low college attendance.

In this study I expected that the community connections available to youth in the form of community social capital (as measured by the Social Capital Index), youth organizations per child, high school activities per child, and private schools per child would all work to help positively predict successful youth outcomes (lower dropout rate, higher college attendance, lower juvenile delinquency, and lower teen
fertility). This study showed that each community connection variable had different associations with the different youth outcomes.

It matters how social capital is measured. In this study the Social Capital Index is measured through associational densities, the response rate for the Census Bureau’s decennial population and Housing Survey, the percentage of voters who voted in presidential elections, and per capita non-profit organizations obtained from the National Center for Charitable Statistics. The Social Capital Index is based on community and civic participation rates of adults. This study seems to find little connection between the social capital level among adults and benefits for children. This seems to contradict Putnam’s results. One limitation of the study, however, is that the Social Capital Index focuses only on the state of Missouri, while Putnam looked at all the states in the country. These state level statistics may not be generalizable to the rest of the country, which may demonstrate higher levels of association between social capital and youth outcomes.

There are also limits to this study due to the use of the social capital data set created by Rupsingha, Goetz, and Freshwater. The use of the existing data set limits this study to looking at the county as the unit of analysis. Looking at the variables at this aggregated level limits the explanatory power of the model. More precise explanations could be teased out if the data was based on individual cases with each child being interviewed about the adult connections and social capital to which they are exposed.
The measure of community social capital is correlated with college attendance and teen fertility rates. It is these two measures of youth success that are also most significantly associated to median family income. This seems to indicate that this measure of community social capital is heavily connected to the median family income in the county. Areas with high median family incomes lend themselves to more social capital because they likely have more time and education to facilitate their community and civic involvement.

The variable measuring youth organizations per child also performs differently than expected. It was hypothesized that more youth organizations per child would be associated with youth success. In previous research, participation in youth organizations has had mixed results on participants. Some researchers find that participation in youth organizations has positive impacts on the participants while other research shows that participation in youth organizations results in negative impacts or no impacts on the participants. This research seems to side with more youth organizations having no correlation with youth success and some evidence of youth organizations associated with negative behavior.

In this study more youth organizations per child is significantly correlated with higher juvenile delinquency. Although the significance of this association is diminished in the regression model when controlling for single parent families and median family income the finding is still of concern. Youth organizations are being counted on to provide increasing levels of support for youth, especially those lacking
in family and physical capital, and rather than helping children, they are associated with more bad behavior.

A possible reason for the correlation between more youth organizations and higher juvenile delinquency may be explained by the quality of the programs available. There is no measure in this study for the quality of the youth organizations. All the youth organizations are counted equally. If the majority of the programs are low quality, this would help explain the correlation. It is also possible that youth organizations are targeted to areas that are most in need of youth supports or in areas where youth are seen as “at risk.”

High school activities per child are correlated with significantly lower juvenile delinquency. This seems to indicate that high school activities provide a different kind of support for youth than do youth organizations. This may be because high school activities are more structured or provide higher quality experiences for youth. The high school activity sponsors may also be more educated in youth development than employees in youth organizations. The difference between high school activities and youth organizations is something future research can explore. Perhaps youth organizations can be more successful in creating successful youth outcomes if they are structured like high school activities.

High school activities are also significantly correlated with lower dropout rates. It has been shown in previous research that youth who participate in high school activities are less likely to dropout. This study shows that the availability of more high school activities is associated with lower dropout rates even without
looking at participation. It is possible that having more activity options in high school gets more students involved in the high school community because there is more likely an activity that fits their interests. In the future it will be important to look into which high school activities have the greatest impact on youth outcomes. There is some support from previous research that athletic activities have the greatest impact on preventing dropouts and raising academic achievement. The way this study counted high school activities, counting each sport separately by gender and lumping art and music activities into single categories also gives the most weight to athletic activities. This study however did not explore the reason why more activities per child was associated with decreased dropout rates. It is possible that more activities a school is able to provide per child is associated with funding and faculty support available which may ultimately be the cause of the association. Or more activities may be provided at schools where there are more kids interested in participating. Future research should explore why more high school activities per child is associated with lower dropout rates.

The finding that high school activities are not significantly associated with all the youth outcomes may be due to differences in urban and rural areas. Urban and rural areas most often had fewer activities per child while suburban counties had more activities per child. This difference between urban, rural, and suburban counties could offset the impact of high school activities in suburban areas, and high school activities may have a greater association than that which shows in this study.
The variable private high schools per child did not function as expected. Coleman had indicated in his research that private high schools had higher levels of social capital based on the shared value system and connections between the parents, teachers, and students of the school. It was expected that these connections and social capital created by the private high schools would translate into increased youth success in the county.

In this study private high schools per child is only significantly correlated with dropout rate. It may be that there are too few private high schools in each county to impact youth success on a larger scale. The positive correlation between private high schools per child and dropout rate may be due to the way dropout rate is measured. This study only looks at dropout rates in Missouri public schools. It is possible that more private high schools pull more students likely of school completion due to increased financial and family supports away from the public schools leaving the dropout rate in the public schools higher. This is something that can be looked into in the future.

In the future, social capital and community supports for youth should be considered separately. When touting the benefits of social capital for youth, it will be important to discriminate what the social capital variable is actually measuring because different measures are associated with different youth success variables. Association and civic participation by adults as a measure of social capital in this study has limited predictive power on successful youth outcomes.
Because that social capital may not be a useful indicator of youth outcomes as focus by planners on building social capital may be misguided. Core family structure and financial resources of families in communities may play a more powerful role. For example, building playgrounds and community centers may be useful endeavors, but their capacity to lead to successful youth outcomes may be limited.

Alternatively, social capital indicators such as involvement in youth organizations, high school activities, and private schools, may not effectively measure the level of social capital for youth. Even if these social capital measures are valid, the results of this study indicate that they do not really provide for the social capital needs of youth. Other measures may do a better job of measuring social capital for youth, which in turn may make it easier for planners to develop interventions more appropriate to their unique needs and smaller social circles.
References


## Appendix

### Table 7: Independent Variable Correlations

<table>
<thead>
<tr>
<th></th>
<th>Social Capital</th>
<th>Youth Orgs. per Child</th>
<th>High School Activities per Child</th>
<th>Private High Schools per Child</th>
<th>Median Family Income</th>
<th>Single Parent Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital Index</td>
<td>1.000</td>
<td>0.072</td>
<td>0.059</td>
<td>0.089</td>
<td>0.300 **</td>
<td>0.006</td>
</tr>
<tr>
<td>Youth Organizations per Child</td>
<td>0.072</td>
<td>1.000</td>
<td>-0.055</td>
<td>-0.104</td>
<td>-0.047</td>
<td>0.049</td>
</tr>
<tr>
<td>High School Activities per Child</td>
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<td>-0.055</td>
<td>1.000</td>
<td>-0.223</td>
<td>-0.348 **</td>
<td>-0.394 **</td>
</tr>
<tr>
<td>Private High Schools per Child</td>
<td>0.089</td>
<td>-0.104</td>
<td>-0.223</td>
<td>1.000</td>
<td>-0.009</td>
<td>-0.019</td>
</tr>
<tr>
<td>Median Family Income</td>
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</table>

*p<.05, **p<.001