EGC

Economic Growth Centre
Working Paper Series

The Role of Families in Shaping Youth Social Participation: Evidence from Singapore

by

Irene Y. H. NG, Kong Weng HO and K. C. HO

Working Paper No: 2008/01

Copies of the working papers are available from the World Wide Web at:

Website: http://www.ntu.edu.sg/hss/egc/

RESEARCH ARTICLE

The Role of Families in Shaping Youth Social Participation: Evidence from Singapore

Irene Y.H. Ng[a*], Kong Weng Ho[b], and K.C. Ho[c]

[a] *Department of Social Work, National University of Singapore, Singapore;*

[b] *Division of Economics, Nanyang Technological University, Singapore;*

[c] *Department of Sociology, National University of Singapore, Singapore*

March 2008

---

[*] Corresponding author. Email: swknyhi@nus.edu.sg

RESEARCH ARTICLE

The Role of Families in Shaping Youth Social Participation: Evidence from Singapore

Abstract:

Youth participation in social groups is important in developing skills and experience for successful transition to adulthood. What kinds of families do youth who are active in social groups and who take on leadership positions come from? Using data from the National Youth Survey 2005, this research studies the social participation of Singaporean youth aged 15 -18. Through probit regression analysis, it examines how youth participation in Singapore is associated with two types of family characteristics. First, it examines the role of maternal education. As a proxy for social class, maternal education represents the roles of cultural capital formation and concerted involvement by middle class parents. Second, it studies the role of family challenge and support. Maternal education is found to predict both high participation and leadership. While additional family challenge induces greater participation, family support increases participation only when the level of support is high.

The importance of social participation in the transition to adulthood

Successful transition to adulthood is marked by the skills necessary to perform adult roles which are tied to different groupings – work, family and community. Such skills are not only economic but also social; they involve learning in settings outside of the classroom. Fine (2004) points out that becoming an adult is a process of progressively adopting a series of strategies that are deemed by young people to be appropriate and discarding those they have previously relied on.

An understanding of this process needs to be extended to the context in which learning occurs. Zill *et al.* (1995) suggests that programs in various social groups are important in developing skill, creating challenges and providing fulfilling experiences. Through group interaction and teamwork, young people pick up interpersonal and leadership skills important in life. More specifically, Eccles (2003, p.867) asserts that "participation in extracurricular and service learning activities has also been linked to interpersonal competence, self-concept, high school grade point average (GPA), school engagement and educational aspirations". We should also think of life course connections to social participation. A longitudinal study conducted by Mahoney, Cairns and Farmer (2003) found that consistent extracurricular activity involvement was linked to high educational status at young adulthood.

The role of the family

Given the benefits of social participation to youth transitions to adulthood, what family characteristics influence youth participation? The growing complexity of contemporary society implies that youth need a variety of skill sets in their transition to

adulthood. Within a complex and rapidly changing society, parents may be aware that their role in enabling a successful transition to adulthood is limited. They may supplement this limitation by encouraging their child to participate in a variety of group activities. An early start is made by parents when they encourage their child to participate in extracurricular activities in schools. For example, Fletcher and Elder (2000), using data from the 9th and 10th grade waves of the Iowa Youth and Families Project, found that both the behavioral model set by parents and their personal reinforcement of children's actions make significant differences in the extracurricular activity involvement of boys and girls.

Whether and to what extent parents encourage their children to take part in extracurricular activities may depend on social class. When participation is linked to social class, the consumption of goods and activities take the form of positional goods, which are commodities that serve as markers of social position and cultural style (Lury 1996, p.45-46). To the extent that mass consumption allows for a full range of affordable goods and services, and that social mobility continually reshapes class boundaries, then consumption of positional goods become a critical way for the middle and professional classes to distinguish themselves from other groups (Lury 1996, p.80-108). Thus, aside from education as the chief means of class reproduction, middle class parents socialize their children on cultural consumption of positional goods. Some evidence of these tendencies can be deduced from a longitudinal qualitative study of working class and professional families in Belgrade by Tomanović (2004). Tomanović (2004, p.348) found that the non-school activities of professional families are more varied compared to working class families and involved a range of social, educational, sports and cultural

activities, many of which were specifically designed for children (for example, theatre and cinema shows, children's music). In the second wave of research conducted seven years later, Tomanović (2004, p.348) found that these cultural tastes, which stem from exposure to particular sets of activities, persisted when the children were in their early teens. Tomanović (2004, p.354) concluded that family socio-economic backgrounds exerted strong influences on the cultural tastes of children.

Citing the work of Lareau (2003), Corsaro (2005) contrasted middle class with working class parenting styles. The working class style, termed as accomplishment of natural growth, viewed child development as a natural process. Its parenting practices stressed obedience with little parental intervention outside the home. In contrast, the middle class style, labeled as concerted cultivation, stressed heavy parental involvement outside the home with school and extracurricular activities and greater freedom within the home.

Empirically, how does one measure socio-economic class (SES)? Income, occupation, education, or combinations of the three have often been used (Bradley and Corwyn 2002, p.373). However, amongst the three indicators of class, an educated mother may have additional socialization effects on youth participation beyond effects of cultural capital that the class status itself derives. For example, West *et al.* (1998) found that it is maternal education levels rather than occupation of the household head that is significant as a predictor of parental involvement in children's education, specifically in terms of informal discussions with teachers, attendance at parent-teacher meetings, use of workbooks, and hiring of private tutors. Put in Corsaro's framework, mother's education may be the main source of concerted cultivation in a middle class family.

Besides class, what kinds of family dynamics encourage adolescents' involvement in activities? In studies on educational achievement, parent-child interaction has been found to be important. Fan and Chen (2001) conducted a meta-analysis to synthesize the quantitative literature about the relationship between parental involvement and student's academic achievement. They found an average correlation between parental involvement and academic achievement of "medium effect size". In terms of the type of parental involvement, they found that parental expectation of the children's achievement has the strongest relationship, whereas parental home supervision has the weakest relationship with student's academic achievement. A study by Csikszentmihalyi (2000) of 3604 American students from grades 6-12 in different types of schools and communities (Csikszentmihalyi 2000, p.25, 26) found the importance of family support and challenge to adolescents' school grades as well as their enjoyment of school and homework. Family support refers to responsiveness to the child of parents or more broadly of family members. "In a responsive family, the child is comfortable in the home, spends time with other family members, and feels loved and care for". "A family environment is challenging when parents expect adolescents to take on greater responsibilities, learn new skills, and take risks that lead toward greater individuation." (Csikszentmihalyi 2000, p.115, 116). Through multivariate analysis and qualitative narratives, Csikszentmihalyi (2000) concluded that "the most effective families appear to be those that give teenagers the sense that they are loved (support), together with the sense that much is expected from them (challenge)".

Do these findings on the relationship between family dynamics and educational outcomes extend to social participation? Does social class predict greater participation

among youth in Singapore? This study explores the relationship between the extent (frequency and leadership) of participation in various social groups and family factors, namely family socio-economic background (indicated by maternal education) and family environment (particularly in terms of family challenge and family support), among 15-18 year old youth in Singapore. In the Singapore context, the majority pattern is that young people live with their parents until they graduate, find jobs and get married. The age range selected for the study represents a dynamic period where the youth is still within the influence of parents but is at the stage where the transition to adulthood has already started in terms of a stronger bonding with their peer group and participation in a variety of group activities.

Data and methodology

Nature of the data

We conducted probit regressions of high participation and leadership on family characteristics and a set of demographic control variables. The data used comes from the 2005 National Youth Survey (NYS) commissioned by the National Youth Council. The total sample of 1504 young people 15-29 years of age was drawn from a sampling frame obtained from the Department of Statistics Singapore. The sample matched the national youth population by nationality, age, gender and ethnicity. The regressions in this analysis focused on the 501 youth who were aged 15-18.

Dependent variables

Active involvement in activities was derived from respondents' answers on eight activities: sport-related groups, arts and cultural groups, uniform groups, community

groups, welfare and self-help groups, religious groups, interest and hobby groups, and discussion groups. Leadership is a dichotomous variable taking the value 1 if the respondent indicated that he or she was in a leadership position in any of the activities. The high participation variable was created from respondents answers on their extent of involvement: "not at all", "less often", "once in 2-3 months", "once a month", "2-3 times a month", or "once a week or more". First, we selected respondents' answers for the activity that they were most involved in. Second, from this maximum participation pool, we identified the median level of participation, which was "once in 2-3 months". Finally, those who participated more than the median level was put in the high participation group and assigned the value 1. Hence, high participation means that the respondent's level of participation in the activity that he or she was most involved in is above the median participation level of all respondents in the activity that they were most involved in.

Independent variables

The NYS had adopted Csikszentmihalyi's concepts of family challenge and support as indicators of family dynamics. It extracted seven out of Csikszentmihalyi's original 32 indicators that were considered culturally relevant, three for family challenge and four for family support (Ho and Chia 2006). Respondents answered each item on a five-point likert scale from strongly agree to strongly disagree.

Hence, family dynamics in this study was confined to these two measures. We checked internal validity and reliability of the items through confirmatory factor analysis and Cronbach's alpha. Table 1 presents the items, their factor loadings and alpha values. Given that the number of items was few, the results were reasonable. For family challenge, the three items gave a combined α of 0.53, and the factor loading of each item

was at least 0.4. For family support, "the only time I'm being noticed is when I have a problem" had a factor loading of less than 0.4 and was dropped. The remaining three items yielded an *α value* of 0.52.

The family challenge and support factors were constructed by simply summing the three items that each factor was made up of, resulting in scales that ranged from 3-15. One item, "we can't get along with each other", was reverse coded. We further categorized families into four types: (1) high challenge and high support (HCHS); (2) high challenge but low support (HCLS); (3) low challenge but high support (LCLS); and (4) low challenge and low support (LCLS). Support and challenge were dichotomized into high and low by cutting at the median: families with values above the median were considered to be in the high category.

Table 1. Factor loadings and Cronbach's alpha of family challenge and support (N=500)

	Item	Loadings	
	Family Challenge	**I**	**II**
1	I'm expected to do well in all areas of my life	0.50	-
2	I'm expected to use my time wisely	0.50	-
3	I'm encouraged to pick up new interests and hobbies	0.43	-
	Cronbach's alpha	**0.53**	**-**
	Family Support	**I**	**II**
4	I feel appreciated for who I am	0.48	0.51
5	The only time I'm being noticed is when I have a problem	0.30	Dropped
6	We enjoy having dinner together and talking	0.49	0.52
7	We can't get along with each other (reverse coded)	0.52	0.43
	Cronbach's alpha	**0.51**	**0.52**

For SES, the NYS provides information on parental income, mother's education, and father's education. However, occupation was not reported. In addition, 40% of parental income was missing. With only education remaining as a proxy for SES, we have chosen to include mother's and not father's education because of the additional socialization effect that mother's education may have on youth's participation. As can be seen from Table A1 in the appendix, correlation between the non-missing cases of household or parental income, father's education, and mother's education are positive and high. Hence, we believe that mother's education is a fairly good proxy for SES. Mother's educational qualification takes on four values: "primary education & below" (up to 6 years of formal education), "secondary education" (between 7-10 years of formal education), "pre-university or polytechnic" (between 11-13 years of education), and "bachelor or graduate degree" (13 years of education or more).

Besides SES per se, mother's education further represents two class-based concepts. First, it represents cultural capital. To the extent that certain types of social activities add to cultural capital formation in ways suggested by Tomanović (2004), we expect higher involvements in such activities. This linkage is supported in Figure 1, which shows that children's leadership does not rise with mother's education except for arts activities. That mother's education correlates with leadership in arts activities is indicative of the link between family cultural consumption and youth participation in such activities, a point made by both Lury (1996) and Tomanović (2004).

Figure 1. Leadership in various types of social activities by mother's education level
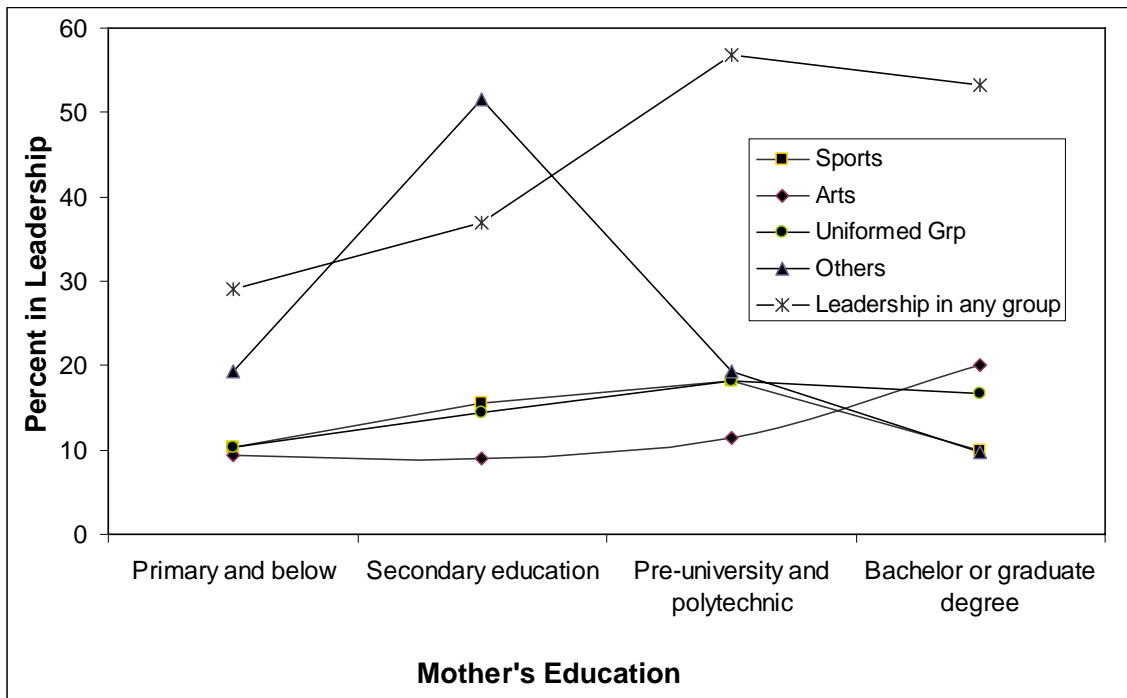
Table 2. Social participation and socially desirable attributes

A. Group Participation

Socially Desirable Attributes	High Group Participation	Low Group Participation	Difference
Multicultural Orientation			
Knowledge about other groups	50.7%	36.7%	14%*
Interpersonal Relationships			
Caring about other people's feelings	80.2%	70.3%	9.9%*
Good at making friends	73.7%	64.1%	9.6%*
Work well with others	75.1%	51.6%	23.5%*
Outward Orientation			
Public speaking	32.4%	16.4%	16%*
Adapt to change	66.2%	47.7%	18.5%*
Civic Involvement			
To be actively involved in local volunteer work	58.5%	39.1%	19.4%*
To be actively involved in overseas volunteer work	39.1%	23.4%	15.7%*

B. Leadership

Socially Desirable Attributes	Leader	Non-Leader	Difference
Multicultural Orientation			
Knowledge about other groups	52%	44.4%	7.6%
Interpersonal Relationships			
Caring about other people's feelings	80.5%	76.1%	4.4%
Good at making friends	77.7%	67.7%	10%*
Work well with others	74.3%	66.2%	8.1%
Outward Orientation			
Public speaking	38.6%	22.7%	15.9%*
Adapt to change	62%	61.2%	0.8%
Civic Involvement			
To be actively involved in local volunteer work	61.5%	49.1%	12.4%*
To be actively involved in overseas volunteer work	41.3%	31.7%	9.6%*

Note: The figures in the rows "Multicultural orientation", "Interpersonal relationships" and "Outward Orientation" represent percentages of respondents who responded "quite like me" and "very much like me"; the figures in the row "Civic Involvement" represent percentages of respondents who answered "somewhat important" and "very important" when asked about volunteer work in a local and overseas context respectively; * Chi-square test of difference significant at 5%.

Table 3. Cross tabulation of high participation and leadership in social groups

		Leadership		
		No	Yes	Total
High Participation	No	125	3	128
		(38.82%, 97.66%)	(1.68%, 2.34%)	(25.5%,100%)
	Yes	197	176	373
		(61.18%, 52.82%)	(98.32%, 47.18%)	(74.5%,100%)
	Total	322	179	501
		(100%, 64.3%)	(100%, 35.7%)	

Note: Figures in parentheses refer to (column percentage, row percentage).

Second, as Corsaro (2005) have reported, the concerted cultivation strategy adopted by middle class families implies a higher likelihood that youth of better educated mothers are likely to participate and take leadership positions in social activities. The role of mother as an agent of socialization can be seen from sample youths' responses on who they turn to for advice or when troubled. When asked "who is the first person you would turn to when you are worried or troubled", 40.72% of our 501 teenage students chose "mother", followed by "friend" (31.14%), and "father" (11.18%). In another question when the youth was asked "who is the first person you would turn to for advice on important life decision", 45.11% indicated "mother", followed by "father" (20.36%), and "Friend" (12.97%). The closeness of mothers to our teenage students explains why mother may be an agent of socialization.

Finally, our analysis controlled for family disruption (=1 if parents were separated, divorced, widowed, or deceased), age, gender (=1 if the respondent is female), and ethnicity (= 1 if the respondent is non-Chinese).

Descriptive analysis

One motivation of this study was the relationship between social participation and the skills for transition to adulthood. Table 2 relates the dependent variables in this study, participation and leadership in social groups, to a set of socially desirable skills and orientation. Section A of the table indicates that teens with a high frequency of group participation are more likely to cite a range of social skills involving interpersonal relationships and public speaking. This group of active participants is also more likely to mention being knowledgeable about the values and beliefs of other ethnic and religious groups and report that they adapt well to change. Involved youth are also likely to mention volunteering as important in their lives. Section B examines the relationship between leadership and the same set of attributes. The data indicates that leaders are more likely to rate higher on ability to make friends, public speaking and volunteering.

Taken together, both sections indicate that frequent group involvement coupled with leadership correlates significantly with a set of social skills, multicultural knowledge as well as civil orientations in the form of volunteerism. These links lead us to suggest that participation and leadership in social groups bring young people into healthy social situations where they pick up a range of socially desirable skills and orientations.

We also looked into the relationship between leadership and social participation Table 3 shows that 74.45% of the 501 teenage students had high participation in a social activity while 35.73% of the teenage students held leadership positions. It also shows that leaders are very likely to have high participation (98.3%) but only a portion of those with high participation are leaders (47.2%). Pearson χ^2 test shows that row and column are not

independent. In other words, we do not observe sleeping or inactive leaders; leaders are leaders by examples and are more involved in the social activities.

Table A2 provides the descriptive statistics of the independent variables. A key variable in the analysis is family environment, and as discussed in the earlier segment of the paper, this is represented by the degree of family support as well as family challenge. The score of family support ranges from 6-15, with a mean of 12.42 and a standard deviation of 1.79. As for family challenge, the score ranges from 5-15, with a mean of 11.33 and a standard deviation of 1.83.

Moving to categories of family challenge and support, Table A2 shows that the distribution is even: 25.75% of the teenage students have high family support and high family challenge (HSHC), 21.36% have high support and low challenge (HSLC), and 20.96% have low support and high challenge (LSHC). Relating the four types of family environment in Table A3, we see that students receiving high support are more likely to face high challenge relative to those with low support; similarly, those facing high challenge are more likely to receive high support relative to those facing low challenge. Pearson χ^2 test shows that row and column are not independent.

The other key independent variable is mother's education level. 22.55% of our sample has missing observations for this key variable. Hence, using the algorithm detailed in van Buuren *et al*. (1999), we imputed values in this single variable based on multiple regression (ordered logit model) on father's education, parental income category, family disruption, female, non-Chinese, and age. We included father's education and parental income in the list of covariates because mother's education represents SES and is correlated with father's education and parental income as given in

16

Table A1. Estimations were bootstrapped, giving an advantage of robustness as the distribution of coefficients were no longer assumed to be multivariate normal. Different runs of imputation give similar breakdown of the imputed mother's education and therefore, the results to be reported in the next section are not changed with different runs of imputations. The breakdown of the imputed mother's education is given in Table A2: 46.51% of the mothers have primary education and below, 37.92% with secondary education, 9.18% with pre-university or polytechnic education, and 6.39% with bachelor or graduate degree.

In terms of sex and ethnicity, the profile of the sample youth is consistent with the national profile, which is about a one-to-one male-female ratio, but a three-to-one ratio of Chinese to other ethnicities, which consisted mainly of Malays (16%) and Indians (8%). Age wise, the sample has an over-representation of 15 year olds and an under-representation of 18 year olds. There are only 30 (6%) disrupted families in the sample.

Multivariate analysis

Table 4 shows results from two sets of probit regressions. Specifications (1) and (2) are regressions for high participation in any social activity while specifications (3) and (4) study the association with leadership in any social activity. We examined two possible ways that family support and challenge may be related to participation: first, whether incremental increases in family support or family challenge may influence social participation and leadership of youth; second, whether participation may differ by different categories of family support and challenge, specifically high or low family support or challenge. For the second channel of influence, the reference group is family

with low support and low challenge. Specifications (1) and (3) examine incremental changes while specifications (2) and (4) study categorical changes, which are changes from low to high levels of family support and challenge.

Mother's education has a high statistically significant impact on high participation as well as leadership of the youth in social activities. An improvement in mother's education from secondary to post-secondary increases the probability of high participation in social activities of the youth by about nine percentage points. The same increase in mother's education enhances the probability of the youth taking up leadership position by about 10 percentage points. Mother's education represents her ability as an agent of socialization and hence a higher level of mother's education leads to higher participation and leadership of the youth in social activities.

Among the control variables, gender, ethnicity, and age do not show any statistically significant impact on high participation or leadership of the youth in social activities. Disruption in family such as divorce or separation of parents, however, has a positive and statistically significant impact on the high participation of youth in social activities, increasing the probability by about 15 percentage points. The youth from disrupted families may be finding alternative channels of self expression and involvement in social activities, a substitute of family activities. However, family disruption does not have any statistical significant impact on leadership of the youth in social activities. One caveat is that the results may be inflated or deflated by the small number of disrupted families (6%) in the sample.

Table 4: Marginal effects on high levels of participation and leadership in social activities

	(1)	(2)	(3)	(4)
	High Participation	High Participation	Leadership	Leadership
Family Support	0.005		0.005	
	(0.011)		(0.013)	
Family Challenge	0.027		0.013	
	(0.011)*		(0.013)	
HSHC		0.110		0.044
		(0.045)*		(0.059)
HSLC		0.092		0.053
		(0.047)*		(0.062)
LSHC		0.077		-0.051
		(0.049)		(0.061)
Mother's Education	0.088	0.086	0.101	0.100
	(0.024)**	(0.025)**	(0.025)**	(0.025)**
Family Disruption	0.150	0.154	0.020	0.023
	(0.057)**	(0.056)**	(0.094)	(0.095)
Female	-0.047	-0.053	-0.037	-0.046
	(0.040)	(0.039)	(0.044)	(0.044)
Non-Chinese	0.025	0.028	0.009	0.023
	(0.046)	(0.046)	(0.053)	(0.053)
Age	-0.027	-0.027	-0.029	-0.031
	(0.018)	(0.018)	(0.021)	(0.021)
N	501	501	501	501

Note: Standard errors in parentheses; *significant at 5%; ** significant at 1%

After controlling for the above socio-demographic background variables, what is left for the influence of family support and family challenge? Specification (1) shows that incremental changes in family challenge increases social participation significantly. A one-point increase of family challenge increases the probability of high participation by 2.7 percentage points. Since the score of family challenge ranges from 5-15, we may interpret this as follows: a 10% increase in the score of family challenge will increase the probability of high participation of the youth by 2.7 percentage points. How about categorical changes in family support and challenge? Specification (2) shows that a high support family background leads to high participation in social activities, regardless of whether the family provides high or low challenge. Compared to students with low support and low challenge family backgrounds, teenage students from families with high support and high challenge are 11 percentage points and those from families with high support but low challenge are nine percentage points more likely to have high participation in social activities. In summary, we see an incremental impact of family challenge. However, only high levels of family support are influential on active participation of the youth in social activities.

The results of specifications (3) and (4) show that family support and challenge do not have an impact on leadership of youth. Leadership is mainly influenced by mother's education, which represents the class position of the family as well as an agent of socialization for the youth.

Conclusion

The transition to adulthood will require young people to acquire a variety of skills, skills which may be beyond the formal academic learning offered within the classroom. We started this paper by noting how participation and leadership in various social groups have benefits for its members in terms of social skills and orientations which complement the academic qualifications acquired through formal education. We had wanted to do a more detailed analysis of how families may matter in the acquisition of these informal skill sets.

The results took us in two main directions. First, there was a clear indication of how family environment matters to participation. While providing greater challenges to young people serves as impetus to be more involved, family support becomes important only when the level of support is high. Specifically, as their families' expectations on them to do well, spend their time wisely, and develop new interests increase, youths are more challenged to be active in social groups. Why does family support not present similar incremental effects? This lack of incremental association between family support and youth participation makes sense, actually. There is no reason why get along well with family members and feeling appreciated by them should have direct bearings on participation in social groups. However, to the extent that highly supportive families result in youth who are more "optimistic and open to experience", as found by Csikszentmihalyi (2000, p.119), family support, when high, is important in encouraging greater participation. Put together, a family where both challenge and support are high provide the most conducive environment for youth to be actively engaged in social groups.

Second, we found that mother's education level was a significant predictor of social participation <u>and</u> leadership. Our findings suggest class effects through cultural capital formation and concerted cultivation. The positional goods that middle class families consume and hence the social activities that they are engaged in provide the cultural capital for youth to engage in organized activities. For example, youth who grow up attending piano classes and theatre performances with their parents may be more likely to participate actively in a formal arts group. In addition, educated mothers work more intensively to involve their children in a variety of extracurricular activities in school and non school settings and also encourage their children to take up leadership positions. An example of such concerted efforts is indicated in a focus group session with parents of a well-known school in Singapore:

Moderator: Do you think that your kids learn anything from extracurricular activities?

Parent A: Yes, definitely. Teamwork (and) experiencing disappointment. My son was in primary school, he went for badminton competition amongst the schools, his team when they lost it, they just cried in the hall, so (when he came home) my husband said, "good! Learn disappointment early. So that they know how to handle disappointment in later life"

Parent E: We purposely put them (her 2 sons) in a uniform group. They learn a lot, basic things like keeping their uniforms, and teamwork and team spirit.

Parent D: My child, I encourage him to join the National Police Cadet Corps. And as they get older, they have to be leaders to the younger kids, so it's very good, they learn leadership… so I think ECA and all these extra activities are very important in building the child's own abilities, which I think if the parents (have to teach these abilities) themselves, it's difficult to teach him all these.

(NYC Focus Group session with parents, 28th October, 2005)

There was a third finding in the paper, that disrupted families were more likely to join social groups. This result presents interesting possibilities but unfortunately may be

spurious because the number of disrupted families in the sample is small. Perhaps family disruption exert a push for kids to join social groups for the compensatory support and identity such groups offer. This kind of push towards extra-familial engagement could have risk or protective functions. On one hand, Eccles *et al.* (2003) suggests that active engagement in organized activities protect young people from delinquency through the provision of a positive environment of friends, team spirit, and achievement. However, social groups could very well be avenues for meeting other delinquent youth who engage in anti-social activities outside of the organized activities. These conjectures are interesting topics that future research could explore. Future research can also explore other types of family environment factors besides challenge and support and other measures of SES besides mother's education.

A main methodological limitation in studies of familial effects on youth can be summed up in the word endogeneity. That is, although the analysis treats the family variables as independent predictors, they may be endogenous rather than independent in two ways. First, as a cross sectional study, there could be bidirectional effects. While family environment influences children's social participation, children's behavior could also influence family dynamics. Second, there could be important family characteristics unavailable in the data but correlated with the factors included in the analysis. In this case, the variables in the analysis could be reflecting the effects from such unobservable variables. Therefore, although multivariate results are more robust than bivariate correlations, we cannot claim causality.

However, the strong associations we have found between youth's social participation and an important dimension of family environment (challenge and support)

on one hand and a key indicator of class on the other compel practical implications for agents in youth's lives, including parents, teachers, youth workers and other adult role models. To the extent that social participation matters in creating a set of desirable skills that support the youth in the transition to adulthood, concerted effort to engage youth who do not have the class advantage or supportive-challenging families becomes important. Non family mechanisms such as school and family service counselors become crucial in guiding young people to meaningful and rewarding social activities.

Acknowledgements

References

Bradley, R.H. and Corwyn, R.F., 2002. Socioeconomic status and child development. *Annual review of psychology*, 53, 371-399.

Corsaro, W. 2005. *The sociology of childhood*. Thousand Oaks: Pine Forge Press.

Csikszentmihalyi, M. and Schneider, B. 2000. *Becoming adult.* New York: Basic Books.

Deleire, T. and Kalil, A., 2002. Good things come in threes: Single-parent multigenerational family structure and adolescent adjustment. *Demography,* 39(2), 393-413.

Eccles, J.S. *et al.*, 2003. Extracurricular activities and adolescent development. *Journal of social issues,* 54(4), 865-889.

Entwisle, D.R. and Alexander, K., 1993. Entry into school: The beginning school transition and educational stratification in the United States. *Annual review of sociology*, 19, 401-423.

Fan, X. and Chen, M., 2001. Parental involvement and student's academic achievement: A meta-analysis. *Educational psychology review*, 13(1), 1-22.

Fine, G.A., 2004. Adolescence as cultural toolkit: High school debate and the repertoires of childhood and adulthood. *Sociological quarterly,* 45(1): 1-20.

Fletcher, A.C. Elder, G.H. and Mekos, D., 2000. Parental influences on adolescent involvement in community activities. *Journal of research on adolescence,* 10(1), 29-48.

Fredricks, J.A., Simpkins, S. and Eccles, J.S., 2005. Family socialization, gender, and participation in sports and instrumental music. *In* C.R. Cooper, *et al*., eds. *Developmental pathways through middle childhood: Rethinking contexts and diversity as resources*. New Jersey: LEA Publishers, 41-62.

Jacobs, J.E., Vernon, M.K. and Eccles, J.S., 2005, Activity choices in middle childhood: The roles of gender, self-beliefs and parents' influence. *In* J.L. Mahoney, R.W. Larson and J.S. Eccles, eds. *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*, New Jersey: LEA Publishers, 235-254.

Lafontaine T., Ferguson, M., and Wormith, J.S., 2005. Street gangs: A review of the empirical literature on community, corrections-based prevention, intervention and suppression strategies [online].

Available from: http://www.cps.gov.sk.ca/GangReportforCPSJune30_05.pdf [Accessed 19 February 2008].

Li, X., *et al.,* 2002. Risk and protective factors associated with gang involvement among urban Afro-American adolescents. *Youth and society*, 34(2), 172-194.

Lury, C., 1996 *Consumer culture*. New Brunswick: Rutgers University Press.

Mahoney, J.L., Cairns, B.D., and Farmer, T.W., 2003. Promoting interpersonal competence and educational success through extracurricular activity participation. *Journal of educational psychology*, 95(2), 409-418.

Rathunde, K., 2001. Family context and the development of undivided interest: A longitudinal study of family support and challenge and adolescents' quality of experience. *Applied developmental science,* 5(3), 158-171.

Tomanović, S., 2004. Family habitus as the cultural context for childhood. *Childhood*, 11, 339-359.

Van B.S., Boshuizen, H.C., and Knook, D.L., 1999. Multiple imputation of missing blood pressure covariates in survival analysis. *Statistics in medicine*, 18, 681-694.

West, A., Noden, P., and Edge, A., 1998. Parental involvement in education in and out of school. *Education research journal*, 24(4), 461-484.

Zill, N., Nord, C.W., and Loomis, L.S., 1995. *Adolescent time use, risky behavior, and outcomes: An analysis of national data.* Rockville, MD: Westat.

Appendix

Table A1. Correlation matrix of parent's income, father's education and mother's education (N=245)

	Parental Income	Father's Education	Mother's Education
Parental Income	1.0000		
Father's Education	0.5475	1.0000	
Mother's Education	0.4898	0.5453	1.0000

Table A2. Summary statistics of selected variables (N=501)

Family Characteristics	Percent	Mean	Std Dev	Min	Max
Support and challenge indices					
Family support	-	12.42	1.79	6	15
Family challenge	-	11.33	1.83	5	15
Support and challenge categories					
HSHC: high support, high challenge	25.75				
HSLC: high support, low challenge	21.36				
LSHC: low support, high challenge	20.96				
LSLC: low support, low challenge	31.94				
Mother's highest qualification					
Primary education & below	46.51				
Secondary education	37.92				
Pre-university and polytechnic	9.18				
Bachelor & graduate degree	6.39				
Family Disruption	5.99				
Control Variables					
Female	48.10				
Non-Chinese	24.55				
Age					
15 years old	30.14				
16 years old	26.55				
17 years old	26.75				
18 years old	16.57				

Table A3. Cross Frequency tabulation of high-low support-challenge

		Family Challenge	
		Low	High
Family Support	Low	160	105
		(59.93%, 60.38%)	(44.87%, 39.62%)
	High	107	129
		(40.07%, 45.34%)	(55.13%, 54.66%)

Note: Figures in parentheses refer to (column percentage, row percentage).