

## Does Living Apart from Parents or School Enrollment Matter to Adolescents' Mental Health Risk?

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### Abstract

*The objective of this study is to examine the effects of the presence of parents and school enrollment on mental health among youths aged 15 years. The study employs data from a survey on mental health among 5,238 youths aged 15 who applied for an identification card for the first time at district offices of three provinces from the northern and central regions including Bangkok between March 2009 and April 2010. Findings show that youths who are attending school, whether their parents are present or absent from the household, are less likely to have mental health risks than those who are out of school. This implies that schooling is more important for adolescent mental health outcomes than the presence of parents. Hence, educational services need to enhance or convince youth and their families that they should stay in school as long as possible. Moreover, educational services need to find resources to support low-income students so that they are able to remain in school.*

### Keywords

*Mental health risk; schooling; youth; family; living arrangement; presence of parents*

### Introduction

Mental health profoundly affects how humans manage their life. People with poor mental health usually have problems adapting to their environment and society around them, and they do not learn up to their potential. In addition, they are not able to conduct their lives in ways that benefit themselves and others. This is especially true in considering the mental health of adolescents. These youth are already going through a period of transition from childhood to adulthood and are at higher risk of ignoring warnings, breaking laws, having sex prematurely, experimenting with drugs, having difficulty in school, and suicide (Education News Team, 2012; Limsuwan, n.d).

The influence of significant persons – parents, siblings, peers – and the school (teachers and fellow students) have been found to affect the mental health status of children and adolescents (Ketman, 2007). Research has found that when parents engage in activities with their children, show an interest in them and acceptance of them, the mental health of adolescents is strengthened (Furstenberg & Hughes, 1995; Wickrama & Bryant, 2003; Gray, Chamratrithirong, Pattaravanich & Prasartkul, 2013). By contrast, having only one parent in the household (the

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father or the mother) is associated with adolescent depression (Wickrama & Bryant, 2003). In addition, the quality of the school experience also affects the strength of adolescent mental health (Furstenberg & Hughes, 1995).

In Thailand, there is scant research directly investigating youth mental health. Most of the research focuses on adolescent risk behavior, violence and drug abuse. A number of studies identify the family as an important factor associated with youth risk behavior. For example, youths who witnessed abusive behavior from their parents – either toward each other and/or the youth – were found to be more likely to become abusive to others (Tanimpas, 1998; Archavanitkul, Kanchanachitra & Im-em, 2005). Studies of drug addiction among youth found that addiction was associated with families that lacked warmth or determination, or in which the parents fought; youths who needed group acceptance were also found to be at risk of addiction (UNICEF, 2003).

Family factors have also been found to be associated with attempted suicide among Thai youths. These factors include miscommunication among family members, parental verbal abuse such as cursing of children, parents and youths not spending time in constructive conversation, forceful and dictatorial child-rearing methods by parents, a stressful atmosphere, and negative attitude toward the family among adolescents (Thongpertsri & Prabkree, 2008). A recent study on happiness among Thai adolescents suggests that family factors, such as family structure, relationships, and cohesion, have greater importance than non-family factors (Gray et al., 2013). However, the influence of the school on the mental health of Thai youth is important also. In today's society, parents have less time to spend with their children than in the past due to economic pressures to provide adequately for the family. The parents also may believe that the school will take good care of their children and train them not only in academic subjects, but also in proper behavior and mental health. As a result, the school has an increased burden to build a foundation of knowledge as well as life skills and promote the mental health of their students (Jamuang, 2004).

Coleman's study (1988) stresses that family relationships, along with other institutions such as the school, impact on the mental health of young students and adolescents. The term "social capital" is the basis of a strategy to increase opportunities for youth to achieve success in life. Coleman's definition of social capital is rather broad, and overlaps with the concepts and process of mental health development and how to successfully modify this for adolescents with risk behaviors (Garmezy & Rutter, 1983). He explains social capital as the product of the parent-child relationship (having both parents in the household and being interested in their child's welfare). Parents who support their children will generate social capital in the family. A strong parent-child relationship builds stability and reduces adolescent rebellion. Several other studies suggest that aspects of the family role, such as parental affection, parent-child interaction, and a stable family life, are regarded as robust determinants of adolescent development (Garmezy & Rutter, 1983; Offer & Offer, 1975; Brumrind, 1991). Hence, social capital in the family, such as spending time with family members and conducting activities such as chores jointly with children, is a form of parental investment in the next generation (Coleman, 1988).

Coleman (1988) also suggests that social capital outside the family has a key role in child development. Evidence from the National Longitudinal Survey of Adolescent Health in the U.S. reveals that not only family factors (e.g. family poverty, parental education, parental warmth,

and household size) can play an important role in mental problems, but that environmental factors (e.g. peer relations, and school involvement) are critically associated with the risk of mental problems and delinquent behavior (Gerard & Buehler, 2004). A study of optimism in early adolescence in Canada postulates that support from peers at school contributes to adolescents' optimism, whereas support from teachers, counselors or coaches at school is not significantly associated with adolescent's positive development (Thomson, Schonert-Reichl & Oberle, 2014).

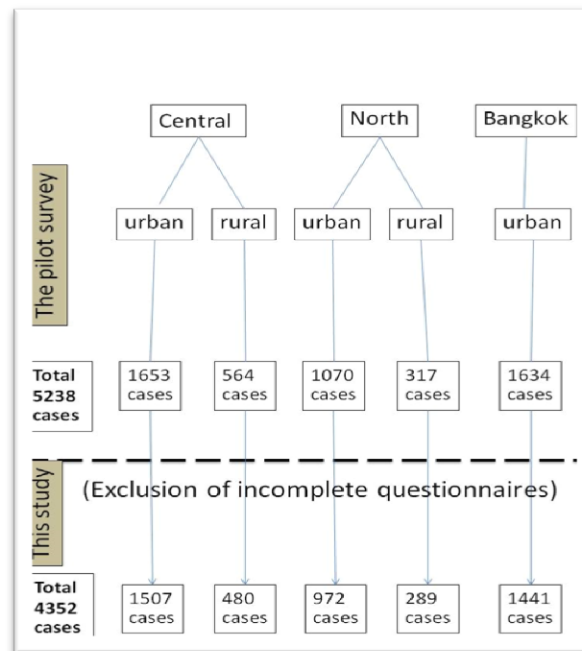
The objective of this study is to investigate the role of social capital both within the family and outside it on Thai adolescent's mental health. Presence of parents in the youth's household is used as a measure of social capital in the family, and school enrollment is used to represent social capital outside the family. The objective of this study is to examine whether these factors identified in studies mainly set in Western countries are associated with the risk of mental health among Thai youths aged 15 years.

## Methodology

### *Source of data and sample size*

This study employs secondary data on the mental health status of Thai youths from a pilot survey among Thai youth aged 15 who were contacted when they appeared at their local district office to obtain their national identification (ID) card for the first time. The survey was conducted in one urban and one rural district of two provinces in the central and the northern regions, and in two districts of Bangkok. Thus the urban area is drawn from four districts (two in Bangkok and one each from municipal area of the two provinces) and the rural sample from two districts (one from each of the two provinces). Since the process of being issued with an identification card only takes about 15 minutes, the survey was designed to be short and was self-administered. Officers at the local district office were asked by the researchers to give the questionnaire to every youth aged 15 who came in to be issued their ID card.

The questionnaire contained items on general characteristics of the respondent such as sex, age, household size, education, household economic status, living arrangement and residence. Additionally it included the 15-item short form of the Thai Mental Health Index (TMHI.15) developed by Mongkal et al. (2009). The total sample size obtained from the pilot survey was 5,238. For this analysis 4,689 cases were utilized after excluding incomplete questionnaires (see Figure 1). Of the total sample of 4,352 youths, 2,324 were male and 2,365 were female. The majority were currently full-time students (92.8%) with only 337 youths not in school (7.2%).



**Figure 1:** Sample size of youth completing the pilot survey by province and rural-urban status

## Measures

### Independent Variables:

**Individual factors:** Participants were asked on the survey to indicate their sex (male or female), household size (3 or fewer members, 4-5 members, or 6 or more members), and current or completed level of education (primary school, lower high school, or upper high school).

**Economic status:** Economic status was measured by asking participants to select their household economic status in three categories (poor, medium, or rich).

**Presence of parents:** Participants were asked to choose one of four categories describing their living arrangement relevant to the presence of parents at home (living with both father and mother, living with either father or mother, living alone, or living with others).

**Schooling:** Participants were asked about their current school enrollment (currently in school or out of school).

### Dependent Variables:

**Mental health status:** The 15-item Thai Mental Health Index (TMHI.15) was included in the survey to measure mental state, mental capacity, mental quality, and supporting factors (see Table 1). The TMHI.15 was developed and reviewed for content validity by scholars from the Mental Health Department, Ministry of Public Health (Mongkol et al., 2009). Each item has four rating-scale alternatives (not at all=0, somewhat=1, a lot =2, and all the time=3). Thus, the maximum total score of the TMHI equals 45. The final index was used to discover the normal range for mental health status among a population aged 15 to 59. The results showed that the

normal range of scores (between the 25<sup>th</sup> and 75<sup>th</sup> percentile for the population) lie between 28-34 points. The scores are thus classified into three levels of mental health, where those who score lower than the normal range (27 points or less) are considered “at risk”, normal scores are defined as from 28-34 points, and scores that are higher than the normal range (35 points or more) are considered “good” (Mongkol et al., 2009). Today, the tool is widely employed to measure mental health status among Thai people.

### *Analysis*

Data were analyzed by logistic regression using the dependent variable mental health risk (where a value of 1 was assigned to risk if the mental health score was below the “normal” level and 0 if the mental health score was in the “normal” or “good” level).

### *Limitations of the study*

Several independent variables associated with mental health status were not included on the survey (such as community participation, parental involvement, and peer relations). In addition, most of the independent variables for the logistic regression analysis in this study are nominal scale.

## **Results**

### *Characteristics of the data related to mental health status*

Results from responses to the 15-item Thai mental health index (TMHI) are shown in Table 1. The items with the highest scores include family factors (last three items) and psycho-emotional state at the time of the response (first five items). The items scoring lowest include emotional capacity or the ability to resolve life problems, confidence in confronting adversity, acceptance of misfortune, and ability to control emotions. The average score for the TMHI in this sample was 32.2 which falls into the “normal” range for mental health.

**Table 1:** Percent and mean score of responses to the THMI.15 (n=4,689)

Question	Self-reported status				Total	Mean score (range = 0-3)
	Not at all	Some-what	A lot	All the time		
1. Are you satisfied with your life?	0.8	10.3	61.3	27.6	100.0	<b>2.16</b>
2. Do you feel good?	0.5	11.8	64.5	23.2	100.0	<b>2.10</b>
3. Do you feel bored or discouraged with your daily life?*	39.6	53.1	6.8	0.6	100.0	<b>2.32</b>
4. Do you feel disappointed in yourself?*	52.1	43.0	4.4	0.6	100.0	<b>2.47</b>
5. Do you feel that your life has nothing but trouble?*	59.8	33.8	5.2	1.2	100.0	<b>2.52</b>
6. Can you cope with difficult problems you face?	6.0	37.7	46.4	9.8	100.0	<b>1.60</b>
7. Do you feel you can control your emotions when in a stressful or abusive situation?	4.1	35.7	49.6	10.5	100.0	<b>1.67</b>

Question	Self-reported status				Total	Mean score (range = 0-3)
	Not at all	Some-what	A lot	All the time		
8. Do you feel confident in your ability to confront adversity in your life?	8.4	41.4	42.1	8.1	100.0	1.50
9. Do you feel empathy for others who are suffering?	2.0	19.2	58.5	20.3	100.0	1.97
10. Do you feel happy when you can help others?	2.8	13.1	53.6	30.5	100.0	2.12
11. Do you help others when the opportunity arises?	0.8	19.4	61.4	18.4	100.0	1.97
12. Are you proud of yourself?	0.7	14.2	51.8	33.3	100.0	2.18
13. Do you feel safe and secure when with your family?	0.4	5.2	39.3	55.1	100.0	2.49
14. Are you confident that your family would care for you well if you were seriously ill?	0.6	4.6	32.4	62.4	100.0	2.57
15. Are the members of your family household loving and close to each other?	0.5	4.9	31.7	62.9	100.0	2.57
<b>Total</b>						<b>32.20</b>

Remarks: \* denotes that this item has negative implications for mental health. Thus in the total index the scoring was reversed for these items such that “not at all” = 3; “somewhat” = 2; “a lot” = 1; and “all the time” = 0

The study found that most respondents scored in the normal range (see Figure 2). Nevertheless, 17.6% of the youth in the sample are classified as having “at risk” mental health status. When comparing scores by school enrollment status (Figure 1), those youths who are not in school have twice the proportion of risky scores than the in-school group (37.7% versus 16.1%). Also, when comparing scores by the presence of parents in the household (Figure 3), those youths living with a single parent have nearly double the proportion of poor scores than those living with both parents (25.3% versus 13.6%). In addition, the proportion of youths living with a single parent who are classified as “at risk” is higher than that of youths living alone or with others (25.2% versus 18.0%)

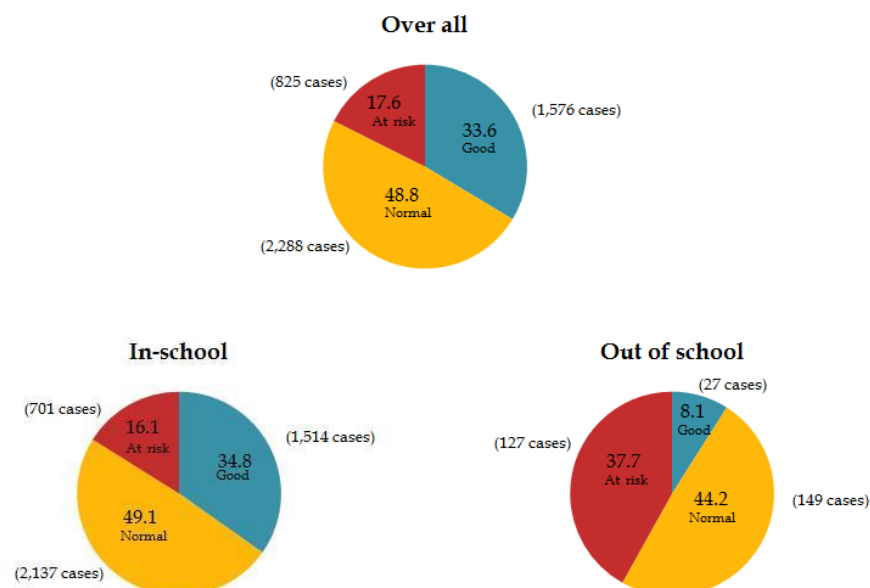
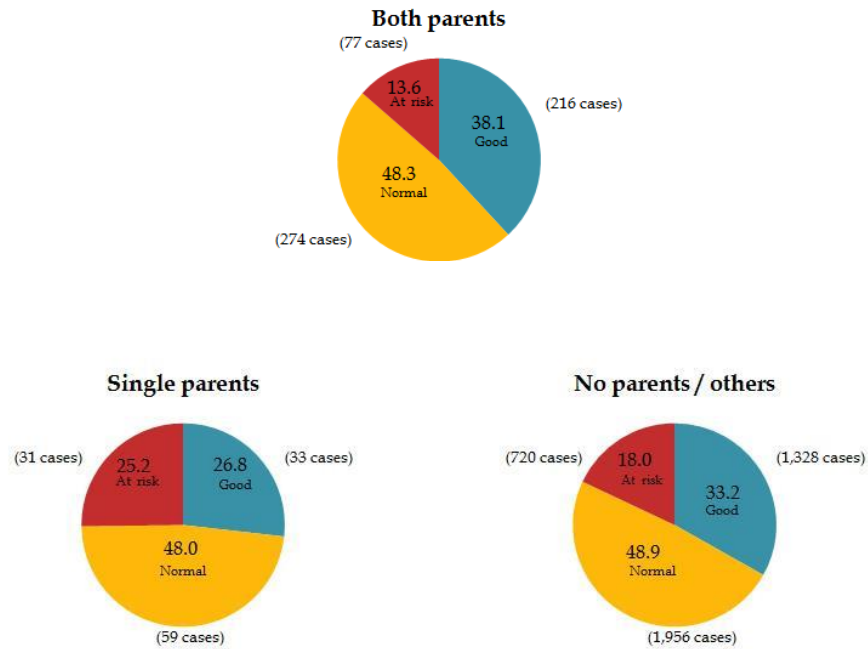


Figure 2: Mental health status by school enrollment status

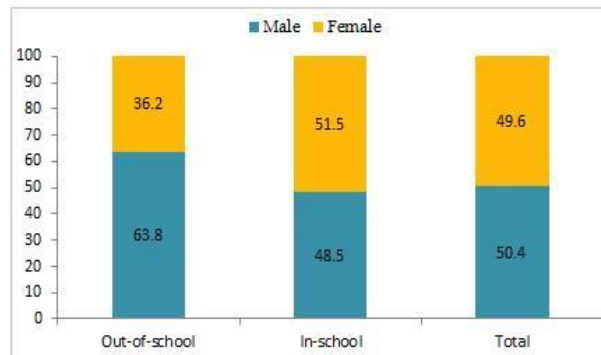


**Figure 3:** Mental health status by presence of parents

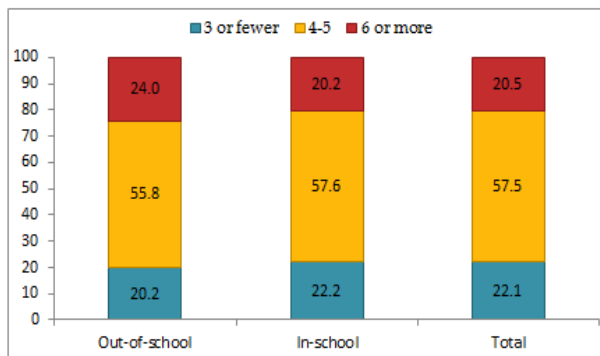
### *Characteristics of the sample by school enrollment status*

Figure 4 presents the characteristics of youths by school enrollment status. In general, there was no significant difference by sex. However, when classified by school enrollment status, the proportion of out-of-school youths is much higher among males than females (63.8% versus 36.2%). Over half of the sample, both in- and out-of-school, come from medium-size families (i.e., 4 to 5 family members). Nearly three-fourths of the sample (72.9%) completed the lower high school level, which is the compulsory level of schooling in Thailand. Only 60.8% of the out-of-school youth had only completed primary education. Among the in-school youth, 75.6% were in lower high school while 23.4% were in upper high school grades. Most respondents (72.0%) said their family was in the middle economically. However, a higher proportion of in-school youths said their family's economic situation was "rich" than the out-of-school youths (27.8% versus 10.1%). A noteworthy finding in this study is that more than four-fifths of the sample (85.3%) were not living with their parents at the time of the survey.

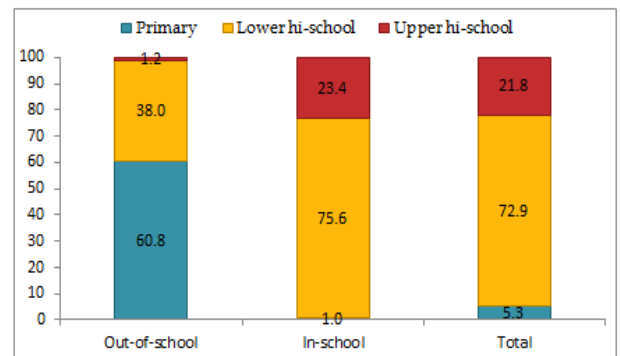
#### 4.1 Gender by school enrollment status



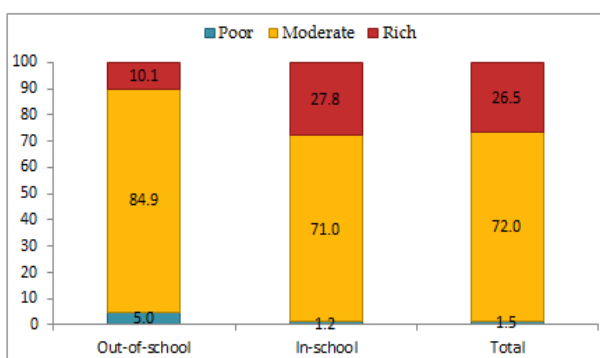
#### 4.2 No. of household members by school enrollment status



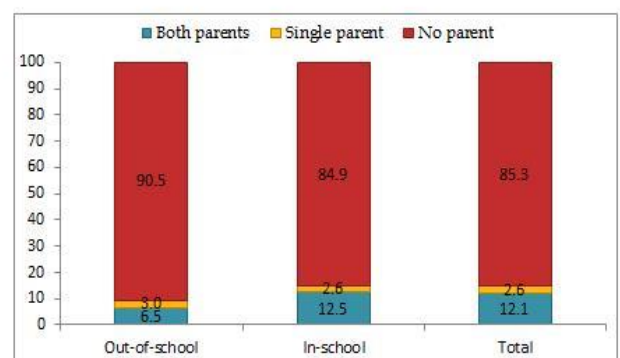
#### 4.3 Education level by school enrollment status



#### 4.4 Economic status (evaluated by respondents) by school enrollment status



#### 4.5 Presence of parents by school enrollment status



*Remarks:* In the case of out-of-school youths, level of schooling is the highest level completed. For in-school youths, level of schooling is the level currently enrolled in at the time of the survey.

**Figure 4:** Characteristics of youth by school enrollment status



### *Factors affecting adolescents' mental health*

Table 2 presents odds ratios from four logistic regression models predicting whether adolescents' score in the "at risk" mental health category. In Model 1, basic individual and household-level factors are analyzed before including school enrollment status and the factors of presence of parents. Adolescents who completed only primary education had 3.2 times the risk of mental health problems than those who completed or are currently studying upper high school. Also, those completing only lower high school had 1.3 times the risk of mental health problems than those who completed or are studying upper high school. Youths who live with 4 to 5 persons in the household are less likely to show mental health risks than those living in more populated households (6 persons or more). However, youths in small households (3 persons or fewer) are not significantly different from more populated households. In addition, the findings show that economic factors affect mental health risk. Youths who rate their households as "rich" had less risk of mental problems than those belonging to a middle-status household, whereas youths in poor or middle status households had no difference in their risk of mental health problems.

Model 2 adds the variable measuring presence of parents. In this model, teenagers who are living with both parents are less likely to be at risk of mental health problems than those who are living with no parents, while there is no difference in mental health between those who are living with a single parent and with no parents. However, adding the presence of parents to the model does not reduce the influence of other factors (number of household members, completed educational level, and household economic status) on the risk of mental health problems.

**Table 2:** Odds ratios from logistic regression models of mental health risk among youths aged 15 years (reference category in parentheses)

<i>Variables</i>		<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>Sex (Female)</i>					
Male		1.111	1.114	1.079	1.081
	(s.e.)	(0.078)	(0.078)	(0.078)	(0.079)
<i>Educational level (Upper high school)</i>					
Primary school		3.177***	3.124***	1.570*	1.588*
	(s.e.)	(0.162)	(0.162)	(0.220)	(0.221)
Lower high school		1.261*	1.261*	1.217	1.217
	(s.e.)	(0.101)	(0.101)	(0.102)	(0.102)
<i>Household size (6 or more household members)</i>					
3 or fewer household members		0.830	1.009	0.843	1.003
	(s.e.)	(0.116)	(0.148)	(0.116)	(0.149)
4-5 household members		0.789**	0.790**	0.794**	0.796**
	(s.e.)	(0.097)	(0.097)	(0.097)	(0.097)

<i>Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>Economic status of family</i> (Middle)				
Poor	1.356	1.350	1.334	1.335
(s.e)	(0.276)	(0.277)	(0.278)	(0.278)
Rich	0.556***	0.562***	0.576***	0.584***
(s.e)	(0.100)	(0.099)	(0.100)	(0.100)
<i>Presence of parents</i> (No parent present)				
Both parents present		0.631*		
(s.e)		(0.175)		
One parent present		1.252		
(s.e.)		(0.239)		
<i>School enrollment</i> (Out of school)				
In school			0.430***	
(s.e.)			(0.173)	
<i>Interaction effect between parental presence and school enrollment</i> (Out of school and not living with parents)				
Currently in school and living with both parents				0.282***
(s.e.)				(0.241)
Currently in school and living with one parent				0.605
(s.e.)				(0.295)
Currently in school and not living with parents				0.429***
(s.e.)				(0.177)
Out of school and living with both parents				0.641
(s.e.)				(0.489)
Out of school and living with one parent				0.623
(s.e.)				(0.717)
-2 Log likelihood	4260.579	4249.939	4237.940	4226.805
Cox & Snell R Square	0.023	0.025	0.027	0.030

Remarks \*\*\* p< .001 \*\*p<.01 \*p<.05

Model 3 removes the variable measuring the presence of parents. Instead, the model adds the school enrollment status factor in order to show the influence of school enrollment status without controlling for the presence of parents. The result shows that teenagers who are still in school are 57% less likely to be at risk of mental health than those who are out of school. Besides, the influence of completed educational level on mental health risk is reduced slightly in this model. The odds of adolescents who completed primary education being at risk of mental health problems is decreased compared with Model 1 (1.6 versus 3.2). In addition, adolescents who completed the lower high school (compulsory) level and those who completed or are studying at upper high school are not different in mental health risk once current enrollment is added.

Model 4 tests the influence of the interaction effect between school enrollment status and the presence of parents on adolescents' risk of mental health, with individual factors and family status used as controls. The R squared value of Model 2 is similar to that of Model 3, implying that the influence of school enrollment status and the presence of parents on mental health risk is similar. However, Model 4 discovers that in-school youths, whether living with parents or not, are less at risk of poor mental health than other groups. In other words, for the sake of an

adolescent's mental health, it is more important to be enrolled in school than living with parents. Most importantly, in-school youths who are living with both parents have the least risk of mental health problems (a risk reduction of 71%), followed by youth enrolled in school but not living with parents (a risk reduction of 57%). However, mental health risk among out-of-school youths was not influenced by whether or not they lived with their parents. Also notably, mental health risk among in-school youths who are living with a single parent was not significantly different from that among out-of-school youths.

## Discussion

The study revealed that being in school has a positive influence on adolescents' mental health risk scores. Said another way, in-school youths have less risk of mental health problems than out-of-school youths, independent of whether they live with their parents or not. This finding points to the importance of social capital outside the family as an influence on the mental health of youths. This is consistent with the hypothesis of Coleman (1988) which suggests that non-family factors are a key influence for the development of children, so that parents can increase the influence of social capital outside of the family by participating in community activities while their children are still of school age. In addition to social capital from external sources by virtue of parental involvement in the community and school, children can also benefit from external social capital if they are still enrolled in school. The form of friendships or peers in school contribute to youths' positive development (Thomson, Schonert-Reichl & Oberle, 2014). Remaining in school gives the adolescent access to external social capital. This social capital helps the adolescent through participation in the school's youth development activities and by reduction of various kinds of hardship. These help strengthen the mental health of the adolescent. As suggested by Parcel and Dufur (2001), whenever external social capital, such as school and community, is limited, social capital in the family has to be added. On the other hand, whenever social capital in the family is limited, social capital external to the family, such as school and community should be compensated.

## Summary and Recommendations

This study found that being in school has a greater influence on adolescent mental health risk scores than the presence of parents in the household. In-school youths have lower mental health risk scores than out-of-school youths regardless of whether the youth lived with parents or others. This finding points to the social capital that is derived external to the family which potentially influences the development of mental health in youth. Thus, it is essential that the agencies in the education sector need to motivate children and adolescents to remain in school for as long as possible. At the same time, there should be set about raising resources to support more children from low-income families to enroll and remain in school to help ease the burden on the family.

In addition, even though school enrollment status is more influential for youth mental health scores than living with parents, this study does not ignore the importance of having both parents in the household with school-age children. This is because children who remain in

school and live with both parents have the lowest mental health risk scores when compared with other groups of youth.

If a choice has to be made, e.g., between being in-school and living with both parents (such as the case where a child would have to move away from the parent's home to continue studies or parents would have to migrate to work in other places) the choice to stay enrolled in school anywhere should have more impact on promoting mental health rather than dropping out. Nevertheless, the presence of both parents will likely increase the closeness and stability of the family. Even if one parent does not have much time to care for and share with the children due to job obligations, another parent can compensate by spending more time with their children. This would not be possible in the single-parent household. If the child is living with only one parent who is also the principal breadwinner for the family, then there will be little opportunity for parent and child to spend quality time together. Providing educational opportunity for all, and extending this to all parts of society will help reduce the need for youths to move away from the family to continue their studies. In addition, remaining in school gives youths support from peers and adults at school (e.g., teachers or counselors), even if they do not live without parents or live with a single parent. Thus, in addition to the presence of parents in the family, educational opportunity should be a key policy for investment in human resources of Thai society.

## Acknowledgement

The research team would like to express its gratitude to the Institute for Population and Social Research, Mahidol University, for permission to use data from the "Pilot Survey of Mental Health Status among Thai Youth Aged 15 Who Appeared at Their Local District Office to Obtain their National Identification (ID) Card for the First Time".

## References

- Archavanitkul, K., Kanchanachitra, C., & Im-em, W. (2005) *Intimate partner violence and women's health in Thailand*. Institute for Population and Social Research, Salaya: Mahidol University.
- Brumrind, D. (1991). Effective parenting during the early adolescent transition. In P.A. Cowan and E.M. Hetherington (Eds.), *Family transitions* (pp. 111-116). Hillsdale, NJ: Erlbaum.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, Suppl.95, S95-120.
- Education News Team. (2012, September 6). Mental health department stunned! Accumulated stress [causes] 170 students to commit suicide each year (กรมสุขภาพจิตชี้! นักเรียนเครียดสะสมฆ่าตัวตายปีละ 170 คน). *Thai Rath*. Retrieved from <http://www.thairath.co.th/content/289132>
- Furstenberg F. F. Jr., & Hughes, M. E. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and Family*, 57(3), 580-592.
- Garmezy, N., & Rutter, M. (1983). *Stress, coping and development in children*. New York: McGraw-Hill.
- Gerard, M., & Buehler, C. (2004). Cumulative environmental risk and youth problem behavior. *Journal of Marriage and Family*, 66(3), 702-720.
- Gray, R., Chamratrithirong, A., Pattaravanich, U., & Prasartkul, P. (2013). Happiness among adolescent students in Thailand: Family and non-family factors. *Social Indicators Research*, 110(2), 703-719. <http://dx.doi.org/10.1007/s11205-011-9954-y>
- Jamuang, J. (2004). Student mental health (สุขภาพจิตนักเรียน). *Journal of Education*, 15(2), 39-48.

- Limsuwan, N. *Suicide among children and youths* (การฆ่าตัวตายในเด็กและวัยรุ่น) [PowerPoint slides]. Retrieved from <https://www.suicidethai.com/download/11june2552/present.pdf>
- Mongkol, A., Wongpiromsan, Y., Tangsari, T., Hattapanom, W., & Romsai, P., Jutha, W. (2009). *Developing and testing of Thai Mental Health Indicator version 2007* (การพัฒนาและทดสอบดัชนีชี้วัดสุขภาพจิต version 2007). Nonthaburi: Department of Mental Health, Ministry of Mental Health.
- Offer, D., & Offer, J. (1975). *From teenage to young manhood*. New York: Basic Books.
- Parcel, T. L., & Dufur, M. J. (2001). Capital at home and at school: effects on child social adjustment. *Journal of Marriage and Family*, 63(1), 32-47.
- Tanimpas, P. (1998). *Research report on family and violence behaviour among adolescents*. Nonthaburi: Mental Health Center Region 4, Department of Mental Health, Ministry of Mental Health. (in Thai).
- Thongpertsri, N. & Prabkree, S. (2008). Family factors associated with suicide attempts in a province of southern Thailand (ปัจจัยด้านครอบครัวที่มีความสัมพันธ์กับการพยายามฆ่าตัวตายของประชาชนจังหวัด หนึ่งในภาคใต้ ของประเทศไทย จังหวัดตรัง). In *The Eighth Academic Conference on Protection of Suicide Problem* (pp. 166-167). Chiang Mai, Thailand: Mental Health Department.
- Thomson, K. C., Schonert-Reichl, K. A. & Oberle, E. (2014). Optimism in early adolescence: Relations to individual characteristics and ecological assets in families, schools, and neighborhoods. *Journal of Happiness Study*, Published online: 12 June. doi: 10.1007/s10902-014-9539-y
- UNICEF. (2003). Summary of country consultation: Young people and drugs Thailand. In *Summary Document of Young People's Participation at the 14<sup>th</sup> International Conference on the Reduction of Drug Related Harm* (pp.48-53). Chiang Mai, Thailand.
- Wickrama, K.A.S, & Bryant, C.M. (2003). Community context of social resources and adolescent mental health. *Journal of Marriage and Family*, 65(4), 850-866.