Parental Engagement and Adolescents Mental Health Wellbeing: Cross-Sectional Study from Sri Lanka

Rasalingam G.1*, Rajalingam A.2

DOI: https://doi.org/10.17511/ijphr.2021.i04.01

1* Gajarishiyan Rasalingam, School of Public Health, University of Aberdeen, , Aberdeen, United Kingdom.
2 Arrosan Rajalingam, Department of Molecular Biology & Biotechnology, University of Peradeniya, , Peradeniya, Sri Lanka.

Background: Parental engagement is one of the key factors that can influence adolescents mental health status, although these associations are not fully measured in the local context. This study will estimate the prevalence and association of parental engagement with adolescents and mental health status in Sri Lanka.

Method: This current study is a secondary analysis of nationally representative data for Sri Lanka. The data was collected from 3262 school attending students in grades 8-12 in the Sri Lankan Global School-based health survey (GSHS) 2016. A two-stage cluster sample design was used to select the representation of samples. The binary variables i.e. loneliness, anxiety and suicidal ideation, were modelled using multivariable logistic regression models with predictors representing gender, age, grade, parental supervision and parental understanding.

Result: It is estimated that the prevalence of parental supervision and parental understanding is 85.3% and 78.5%, respectively. The analysis of both good parental supervision and parenting understanding has reduced the loneliness, anxiety and suicidal thoughts among the adolescents population, compared to those who don't have good parental engagement.

Conclusion: It is seen that there is a higher prevalence of parental and children engagement in Sri Lanka compared to other demographical regions. However, the prevalence of mental health remains higher as compared to the global average. The results suggest that national policies and programs should be integrated for both parents and children. Parents need more knowledge on good parenting, while adolescents need support on coping with their mental health.

Keywords: Parental Understanding, Parental Supervision, Mental Health, Adolescents, Sri Lanka
Introduction

Parental engagement towards adolescents significantly impacts their health, developmental outcome, and risk behaviors [1]. The age between 13 -19 years is a critical transition period to adulthood, in which adolescents continuously changes physically, mentally and psychologically [2]. Around 10-20% of these young people, especially those who live in lower-middle-income countries, suffer from different types of mental health problems [3]. Increased mental health issues and attempts to self-harm among adolescents and young people are challenged worldwide. In this age group, parental engagement in their lives can help them to learn about minimizing stress, as well as maintaining good physical and mental health. In a study among Canadian adolescents, it has been seen that good parental involvement is more strongly associated with a reduction in suicidal thoughts and attempts [4].

Additionally many previous studies have confirmed that strong bonding between parents and children results in a significant decrease in developing the risk of mental health problems [5,6], substance abuse [7] and violence [8]. There is a limitation in studies of different cultural contexts on the association between parental engagement and adolescent mental health [9], which has also been explored in many published studies conducted in western countries indicating individuality and independence. However, in the Sri Lankan context, collectivism should consider the parent-child relationship [10]. The Sri Lankan health authorities acknowledge the severe nature of mental health, including increased psychosocial problems, suicide rates and substance abuse [11]. Previous studies have estimated that 61% of the reported suicidal attempts in Sri Lanka are below 25 years. It is observed that there are less effective programs nationally to support adolescents mental and psychological needs.

Parental engagement and mental health issues are complex areas that can be measured using different concepts. In the case of parental engagement, two concepts have been used by previous researchers, i.e. Parental understanding and Parental supervision [12]. To evaluate mental health issues, three domains have been used, i.e. loneliness, anxiety and suicidal ideation [13,14]. The World Health Organization (WHO), along with Central disease prevention (CDC), collaboratively designed the Global school-based health survey (GSHS), which provides an excellent understanding of relationship analysis between parental engagement and mental health. Given the background on the importance of adolescent mental wellbeing, the present study aims to identify the correlation between parental engagement on adolescents mental health to have a better understanding of the country context, which will support the development of children mental health programs.

Method

Study source: This study is an analysis of secondary data from the Global-School based health survey, which is available in the WHO (World Health Organization) microdata library online [15]. The students self-report their responses to each question in the questionnaire. The WHO jointly develops the questionnaire, CDC (Centers for Disease Control and Prevention) and other united national agencies to measure the adolescents behavioral lifestyle, the environment they are exposed to, protective and negative factors that impact their life. In previous studies also validate the GSHS as acceptable validly [16].

Sampling technique and sample size: The students study population was selected by using two-stage clustering methods. In the first stage, schools were selected based on the probability proportional to the number of enrolments in classes 8-13. Total 40 schools were selected Appendix 01. In the second stage, the classroom was chosen randomly from the selected school. All students in the selected school were eligible to participate. The probability selection of samples and the nonresponses were validated with the appropriate weighting factors to increase the likelihood of the study data [15]. The study was ethically approved by the University of Colombo. The questionnaire was translated into Sinhala and Tamil local languages. All participants gave consent. Appropriate steps were taken to ensure confidentiality and reduce the contamination of the responses. There were 89% responses from the students, and all selected schools participated in the study.

Study Variable: The Response variables were parental understanding and supervision. One question was used to identify the variable, i.e. Parental Understanding (Q4) and the other question (Q5) identified parental supervision.
Details of the predictor variables on mental health are: one question was used to determine the loneliness (Q6) and the other to identify anxiety (Q7), whereas two questions (Q8 and Q9) were used to derive the suicidal ideation. Details of all the variables used, and data recording strategies are shown in Table 01. The standard Sri Lankan GSHS survey is included in Appendix 02.

Data Analysis: Data were imported from the WHO database into R-Software (Version 3.6.0) for analysis. In the descriptive analysis, all the variables were summarized using total frequency and percentage.

Result

Table 01: The variables used in the study and coding strategies used for the analysis.

| Variable           | (Question No.) Survey Question                                                                 | Coding                          |
|--------------------|-----------------------------------------------------------------------------------------------|---------------------------------|
| Demographical      |                                                                                               |                                 |
| Gender             | (Q1) What is your sex?                                                                         | 0= Female 1= Male               |
| Age                | (Q2) How old are you?                                                                          | 0= 12 years or younger          |
|                    |                                                                                               | 1= 13 and 15years old           |
|                    |                                                                                               | 2= 16 years or older            |
| Grade              | (Q3) In what grade you are?                                                                     | 0= Grade 8 and 9                |
|                    |                                                                                               | 1= Grade 10 and 11              |
|                    |                                                                                               | 2= Grade 12 and 13              |
| Parental Engagement|                                                                                               |                                 |
| Parental understanding| (Q4) During the past 30 days, how often did your parents or guardian understand your problems and worries? | 0 = Never and Rarely            |
|                    |                                                                                               | 1 = Sometimes, Most of the time and Always |
| Parental supervision| (Q5) During the past 30 days, how often did your parents or guardian know what you were doing with your free time? | 0 = Never and Rarely            |
|                    |                                                                                               | 1 = Sometimes, Most of the time and Always |
| Mental Health      |                                                                                               |                                 |
| Loneliness         | (Q6) During the past 12 months, how often have you felt lonely                                  | 0 = Never and Rarely            |
|                    |                                                                                               | 1 = Sometimes, Most of the time and Always |
| Anxiety            | (Q7) During the past 12 months, how often have you been so worried about something that you could not sleep at night | 0 = Never and Rarely            |
|                    |                                                                                               | 1 = Sometimes, Most of the time and Always |
| Suicidal Ideation a| (Q8) During the past 12 months, did you ever seriously consider attempting suicide            | 0 = No                          |
|                    |                                                                                               | 1 = Yes                         |
|                     |                                                                                               |                                 |
| Suicidal Ideation b| (Q9) During the past 12 months, did you make a plan how you would attempt suicide              | 0 = No                          |
|                     |                                                                                               | 1 = Yes                         |

a Suicidal ideation is a combination of two questions Q8 & Q9, final coded as 0 or 1, where 0= No in both questions and 1= yes in both question

Table 02: Represent the summary data of different variables (frequency, Percentage) measured on the GSHS 2016 data.

| Variable     | Frequency (n) | Percentage (%) |
|--------------|---------------|----------------|
| Demographical|               |                |
| Gender       | Male          | 1437           | 44.30          |

We constructed an individual logistic regression model on all response variables on mental health. During our analysis, we consider both single and multivariable model analysis. For a single variable, we anticipate that the individual predictor variable corresponds to gender, age, grade and parental engagement. For the multivariate logistic regression model, we used all predictor variables and developed a final model with statistically significant (p<0.05) predictors. For the model selection, we have considered Akaike Information Content (AIC) and the likelihood ratio test. We generated the odds ratio (OR) and respective 95% confidential interval from the final multiple logistic regression model.
A total of 3263 adolescents in class 8-12 participated in the Survey. Table 02 presents the summary statistics of demographical, parental engagement and mental health variables. At the end of the survey collection, we received higher female (55.7%, n=1805) responses than males (44.3%, n=1437). It is estimated that 78.5% of the participants got an excellent understanding parents and 85.3% of them had good parental supervision. Approximately 40.3% of the participants experienced some form of mental health problem in the last 12 months: loneliness, anxiety and suicidal ideation.

Table 3. Estimation of odds ratio (OR) on the unadjusted (single variable) and adjusted (multivariable) logistic regression models of response mental health variable.

| Variables        | Unadjusted | Adjusted |
|------------------|------------|----------|
|                  | CI (95%)   | P-value  | CI (95%)   | P-value |
| Loneliness       |            |          |            |         |
| Gender           |            |          |            |         |
| Female           | 1          |          | 1          |          |
| Male             | 0.87 (0.74-1.01) | 0.061      | 0.83 (0.71-0.98) | 0.024    |
| Age              |            |          |            |         |
| <13 years old    | 1          |          | 1          |          |
| 13-15 years old  | 1.17 (0.69-2.17) | 0.551      | 1.22 (0.68-2.33) | 0.517    |
| 16-17 years old  | 1.94 (1.12-3.57) | 0.024    | 1.42 (0.76-2.79) | 0.288    |
| Grade            |            |          |            |         |
| Grade 8-9        | 1          |          | 1          |          |
| Grade 10-11      | 1.25 (1.06-1.47) | 0.007      | 1.23 (0.92-1.37) | 0.237    |
| Grade 12-13      | 2.70 (2.13-3.42) | <0.001   | 2.37 (1.70-3.29) | <0.001   |
| Parental Supervision |          |          |            |         |
| No               | 1          |          | 1          |          |
| Yes              | 0.65 (0.53-0.79) | <0.001    | 0.82 (0.65-1.03) | 0.088    |
| Parental Understanding |        |          |            |         |
| No               | 1          |          | 1          |          |
| Yes              | 0.58 (0.48-0.69) | <0.001    | 0.60 (0.49-0.73) | <0.001   |
| Anxiety          |            |          |            |         |
| Gender           |            |          |            |         |
| Female           | 1          |          | -          | -        |
| Male             | 1.11 (0.93-1.32) | 0.236    | -          | -        |
| Age              |            |          |            |         |
| <13 years old    | 1          |          | 1          |          |
| 13-15 years old  | 0.68 (0.39-1.24) | 0.188     | 0.65 (0.37-1.19) | 0.089    |
| 16-17 years old  | 1.03 (0.59-1.91) | 0.909     | 0.98 (0.56-1.80) | 0.142    |
| Grade            |            |          |            |         |
| Grade 8-9        | 1          |          | -          | -        |
| Grade 10-11      | 1.21 (1.00-1.46) | 0.048   | -          | -        |
| Grade 12-13      | 1.75 (1.34-2.28) | <0.001   | -          | -        |
| Parental Supervision |        |          |            |         |
| No               | 1          |          | 1          |          |
| Yes              | 0.55 (0.44-0.69) | <0.001    | 0.62 (0.48-0.79) | 0.001    |
| Parental Understanding |        |          |            |         |
| No               | 1          |          | 1          |          |
| Yes              | 0.66 (0.55-0.81) | <0.001    | 0.79 (0.64-0.99) | 0.043    |
| Suicidal Ideation|            |          |            |         |
| Gender           |            |          |            |         |
| Female           | 1          |          | -          | -        |
| Male             | 0.91 (0.62-1.31) | 0.604    | -          | -        |
| Age              |            |          |            |         |
| <13-15 years old | 1          |          | -          | -        |
| 16-17 years old  | 0.98 (0.03-0.05) | 0.921    | -          | -        |
| Grade            |            |          |            |         |
| Grade 8-9        | 1          |          | -          | -        |
| Grade 10-11      | 1.14 (0.77-1.69) | 0.521    | -          | -        |
Parental Engagement: Table 3 represents the logistic regression models of loneliness, anxiety and suicidal ideation. The parental supervision (OR 0.82; 95% CI 0.65, 1.03; P=0.088) and parental understanding (OR 0.60; 95% CI 0.49, 0.73; P<0.001) reduces the risk of loneliness among adolescents. Also, anxiety is less among the adolescents who had good parental supervision (OR 0.62; 95% CI 0.48, 0.79; P=0.001) and parental understanding (OR 0.79; 95% CI 0.64, 0.99; P=0.043). Suicidal ideation is lower by 0.35 and 0.44 times in parental supervision and understanding, respectively.

Discussion

The present study was conducted to examine the association of parental engagement on adolescents mental health among school attending students between grades 8-13. The prevalence of parental engagements was estimated as Parental supervision (85.3%) and Parent understanding (85%), which is higher compared to other regional studies [17]. While the prevalence of mental health among adolescents was estimated as loneliness (30.8%), anxiety (20.2%) and suicidal ideation (3.7%), these rates are higher than the global average [3]. We observed that parental understanding and parental supervision had reduced the risks of loneliness, anxiety and suicidal ideation in adolescents. It has been observed that mental health problems are more experienced by females than males, which is consistent with other published reports that females seek more help than males [18]. However, many other factors contribute negatively to mental health in females, such as social-economic disadvantage, violence, inequality and taking care of their siblings [19]. Loneliness is a destress and painful experience that is characterized by dissatisfaction with social relationships [20]. We have found that loneliness experienced by adolescents can be reduced by good parental engagement, which is similar to other studies stating that parental warmth [21], degree of the relationship and parenting style act as a protecting factor against loneliness [22].

We noted that good parental engagement had reduced anxiety among adolescents. Anxiety is a severe functional impairment and distress which results in problems associated with society, family and schooling. It is believed that 60% of children with an anxiety disorder are familial [23]. And two-fold higher if one of their parents have an anxiety disorder [24].

The study suggests that environmental and genetic factors play an essential role in the familial transmission of anxiety [25]. Three different parenting styles can be considered for a better understanding of the psychology of parental attitudes towards their children and anxiety: permissive, authoritarian and authoritative styles. Permissive is characterized by low demands, low control autonomy granting, high acceptance and not punitive. Authoritarian parents provide increased demand, high control, low acceptance and exert punitive measures. Authoritative parents provide well support, value autonomy, warmth and avoid restrictions or punitive measures, but exert high control and demands. Early research on parental engagement suggests that authoritative parenting was positively correlated with child school engagements, assertiveness, education success. In contrast, permissive and authoritarian parenting is negatively associated with adolescent performance and wellbeing [26,27]. A study published on parental involvement and childhood anxiety stated that; Parenting styles, parental control, parental acceptance & rejection, parental behaviors, parent-child relationship, the cultural context of parenting are some of the factors associated with childhood anxiety [28].

Suicide rates are a higher and common problem in the South Asian region [29]. Our study indicates that parental supervision and better understanding have reduced suicidal thoughts among adolescents. A study from four thousand households in Sri Lanka has shown that household environment has a significant association with the risk of suicide more than the community influences [30].

|                          | Grade 12-13 | Parental Supervision | Parental Understanding |
|--------------------------|-------------|----------------------|------------------------|
|                          | 1.25 (0.67-2.20) | No                    | Yes                    |
|                          | 0.459       | 1                     | 0.24 (0.16-0.35)       |
|                          |             |                       | <0.001                 |
|                          |             |                       | 0.35 (0.22-0.54)       |
|                          |             |                       | <0.001                 |
|                          |             |                       | 0.29 (0.20-0.43)       |
|                          |             |                       | <0.001                 |
|                          |             |                       | 0.44 (0.29-0.68)       |
|                          |             |                       | 0.001                  |

*There is no data for age group <13 years with suicidal ideation, so we merged age categories less than 13 years and 13-15 years into one group.

OR: Odds Ratio 95% CI: 95% Confidence Interval
Adolescents were more likely to attempt suicide when they have conflict, negative arguments, expressing anger, verbalized hostility by parents or close members [31]. But substance abuse like alcohol doubles the risk of suicidal ideation. The suicide epidemic of the country remains a serious problem, but its peak dropped down after the 1990s due to policy amendments by the presidential task force on suicide prevention in 1997 [32]. But still, there are not well-established programs to support the mental health needs, especially the adolescents population.

Mental health and adolescents are complex areas. Much research is needed, such as how the economic, food security and other environmental factors influence both parents and adolescents and how it impacts mental health. Although our study finds an overview of the association of parental engagement and adolescents, it is believed that pertinent findings can be quickly oriented on social policy and programs. To enhance more support for adolescents, community and school-based welfare centres and programs should help students to cope up with their mental health and understand their physical as well as emotional wellbeing.

Programs should be introduced to support the parents to understand better adolescent age groups and how to provide adequate care to their children, establishing more study in-depth and multiple associations on parental-adolescent bonding, mental health and providing effective interventions to resolve this issue at a national level.

**Limitation:** The present study consists of some limitations. First, this survey was conducted five years back; it may not reflect the current status of mental health, especially during and after the post-COVID-19 pandemic. Secondly, it does not include all the adolescents population in Sri Lanka, the UNESCO (United Nations Educational, Scientific and Cultural Organization) had stated that one in three children are out of school in lower and middle-income countries [33], school dropouts, disable school children's and school absentees are not included.

Thirdly, the study variables used in this study are limited for analysis. The outcomes due to many other major influencing factors such as economic of family, food insecurity, influence from friends, substance abuses are not being considered in this study.

**Conclusion**

Using the countrywide school-based survey data, we observed 72.6% of the adolescents in Sri Lanka have good parental engagement, and 40.3% of the adolescents suffer from mental health problems. We observed that parental engagement and parental supervision had reduced the odds of experiencing loneliness, anxiety or suicidal ideation among adolescents in Sri Lanka. The results suggest that more welfare activities should be introduced for parents on better understanding and parenting of their children and creating more social services to cope with children's mental health management. These activities should be widely available in all parts of the country.

**Acknowledgement**

We would like to acknowledge the WHO and CDC for making the GSHS data publicly available for analysis. We also thank the Ministry of Health, Sri Lanka, for conducting the Survey across the country.

**Author Contribution**

Gajarishiyan Rasalingam (Principal Author): Conceptualization, literature review, methodology, formal analysis, investigation and writing.

Arrosan Rajalingam: Data administration work, literature Review and writing

**Reference**

01. Newman K, Harrison L, Dashiff C, Davies S. Relationships between parenting styles and risk behaviors in adolescent health: an integrative literature review. Rev Lat Am Enfermagem. 2008 Jan-Feb;16(1):142-50. doi: 10.1590/s0104-11692008000100022 [Crossref][PubMed][Google Scholar]

02. Cripps, Kayla, and Brett Zyromski. "Adolescents' psychological wellbeing and perceived parental involvement: Implications for parental involvement in middle schools". RMLE Online. 33;4(2009): 1-13. [Crossref][PubMed][Google Scholar]

03. Kieling, Christian, et al. "Child and adolescent mental health worldwide: evidence for action". The Lancet. 378;9801(2011):1515-1525. [Crossref][PubMed][Google Scholar]
04. Fotti S A, Katz L Y, Affi T O, Cox B J. The associations between peer and parental relationships and suicidal behaviours in early adolescents. The Canadian Journal of Psychiatry. 51;11(2006):698-703. [Crossref][PubMed][Google Scholar]

05. Kerr M, Statlin H, Trost K. To know you is to trust you: parents’ trust is rooted in child disclosure of information. J Adolesc. 1999 Dec;22(6):737-52. doi: 10.1006/jado.1999.0266 [Crossref][PubMed][Google Scholar]

06. Fröjd, Sari, Riittakeru Kaltiala-Heino, and Matti Rimpelä. "The association of parental monitoring and family structure with diverse maladjustment outcomes in middle adolescent boys and girls". Nordic Journal of Psychiatry. 61;4(2007):296-303. [Crossref][PubMed][Google Scholar]

07. Bireda, Asamene Demessie, and Jace Pillay. "Perceived parental involvement and wellbeing among Ethiopian adolescents". Journal of Psychology in Africa. 27;3(2017):256-259. [Crossref][PubMed][Google Scholar]

08. Rudatsikira E, Siziya S, Kazembe L N, Muula A S. Prevalence and associated factors of physical fighting among school-going adolescents in Namibia. Annals of General Psychiatry. 6;1(2007):1-5. [Crossref][PubMed][Google Scholar]

09. Hasumi T, Ahsan F, Couper C M, Aguayo J L, Jacobsen K H. Parental involvement and mental well being of Indian adolescents. Indian Pediatrics. 49;11(2012):915-918. [Crossref][PubMed][Google Scholar]

10. Pathirana, Buddhprabha DD. "Sri Lankan adolescents' relationships with their parents, siblings and peers: an exploratory study". The International Journal of Indian Psychology. 3;2(2016):38-50. [Crossref][PubMed][Google Scholar]

11. Ministry of Health SL. Ministry of Health, Nutrition and Indigenous Medicine Sri Lanka [Internet]. 2016 [cited 2020 Jul 19]. Available from: www.health.gov.lk [Crossref][PubMed][Google Scholar]

12. Hasumi T, Ahsan F, Couper CM, Aguayo JL, Jacobsen KH. Parental involvement and mental well being of Indian adolescents. Indian Pediatr [Internet]. 2012 Nov 10 [cited 2021 Jan 31];49(11):915-8. Available from: [Article] [Crossref][PubMed][Google Scholar]

13. Nguyen H T L, Nakamura K, Seino K, & Al-Sobaihi S. Impact of parent–adolescent bonding on school bullying and mental health in Vietnamese cultural setting: evidence from the global school-based health survey. BMC psychology. 7;1(2019):1-10. [Crossref][PubMed][Google Scholar]

14. Murshid NS. Bullying victimization and mental health outcomes of adolescents in Myanmar, Pakistan, and Sri Lanka. Child Youth Serv Rev. 2017 May 1;76:163–9. [Crossref][PubMed][Google Scholar]

15. WHO. Sri Lanka - Global School-based Student Health Survey 2016 [Internet]. 2016. [cited 2020 Jul 11]. Available from: [Article][Crossref][PubMed][Google Scholar]

16. Becker A E, Roberts A L, Perloe A, Bainvualiku A, Richards L K, Gilman S E, et al. Youth health-risk behavior assessment in Fiji: the reliability of Global School-based Student Health Survey content adapted for ethnic Fijian girls. Ethnicity & health. 15;2(2010):181-197. [Crossref][PubMed][Google Scholar]

17. Pengpid S, Peltzer K. Parental involvement and mental health among school-going adolescents in five Caribbean countries. J Psychol Africa [Internet]. 2018 Sep 3 [cited 2021 Feb 4];28(5):394–9. Available from: [Article][Crossref][PubMed][Google Scholar]

18. Murray, Christopher JL. "The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020". Global burden of disease and injury series. (1990). [Crossref][PubMed][Google Scholar]

19. Astbury Jill. "Gender disparities in mental health". (2001):73-92. [Crossref][PubMed][Google Scholar]

20. Qualter P, Brown S L, Munn P, Rotenberg K J. Childhood loneliness as a predictor of adolescent depressive symptoms: an 8-year longitudinal study. European child & adolescent psychiatry. 19;6(2010):493-501. [Crossref][PubMed][Google Scholar]

21. Edwards C P, W Liu, and M H Bornstein. "Handbook of parenting: Vol 1. Children and parenting". (2002): 45-71. [Crossref][PubMed][Google Scholar]
22. Stickley A, Koyanagi A, Koposov R, Blatný M, Hrdlička M, Schwab-Stone M, et al. Loneliness and its association with psychological and somatic health problems among Czech, Russian and US adolescents. BMC psychiatry. 16;1(2016): 1-11. [Crossref][PubMed][Google Scholar]

23. Biederman J, Petty C R, Hirshfeld-Becker D R, Henin A, Faraoe S V, Fraire M, et al. Developmental trajectories of anxiety disorders in offspring at high risk for panic disorder and major depression. Psychiatry research. 153;3(2007):245-252. [Crossref][PubMed][Google Scholar]

24. Li, Xinjun, Jan Sundquist, and Kristina Sundquist. "Age-specific familial risks of anxiety". European archives of psychiatry and clinical neuroscience. 258;7(2008):441-445. [Crossref][PubMed][Google Scholar]

25. Drake, Kelly L, and Golda S Ginsburg. "Parenting practices of anxious and nonanxious mothers: A multi-method, multi-informant approach". Child & Family Behavior Therapy. 33;4(2011):299-321. [Crossref][PubMed][Google Scholar]

26. Dornbusch S M, Ritter P L, Leiderman P H, Roberts D F, Fraleigh M J. The relation of parenting style to adolescent school performance. Child development. (1987):1244-1257. [Crossref][PubMed][Google Scholar]

27. Steinberg, Laurence, Julie D Elmen, and Nina S Mounts. "Authoritative parenting, psychosocial maturity, and academic success among adolescents". Child development. (1989):1424-1436. [Crossref][PubMed][Google Scholar]

28. Wei C, Kendall PC. Parental Involvement: Contribution to Childhood Anxiety and Its Treatment. Clin Child Fam Psychol Rev [Internet]. 2014;17(4):319–39. Available from: [Article][Crossref][PubMed][Google Scholar]

29. Jordans MJD, Kaufman A, Brenman NF, Adhikari RP, Luitel NP, Tol WA, et al. Suicide in South Asia: A scoping review. BMC Psychiatry [Internet]. 2014 Dec 24 [cited 2021 Jan 24];14(1):358. Available from: [Article][Crossref][PubMed][Google Scholar]

30. Knipe DW, Gunnell D, Pearson M, Jayamanne S, Pieris R, Priyadarshana C, et al. Attempted suicide in Sri Lanka - An epidemiological study of household and community factors. J Affect Disord. 2018 May;232:177-184. doi: 10.1016/j.jad.2018.01.028 [Crossref][PubMed][Google Scholar]

31. Rajapakse T, Griffiths K M, Christensen H, Cotton S. Non-fatal self-poisoning in Sri Lanka: associated triggers and motivations. BMC public health. 15;1(2015):1-7. [Crossref][PubMed][Google Scholar]

32. Thalagala N. Suicide Trends in Sri Lanka 1880-2006; Social, Demographic and Geographical Variations. J Coll Community Physicians Sri Lanka [Internet]. 2011 Apr 8 [cited 2021 Jan 24];14(1):24. Available from: [Article][Crossref][PubMed][Google Scholar]

33. UNESCO. New education data for SDG4: Focus on out-of-school children, 27 September 2018. Education within the 2030 Agenda for Sustainable Development [Internet]. 2018. [cited 2020 Jul 6]. Available from: [Article][Crossref][PubMed][Google Scholar]