



THE ROLE OF PARENTING STYLES AND SOCIAL MEDIA AFFINITY IN THE DEVELOPMENT OF ANTISOCIAL BEHAVIORS AMONG SECONDARY SCHOOL STUDENTS

Psychology

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ABSTRACT

Cohesive and strong families are prone to develop physically and emotionally healthy individuals. The study examined the role of parenting styles; authoritative, authoritarian, permissive, and social media affinity in developing the three subtypes of antisocial behavior; Social Aggression (SA), Physical Aggression (PA), and Rule-Breaking Behavior among secondary school students. The study utilized 140 secondary school students between 18 and 19 years in Sri Lanka who lived with their parents and were in touch with social media. The data was collected through the Subtypes of the Antisocial Behavior Scale (STAB), Perceived Parenting Style Scale (PPSS), and social media affinity scale. The results of the study revealed that parenting styles and social media affinity had a relationship with Antisocial Behavior (AB). Furthermore, significant predictors of SA were authoritative and authoritarian parenting; PA was authoritarian parenting, and authoritative parenting predicted Rule-breaking behavior. Throughout the study, authoritative parenting results had a negative relation. The study exclusively found that permissive parenting and social media affinity did not impact AB development. Therefore, the study recommends that parents should endeavor to adopt an authoritative parenting style. The study contributes to authorities dealing with students with behavior problems to take necessary actions by building effective interventions/strategies.

KEYWORDS

Antisocial Behavior, Parenting Styles, Social Media Affinity, Secondary School Students

1. INTRODUCTION

Parents play an indispensable role in the child's development, primarily in regulating punctuality, orderliness, neatness, and politeness⁽¹⁰⁾. Khaliq and Rasool (2019) demonstrated that the child's development from fundamental ages to maturity is in the parents' hands⁽²¹⁾.

Diane Baumrind, in 1960, came up with three parenting styles; authoritative, authoritarian, and permissive. Authoritative parenting encourages two-way verbal communication, autonomy, and conformity but enforces the parent's perspective. The family rules are well clarified, receive higher emotional support, and adopt reinforcement in shaping the behavior⁽²³⁾. Authoritarian parenting shapes, controls, and evaluates the child's behavior and attitudes, followed by a set standard of conduct and assigned household responsibilities intended to respect. Only one-way communication is encouraged, believing the child should accept the instructions from the parents. Additionally, punishment is encouraged, limited autonomy is provided, expects obedience, and takes forceful measures to curb the child's self-will⁽¹⁹⁾. Permissive parenting characterizes parents solely as not being involved in the child's impulses, actions, and desires. The child has few forced demands, household responsibilities, and orderly behavior. The parent presents themselves to the child any way the child wants to have them, and family rules are well clarified⁽³⁷⁾.

AB is a broad term comprising many facets of destructive behavior, primarily harming another person or violating their rights⁽³⁸⁾. These could be behavior changes depending on age, gender, and other factors⁽³²⁾. According to Burt & Donellan in 2009, SA, PA, and rule-breaking behavior were three subtypes of AB; this was developed during their development of the Subtypes of Antisocial Behavior Scale (STAB)⁽⁸⁾. T'ng et al. (2014) defined PA as heritable behavior causing or threatening bodily harm toward others⁽³⁹⁾. Rule-breaking behavior was less exhibited during childhood than adolescence and is highly associated with impulsivity. Examples included; vandalism, littering, and threatening. Finally, SA was defined as the need to harm others within social relationships. The present study was also based on the subtypes developed from the STAB scale, and the operational definitions are as mentioned above.

Whereas the use of social media is rising rapidly amongst every age category. As a result, this constitutes a large part of every individual's life. However, the definition of social media changes continuously, with the primary meaning of communicating and sharing any digital information.

2. Literature Review

2.1 Literature related for AB

Studies conducted in Sri Lanka on ABs mainly focused on why individuals adopted such behaviors, relative actions authorities implemented, effective interventions to overcome the problem, and

which individuals/authorities adopted them. Senaratna & Wijewardana (2012) identified that children living on the streets had a higher risk of ABs, mainly due to poor socialization and unstable families⁽³³⁾. Meanwhile, they observed ABs' determinants; 18% of the children lived alone, and two-thirds never attended school. This resulted in high manual labor efforts, the marketing of illegal alcohol, sex work, pimping, and pick-pocketing to satisfy their day-to-day living expenses. This cause was also identified worldwide⁽⁴⁾. Perera (2013) suggested interventions such as providing improved academics, preschool and AB care, parenting skills, and social skills can reduce the impact on the development of AB⁽³³⁾.

Engaging in such behaviors increases the probability of facing emotional and economic consequences and negatively impacts their educational and employment opportunities⁽²⁾.

2.2 Literature related to Parenting Styles and AB

Literature proves that parenting styles significantly impact the development of AB worldwide⁽⁷⁾. Hoeve et al. (2011) studied adolescents until their early adulthood and explored that authoritative parenting has a less significant relationship with AB development⁽¹⁷⁾. Similarly, it was explored through a meta-analysis of 428 studies⁽³¹⁾. Likewise, studies focused on the relationship between authoritative parenting and the three subtypes of AB. For example, Llorca et al. (2017) explored a negative relationship between authoritative parenting and SA⁽²⁵⁾, PA⁽²⁰⁾, and rule-breaking behavior⁽³⁶⁾. Subsequently, studies explored that children brought up under authoritative parenting was the least prone to develop SA⁽²⁰⁾ and more prone to PA⁽²⁰⁾ and rule-breaking behavior⁽³⁰⁾.

Steinberg (2016) explored deficient or overt levels of control on the child, such as permissive and authoritarian parenting, results in a higher exhibition of AB⁽³⁴⁾. Likewise, studies focused on the relationship between authoritarian parenting and the three subtypes of AB. Studies explored a positive relationship between SA⁽²⁰⁾, PA⁽²³⁾, and rule-breaking behavior⁽³⁶⁾. Subsequently, studies explored children brought up under authoritarian parenting as being least prone to develop SA⁽²⁰⁾ and more prone to PA⁽²⁶⁾ and rule-breaking behavior⁽¹⁸⁾. Johnson (2016) suggested that growing through a long-lasting negative effect throughout adolescence could lead to AB, mainly due to difficulty respecting other individuals and abiding by social norms⁽¹⁹⁾. Kirm et al. (2017) explored through a study of 390 secondary school students in Punjab that permissive parenting has a more substantial influence than authoritarian parenting⁽²²⁾. Likewise, studies focused on the relationship between permissive parenting and the three subtypes of AB. For example, a study conducted with students explored a positive relationship between permissive parenting and SA⁽¹⁴⁾, PA⁽²⁹⁾, and rule-breaking behavior⁽³⁶⁾. Subsequently, studies explored children brought up under permissive parenting are the least prone to develop SA⁽²⁰⁾ and more prone to PA⁽²⁶⁾ and rule-breaking behavior⁽³⁰⁾.

2.3 Literature related to Social Media Affinity and AB

According to statistics in Sri Lanka, 7.9 million Sri Lankans use social media by 2021. This was increased by 1.5 million since 2020⁽¹¹⁾. Studies explored that Social Media Affinity also impacts AB development. Mainly due to the aggressiveness the individuals gain when followers do not comment on one's status updates, the retaliation against negative comments, and especially when they seek social support more than they are to be received⁽¹⁰⁾. While lower age Sri Lankans negatively influenced their studies and behaviors due to social media⁽⁴¹⁾. Hameed and Ifran (2020) argued that the rise in social media use gave rise to ABs and resulted in losing focus from work, causing procrastination and frustration⁽¹⁶⁾. Likewise, studies focused on the relationship between social media affinity and the three subtypes of AB. They explored a positive relationship between social media affinity and SA⁽²⁷⁾, PA⁽³⁹⁾, and rule-breaking behavior⁽²⁴⁾.

In order to derive results on the two factors influencing AB in Sri Lanka following hypotheses were followed;

H1-There is a significant negative relationship between authoritative parenting style and AB among secondary school students.

H2-There is a significant positive relationship between authoritarian parenting style and AB among secondary school students.

H3-There is a significant positive relationship between permissive parenting style and AB among secondary school students.

H4-There is a significant relationship between social media affinity and AB among secondary school students.

H5-There is a significant difference in the development of AB between authoritative, authoritarian, and permissive parenting styles among secondary school students.

H6-There is a significant prediction in developing AB by parenting styles and social media affinity among secondary school students.

3. Research Aim

According to the statistics in Sri Lanka on the increase in AB, studying the factors influencing such behaviors is essential. Unfortunately, no research has been conducted in recent decades on the predictors of ABs based only on secondary school students in Sri Lanka, especially on which factor is a more potent contributor to the development of AB and which parenting style has the most substantial influence. Similarly, Baharudin (2011) explored that determinants are necessary to enforce a law⁽³⁾. Therefore, the study attempts to provide sufficient information on the two main determinants of AB, which were identified as essential predictors of AB by previous research⁽⁴⁰⁾.

4. METHODS

4.1 Design

The study examined quantitative survey research, and there was no variable control or manipulation.

4.2 Participants

A statistical power analysis was executed to estimate the sample size using G*Power 3.1 with an effect size $f = 0.25$, considered a medium-sized effect following Cohen (1988), with an $\alpha = .05$ and power = 0.80. Therefore, the projected sample size needed with this effect size was $N = 123$. The final sample consisted of 140 secondary school students in Sri Lanka (45 males, 95 females) aged 18 and 19 years. The samples were collected using convenience sampling.

4.3 Inclusion and Exclusion Criteria

The research accepted only students between 18 and 19 years, using social media and living with parents, including single parents. Any student below 18 years or above 20 years who refused to consent, could not read and understand English, lived with guardians, friends, or other family members, and had undergone psychological treatment/counseling was excluded from the study.

4.4 MATERIALS

Data collection was conducted online using the survey platform 'Google Forms' due to COVID-19 safety concerns during the time of study.

The participant information sheet, informed consent form, and debriefing were developed to inform the purpose of the research, why they were chosen, the discretion of the participants, the option to withdraw their data within 14 days, and contact details of a life center were provided if participants found the questionnaire to be psychologically or emotionally disturbing after participating in the research.

A demographic information form was developed to collect basic information from the participants on their age, gender, social media apps they use, whom they live with, and if they have or have not gone through psychological treatment or counseling.

SubTypes of Antisocial Behavior scale (STAB) assessed the students' levels of AB throughout the research. Alexandra Burt and Brend Donnellan developed this in 2009. STAB is a 32-item scale with a 5-point Likert scale. The scale consists of SA, PA, and rule-breaking behavior. Burt and Donnellan explored the scale has a higher validity and reliability (Burt & Donnellan, 2009).

Divya and Manikandan developed the Perceived Parenting Style Scale (PPSS) in 2013. This scale measures the child's perception of their parent's behavior. Authoritative, authoritarian, and permissive parenting was measured separately. The scale consists of 30 items with a 5-point Likert scale. PPSS has a reliability of 0.79 for authoritative parenting, 0.81 for authoritarian parenting, and 0.86 for permissive parenting⁽¹³⁾.

The social media affinity scale was developed by R. Nicholas Gerlich, Leigh Browning, and Lori Westermann in 2010. This scale measures social media beliefs and the readiness to use social media. It is a 13-item scale and is answered on a scale of 1 to 5. The scale shows higher internal reliability of 0.77⁽¹⁵⁾. 3 Single-items were developed for the major confounding factors.

4.5 Ethical Considerations

The research conformed to the ethical guidelines of the British Psychological Society (BPS)⁽⁶⁾, the Colombo Institute of Research and Psychology ethics committee, and the declaration by Helsinki on the ethical principles for medical research involving human subjects⁽⁴²⁾. Throughout the research, discretion was maintained to protect the participants' identity and participation. The climate of confidentiality was restored by explaining the purpose of the study and the intended use of the data collected. Consent was obtained from respondents whose participation was voluntary. After data collection, access to the data was strictly only accessible to the researcher.

5. Results

5.1 Sample Issues

The initial aim was for all participants to be in a mixed school. However, once data collection was concluded, it was discovered that only 93 participants were from a mixed school. However, due to time constraints, it was decided to use the entire collected sample of 140, disregarding the mixed school criterion.

5.2 Descriptive Statistics

The total number and percentage of males and females who participated in the study are provided in Table 1.

Table 1 Frequency Distribution for Gender

Gender	Frequency	Percent
Males	45	31.9
Females	95	67.4

5.3 Inferential Statics

5.3.1 Relationship between the three Parenting Styles and the three Subtypes of AB

To determine the direction and size of the linear relationship between the three parenting styles with the three subtypes of AB, a bivariate Pearson's correlation coefficient (r) was calculated. The results for authoritative parenting demonstrated a moderate negative correlation, $r(138) = -.36, p < 0.01$ with SA, and a weak negative correlation, $r(138) = -.20, p < 0.05$ with PA.

The results of authoritarian parenting demonstrated a moderate positive correlation, $r(138) = .40, p < 0.01$, with SA, and a weak positive correlation, $r(138) = .29, p < 0.01$, with PA. The results for permissive parenting demonstrated a weak positive correlation, $r(138) = .19, p < 0.05$, with SA but no significant relationship with PA.

To determine the direction and size of the relationship between the three parenting styles and rule-breaking behavior, the spearman correlation coefficient (r) was calculated. Since the data was highly skewed, the non-parametric test was used. The results showed no significant correlation between authoritative parenting and rule-breaking behavior, $r(138) = -.16, p = .068$. However, there was a weak

positive correlation, $r(138) = .17, p < .05$, with authoritarian parenting, and $r(138) = .21, p < .05$, with permissive parenting.

5.3.2 Relationship between Social Media Affinity and the Three Subtypes of AB

To determine the direction and size of the linear relationship between social media affinity with the three subtypes of AB, a bivariate Pearson's correlation coefficient (r) was calculated. The results for SA demonstrated a weak positive correlation, $r(138) = .22, p < .05$, and there was no significant correlation between PA and rule-breaking behavior. To determine the direction and size of the relationship between social media affinity and rule-breaking behavior, spearman correlation coefficient (r) was calculated. Since the data was highly skewed, the non-parametric test was used.

5.3.3 Most Influential Parenting Style on Developing AB Subtypes

A hierarchical regression analysis was conducted to predict which parenting style best impacts the development of each subtype of AB. The results indicate that authoritarian parenting has a positive effect, and authoritative parenting has a negative effect on the development of SA. The most influential parenting style for PA was authoritarian parenting. The results for rule-breaking behavior demonstrated that authoritative parenting was the most influential parenting style but had a negative effect. However, data for rule-breaking behavior was highly skewed; therefore, rule-breaking behavior result is unreliable.

5.3.4 Most Influential Predictor on the Subtypes of AB

A hierarchical regression analysis was conducted to predict which predictor variable had the highest influence on the subtypes of AB. The results reveal that authoritative parenting has a negative effect, and authoritarian parenting has a positive effect on SA. Additionally, authoritarian parenting positively affects the development of PA. Finally, authoritative parenting has a negative effect on the development of rule-breaking behavior. However, data for rule-breaking behavior was highly skewed; therefore, rule-breaking behavior result is unreliable.

6. DISCUSSION

The study's findings indicate that authoritative and authoritarian parenting plays a significant role in developing AB. But, permissive parenting and social media affinity do not significantly impact AB. As Collin et al. (2012) stated, parents are responsible for developing their children's behaviors; it can also be applied to Secondary school students in Sri Lanka⁽¹⁰⁾.

The acceptance of the first four hypotheses indicates that authoritarian parenting, permissive parenting, and social media affinity play a significant role in the development of AB. In contrast, authoritative parenting reduces the development of AB.

The results of hypothesis 5 indicate that SA is negatively affected by authoritative parenting and positively affected by authoritarian parenting. While authoritarian parenting positively affects PA, rule-breaking behavior is negatively affected by authoritative parenting.

The results of hypothesis 6 indicate that SA is negatively affected by authoritative parenting and positively affected by authoritarian parenting. While authoritarian parenting positively affects PA, and authoritative parenting negatively affects rule-breaking behavior. Note that results related to rule-breaking behavior cannot be reliable due to data being highly skewed.

However, literature shows that social media use and permissive parenting develop AB⁽²⁰⁾. The results could differ from past research due to the differences in the function of the parenting style, parental practices⁽⁵⁾, and viewpoints of parenting styles between cultural contexts.

The overall results of the study reveal that the three parenting styles and social media affinity has a significant relationship between each subtype of AB, except for permissive parenting and PA, authoritative parenting and rule-breaking behavior and social media affinity and PA and rule-breaking behavior. Additionally, the study discovers that parents who are nurturing, supportive, and responsible for their children are more prone to reduce the development of AB. In contrast, extremely strict parenting would increase AB. Thus the study recommends that authoritative parenting would be most beneficial among Sri Lankan secondary school students⁽¹²⁾.

7. Implications

The results could be used by policymakers such as government or non-governmental bodies, local communities, police departments, educational institutions, and social welfare organizations dealing with students with behavior problems to build effective interventions, strategies, and legislation. For example, providing academics, preschool and AB care, parenting skills, and social skills can reduce the impact on the development of AB⁽³⁰⁾.

8. Weaknesses

Using the STAB scale leads to a problem with content validity, mainly if the participant's interests are of different comprehensions⁽³⁵⁾. Also, the participants' background in this study would lead the study to have lower significant results. If the study also focused on high education centers, recreational centers, and juvenile detention centers, the study could have found different relationships for the development of ABs. Similarly, the results could have differed with more females participating in the study.

9. Future recommendations

Future researchers could emphasize AB pathways in different age categories and methods to better manage individuals with such behavior styles and the effect on victims of such behaviors in Sri Lanka⁽¹⁾. In addition, it would be beneficial to focus on multiple ethnic groups of secondary school students. This would also benefit authorities in differentiating their strategies according to the ethnic categories in Sri Lanka.

10. REFERENCES

- [1] Acquaviva, E., Ellul, P., & Benarous, X. (2018). Variations in pathways into and out of antisocial behavior from the perspective of developmental psychopathology. *Understanding Uniqueness and Diversity in Child and Adolescent Mental Health*, 3-23. <https://doi.org/10.1016/b978-0-12-815310-9.00001-0>
- [2] Álvarez-García, D., González-Castro, P., Núñez, J. C., Rodríguez, C., & Cerezo, M. (2019). Impact of family and friends on antisocial adolescent behavior: The mediating role of impulsivity and empathy. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02071>
- [3] Baharudin, Rozumah., Krauss, S. Eric., Yacoob, S. Nor., Pei, T. Jo. (2011). Family processes as predictors of antisocial behaviors among adolescents from Urban, single-mother Malay families in Malaysia. *Journal of Comparative Family Studies*, 42(4), 509-522.
- [4] Ballet, J., Sirven, N., Bhukuth, A., & Rousseau, S. (2011). Vulnerability to violence of girls of the street in Mauritania. *Children and Youth Services Review*, 33(5), 656-662. <https://doi.org/10.1016/j.childyouth.2010.11.004>
- [5] Bornstein, M. (2012). Cultural approaches to parenting. *Parenting*, 12(2-3), 212-221. <https://doi.org/10.1080/15295192.2012.683359>
- [6] BPS Code of Human Research Ethics. BPS. <https://www.bps.org.uk/guideline/bps-code-human-research-ethics>
- [7] Burnette, M., Oshri, A., Lax, R., Richards, D., & Ragbeer, S. (2012). Pathways from harsh parenting to adolescent antisocial behavior: A multidomain test of gender moderation. *Development and Psychopathology*, 24(3), 857-870. <https://doi.org/10.1017/s0954579412000417>
- [8] Burt, S., & Donnellan, M. (2009). Development and validation of the Subtypes of Antisocial Behavior Questionnaire. *Aggressive Behavior*, 35(5), 376-398. <https://doi.org/10.1002/ab.20314>
- [9] Carpenter, C. (2012). Narcissism on Facebook: Self-promotional and anti-social behavior. *Personality and Individual Differences*, 52(4), 482-486. <https://doi.org/10.1016/j.paid.2011.11.011>
- [10] Collin, Catherine, B., Nigel, G., Jonnah, G., Voula, L., Merrin, W., Marcus. (2012). *The Psychology Book*. Dorling Kindersley.
- [11] Data reportal. (2021). Digital 2021: Sri Lanka. <https://datareportal.com/reports/digital-2021-sri-lanka>
- [12] Dias, S. R. (2017). What you know and what you ought to know about parenting in contemporary Sri Lanka. Sunday Times. <https://www.pressreader.com>
- [13] Divya, T. V. & Manikandan, K. (2013). Perceived parenting styles scale. Department of Psychology.
- [14] Ehrenreich, S., Beron, K., Brinkley, D., & Underwood, M. (2014). Family predictors of continuity and change in social and physical aggression from ages 9 to 18. *Aggressive Behavior*, 40(5), 421-439. <https://doi.org/10.1002/ab.21535>
- [15] Gerlich, R., Browning, L., & Westermann, L. (2010). The social media affinity scale: Implications for education. *Contemporary Issues in Education Research (CIER)*, 3(11), 35. <https://doi.org/10.19030/cier.v3i11.245>
- [16] Hameed, I., & Irfan, B. (2020). Social media self-control failure leading to antisocial aggressive behavior. *Human Behavior and Emerging Technologies*, 3(2), 296-303. <https://doi.org/10.1002/hbe2.226>
- [17] Hoeve, M., Dubas, J. S., Gerris, J. R. M., Laan, H. V. D., & Smeenk, W. (2011). Maternal and paternal parenting styles: Unique and combined links to adolescent and early adult delinquency. *Journal of Adolescence*, 34(5), 813-827. <https://doi.org/10.1016/j.adolescence.2011.02.004>
- [18] Hosokawa, R., & Katsura, T. (2018). Role of parenting style in children's behavioral problems through the transition from preschool to elementary school according to gender in Japan. *International Journal of Environmental Research and Public Health*, 16(1), 21. <https://doi.org/10.3390/ijerph16010021>
- [19] Johnson, S. A. (2016). Parenting styles and raising delinquent children: Responsibility of parents in encouraging violent behavior. *Forensic Research & Criminology International Journal*, 3(1), 243-247.
- [20] Kawabata, Y., Alink, L., Tseng, W., van IJzendoorn, M., & Crick, N. (2011). Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta-analytic review. *Developmental Review*, 31(4), 240-278. <https://doi.org/10.1016/j.dr.2011.08.001>
- [21] Khaliq, A., & Rasool, S. (2019). Causes of students' antisocial behavior at secondary level schools. *The Spark*, 4(1).
- [22] Kim, U., Farooqui, M. T. Khan., & Zia, S. (2017). Relationship of fathers' parenting style with secondary school students' anti-social behaviour. *Journal of Educational Research*, 20(2), 54-69.

- [23] Kuppens, S., & Ceulemans, E. (2018). Parenting styles: A closer look at a well-known concept. *Journal of Child and Family Studies*, 28(1), 168-181. <https://doi.org/10.1007/s10826-018-1242-x>
- [24] Liggett, R., & Ueberall, S. (2016). Social media impacts behaviour and norms. <http://www.nycrimcomission.org/pdfs/social-media-impacts-behavior-norms.pdf>
- [25] Llorca, A., Cristina, R. M., & Malonda, E. (2017). Parenting, peer relationships, academic self-efficacy, and academic achievement: Direct and mediating effects. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.02120>
- [26] Masud, H., Ahmad, M., Cho, K., & Fakhr, Z. (2019). Parenting styles and aggression among young adolescents: A systematic review of literature. *Community Mental Health Journal*, 55(6), 1015-1030. <https://doi.org/10.1007/s10597-019-00400-0>
- [27] Nesi, J., Choukas-Bradley, S., & Prinstein, M. (2018). Transformation of adolescent peer relations in the social media context: Part 2—Application to peer group processes and future directions for research. *Clinical Child and Family Psychology Review*, 21(3), 295-319. <https://doi.org/10.1007/s10567-018-0262-9>
- [28] Olson, S., Lopez-Duran, N., Lunkenheimer, E., Chang, H., & Sameroff, A. (2011). Individual differences in the development of early peer aggression: Integrating contributions of self-regulation, theory of mind, and parenting. *Development and Psychopathology*, 23(1), 253-266. <https://doi.org/10.1017/s0954579410000775>
- [29] Pascual-Sagastizabal, E., Azurmendi, A., Braza, F., Vergara, A. I., Cardas, J., & Sánchez-Martin, J. R. (2014). Parenting styles and hormone levels as predictors of physical and indirect aggression in boys and girls. *Aggressive Behavior*, 40(5), 465-473. <https://doi.org/10.1002/ab.21539>
- [30] Perera, H. (2013). Childhood predictors of adult mental disorders: implications for prevention. *Sri Lanka Journal of Psychiatry*, 4(1), 1. <https://doi.org/10.4038/sljspsc.v4i1.5712>
- [31] Pinquart, M., & Kauser, R. (2018). Do the associations of parenting styles with behavior problems and academic achievement vary by culture? Results from a meta-analysis. *Cultural Diversity and Ethnic Minority Psychology*, 24(1), 75-100. <https://doi.org/10.1037/cdp0000149>
- [32] Rhee, S., Friedman, N., Boeldt, D., Corley, R., Hewitt, J., & Knafo, A. (2012). Early concern and disregard for others as predictors of antisocial behavior. *Journal of Child Psychology and Psychiatry*, 53(2), 157-166. <https://doi.org/10.1111/j.1469-7610.2012.02574.x>
- [33] Senaratna, B., & Wijewardana, B. (2012). Risk behaviour of street children in Colombo. *Ceylon Medical Journal*, 57(3), 106. <https://doi.org/10.4038/cmj.v57i3.4047>
- [34] Tng, S., Baharudin, R., & Ismail, Z. (2014). Antisocial behaviour in Malaysian adolescents: Assessing measurement equivalence across gender differences. *Child Indicators Research*, 8(3), 537-550. <https://doi.org/10.1007/s12187-014-9279-x>
- [35] Rizvi, S. F. I., & Najam, N. (2015). Emotional and behavioural problems associated with parenting styles in Pakistani adolescents. *Transactions on Education and Social Sciences*, 8(2), 6-13.
- [36] Rego, T. (2015). The concept of authoritative parenting and its effects on academic achievement. *Journal of Psychology and Clinical Psychiatry*, 3(6), 1-5.
- [37] Tuvblad, C., & Beaver, K. (2013). Genetic and environmental influences on antisocial behavior. *Journal of Criminal Justice*, 41(5), 273-276. <https://doi.org/10.1016/j.jcrimjus.2013.07.007>
- [38] Steinberg, L. (2016). Adolescence (3rd ed.). McGraw-Hill Education.
- [39] Um, Y., Choi, Y., & Yoo, S. Y. (2019). Relationships between smartphone dependency and aggression among middle school students: Mediating and moderating effects of ego-resilience, parenting behaviour, and peer attachment. *International Journal of Environmental Research and Public Health*, 16(19). <https://doi.org/10.3390/ijerph16193534>
- [40] Vannucci, A., Simpson, E. G., Gagnon, S., & Ohannessian, C. M. (2020). Social media use and risky behaviors in adolescents: A meta-analysis. *Journal of Adolescence*, 79(1), 258-274. <https://doi.org/10.1016/j.adolescence.2020.01.014>
- [41] Weerasendera, R. (2014). The impact of social media in Sri Lanka: Issues and challenges in mental health. *Sri Lanka Journal of Psychiatry*, 5(1), 1-2.
- [42] World Medical Association. (2001). World Medical Association Declaration of Helsinki. Ethical principles for medical research involving human subjects. *Bulletin of the World Health Organization*, 79 (4), 373 - 374. World Health Organization. <https://apps.who.int/iris/handle/10665/268312>.