ORIGINAL ARTICLE

Parental and children's health behavior stemming from the Thai national health recommendations in Bangkok

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ABSTRACT

Non-communicable diseases (NCDs) have an impact on treatment costs and economic prosperity. Ten National Health Recommendations (NHRs) were announced by the Thai government in 1996 to promote the good health of children, adolescents, and the general public. Although regular practice of these recommendations should promote good health, the data from the Ministry of Health in 2015 shows that Thai children moderately following the NHR have higher health risk behaviors, potentially leading to obesity; a continually growing threat to Thai children, as well as increasing the risk of Type 2 diabetes and NCDs in adults. This research aims to study the promotion of good health by parents of students in primary schools in Bangkok under the NHRs and the relating factors. This study uses both quantitative and qualitative methods. The quantitative method is descriptive-comparative research conducted on the health promotion behavior of parents and children in three groups. These consist of schools under the Office of the Basic Education Commission (OBEC), the Bangkok Metropolitan Administration (BMA), and the Office of the Private Education Commission (OPEC). Multi-stage and stratified sampling are used to select 1,043 participants from eight schools in Bangkok, while the statistical analysis is conducted by one-way ANOVA. The qualitative method uses in-depth interviews with 12 parents and six school directors. According to the results, the health behavior of parents and students from the three schools showed statistically significant differences at the 0.05 level. In terms of health promotion, students with higher scores relating to NHRs on the questionnaire had parents with better health behavior than those with lower scores. The NHRs are used to organize knowledge-sharing sessions in schools.

Key words:
health behavior; non-communicable diseases; national health recommendations

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INTRODUCTION

Chronic non-communicable diseases are a leading cause of morbidity and mortality in the global population, increasing every year. One of the 17 Sustainable Development Goals (SDGs) established by the United Nations in 2015 is to maintain health and well-being to address global health problems.[1] The risk of non-communicable diseases (NCDs) is greatest during childhood and adolescence.[2] Many children grow up in an environment that does not promote healthy lifestyles, leading to a decrease in human capital capabilities and opportunities for children and adolescents.[3] According to the global health data on children and adolescents under 20 years of age, 1.2 million people per year suffer from NCDs. A report on children's health checkups undertaken in 2014 shows that more Thais are becoming overweight or obese. Children between 12 and 14 years old tend to be the most overweight, followed by those between 6 and 11, and 1 and 5 years old, respectively.[4] Obesity is a growing threat to Thai children and increases the risk of Type 2 diabetes, which will not only place a cost burden on them in terms of medical treatment but also on the national health agency.

Although families play an important role in promoting children's health, they can also lead to many health risks. A study shows that the attitudes and health literacy of families impact the health promotion of children.[5] In addition, collaboration between schools and families in relation to children's health promotion helps to develop a healthy environment.[6] Co-management leads to better health of children and lowers the risk of health issues.[7]

The promotion of health education helps to create a learning space and activities for developing healthy behavior in children.[8] Ten National Health Recommendations (NHRs) were proposed by a health education committee, established with the approval of the cabinet under the health promotion principle of the Thai government, and should be regularly practiced by children, adolescents, and the general public to maintain good physical and mental health. The NHRs were eventually announced on May 28, 1996, with any related agencies being encouraged to promote them.[9] Health promotion relates to individual behaviors and activities which aim to elevate a person's well-being. The six fundamental elements of well-being are health responsibility, exercise, diet, interpersonal relationships, spiritual development, and stress management. These are the ultimate goals of positive health behavior.[10]

According to the Ministry of Health data for 2015, Thai children moderately follow the NHRs but exhibit higher health risk behaviors such as eating to alleviate sadness, consuming sweets, and drinking carbonated beverages. These poor health habits increase the risk of NCDs.[11] However, schools in Bangkok function under three different agencies: the Office of the Basic Education Commission (OBEC), the Bangkok Metropolitan Administration (BMA), and the Office of the Private Education Commission (OPEC). The government's annual action plan for the health division in 2018 focuses only on students' health. To the best of the author's knowledge, no current studies exist on students' health promotion by parents, despite its importance for the ongoing control of their well-being.

This research aims to: 1) examine the health promotion behavior of parents and students in Bangkok; 2) compare the health promotion behavior exhibited by parents in the three groups of primary schools under study; 3) compare the practice of the 10 NHRs among students in the three groups of primary schools; and 4)

investigate the factors affecting students' health.

METHODS

This study used the following mixed methods: 1) Quantitative research, involving one questionnaire for parents containing six elements of health promotion behavior according to the theory of Walker, Sechrist, and Pender, and a second questionnaire to survey the students' behavior according to the 10 NHRs. 2) Qualitative research involving in-depth interviews with parents and school directors concerning the promotion of students' health. The data collection period covered five months from April to August 2021 and focused on eight schools in three groups in Bangkok.

Data collection

The researcher informed the participants of the research objectives and study procedures, distributing the following documents: Information Sheet, Consent Form, and Assent Form. The researcher distributed a questionnaire to those students who agreed to participate in the research and gave the students privacy and confidentiality by allowing them to complete the questionnaire independently in class and distributing another questionnaire for students to give their parents to complete at home. Parents were then screened for in-depth interviews, including one with the school directors. The researcher distributed the following documents: Information Sheet and Consent Form, requesting permission to take notes and make a recording of the telephone interview.

Population

The population consisted of parents, students, and school directors from three groups of primary schools.

Inclusion criteria for the quantitative research: 1) Students in grade four who are healthy and have no deficiencies which may affect the research questionnaire responses with parental consent obtained to participate in the research. 2) Parents must be in the same family as the students and live with them, with their main duty being to take care of the children's health. The parents must also consent to participate in the research. Inclusion criteria for the qualitative research: 1) Participants must be parents of grade four students. 2) School directors (same school as quantitative research) must give their consent to participate in the research.

Exclusion criteria for the quantitative research: 1) Students in grade four with impaired health, which may affect the questionnaire response and without parental consent to participate in the research. 2) Parents who are not in the same family as the students. Exclusion criteria for the qualitative research: Parents and school directors who do not agree to participate in the research or request that their participation in the research be canceled.

Sample size

The 1,043 participants for the quantitative research consisted of the following: 503 parents and 540 students from three groups of primary schools. The research data shows that children start to receive excess nutrition at this level. The required minimum sample size of 800 was obtained from the studies by William G. Cochran[12] and Taro Yamane[13]. The multi-stage sampling method was applied, beginning with stratified sampling. The schools were split into different sub-groups under the three groups of OBEC, BMA, and OPEC. To ensure greater sample variation, the researcher then applied cluster sampling to categorize the schools according to the district in which they were located. The areas were divided into inner Bangkok, middle Bangkok, and outer Bangkok. The second sub-method used was simple random sampling.

The 18 participants for the qualitative research consisted of 12 parents and six school directors in the three groups of Bangkok schools. The researcher uses purposive sampling from a specific key person who meets the inclusion criteria. A school director and two parents of children with the highest and lowest NHR scores from each of the six schools were selected for this research. The total sample size used in this study was 1,061.

Research instruments

This research employed the following mixed methods:

1) Quantitative research: Two questionnaires were distributed, the first of which contained 24 questions, using a rating scale for responses ranging from "always" to "never" on the six elements relating to the promotion of health by parents according to the theory of Walker, Sechrist, and Pender.

The second questionnaire containing 25 questions used a rating scale for responses ranging from "always" to "never", to elicit the students' behavior according to the 10 NHRs.

The 10 NHRs are categorized according to Pender's Health Promotion Theory as follows:

1. Health responsibility: (1) Take care of your body, (2) Keep teeth healthy, (3) Wash hands, (5) No drugs, and (7) Prevent accidents.
2. Physical activity: (8) Exercise
3. Nutrition: (4) Eat cooked food
4. Interpersonal relations: (6) Family relationships
5. Spiritual growth: (10) Social conscience
6. Stress management: (9) Cheerful mind

2) Qualitative research: In-depth interviews with parents concerning health promotion awareness and the role of the family, and interviews with school directors on the health promotion policy for students and the role of the school.

Validity and reliability

The research tools were verified by three experts in the health promotion field using the Content Validity Index (CVI). For the parents' questionnaire, the CVI was equal to 0.85; and the Cronbach's Alpha (pre-tested with the 30 parents) was equal to 0.70. For the children's questionnaire, the CVI was equal to 0.90 and the Cronbach's Alpha (pre-tested with the 30 students) was equal to 0.71. For the in-depth interview instrument, the CVI of the parents' interviews was equal to 0.91, and the CVI of the school directors' interviews was equal to 0.93.

Ethical considerations

Data collection began following the approval of the Ethics Committee, based on the willingness of participants. The research ethics were approved by the second Ethics Committee of Sociology, Thammasat University. Project code: 049/2020.

Statistical analysis

Descriptive statistics were used to analyze the information on parents and students. The health behaviors were compared among the three groups of schools using the one-way ANOVA, and the average values (x), standard deviation values (SD), and p-values presented. The qualitative data from the semi-structured and in-depth interviews were then analyzed.

RESULTS

Quantitative research results

Characteristics of parents with children in the three groups of primary schools

There were 503 participants in total: 147 had children who attended schools under the OBEC, 182 under the BMA, and 174 under the OPEC. Most participants were female, aged from 31–40 and 41–49 years. The majority were mothers of the children and had no congenital diseases.

Characteristics of students in the three groups of primary schools

There were 540 participants in total: 160 attended schools under the OBEC, 202 under the BMA, and 178 under the OPEC. Most participants were Buddhists and had no congenital disease.

Health promotion behavior of parents and students

The overall health promotion behavior of the parents in all groups was at a high level, while
students in all groups exhibited a moderate level of such behavior. Parents and students exhibited
the same level of behavior for health responsibility and spiritual growth (high) and physical exercise and nutrition (moderate). However, two types of behaviors differed between parents and students: interpersonal relationships and stress management. The health promotion behavior scores for parents and students in the three school groups in Bangkok are presented in Table 1.

Table 1. Health promotion behavior scores for parents and students in the three groups of primary schools in Bangkok

Health promotion behaviors	Parents M	Level	Students M	Level
1. Health responsibility	16.20	High	12.99	High
2. Physical activity	11.02	Medium	4.10	Medium
3. Nutrition	14.62	Medium	13.22	Medium
4. Interpersonal relations	9.63	High	4.68	Medium
5. Spiritual growth	14.01	High	7.38	High
6. Stress management	10.51	High	5.0	Medium
Total score	75.99	High	47.37	Medium

Comparing the health promotion behavior of parents in the three groups of primary schools

The parents' scores for health promotion behavior were high in the three groups of primary schools. The scores were high for four aspects of health promotion (health responsibility, interpersonal relations, spiritual growth, and stress management), while the other two aspects (physical activity and nutrition) resulted in moderate scores.

A comparison of the overall results for health promotion behavior among the three groups of primary schools showed statistically significant differences at the 0.05 level. When considering each aspect of health promotion, namely health responsibility, physical activity, interpersonal relations, spiritual growth, and stress management, all exhibited statistically significant differences at the 0.05 level. However, no statistically significant differences were exhibited for nutrition.

The scores for parents' health promotion behavior are presented in Table 2.

Table 2. Parent scores for health promotion behavior in the three groups of schools in Bangkok

Health promotion behaviors	OBEC		BMA		OPEC		Comparison		
	M	**SD**	**M**	**SD**	**M**	**SD**	**MS**	**F**	***p*-value**
1. Health responsibility	16.11	2.33	15.12	2.92	17.40	2.01			
Between groups	(High)		(High)		(High)		233.56	38.37	.000***
2. Physical activity	10.82	2.41	10.50	2.62	11.74	2.25			
Between groups	(Medium)		(Medium)		(Medium)		72.86	12.26	.000***
3. Nutrition	14.54	1.74	14.43	2.62	14.89	1.85			
Between groups	(Medium)		(Medium)		(Medium)		9.91	2.77	.063
4. Interpersonal relations	9.97	1.47	9.51	2.02	9.46	1.70			
Between groups	(High)		(High)		(High)		12.13	4.69	.01**
5. Spiritual growth	13.81	1.96	13.86	1.61	14.32	1.70			
Between groups	(High)		(High)		(High)		13.24	3.78	.023*
6. Stress management	10.39	1.70	10.31	1.94	10.83	1.40			
Between groups	(High)		(High)		(High)		13.77	5.28	.005**
Total score	75.64	6.84	75.73	7.19	78.65	5.73			
Between groups	(High)		(High)		(High)		1086.78	24.81	.000***

*Results (P-value significance level: *.05, **.01, ***.001) One-way ANOVA was used to analyze the data*

Comparing the health promotion behavior of students in the three groups of primary schools

The students' scores for health promotion behavior in the three groups of primary schools were high. The scores for three aspects (washing hands, no drugs, and social conscience) were high, and those of the other three (keeping teeth healthy, eating cooked food, and family relationship) were moderate. Four aspects differed between the three groups as follows: The personal hygiene observation behavior of students from schools under the OBEC and OPEC was high, but moderate for those under the BMA. The accident prevention and cheerful mind behaviors of students from schools under the OPEC were high, but moderate for those under the OBEC and BMA. The physical exercise behavior of students from schools under the OPEC was moderate but low for those under the OBEC and BMA.

When comparing all health promotion behaviors according to the 10 NHRs, statistically significant differences at the level of 0.05 were observed in students attending all groups of schools. When considering each type of behavior, statistically significant differences were observed at 0.05 for nine behaviors, while there was no statistically significant difference in relationship-building behavior. The scores for the students' health promotion behaviors are presented in Table 3.

Table 3. Student scores for health promotion behavior in the three groups of schools in Bangkok

Health promotion behaviors	OBEC		BMA		OPEC		Comparison		
	M	**SD**	**M**	**SD**	**M**	**SD**	**MS**	**F**	***p*-value**
1. Take care of body	5.21	0.71	4.98	0.77	5.51	0.67			
Between groups	(High)		(Medium)		(High)		13.35	25.45	.000***
2. Keep teeth healthy	4.58	0.91	4.34	1.01	4.70	0.75			
Between groups	(Medium)		(Medium)		(Medium)		6.35	7.71	.000***
3. Wash hands	5.03	0.88	5.22	0.82	5.56	0.66			
Between groups	(High)		(High)		(High)		12.02	19.00	.000***
4. Eat cooked food	13.22	1.66	13.00	1.71	13.47	1.60			
Between groups	(Medium)		(Medium)		(Medium)		10.25	3.69	.025*
5. No drugs	5.96	0.25	5.82	0.51	6.00	0			
Between groups	(High)		(High)		(High)		1.66	13.95	.000***
6. Family relationship	4.68	0.89	4.61	0.86	4.76	0.82			
Between groups	(Medium)		(Medium)		(Medium)		1.06	1.44	.236
7. Prevent accidents	4.67	1.00	4.46	1.02	5.15	1.01			
Between groups	(Medium)		(Medium)		(High)		23.60	22.84	.000***
8. Exercise	3.97	1.13	3.99	1.01	4.33	0.94			
Between groups	(Low)		(Low)		(Medium)		7.27	6.85	.001***
9. Cheerful mind	4.87	0.95	4.70	0.93	5.47	0.74			
Between groups	(Medium)		(Medium)		(High)		30.01	38.40	.000***
10. Social conscience	7.25	1.12	7.04	1.09	7.87	1.07			
Between groups	(High)		(High)		(High)		34.63	28.73	.000***
Total score	59.44	5.36	58.15	5.01	62.81	4.74	1073.44	42.34	.000***
Between groups	(High)		(High)		(High)				

*Results (P-value significance level: *.05, **.01, ***.001) One-way ANOVA was used to analyze the data*

Qualitative research results

Factors affecting the students' health

Parents whose children had both high and low scores for NHRs defined "health promotion" in the same way. Parents of students who had a high score for NHRs tended to focus more on taking care of personal hygiene, while most parents who cooked at home and exercised regularly positively affected the health behavior of their children. The physical and mental health of most children in this group was good, and they had no other problems. Furthermore, they did not consume unhealthy snacks, sweets, and carbonated beverages very often since the parents controlled the children's eating behavior by scheduling their meals, and regularly providing vegetables, fruits, and milk.

Of the parents whose children had a low score for NHRs, half bought ready-to-eat food while the remainder cooked meals themselves. Most of them did not exercise. Although half the children had normal physical and mental health, the remainder experienced problems with physical and mental health due to their addiction to games and phones. Most of them also regularly consumed unhealthy snacks, sweets, and carbonated beverages. The results of in-depth interviews with parents of children attending primary schools in the three groups are presented in Table 4.

Table 4. Results of in-depth interviews with parents

	Parents whose children had a high score for NHRs	Parents whose children had a low score for NHRs
Master themes	Awareness/meaning of "health promotion"	
	Health promotion is hygiene observation, exercising, eating healthy food, maintaining good mental health, and having enough sleep.	Health promotion is exercising, eating healthy food, maintaining good mental health, and having enough sleep.
Subthemes	The role of family in students' health promotion	
	- Personal health observation involves taking care of both physical and mental health and exercising regularly. - Families play a more important role than schools.	- Personal health observation involves taking care of mental health and relieving stress. - Schools play a more important role than families.

In terms of health promotion in schools, the research showed that the most common health promotion policies were setting an annual medical checkup, arranging a sports day once a week, and adding a physical education class to the schedule. In terms of school standards for selling food and snacks, none of the three groups allowed the sale of unhealthy snacks and carbonated beverages in the schools. Moreover, all schools collaborated with other related agencies in playing an important role in students' health promotion, especially local health centers. Other supportive organizations consisted of local hospitals, the Metropolitan Health and Wellness Institution, district offices, and temples.

DISCUSSION

The health promotion behaviors of parents and students in all three school groups were at a high level. This aligns with an earlier study which found that parents with high health literacy tended to encourage good health behaviors in their children, including health responsibilities such as brushing teeth, eating nutritious food, and engaging in physical activities.[14] The parents' dental health also impacts children's health promotion behavior, such as having decayed teeth and bad gum health.[15] Parents who have good dental health attitudes and behaviors are likely to see the importance of their children's dental health.[16] The hand-washing behavior of parents also relates to children's health promotion behavior.[17]

The physical exercising behaviors of parents and students were at a moderate level. This aligns with a study demonstrating that good parental modeling has a positive relationship with the physical activity of their children.[18] It also positively affects other factors, such as the care and motivation of the children.[19] Parents who encourage exercise create a positive impact on the fitness level of their children and the family's support recognition.[20] Believing and recognizing the support of the family encourages children to take part in more exercise. This helps the family to create a positive relationship with children who have low self-esteem.[21]

The nutrition-related health behavior of the parents and students in the three primary school groups was at a

moderate level. This aligns with a study showing that parenting styles, nurturing, and setting a good example in terms of healthy eating habits impact children's eating behavior.[22] The children's diet control is an important factor in shaping their eating behavior, such as limiting unhealthy food intake and educating them about healthy food.[23] However, parents should also explain the reasons. Forcing has a negative effect on children's food preferences and can lead them to consume more fatty and ultra-sweet food.[24]

In terms of interpersonal relationships, parents of children in the three primary school groups exhibited high scores for this type of health promotion behavior, while the children's scores were at a moderate level. Authoritative parenting has a more positive effect on children's health than authoritarian parenting.[25] A good and close relationship within the family can reduce stress in children.[26] Parents who are emotionally aware tend to have children with fewer behavioral problems, such as aggressiveness and the use of addictive substances.[27] A low-quality relationship between children and their parents can lead to children experiencing severe phone addiction and a low capability to control themselves.[28]

In terms of the spiritual growth aspect of health promotion behavior, both parents and children exhibited high scores. Spiritual development is related to the environmental context and helps to promote appropriate behaviors in children in terms of learning and being publicly minded.[29] Spiritual development comprises many components, such as understanding one's self and others, defining things around one's self, and being aware of how things are related.[30] Spiritual thoughts are formed in children according to socio-psychological conditions such as families, teachers, friends, and social media.[31] Schools participate in developing the children's spirit.[32]

In terms of the stress management aspect of health behavior, parents exhibited high scores while the children's scores were at a moderate level. The family's emotions are likely to affect the children's stress level and responsive behavior.[33] Stress in children affects their health behavior in many ways, such as impolite eating manners and changes in eating habits.[34]

Factors relating to children's health

Health promotion awareness of the parents

Parents whose children exhibited a low score for NHRs were more likely to emphasize mental health care rather than physical. This aligns with a study indicating that the awareness of parents toward health promotion is likely to focus on happiness and respect for others rather than the physical health of the children. The authors believe that schools play an important role in promoting children's health.[35] Health promotion is associated with the parents' awareness of their children's body weight. Parents often underestimate their children's weight.[36]

School policy

None of the schools in the three groups allow the sale of unhealthy snacks and carbonated beverages on the premises. This aligns with a study showing that the sustainability of students' health behavior depends on the continual support of the school management and the readiness of tools and teamwork.[37] Health activities or programs arranged by schools play an important role in promoting students' health.[38]

Other factors

Food marketing through various forms of media impacts children's attitudes and preferences.[39] Screen addiction can lead to obesity in children through the increased intake of high-energy food with little nutritional value and a reduction in sleep and exercise.[40] Children are influenced by the family environment, such as fewer family activities, the behavior of

other family members, and school policies.[41] Due to the COVID-19 pandemic, many learning and working activities have moved to online platforms, resulting in a change in people's health behavior and lifestyles.

Strengths and limitations of this study

The strengths of this study are the data analysis components; the use of quantitative methods to ascertain the health promotion behavior of parents and children and qualitative methods for eliciting the participants' awareness of the roles played by family and schools in three groups of elementary schools in Bangkok. The limitations of this research are that parental attitudes and health behavior are only exhibited, rather than being directly observed.

However, self-reported health behavior and attitudes are presented.

RECOMMENDATIONS

The government should promote the 10 NHRs in schools. Related agencies should also create an environment that supports students' exercise and educates the parents on health promotion. Parents of children with a low NHR score exhibit low health behavior and health literacy. The government should also analyze additional psychological factors of the parents, such as their attitudes toward health and awareness of the elements impacting children's health behavior.

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REFERENCES

1. United Nations. The Sustainable Development Goals Report 2020 [Internet]. [cited 2021 Jul 29]. Available from: https://unstats.un.org/sdgs/report/2020/
2. Mokdad AH, Forouzanfar MH, Daoud F, Mokdad AA, El Bcheraoui C, Moradi-Lakeh M et al. Global burden of diseases, injuries, and risk factors for young people's health during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2016;387(10036):2383-401.
3. Jan S, Laba TL, Essue BM, Gheorghe A, Muhunthan J, Engelgau M, et al. Action to address the household economic burden of non-communicable diseases. Lancet. 2018;391(10134): 2047-58.
4. Aekplakorn W. Thai National Health Examination Survey in 2014. Nonthaburi: Health Systems Research Institute (HSRI); 2014.
5. Fernandez-Jimenez R, Jaslow R, Bansilal S, Santana M, Diaz-Munoz R, Latina J, et al. Child health promotion in underserved communities: the FAMILIA trial. J Am Coll Cardiol. 2019;73(16):2011-21.
6. Santos-Beneit G, Bodega P, De Miguel M, Rodríguez C, Carral V, Orrit X, et al. Rationale and design of the SI! Program for health promotion in elementary students aged 6 to 11 years: A cluster randomized trial. Am Heart J. 2019;210:9-17.
7. Maksampan P. The style of cooperative management to promote the best of health of the students of Paidampittayakom Ratchamangkalapisek School. LP Rajabhat J. 2015;4(1):1-15.

8. Branco LD, Salomé AL, Rocha LJ, Braga EC, De Souza Santos D. Health promotion education for children: an intersectoral project. Int J Integr Care. 2019;19(4):596.
9. Health education division, Ministry of Public Health. National health commandments. Nonthaburi: Ministry of Public Health; 2008.
10. Pender NJ, Pender AR. Health promotion in nursing practice Norwalk. Stamford: Appleton & Lange; 1987.
11. Sopontammarak A. Eating Disorders in Children [Internet]. 2014 [cited 2021 Jul 18]. Available from: https:// www.thaihealth.or.th/Content/24459.
12. Cochran WG. Sampling techniques. 2nd ed. New York: John Wiley and Sons Inc; 1963.
13. Yamane T. Statistics, An Introductory Analysis. New York: Harper and Row CO; 1967.
14. De Buhr E, Tannen A. Parental health literacy and health knowledge, behaviours and outcomes in children: a cross-sectional survey. BMC Public Health. 2020;20(1):1-9.
15. Okada M, Kawamura M, Kaihara Y, Matsuzaki Y, Kuwahara S, Ishidori H, et al. Influence of parents' oral health behaviour on oral health status of their school children: an exploratory study employing a causal modelling technique. Int J Paediatr Dent. 2002; 12(2):101-8.
16. Vanagas G, Milašauskienė Ž, Grabauskas V, Mickevičienė A. Associations between parental skills and their attitudes toward importance to develop good oral hygiene skills in their children. Medicina. 2009;45(9):718.
17. Song IH, Kim SA, Park WS. Family factors associated with children's handwashing hygiene behavior. J Child Health Care. 2013;17(2):164-73.
18. Hong JT, Chen ST, Tang Y, Cao ZB, Zhuang J, Zhu Z, et al. Associations between various kinds of parental support and physical activity among children and adolescents in Shanghai, China: gender and age differences. BMC Public Health. 2020;20(1):1-9.
19. Vander Ploeg KA, Kuhle S, Maximova K, McGavock J, Wu B, Veugelers PJ. The importance of parental beliefs and support for pedometer-measured physical activity on school days and weekend days among Canadian children. BMC Public Health. 2013; 13(1):1-7.
20. Wilk P, Clark AF, Maltby A, Tucker P, Gilliland JA. Exploring the effect of parental influence on children's physical activity: The mediating role of children's perceptions of parental support. Prev Med. 2018;106:79-85.
21. Shen B, Centeio E, Garn A, Martin J, Kulik N, Somers C, et al. Parental social support, perceived competence and enjoyment in school physical activity. J Sport Health Sci. 2018;7(3):346-52.
22. Scaglioni S, De Cosmi V, Ciappolino V, Parazzini F, Brambilla P, Agostoni C. Factors influencing children's eating behaviours. Nutrients. 2018;10(6):706.
23. Yee AZ, Lwin MO, Ho SS. The influence of parental practices on child promotive and preventive food consumption behaviors: a systematic review and meta-analysis. Int J BehavNutr Phys Activ. 2017;14(1):1-4.
24. Vollmer RL, Baietto J. Practices and preferences: Exploring the relationships between food-related parenting practices and child food preferences for high fat and/or sugar foods, fruits, and vegetables. Appetite. 2017;113:134-40.
25. Kaufmann D, Gesten E, Lucia RC, Salcedo O, Rendina-Gobioff G, Gadd R. The Relationship between parenting style and children's adjustment: The parents' perspective. J Child Fam Stud. 2000;9(2):231-45.
26. Chen E, Brody GH, Miller GE. Childhood close family relationships and health. Am Psychol. 2017;72(6): 555.

27. Coatsworth JD, Timpe Z, Nix RL, Duncan LG, Greenberg MT. Changes in mindful parenting: Associations with changes in parenting, parent–youth relationship quality, and youth behavior. J Soc Soc Work Res. 2018;9(4):511-29.
28. Kim HJ, Min JY, Min KB, Lee TJ, Yoo S. Relationship among family environment, self-control, friendship quality, and adolescents' smartphone addiction in South Korea: Findings from nationwide data. PLOS ONE. 2018;13(2):e0190896.
29. Homsin N, Chantarasombat C, Yeamsang T. Using Knowledge Management for Developing Secondary School Students' Public Mind in Thailand. Int J Educ Res. 2014;2(10):551-66.
30. Haugen HM. It is time for a general comment on children's spiritual development. Int J Child Spiritual. 2018;23(3):306-22.
31. Pomytkina L, Moskalyova L, Podkopaieva Y, Gurov S, Podplota S, Zlahodukh V. Empirical studies of socio-psychological conditions of formation of ideas about the spiritual ideal in primary school children. Int J Child Spiritual. 2019;24(4):371-88.
32. Srijumnong S, Sri-ampai P, Chano J. Developing public mind curriculum for lower secondary school classes using contemplative education methods. Educ Res Rev. 2015;10(16):2387-99.
33. Waters SF, Karnilowicz HR, West TV, Mendes WB. Keep it to yourself? Parent emotion suppression influences physiological linkage and interaction behavior. J Fam Psychol. 2020;34(7): 784.
34. Hill DC, Moss RH, Sykes-Muskett B, Conner M, O'Connor DB. Stress and eating behaviors in children and adolescents: Systematic review and meta-analysis. Appetite. 2018;123:14-22.
35. Kone J, Bartels IM, Valkenburg-van Roon AA, Visscher TL. Parents' perception of health promotion: What do parents think of a healthy lifestyle in parenting and the impact of the school environment? A qualitative research in the Netherlands. J Pediatr Nurs. 2022;62:e148-55.
36. Salas XR, Buoncristiano M, Williams J, Kebbe M, Spinelli A, Nardone P, et al. Parental Perceptions of Children's Weight Status in 22 Countries: The WHO European Childhood Obesity Surveillance Initiative: COSI 2015/2017. Obes Facts. 2021;14(6): 658-74.
37. Shoesmith A, Hall A, Wolfenden L, Shelton RC, Powell BJ, Brown H, et al. Barriers and facilitators influencing the sustainment of health behaviour interventions in schools and childcare services: a systematic review. Implement Sci. 2021;16(1):1-20.
38. Bandoni DH, Canella DS. Can Eating Food Offered by Schools Have a Positive Influence on Nutritional Status of Children? An Example from Brazil. Health Behav Policy Rev. 2021;8(3): 202-11.
39. Smith R, Kelly B, Yeatman H, Boyland E. Food marketing influences children's attitudes, preferences and consumption: A systematic critical review. Nutrients. 2019;11(4):875.
40. Robinson TN, Banda JA, Hale L, Lu AS, Fleming-Milici F, Calvert SL, et al. Screen media exposure and obesity in children and adolescents. Pediatrics. 2017;140(2):97-101.
41. Arundell L, Parker K, Timperio A, Salmon J, Veitch J. Home-based screen time behaviors amongst youth and their parents: familial typologies and their modifiable correlates. BMC public health. 2020;20(1):1-11