

Effect of Parenting Styles on Vegetable Having Behavior of Small Children

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Abstract—The objectives of this research were 1) study on the parenting style effects on vegetable having behavior of small children 2) to study vegetable having behavior of small children and 3) to study the relation between parenting style and vegetable having behavior of small children. The samples used include the parents of 120 small children both male and female studying in pre-kindergarten level of preschool training center, Wat Phetsamut at Maeklong Sub-district, Mueng District, Samutsongkhram Province. Statistics used in the analysis were percentage, mean, standard deviation and the relation between parenting style and vegetable having behavior of small children by Pearson's coefficient. The research found that the parenting style with attention is in high level ($\bar{X}=4.40$), the parenting style with control and the parenting style with indulgence are in the intermediate level ($\bar{X}=3.33$) and ($\bar{X}=2.56$) respectively and the parenting style with abandon is in low level ($\bar{X}=1.86$). Vegetable having behavior of small children found that the most are in intermediate level ($\bar{X}=3.35$). The relation between parenting style of parent and vegetable having behavior of small children found that parenting style with attention and control have positive relation to vegetable having behavior of small children but parenting style with indulgence and abandon have negative relation to vegetable having of small children.

Index Terms—parenting style, vegetable having behavior, small children

I. INTRODUCTION

Parenting is an important factor that makes overall development of children growth. Parenting covers advising, teaching and training that aims to keep children well-behaved, discipline, ability to be control of themselves and to have responsibility by aiming to keep children healthy, happy, intelligence and to have good relationship with others. The growth and development of a child depends on two main factors: genetics and the environment. Parenting is an important environment factor to raise children. Environmental factors have huge influence on human development such as nutrition, family relationships, traditional culture and parenting style especially parenting style is an environmental factor that has a high influence on human development as Nopanate Tummaborwon [1] stated that good child development start from the family. How will a child grow

with quality of life and personality? Will a child be a good person that helps the society or will a child create problems for themselves and society? Partly depends on the family condition and methods of parenting from family members.

The current situation of child health problems is the rate of consumption of fruits and vegetables in childhood has been decreases which result in long-term health issue. From the report of the Thai People's Health Survey, the 4th physical examination 2008 - 2009 (child health) found that children aged 2-5 years old consume fruits and vegetables on average of 1.6 parts per day which is lower than standard. Fruits and vegetables are important to the health of children at this age, because it provides vitamin C for building various cells and membranes throughout the body, including vitamin A allowing the nerve cells to function properly which directly and indirectly result in brain development. Insufficient consume of vitamin A will decrease the function of the brain cells resulting in slow learning, as well as interrupt the growth of children. Common problem in children is anorexia and food choices which children deny trying new foods also refusing to eat fruits and vegetables, which later causes long-term health problems. It is reported that 31% of people with heart disease, 19% of people with gastrointestinal diseases and 11% of people with stroke is mainly caused by insufficient consume of vegetables and fruits per day. Also insufficient consume of vegetables and fruits are important risk factor for obesity that is becoming more and more intense, by increasing obesity more than 3 times. [2] Promoting the consumption of fruits and vegetables in young children is particularly important because it is the starting point for the development of healthy behaviors leading to promote sustainable behaviors because it is the age of learning vegetable consumption behavior for small children and should therefore be promoted until consume regularly and becomes a habit. [3]

II. LITERARY REVIEW

A. The Concept about Small Children

1) Nature of small children

Small children refer to children who are new born to 5 years old. [4] The nature of small children is something that carries children since fertilization as fetus and grow

up as an adult. When considering the nature of children whose development is growing, maturity, learning and various needs depending on the age and natural development of children Sirima Pinyoarnuntapong. [4] said that childhood from birth to eight years of age or early childhood is the most important phase of development in all aspects such as physical, intellectual, emotional, psychological, social and personality.

2) *Meaning and importance of parenting*

Parenting means that parents or instructors cultivate children to be responsible, discipline, self-reliant by giving love and attention by provide protection and assistance to satisfy both physical and mental needs in order for children to live happily in society. [5] The children that have good physical and mental development, family is one of the most important factors for the development of children especially the style that parents raise children to influence the current behavior patterns of children and the potential of children in the future. Which the child environment, especially the family pattern and parenting style as well as the behaviors that parents treat children are involved in the development of children both physical and mental health both at present and in the future. [6]

B. *The Concept of Raising Children*

Important key concepts and models for developing child rearing which are widely accepted today can be summarize into 4 forms of parenting according to the concept of Diana Baumrind [7] as follows: 1. Authoritative Parenting Style 2. Authoritarian Parenting Style 3. Permissive Parenting Style and 4. Uninvolved Parenting Style.

C. *The Concept of Behavior*

Behavior refers to reactions or things that a person expresses to respond to stimuli, one way or the other in any situation that can be observed or heard, which may have been unconscious or well contemplated with knowledge, understanding and practice is a manifestation made by others and can be observed by people in the surrounding which can be measure with an instrument. [8]-[9]

1) *What determines human behavior?*

There are many aspects of human behavior, which may be separated into 2 types as follows: 1. Personal characteristics include beliefs, values, attitudes and personality 2. Other social processes include behavioral stimuli (stimulus object) and stimulant concentrations and situation. [10]-[11]

2) *Food consumption behavior*

Food consumption behavior means manner, expression of the person both words, gestures and actions that is observed by in selecting, storing, and eating foods that were used to consume for example: like or do not like the food, number of meals consume including habits before eating, eating style, as well as the type of food to eat. [12], [13]

3) *Food needs for children aged 5-1 years*

Children aged 5-1 years need to receive enough various nutrients for the needs of the body as follows: 1.

Vegetables should allow children to have vegetables every day can be both green and yellow vegetables, about 8-4tablespoons per day 2. Energy for growth and activities of children of this age should receive about - 90 100calories per day per 1kilogram of body weight or about 1,200 - 1,500 calories per day. 3. Sufficient proteins for body growth and development should receive 1.3 - 1.5 grams of protein per 1 kg body weight. 4. Vitamins and minerals children aged 1-5 years will need vitamins and minerals as much as infants. [14]

D. *Related Research*

Supapan Kotjarat and Chumporn Yongkittikul [15] study the relationship between parenting styles according to Baumrind's concept and personal behavior of Thai teenagers in family adjustment, emotional intelligence and problem facing with study of 1,316 sample group of students, 654 students of 7th grade students, 662 students of 12th grade student from 5 regions of Thailand namely Bangkok, Central, Northern, Southern and Northeastern regions. The research found that adolescents who have received authoritative parenting style have better adaptation in the family, can face more problems and good at problem management and less avoid problems than adolescents who received authoritarian parenting style which is consistent with the research of Petcharat Juntos and Simon & Conger that found that children who are well cared have higher co-operative behavior than those who receive other parenting and will give the most positive results for children. Also help protect children from various dangerous things effectively [16]- [17] and Phannee Rojanabenjakun [18] studied the factors that affect English language learning for early childhood and found that factor that affects high level for learning English for small children are family.

III. RESEARCH METHODOLOGY

A. *Population and Sample Group*

The population used in this study were parents of both male and female of small children who were studying in the pre-kindergarten class of 171 students in the first semester of academic year 2015 of preschool training center at Wat PhetSamut, Maeklong Sub-district, Muang District, Samutsongkhram Province.

The sample group used in this study was the parents of small children both male and female of 120 children who were studying in the pre-kindergarten level of preschool training center at Wat PhetSamut, Maeklong Sub-district, Mueng District, Samutsongkhram Province. By studying from the sample group representing the entire population, the size of the simple random sampling group. In this study, calculated from the sample size formula of Taro Yamane [19] at the confidence level of 95 percentage from the sample size calculation using at least 119.79 samples, therefore using a sample of 120 people.

B. *Research Tools*

The tools used in this study are questionnaire research consisting of 3 parts as follows:

Part 1: consists of general information of 10 question including gender, relationship with children, age, marital

status, education level, occupation, monthly income, number of children, number of children and gender admit to preschool training center, age of children sent to pre-kindergarten level of preschool training center at Wat PhetSamut.

Part 2: Parenting style for children at preschool training center at Wat PhetSamut, Meaklong Sub-district, Mueng District, Samutsongkhram Province; are divided into 4 field as follows:

- Authoritative Parenting Style 5 questions
- Authoritarian Parenting Style 5 questions
- Permissive Parenting Style 5 questions
- Uninvolved Parenting Style 5 questions

By inquiring about parenting style of parents. There are 5 levels of question: the most practical, very practical, moderate practice little practice and minimal practice requiring the respondent to choose only one answer.

Part 3: 12 questions about vegetable having behaviors of small children consisting of positive statement questions and negative statements question. There are 5 levels of questions: the most practical, very practical, moderate practice, little practice and minimal practice requiring the respondent to choose only one answer.

C. Analysis and Interpretation of Data

Part 1: Analyze general data by descriptive statistics i.e. frequency and percentage to identify characteristics of general data of the study sample group.

Part 2: The parenting style of the parents is divided into 4 parts with 20 question analyzed using the average statistics (\bar{x}) and standard deviation (S.D.).

Part 3: Vegetable having behaviors of small children of 12 question, analyzed by means of statistics (\bar{x}) and standard deviation (S.D.).

Statistics used in research studies

1. Use statistics of percentage (Percentage), average (\bar{x}), standard deviation (S.D.) for basic data analysis.
2. Determine the relationship between independent variables and dependent variables using stepwise multiple regression analysis.
3. Find the correlation coefficient between two variables using Pearson Product Moment Correlation.

IV. DATA ANALYSIS

TABLE I. THE NUMBER AND PERCENTAGE OF PARENTS OF CHILDREN OF THE SAMPLE GROUP IS CLASSIFIED BY RELATIONSHIP WITH CHILDREN

Relation with the children	Amount of population	Percentage
Parents	90	75.0
Grandparents	21	17.5
Uncle/Aunt	7	5.8
Other	2	1.7
Total	120	100

The results of the study showed that parents of small children in the sample group of 120 people were 86 female representing for 71.1 percentage and 34 males representing 28.3 percentage, respectively. Majority of

them were parents 90 percent representing 75 percentage, some of the population were grandparents of 21 persons representing 17.5 percentage, few were relative i.e. uncle, aunt of 7 person representing 5.8 percentage and others 2 persons representing 1.7 percentage respectively. (Table I)

As for the results of 4 forms of parenting style from the sample group of parents at the pre-kindergarten level of preschool training center at Wat PhetSamut Worawihan, a total of 120 people were found to be at a moderate level ($\bar{x} = 3.04$). If considering accordingly authoritative parenting style has the highest mean ($\bar{x} = 4.40$), followed by authoritarian parenting style ($\bar{x} = 3.33$), permissive parenting style ($\bar{x} = 2.56$) and uninvolved parenting style ($\bar{x} = 1.86$), respectively. (Table II)

TABLE II. MEAN (\bar{x}) STANDARD DEVIATION AND INTERPRETATION OF 4 FORMS OF PARENTING

Parenting style	(\bar{x})	(SD)	Levels
1. Authoritative parenting style	4.40	0.46	High
2. Authoritarian parenting style	3.33	0.58	teModera
3. Permissive parenting style	2.56	0.69	Moderare
4. Uninvolved parenting style	1.86	0.74	Low
Total	3.04	0.38	Moderate

TABLE III. MEAN (\bar{x}) STANDARD DEVIATION (SD) INTERPRETATION OF AUTHORITATIVE PARENTING STYLE

g styleAuthoritative parentin	(\bar{x})	(SD)	Level
1. Show love and affectionate by embracing them with hug.	4.68	0.58	High
2. Train the children to help themselves (such as eating, sleeping, going to the toilet) in daily life	4.26	0.67	High
3. Cheer them up or comfort them by word when they are afraid.	4.47	0.69	High
4. Careful of dangerous object that can hurt the children (such as sharp objects or broken toys)	4.59	0.56	Highest
5. Teach the children to consume healthy food such as vegetables and fruits.	4.02	0.92	High
Total	4.40	0.046	High

The results of each analysis found that the overall authoritative parenting style is at a high level ($\bar{x} = 4.40$) when considered individually found that question number 1) they shows love to children by embracing them with hug and kiss on the cheeks with the highest mean of ($\bar{x} = 4.68$), followed by the question number 4) they are careful of dangerous things and accidents that may occur to children (such as sharp objects or broken toys) ($\bar{x} = 4.59$) and the least average is question number 5) you train the child to consume useful and healthy food such as vegetables, fruits etc. ($\bar{x} = 4.02$) (Table III) Authoritarian parenting style was at a moderate level ($\bar{x} = 3.33$) when considered individually question number 1) authoritarian parenting style has the highest mean ($\bar{x} = 3.65$), followed by the question number 2) strict in consuming foods that are useful for children, such as vegetables, fruits ($\bar{x} = 3.58$) and the least average is question number 3) do not allow children to play independently or as their own ($\bar{x} = 2.76$). The overall parenting style is at a moderate level ($\bar{x} = 2.56$) when considered individually found that

question number 4) child have problems with friends you will listen to your child's reasons for making decisions is with the highest mean ($\bar{x} = 3.09$) followed by question number 3) letting your child eat all the food they like ($\bar{x} = 3.04$) and the least average is question number 5) you will not scold them or warn them when the child make mistake or shows offensive behavior ($\bar{x} = 1.80$) while the overall uninvolved parenting style is at a low level ($\bar{x} = 1.86$) when considering individually found that question number 5) you feel agitated when the child do not behave well and does not meet your needs with the highest mean ($\bar{x} = 2.30$) followed by question number 1) you rarely have time with children ($\bar{x} = 1.94$) and the least average is question number 2) you rarely talk or play with children ($\bar{x} = 1.60$).

The overall vegetable having behavior of small children is at a moderate level ($\bar{x} = 3.35$) when consider individually found that question number 7) Children who do not eat bitter taste vegetables such as bitter gourd are at a high level ($\bar{x} = 3.95$) and question number 12) children eat vegetables because they have been deceived that they are not vegetable are the lowest level ($\bar{x} = 2.46$).

TABLE IV. THE PEARSON PRODUCT MOMENT CORRELATION COEFFICIENT BETWEEN PARENTING STYLE AND THE VEGETABLE HAVING BEHAVIOR OF SMALL CHILDREN

Independent variables	Dependent variable	r	p
Authoritative parenting style	having behavior Vegetables of small children	.184*	.044
Authoritarian parenting style	Vegetables having behavior of small children	.182*	.047
Permissive parenting style	Vegetables having behavior of small children	-.298**	.001
Uninvolved parenting style	es having behavior Vegetabl of small children	-.179*	.050

From Table IV found that the correlation coefficients of parenting style and vegetable having behavior of small children when considering each style of parenting, the variables with the highest level of relationship are the authoritative parenting style having a positive relationship with vegetable having behavior of small children ($R = .184$) That is, when the child is being cared for, the vegetable having behavior of small children will be followed. Variable that has a secondary relationship is authoritarian parenting style that have a positive relationship with vegetable having behavior of small children ($R = .182$), but parenting with the negative relationship related the most to the vegetable having behavior of small children is permissive parenting style ($R = -.298$) i.e. when children receive indulgence, vegetable having behavior of small children is decreased. Followed by uninvolved parenting style with negative relationship with vegetable having behavior of small children ($R = -.179$).

V. DISCUSS RESULTS

From this research, it was found that 4 form of parenting style according to the concept of Diana Baumrind at the pre-kindergarten level of preschool

training center, Wat Phet Samut Worawihan, Maeklong Sub-district, Mueng District, Samutsongkhram Province in the overall picture it was at a moderate level ($\bar{x} = 3.04$). Authoritative parenting style with the highest mean of ($\bar{x} = 4.40$) which is consistent with the research of PetcharatJuntos [16] studies the relationship between cooperative behavior and different parenting styles according to their own perceptions of students grade 5 and 6, the results showed that children who received authoritative parenting style have higher cooperative behavior than those who received other parenting. Authoritative parenting style is that parents encourage children to develop according to their child's maturity and to give them love, affectionate and attention to children. Give opportunity for children to be themselves, listen to reason from children's side and encourage children to participate in thinking, decision-making and various matters of the family.

The results of the study of vegetable having behavior of small children found that overall vegetable having behavior of small children is at a moderate level ($\bar{x} = 3.35$). When considering individually found that question number 7) Children do not eat vegetables that are bitter taste like gourd are at a high level ($\bar{x} = 3.95$). That is, the nature of the child does not like to eat vegetables or foods that are bitter in taste, therefore causing children to not eat vegetables. However, the family has influence on cultivating vegetables having behavior for children from younger age in order to make children familiar to consume vegetables. The parents must have a good vegetable consumption behavior to be a role model for the children, which is consistent with the concept of Aree Wanyasawee [20] that the food consumption patterns of people are the result of accumulated learning of food experiences in childhood came from the family until became the consuming habits when grew up and studies of Phannee Rojanabenjakun [18] found that the factors affecting English language learning for small children at a high level are family.

From this study of the relationship between parenting style and vegetable having behavior of small children. The results of the study showed that the 4 forms of parenting were related to the children's vegetable having behavior. Significantly at the level of .05.

VI. SUMMARY OF RESULTS AND SUGGESTIONS

Based on the results of this research, it was concluded that the form of authoritative parenting style have a positive relationship with vegetable having behavior of small children so parents or guardians can take this form of parenting for child care to use to promote vegetable consumption of children for the children to be healthy and have suitable development.

The vegetable consumption behavior of most small children is at a moderate level. If encouraging small children to consume vegetables more, parents should be a good example of consuming vegetables. Cultivate the children's vegetable having behavior since they are young, compliments the children to be encouraged.

If applying authoritative parenting style and authoritarian parenting style will greatly promote vegetables having behavior of small children.

CONFLICT OF INTERSET

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

Chantarasompoch, V. conducted the research; Sudsawart, J. analyzed the data; Phuprasongkharm, D. wrote the paper; Hadsamad, S. & Saisanan Na Ayudhaya, W. had approved the final versions.

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