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The Role of Self-Regulation in Children's Eating Behavior

Changxin Ren[1,a,*]

[1]*Department of Business and Humanities, South East Technological University, Wexford, Ireland*
a. C00290970@itcarlow.ie
**corresponding author*

Abstract: Considering food, many people are particularly interested. Food can satisfy hunger and make some foods highly creative. People have an appetite, and more advertisements about food are attractive. Some people want to eat something delicious to celebrate when they are happy, and some people eat to relieve when they feel sad or depressed. There are many delicious foods for people to choose from, however, these food might not be good for children. This paper presents the concept of self-regulation and how self-regulation plays a role in children's dietary behaviors. The purpose is to find out what impacts children's healthy eating habits from an early age. A healthy diet has different effects on children from childhood to later stages. If eating healthily is the basis, it can make child have a good and stable mood as well. In addition, children's self-regulation in dietary behaviors can be influenced by factors of the environment, e.g., the impact of family or parental lifestyles. When a family is well-educated and parents create a harmonious atmosphere, the child's daily diet and behavior habits are positive, which also lays the foundation for the future. On the contrary, if children live under malnutrition, it will affect their living habits in youth and adulthood. Finally, there are the external factors that come into playing a role. Moreover, another restriction should also be considered. Children should have a balanced diet every day. Snacks can be added between meals, but they will not be used as the main meal. This review can provide some insights for healthy diet related programs at schools and communities.

Keywords: self-regulation, eating, behavior

1. Introduction

The ability to comprehend and control behavior and response is known as self-regulation [1]. It makes it easier for children and adolescents to learn, have a good relationship with others, and become independent. Self-regulation begins to develop rapidly in early childhood and preschool children. It continues to grow through to adulthood. There are four types of self-regulation: target setting, self-monitoring, efficient use of self-study or self-talk, and self-study. For children at an early age, their eating habits will impact their lives and control their diet. This is why the role of self-regulation in children's food behavior is particularly important. First, the development of good habits early in childhood promotes the health of children and is conducive to children's health. The sooner they step in, the more the child's anticognitive is conducive to the significance of this habit. Secondly, teaching or assisting children with this skill at this stage is conducive to children's communication. Children learn how to control eating habits by seeing good eating habits. If they can use it properly, diet and life will affect other aspects, including personal emotions. In contrast, it is hard to believe that

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children's mood is stable without self-regulation, such as in a state of hunger. Therefore, children can develop and socialize with others when they are in good health and emotional stability while having self-regulation. Thirdly, because of learning, children will feel more confident about other aspects of their lives. From a psychological point of view, children will have more positive energy when they are eating properly. For example, prior to eating, some children believe that they will only eat when they are hungry. They may try something fresh. However, if they eat too much, then their concern will be considering which ingredients are in the food. Because of these interesting questions, there is a topic that needs to be addressed with others.

In general, self-regulation is always good for most people, and self-regulation and outcomes affect different sectors, such as health, longevity, crime, economic savings, labor performance, and relationships [2]. Therefore, self-regulation has the potential to keep people healthy. When people are healthy, they can develop good relationships with others. However, self-regulation does not work well in most instances without monitoring. For example, the symptoms of attention-deficit/hyperactivity disorder (ADHD) are related to eating habits. In the case of unbalanced nutrition, excessive intake will occur. In addition, if there is no supervision, there will be arbitrary will. On the contrary, some people will choose to eat when they are depressed and want to adjust to it in this way. Of course, people often choose high-sugar/high-calorie foods to relieve them currently, but they ignore the amount of food they eat when focusing on their emotions, so it is easy to overeat. In such a situation, it is best if someone suggests or reminds. Nevertheless, even if it can be controlled by someone's monitor, there are still many temptations.

There are several external factors as well, e.g., photos/advertising temptation, particularly certain food dissemination programs. For example, some new product development uses the media to broadcast TV advertisements repeatedly, to achieve an eye-catching effect. Some children are more interested in cartoons related to food. Certainly, when they see them, they love to try and satisfy their desires. Plus, during the epidemic, most people locked down at home made nice food, and then shared with friends and streamed on the website or cellphone apps. Everyone wants to use their cooking time to enjoy life. However, increased people lost their control. At the same time, they are worried about the temptation of delicious food and overeating. Some individuals will not be affected by them, while others will be affected. Sometimes, meals are too long. This is because some people think that table culture is particularly important. This is a good place for meaningful socialization or family connection. Some people like to eat fast and satiate, but it is not conductive to digestion, so it is easy to get overweight, while others eat slowly. Although they eat for a long time, the food has enough time to digest in the stomach, which is not easy to gain weight.

2. Specific Factors of Self-Regulation and Eating

When people's attention is beneath the affected emotions, if they lose control, they might easily eat it too much. In this study, the paper examined inhibitor control and the state of the adverse effect [3]. Inhibitory control, which is called response inhibition, is a cognitive process, and more precisely, an executive function. This allows a person to inhibit his or her natural, habitual, or dominant impulses behavioral responses to stimuli to choose a more appropriate one. For example, when children were watching a sad/neutral mood induction of film clip, they will lose control after the clip that they put more consideration on the clip line. Inhibitory control, not self-regulation control, was found to interact with mood induction. In addition, the low inhibitor controls more loss of control (LOC), than in the moody condition. Furthermore, it was found by Eva et al., that the trigger is LOC with low inhibitory control in teenagers. The aim of this study was to explain and address a key gap in the LOC's research area. In addition, the important interaction between control inhibition and experimental conviction of a negative effect in LOC predication. The idea is that food intake counts at once per gram and kilocalories. As a result, mood swings will impact the amount of food being

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eaten. When external factors affect emotions and focus on changing emotions, they will lose control over their diet, which will lead to over-eating.

Considering the health of many children's eating habits, it delays the time to meet the needs of children to exercise their desire for many foods. It can be carried out from the following points of view: first, appetizing self-regulation, for example, when children see others eating and they are not hungry, the best way is to stay away from those who eat. The second is inhibitory control. It is not easy to do it alone. As a result, the support of others is necessary. For example, make it a practice to do so daily for children. Since they have a little stomach, they need to eat several times to maintain their energy. Thirdly, attentive control predicted eating without hunger. This indicates a stable behavioral risk factor for increased energy consumption but has not been linked to body composition within this cohort. Most children eat without starvation, suggesting that interventions to reduce responsiveness to external food indices can help reduce energy inputs. In this research, the measurement of a delay of gratification task is negatively associated with EAH 1 year later [4]. Constantly, the inhibitory and attentional control did not predict EAH by the measurement. Moreover, EAH, with the strongest in the field, should be better. Last, the study related homogenous with race and ethnicity. Therefore, it turns out that such time-lapsed satisfaction training is highly effective.

Delaying satisfaction is highly effective for ordinary children; therefore, it is just as effective for attention deficit/hyperactivity disorder (ADHD). This study was associated with dietary behaviors and obesity in adolescents and young adults [5]. Obviously, the goals are symptoms of ADHD and eating behaviors. It is taken from New Epigenetics Study. Multivariable linear regression models, cross-sectional. Attention problems (AP) and hyperactivity (Hy) are positively associated with food responsiveness, emotions, overeating, desire to drink, and slow eating. AP is showing enjoyment. Laten Change Score (LCS) drives AP and HY positively emotional overeating and satiety. Moreover, the main finding of the current study on cross-section found that positive relation between ADHD to food responsiveness and emotional overeating. Furthermore, the finding shows ADHD symptoms to be related to food-avoidant behavior. However, the findings also be interpreted with some limitations, for example, the community sample could work in a certain place, but it is difficult in others. Additionally, LCS tested relations from discrete time points, whether continuing across the life span impacts future risk.

3. Environmental Aspects of the Relationship

If it is difficult for children to control their eating habits when they grow up, it is the environment they live in from an early age related to their parents' eating. When children are young and cannot eat independently, they are usually assisted by their parents. According to the study, obese and poor households tend to eat excessively. Healthy eating practices, self-control, parent-specific food practices, and responsive parental scaffolding are all present. In comparison with Recipe 4, It was discovered that, first in toddlers 'eating habits in healthily and their self-regulation attachment by their parents' treatment [6]. As the first educator of the child, parents play a lot of roles in the child's behavior. At the same time, children also learn quickly. Second, as Parents, they have always been responsible for feeding and care of their children's daily life. The reaction will be overly sensitive to what happens to the child. This refers to the good side of the child. Then, while accompanied by the family, the rest must consider the development independently. Furthermore, Recipe 4 was successful in mentioning the sensitive scaffolding and responsive feeding techniques used by both parents to support child development during the sensitivity phase. However, over time, the high and low levels of self-regulation will reinforce each other. As a result, variations between people will show themselves in adult life in numerous ways, such as in terms of physical health, criminal arrests, level of education attained, and financial situation.

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Additionally, eating patterns and emotions are linked. When they are feeling happy, some people eat a lot. Contrarily, some people overeat because of their negative mood. This is also the case because people tend to prioritize their emotions over their food intake. The goal of Ana et al.'s study is to investigate how parents employ behavioral control to support early children who are overweight or obese as well as those who are not [7].

A survey showed that when the proportion of boys and girls is balanced, it is divided into two groups: non-overweight vs. Overweight; year 4 and year 7. For the results, first is obesity/overweight is much higher than the non-overweight basis on parents' behavior regulation and the child's emotional overeating; second, there is no difference in age; thirdly, there is no difference by gender. According to the results, there would be two factors for discussion, one is the use of food by parents in a regulatory way: rewarding/punishing, feeding style, and power struggle; and the other is children's emotional overeating. Children may overeat more when they get upset, and for the temperament. For children who are obese or for those who lack regulation for the first two years, children may have disorders by an early age and boys and girls are different.

Different ages overeat, and teenagers are at no exceptions. Children in this age group have weaker self-control. The problem of bulimia in adolescents is associated with negative developmental results [8]. To be obviously affectivity is a key factor. This study was found to study the unique and joint contributions of both factors to understanding hyperphagia in teenagers. The main effects of self-regulation and the condition revealed negative affectivity, only in the predicting of probability. In addition, the main effects affect only one type of dietary hyperphagia, objective binge eating episode (OBE). It also lacks the main effort of inhibitory control in control in prep studies. Further research has focused on the appropriateness of self-regulation and affectivity within the LOC, OBE, and SBE (subjective binge eating episode). It shows that the most significant difference between self-regulation and negative affectivity depends on the parents. Also, self-regulation reported by adolescents with positive affectivity has been found to predict SBE. In the two high and low levels of positive affectivity with an elevated risk.

Moreover, the aim of temperament is eating behavior and some influence with middle childhood, aged 4 to 10 [9]. Temperature: negative affectivity, effortful control, surgency. In addition, there are four "food approach": food responsiveness, the desire to drink, pleasure of eating, and emotional overeating. Plus, there are four "foods that avoidant": emotional malnutrition, responsiveness to satiety, food agitation and slowness to eat. In this research, higher negative affectivity predicated more "food approach" and "food avoidant" behavior. Currently, this study has many strengths, amount of community sample, useful information. Furthermore, by counting dissimilar stages of children, that more considering with by the environment influence (e.g., eating at home with homemade meals, or sharing food with friends), uncontrolled ruled of the eating behavior. Even so, children are developing, and families' situations may get on both sides of eating behavior and temperament.

4. Intervention of Self-Regulation and Eating

Mindfulness means keeping an instantaneous awareness of thoughts, feelings, bodily feelings, and surrounding environment through gentleness, nurturing lens. For the sake of children's healthy growth and hope for the future, it is better to help them eat healthier. The goal is to make the connection between healthy eating and mindfulness and in-class play to discover how fruits and vegetables work [10]. It would be fine with nutrition education principles. For example, recognize the food pyramid in the classroom/class. Helping children know the food they ate at an early age and what is included in the daily diet needed by human body. In addition, healthy food keeps children physically balanced. Why it is important to know how to appreciate and eat fruits and vegetables. Human body not only needs vitamins from fruits and vegetables but also carbohydrates to provide

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energy and protein, such as milk, eggs, and meat. The previous study showed how effective training on mindfulness and engagement in classroom games is. These include music and motor activities. While the results are helpful, for the long-term thinking both behavioral regulation and love of fruits and vegetables in young children still have some limitations, such as the size of samples and the underpowered personality.

5. Conclusions

Therefore, eating habits change in different environmental backgrounds, which will cause different changes due to cultural differences in the region. In the family environment, it has many impacts on birth and development. Thus, regular eating habits can promote the healthy development of children. This can ensure the physical and mental health of children and maintain social relations. Furthermore, many children dislike eating vegetables and fruits. Compared with carbohydrates, they need to chew a lot while eating them. Most children do not have such patience. Even if they eat vegetables and fruits, they feel uneasy to feel full, so some children do not take the initiative to eat or even refuse. To be rich in nutrition, they should be promoted as parts of a healthy diet.

In addition to the above, there are few other limitations in previous studies. First, the sample size, the level of LOC might be in a wide age range (10-18 years) but with small sample sizes. Children in this stage are in puberty, and their moods do not fluctuate much. It is difficult to know the specific situation. Although it could communicate with children in this age, most children do not take the initiative to contact adults. They would rather share with their friends, and for the self-reported questionnaire, it may have some risk of obtaining socially desirable responses. Plus, the survey data were not followed up afterwards. Because children are developing, there are momentous changes in the process of growth. Without staying connected, it will affect the analysis and understanding of the results. In addition, future research should learn how the relationship between SR and EAH changes over time. This review can provide some directions for the design of relevant interventions in schools.

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