

# *The Influences of Parenting Style on Child Self-regulation*

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**Abstract:** Self-regulation ability is important for developing and maintaining organized behavior. These skills participate in several tasks and help an individual to perform better. Parental influence can shape children's behavior and have further effects on their self-regulation ability. This research focuses on the interaction between parenting style and children's self-regulation skills in China. All studies were based on scales. Self-regulation Questionnaire and Parenting style scale were used to determine the different factors in this research. In addition, other questions evaluating family status and child academic performance are added. 146 effective responses were received. Children with authoritative parents show a higher self-regulation ability. While authoritarian and neglect parents may contribute to the low self-regulation ability of the child. Whereas, Gender shows no significant difference in these skills. And mother shows a greater influence on the child than the father. Further research is needed to study self-regulation and child development deeply.

**Keywords:** self-regulation, parenting style, childhood

## 1. Introduction

Interaction between parent and child plays an important role in child development. Self-regulation is one of the skills that can be influenced by parents' behavior. The ability to generate and maintain organized behavior is referred to as self-regulation, which is important for several aspects of an individual's life. Executive Functions (EFs) are closely related to self-regulation, referring to a mental process needed when an individual need to do a task concentratedly. EFs can be divided into Updating, Inhibition, and Shifting abilities [1]. There are various studies conducted by previous researchers to focus on different regions related to child self-regulation [2]. One of the main topics is the relationship between parental influences and this ability. This research can be roughly divided into 4 groups: epidemiology, child development, emotional regulation, and achievement.

Recently, many researchers have focused on child obesity. According to Anderson and Keim, a positive relationship between parents (especially the child caretaker) and the child can reduce the possibility of the child becoming obese in the future. To gain this result, the attachment security scale is first used in the experiment. Various aspects to evaluate parent's behavior including responsiveness to the child's requites, positive and negative affect, and intrusiveness were examined. Next, the Nursing Child Assessment Teaching Scale was referenced to evaluate the interaction between child and their parents. Whereas, to build the linkage with obesity, the weight of the children is determined [3]. However, this paper focuses on the influence of the mother and the child's caretaker. While paternal influences were not considered enough.

Another experiment related to adolescents with internet addiction illustrates that parents with unsuitable acceptance/supervision are responsible for teenagers showing internet addiction. In this experiment, target samples (i.e. young adults with internet addiction) were selected from patients with psychiatric complaints of internet addiction. Similarly, scales were used to directly receive data. Scales include the Hollingshead - Redlich scale, which is used to determine parent's social status, Young's Internet Addiction Test, which is used to ensure the participants with internet addiction, and Parenting Style Scale [4]. In addition, several statistical tools were used to analyze the relationship between parental influences and addiction behavior. The chi-square ( $\chi^2$ ) test and Pearson correlation analysis were used. Therefore, the comparison of observed value among groups and building of the significant linkage between factors can be gained [4]. Besides experiments related to diseases, research on child development is also important.

Influences of culture on child development have been considered by more researchers recently. Shared value in a cultural group shows an effect on parents. Parental behaviors can shape children's self-regulation ability [5]. Cultural values that can shape an individual's goals and actions are the basic cultural model used in this experiment. Therefore, linking this model and self-regulation is more focused on the development of the ability to self-regulate with the expectations of others. In cultures promoting independence, external rules may act as a coercive control that undermines self-regulation. Another experiment about cross-culture reveals that behaviors are always subordinated to promote social harmony in Asian cultures. While this is different in Western cultures. Experiments related to this topic were mostly focused on Western culture, and the evidence about cross-cultural differences in behavior regulation is limited. The reason for this is that attention is paid to the maturation perspective rather than to the development path [5]. According to Obradović et. al, at the early stage of life, greater parent-child dependency shows a higher self-regulation ability of a child. However, too much parental directive engagement shows a reduction in children's self-regulation ability [6]. Researchers set up different tasks to test the relationship between children and their parents. Parents' behaviors were evaluated by using global ratings. Tasks need children to finish tasks including the backward digit span task. Children are requested to repeat a specified number backwards in this assignment. And during the gift wrap task, researchers were packaging the gift loudly. While children were asked not to peek during the whole process. These two tasks were used to measure children's EF ability. This experiment measures the parents' support for the child's development of self-regulation during primary school. There is no more evidence to explore the later life of a teenager.

There is another research link between personality psychology and self-regulation. The result of this study illustrates that there is a negative correlation between shyness and prosocial tendency. This pattern only exists in teenagers with high levels of emotion regulation [7]. Researchers spent 4 years evaluating students' mental health in Southern Ontario, Canada. The survey was divided into two parts and were all finished in 4 months annually. Scales related to shyness; self-regulation ability and prosocial tendencies were used to determine different facets [7]. By considering the time for students to study, some questions in the scales used were deleted. However, there was some missing data exist, due to some students not giving complete answers. Binary logistic regressions were used to solve this problem. Interestingly, after using multiple iterations, biased parameters that occurred with list deletion can be avoided [7]. Moreover, this experiment is focused on adolescents with high educational level parents. Data for parental influences on shyness and prosocial tendency is limited.

Furthermore, self-regulation is associated with achievements, especially academic outcomes. To determine whether the economic level of the family is a factor that can vary EF skills influences in children's academic performance. Groups of children were recruited from urban emergency families and middle-income families. Although two sample groups show child-adverse life events. A greater number of these problems happened in emergency families. During the experiment, several tasks were prepared. These were measurements to examine adolescents' EF ability. Dimensional Change

Card Sort-Developmental Extension and Flanker Inhibitory Control Task-Developmental Extension belong to these tasks. The first activity requires youngsters to switch between several rules to sort distinct photographs. While the subsequent task was being completed on computers. A queued fish was displayed, and then participants were instructed to click the button that matched the orientation of the middle fish. [8]. Interestingly, EF abilities show a positive pattern for academic performance. The effect of this ability is similar in children from two economic-level families [8].

Whereas the possibility relates to unemployment, aggressive and criminal, smoking behaviors were also evaluated by researchers. Most of these experiments were based on scales. The result supports that, individuals with higher self-regulation ability show higher possibilities for them to achieve their goals [9]. In this study, researchers screened all related published papers by using several terms and databases. Data were then extracted from each study including the sample size, participants' gender and age, measurements of self-regulation, and effect size estimates. Inverse-variance weighted random-effects meta-analysis was used to analyze the data extracted [9]. Individuals with better social skills, greater mathematic ability, as well as fewer internalizing and externalizing problems in the early stage show a positive relationship with higher self-regulation ability [9]. Regarding several previous studies, little research has been done on Asian culture. Furthermore, the interaction between father and child is still not enough. Thus, the influences of parenting style on child self-regulation need to be examined.

## 2. Method

In this experiment, several peer-reviewed scales were used to evaluate teenagers' self-regulation ability. The questionnaire was posted online, allowing volunteers to examine them. The first part of this scale was questioned to detect children's self-regulation ability. In addition, the Self-Regulation Questionnaire (SRQ) was referenced [10]. However, there is no item to evaluate participants' academic performance on this scale. Achievements are also an important factor in assessing an individual's self-regulation ability. Thus one more question was added to gain data on volunteers' performance in exams. Following SRQ, the Parenting Style Scale (PSS) was used to determine the parent's behavior [11]. Both the mother's and father's behavior were asked to determine the parent's influence on the child. All questions were set as a 5-point rating question (from 1(never) to 5 (always)), which provides a sufficient distribution of responses. Whereas, the educational level and occupation information of parents were asked at the end of the scale. Family status is marked according to the scoring method illustrated in a paper published by Kumar et.al [12].

Four types of parenting styles can be identified by using two dimensions. The control level and responsiveness of parents play an important role in determining their behavior. The authoritative parents with high responsiveness and high control levels. They are characterized by attentive, encouraging autonomy, and impart clear standards for their children's conduct. In addition, parents with high control levels but low responsiveness are determined as authoritarian parents. These parents are not prepared to accept the individuality of the child and with strict obedience to parental authority. Permissive parents with low control levels and high responsiveness. They allow children to make their own decisions, with low enforcement of rules and authority. Whereas, the negligent parents with low control levels and responsiveness. There is little interaction between parents and children [11].

## 3. Result and Data Analysis

The total number of answers received from the scales is 154, however, 8 answers were finished in 30 to 40 seconds. While the mean time for finishing this questionnaire is 115 seconds. Also, the answers in this feedback were all the same. Thus, these 8 scales were deleted. The total number of effective answers then becomes 146. In all scales, females occupied 64.8%. In addition, the average score for

females on the self-regulation test is 12.15. Compared to males, with a slightly higher score (13.81). Whereas, the T-test is used to determine whether the gender factor causes significant differences in self-regulation ability. The data gained from this statistical test illustrates that there are no significant differences ( $p=0.202$ ). Thus, the difference in data may be caused by the gap in the number of male and female subjects.

Participants with self-regulation score higher than 14, is defined as teenagers with high self-regulation ability. Participants with high self-regulation skills with a more planned life, and stable emotions. In this category, 59.3% of teenagers have two authoritative parents. While 33.33% of participants had a commanding parent. This is because authoritative parents impart clear standards for their children's conduct, which is an important environment for children to understand their goals. Moreover, Except for 2 volunteers, adolescents with an authoritative mother show relatively high self-regulation ability (with a mean self-regulation mark of 16.7). This may be because mothers often take care of the child at home, thus the behavior of the mother influences the children largely rather than the father's behavior. Interestingly, conflicts between parents show no effect on children's behavior. While a higher level of violence in children shows a decreasing level of self-regulation ability. However, there are 2 exceptions. These two children rate the violent behavior of their parents as 4 and above. However, their self-regulation ability is still relatively high. Compared to participants with high self-regulation ability, a teenager with relatively low ability shows a different pattern. 40% of them with an authoritarian mother, and 20% of them with a permissive mother. And 33.33% of these samples with a negligent parent. Still 13.33% of students with authoritative parents but this data is far less than teenagers with high self-regulation abilities.

Furthermore, 5.5% of volunteers in this experiment with parents have a high education level (postgraduate and above). Interestingly, these children with different self-regulation levels. Thus, parents' education level cannot influence children's behavior. However, 60% of children with stay-at-home mother shows a high self-regulation ability. And negligent of the father shows slight influences on children's behavior. Although there is 1 expected boy, who with negligent father and an authoritative mother. Showing relatively low self-regulation ability.

#### 4. Discussion

There is a slight difference in self-regulation ability levels between males and females. Although this gap may be caused by the relatively large gap among the number of participants. An evolutionary framework supports that there is a different and strong social selection pressure on females, which can provide an advantage in self-regulation, especially inhibition [13]. Parental investment theory illustrated that, females invest more in their offspring. Not only by providing more time and nutrition to the offspring but also by the ability to choose high-quality companions and inhibit maladaptive social responses. These abilities depend on the self-regulation level of the individual. Research proved that female has a higher ability to face delayed gratification, and self-control [13]. However, this research shows an opposite result. This may be caused by the different cultural backgrounds and ages of participants. Teenagers are now not considering marriage and offspring. Therefore, they do not need to protect their offspring. Thus, self-regulation ability, especially inhibition, shows a relatively low pattern in this study. Different cultures can influence the self-regulation ability level. In Asian cultures promoting social harmony, self-regulation behaviors are more focused on this aim [5]. Most of the participants with high self-control ability agree with question 5 (I think a lot about what other people think of me) on the scale.

The result of this experiment also illustrates that the mother's behavior may influence more than the father's behavior. This is also shown in a study conducted by Anderson and Keim [3]. Children with high attachment security with their mothers show a higher self-regulation ability [3]. While fathers' accompaniment of the child is also important, by playing a specific role in socializing

regulation through regularly occurring. According to the Activation relationship theory, proposed by Paquette, father-child interaction mainly focuses on two aspects: the encouragement to the outside world and the discipline to maintain children's safety [14]. The regular pattern of emotional arousal for the child playing with the father is different, compared to the pattern with the mother. And Fathers naturally engage in physical games with children which can promote children's relationships with their peers, and further improve their self-regulation skills [14].

Children of authoritative parents with a higher self-regulation level. The same results are shown in the experiment done by Newman [15]. These children are with higher social skills, and a happy, optimistic personality. And these results are not influenced by cultural differences [15]. In addition, a meta-analysis is used to illustrate that, a positive control level of parents has a positive correlation with self-regulation [15]. Thus, the proportion of higher-ability children with authoritative parents is higher than children with permissive parents. Whereas neglected children show relatively low self-regulation, which is also agreed by Fidler. Loss of interaction with parents in childhood can be a factor leading to disorganized attachment patterns [16]. These patterns include self-destructive behavior and substance abuse. Abused children often fail to develop abilities to express their emotions correctly [16]. In this experiment, neglect of one of the parents shows almost no effects on child development. Especially the loss interaction of father. Moreover, there is no influence on children's behavior when there is conflict among parents.

Violence in children contributes negatively to children's self-regulation ability. The violent behavior of parents is often connected with family chaos, maternal depression, and harsh parenting. According to Cook et.al, direct violent behavior was linked with a method of coercive parenting in South Africa. Children's experienced violence were thought of as normal in that region [17]. While there is no correlation between violence and self-regulation levels, but a negative relationship between coercive parenting [17]. Furthermore, parents' educational level shows little influence on children's behavior. However, the income level of parents is responsible for the children's self-control ability [15].

## 5. Limitation

This research considers parents' educational level, occupation, and parenting type. However, there is little focus on the children. For example, information about children's status in the family (whether the child is the first child in the family), educational level, and personality traits are not included as subjects of the present study. Also, the experiments are all based on scales. It is uncertain whether the participants answered the questionnaire honestly and accurately. This can be improved by inviting parents or teachers to evaluate teenagers instead of adolescents judging themselves. In addition, the sample size of this research is not relatively large. Whereas, there were more female participants than male participants.

In the future, researchers can be more focused on finding the factors to solve the reason behind the relationship between higher self-regulation children and authoritative parents. Related research may study more on linking the personality traits of the children and their self-regulation ability. More surveys can be conducted on the cultural influences on children's executive functions. To find reasons for high self-regulation in children with different degrees in various aspects. Also, more research can be done to evaluate the change in self-regulation ability of children during development. In addition, there is still less evidence to illustrate the effect of coercive parenting.

## 6. Conclusion

This research illustrates that, children with authoritative parents with a higher self-regulation ability. And the mother shows a greater influence on the child rather than the father. Whereas, a child with

authoritarian and neglected parents shows a higher possibility of having a low self-regulation skills. Thus, high control levels and high responsiveness are both important for child development. In addition, this study provides some evidence related to the effects of parenting style in Asian culture. Further research is needed to keep studying the self-regulation ability during child development.

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