Research Progress of Children's Emotional Regulation Ability
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Abstract. Emotional regulation is very important to the development of children's sociality and has an important impact on the healthy development of children. At present, foreign research on children's emotional regulation has obtained a lot of results, and most empirical research, but in China, most of the relevant research is theoretical. This paper mainly elaborates the classification of children's emotional regulation strategies, the development characteristics of children's emotional regulation, and the factors affecting children's emotional regulation ability. At the same time, based on the summary of previous research results, it tries to put forward some expandable research ideas.

Introduction
Young children's emotional ability has an important impact on their growth and socialization, which can even continue into adulthood. Therefore, young children's emotional ability has gradually attracted the attention of scholars. In the process of early socialization, children will use different emotional regulation strategies to solve problems, in order to better adapt to the environment. Early emotional regulation ability can predict future peer relationship and personality development. Therefore, the development of emotional regulation is considered to be an important part of early emotional development of young children. Over the past decade, developmental psychology has paid more and more attention to the study of emotional regulation. Researchers have also done a lot of research on the characteristics of children's emotional regulation development. The importance of emotional regulation is related to individual survival and adaptation, especially in the early childhood stage, which is the embryonic stage of emotional regulation and will lay the foundation for the process of emotional regulation in individual development. Understanding the development process of children's emotional regulation strategy will help us to have a deeper understanding of the connotation of the emotional regulation strategy itself. Therefore, this paper intends to sort out and summarize the research on children's emotional regulation in the past ten years, in order to facilitate further research on children's emotional regulation in the future.

The Connotation and Focus of Emotional Regulation Strategies
Generally speaking, emotional regulation strategy refers to the change of emotions in physiological activities, subjective experience, expression and behavior through certain strategies and mechanisms. Scholars have many different definitions of emotional regulation strategies. Grolnick et al. (1996) argued that emotional regulation strategies are used to regulate emotional experience in infants and young children. Masters et al. (1983) argued that emotional regulation strategy is a planned and strategic effort that individuals try to control it to a certain extent in order to reduce the negative consequences of situations when facing stressful or challenging situations. Denham (1998) argues that emotional regulation strategies are the strategies used by individuals in explaining and experiencing emotions, including behavioral, emotional and cognitive components.

Although different scholars have different understandings of emotional regulation strategies, their focus on emotional regulation strategies includes: 1. The number and types of emotional regulation strategies used by individuals. Many scholars pay attention to the situation that the frequency of individual's use of emotional regulation strategies changes with the development, or the classification of emotional regulation strategies; 2. Measurement of different emotion regulation
strategies. For example, the study of infants and young children often observes the behavior of individuals when experiencing negative emotions as indicators of their emotional regulation strategies; 3. Specific emotions or overall emotional measurement. Individuals experience special emotional regulation strategies used under specific emotions, or emotional regulation strategies commonly used under general circumstances; 4. Establish criteria for judging emotional regulation. For example, to explore what is an emotional regulation strategy, how to judge whether individual performance strategy is an indicator of emotional regulation, and so on.

Classification of Emotional Regulation Strategies in Children

Because scholars have different definitions of emotional regulation strategies, many classification criteria of emotional regulation strategies have been derived. As a special group of children, when facing setbacks, negative emotions are aroused, and emotional adjustment strategies are needed to respond to them. However, because children's language expression ability is not yet fully mature, and their self-observation ability is not as keen as adults, many scholars use actual observation of children's emotional regulation strategies in situations, supplemented by statistical techniques or according to emotional regulation theory to classify strategies.

Lu Fang and Chen Guopeng divide children's emotional regulation strategies into six categories according to the empirical research results: self-comfort, alternative activities, passive coping, vent, problem solving and cognitive reconstruction. Among them, self-comfort includes behavioral and linguistic self-directed comfort; alternative activities refer to children's diversion of attention from situations that trigger frustration or negative emotions and active involvement in other activities. Passive coping refers to children's attempt to leave or avoid situations that trigger negative emotions, or "inaction" in the face of problems and setbacks. Venture refers to the use of destructive or harmful behavior by children to vent their negative emotions. Problem solving means that children adopt all possible adaptive behaviors and means to eliminate the source of frustration and get rid of the difficulties they are facing. Cognitive reconstruction refers to children's rethinking or reinterpretation of various parameters in negative situations.

Saarni (1999) divides emotional regulation strategies into two categories according to whether the situation is controllable or not: 1. The situation is moderate to highly controllable: strategies proposed by children include problem solving, seeking caregivers, staying away from stimulation, internal strategies (self-blame, anxiety, anxiety), and external strategies (blaming others, aggressive behavior). Among them, problem solving strategies and caregiver seeking strategies are the best, while external strategies are the worst. 2. Emotion is low to uncontrollable: the strategies proposed by children include leaving the situation or emotion, redefining the situation or emotion, seeking more information, avoiding, denying, and withdrawing themselves from the situation. The first three are the strategies that children think are better.

Denham (1998) believes that emotional regulation strategies are the strategies used by individuals in explaining and experiencing emotions, which can be divided into behavioral, emotional and cognitive strategies. The function of emotional strategies is to change emotional expression and emotional experience and avoid overarousal of individual emotions or behaviors. Behavior strategy is a kind of behavior strategy that individuals want to mediate their emotions by "doing something", and different emotions will affect the behavior strategies used by individuals. Cognitive strategy refers to the redefinition of an individual's goal in an emotional situation or the reappraisal of causality in an event to help him reduce his emotional distress.

Scholar Ayers used confirmatory factor analysis to test children's emotional regulation strategies, and classified them according to problem-oriented and emotional-oriented approaches and avoidance. He proposed a four-dimensional model of emotional regulation strategies, including active regulation, avoidance regulation, distraction and social support. Among them, avoidance regulation and distraction have been regarded as the same avoidance strategy in the past studies, but Ayers argues that distraction strategy needs to use alternative activities to distract oneself from other things, while avoidance regulation only concentrates on this matter or imagines that it has not happened.
In the above different emotional regulation strategies, some of them can be replaced each other, and lack of theoretical model support. Each researcher classifies them separately according to his own criteria, lacking further revision and integration. And most of the emotional regulation strategies are aimed at negative emotions, and few of them involve positive emotions. It should be noted that each emotion regulation strategy has its applicable situations and emotional types. Because of the differences in individual characteristics and past experience of children, the good and commonly used emotion regulation strategies will also be different.

Developmental Characteristics of Emotional Regulation Strategies for Children

With the growth of children's age, psychological and physical development and changes, the emotional adjustment strategies used by children at different age stages are also inconsistent.

Cole (1994) pointed out that in the early stages of life, babies rely mainly on adults to mediate their environment, experience and emotions, and caregivers usually try to provide some more comfortable environment and avoid setbacks and dangers. However, at this time, babies have begun some self-regulation processes, such as seeking tactile stimulation to maintain a positive state or staring at aversive stimulation to reduce the negative state, but most of the time still rely on caregivers to regulate their emotions. Gianino and Tronick (1988) studied the development and change of emotional regulation strategies in infants from another perspective. In a comparative study of infants aged 3 months, 6 months and 9 months, they found that coping strategies for distraction and overuse increased with age. On the other hand, negative coping strategies, such as withdrawal and fist clenching, tend to decrease with age, while infants' self-comfort behavior strategies seem to decrease with age.

At the toddler stage and preschool stage, parents often help children adopt cognitive adjustment strategies to redirect their attention. Stanbury & Sigman (2000) found that children whose mothers used guidance, cognitive and decentralization strategies were more likely to adopt the same adjustment strategies as their mothers. Children in this period tended to adopt concentration or distraction strategies, such as attention preference stimulation or inattention aversion stimulation. Denham (1998) believed that young children mainly rely on supportive emotional regulation provided by caregivers during their infant and pre-school years. With the growth of age, young children gradually become more flexible in using various emotional regulation strategies independently.

As children grow older, their emotional regulation strategies will gradually shift from social support (relying on adults to regulate their environment, experience and emotions) to internal regulation. Thompson (1991) believed that the individual was confined to neurophysiological control in infancy, so emotional regulation relied on external help. The preschool stage is a transitional period from external regulation to the internal regulation of emotional regulation, and children will use more and more internal strategies.

From academic research, we can see that the development of children's emotional regulation strategies has the following remarkable characteristics: first, from depending on others-oriented social strategies to self-guided personal strategies. With the growth of age, children's emotional regulation has evolved from the early stage of relying on others-oriented social strategies to the gradual increase of self-guided personal strategies. Emotional regulation strategies have progressed with the maturity of cognitive and social abilities. Secondly, with the increase of age, more and more intrinsic strategies emerge. Thirdly, the ability to use strategy and situation pairing improves with development. With the increase of age, children's cognitive ability matures and complicates gradually. They have the ability to shift their attention to other things and change situations with symbolic ability. They can think about the meaning of situations from different perspectives and use a variety of methods to solve problems.

Relevant Factors Affecting Children's Emotional Regulation Strategies

The characteristics of children and caregivers mainly influence Children's emotional regulation.
Childhood Traits

Infant Temperament

Emotionality and regulation is one of the important dimensions of temperament. Eisenberg et al. (1997) put forward the model of how emotionality affects individual social function. Emotional intensity can be divided into two types: moderately high or moderately low. For individuals with moderate and high emotional response and lack of regulation ability, they are highly emotional but lack sufficient ability to mediate it. Therefore, they are prone to emotional disorders, and may have aggressive and anti-social behavior in the future. Eisenberg et al. also pointed out that in order to predict children's emotional regulation strategies, two important temperament dimensions, namely, emotional intensity and regulation degree, must be evaluated. They believe that the combination of moderate regulation and moderate intensity of emotion may be the best, because such children have the ability of emotional expression, planning, problem-centered coping and flexible use of various emotional regulation strategies.

Childhood Gender

Many studies have shown inconsistent results on whether there are differences in emotional regulation strategies among children of different genders. Some findings are different, while others are not. The findings show that women tend to seek social support, use emotional guidance strategies and internal strategies when facing stress, while men tend to use physical activity or exercise to mediate emotions (Brenner & Salovey, 1997). Saarni believes that gender is not the main source of emotional or regulatory differences among individuals (Saarni, 1997). If at least part of the gender difference comes from the result of socialization, the gender difference in early childhood may not be so obvious. Gender treatment is shaped by socialization, but it also has its inherent characteristics. Brody and Hall (1993) argue that women are better at using language to discuss emotions and feelings with caregivers, so they may be better at using emotional-oriented strategies than men when they grow up. Wan Jingjing et al. (2002) found that mothers support girls in expressing their happiness and sadness adequately, and that girls' crying is not strictly prohibited; boys are required to be strong and not cry easily in the early stages. Regardless of whether gender differences come from birth or acquired, there is still much room to explore the differences in the use of emotional regulation strategies among children of different genders.

Caregiver Traits

There are many social factors affecting individual emotional regulation, such as family, school, workplace, social culture and related people, things and so on. But most scholars agree that the most important social factor affecting children's emotions is family. Denham (1998) pointed out that the interaction between caregivers and young children is an important reason for individual differences in emotional regulation. There are differences in the use of emotional regulation strategies among children of different ages, different educational levels and different types of caregivers. Because children's emotional regulation is basically developed in the context of interaction with caregivers, caregivers provide a structure or framework for the development of children's emotional regulation ability.

Because of their different roles and nature of work, different caregivers will respond differently to the emotional needs of children, which also affects the way children face emotions. In terms of age, 31-40-year-old caregivers used more emotional adjustment strategies than 21-30-year-old caregivers. In terms of education level, children with higher education level caregivers are more likely to use "others' guidance and comfort" and "using language to express emotions" strategies than other children; in terms of caregiver types, children cared for by mothers or grandmothers are more likely to use "others' guidance and comfort" than those cared for by kindergartens. Eisenberg, Fabes and Murphy (1996) found that the correlation between parents' negative emotional response and children's social competence was different. Mothers' problem-oriented response and reduced severity response are related to their children's social competence, but fathers' response is not related to their children's social competence.
Revelation and Prospect

To sum up, the research on the emotional regulation of young children is of great significance for their psychological development, which gives us the following inspiration:

Create rich situations and cultivate children's emotional understanding ability. The socialization of children's emotions is an important aspect of children's socialization, and the ability of emotional understanding plays an extremely important role in the process of children's development. One of the main tasks of early childhood education is to cultivate children's ability of emotional understanding. The cultivation of children's emotional understanding ability can be carried out in the following three aspects: (1) creating a rich communication environment to enrich children's emotional experience; (2) carrying out various activities to help children understand different emotions; (3) reasonably guiding children's emotional catharsis and promoting the healthy development of children's emotions.

Pay attention to children's various abilities and promote children's socialized emotional development. Understanding ability is an important part of social ability, and also an important part of children's socialization. While cultivating children's emotional understanding ability, parents and educators should also pay attention to improving the parent-child relationship, improving children's cognitive ability, developing children's pro-social behavior and fostering children's empathy. This can not only help children to establish a good parent-child relationship, improve emotional understanding ability, but also promote the development of children's socialization.

Since the 1990s, there have been more and more studies on the emotional regulation of young children. Reviewing the research results in this field, the author summarizes two aspects that can be expanded. Firstly, from the perspective of research methods, most of the foreign studies on the emotional regulation of young children are empirical studies, especially in the relationship between emotional regulation and peer acceptance, academic success, social adaptability and so on. However, in China, most of the relevant studies are theoretical. There are relatively few empirical studies on emotional regulation and problem behavior, social behavior, mental health of young children, which need to be further explored and studied. In addition, due to the influence of temperament types, whether children use emotional regulation strategies also shows significant differences, which is also a direction worth exploring. Secondly, from the perspective of research content, previous studies were mainly limited to the development characteristics and influencing factors of children's emotional regulation ability, and remained at the stage of describing phenomena. However, there were few in-depth studies on the internal process of emotional regulation and the impact of emotional regulation development on other psychological characteristics of children. At the same time, emotional regulation is of great significance to children's development. Therefore, it should not be limited to theoretical research, but should strengthen practical value. More attention should be paid to how to make children adjust their emotions reasonably so as to achieve healthy psychology and good social communication ability. Future research should pay more attention to practical value and improve the social benefits of research.

References


