

A Study on the Application of Psychosocial Therapy Model in Enhancing Emotional Regulation in Children with Cerebral Palsy

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Abstract:

Children with cerebral palsy, as a special group, due to the defects of their physical functioning, are very vulnerable to the influence of external factors in learning, life and rehabilitation treatment, resulting in the inability to control their own emotions, and the lack of the ability to regulate their emotions not only affects the effectiveness of the rehabilitation treatment of children with cerebral palsy, but also has a serious negative impact on their physical and mental development and even the level of family harmony. This paper discusses the application of psychosocial therapy model during the enhancement of emotional regulation ability of children with cerebral palsy, aiming to provide reference value for special schools, therapeutic rehabilitation centres and medical workers, to deeply understand the influence of psychosocial therapy model on the effectiveness of emotional regulation of children with cerebral palsy, and at the same time to grasp the specific therapeutic measures, and to continuously improve the theory and practice system of rehabilitation therapy for the children with cerebral palsy, and to provide targeted help and guidance for children with cerebral palsy. We will continue to improve the theory and practice system of rehabilitation therapy for children with cerebral palsy, and provide them with targeted help and guidance.

Keywords:

Psychosocial Therapy, Emotional Regulation, Positive Emotional Experience, Negative Emotional Experience

1. Introduction

Most children with cerebral palsy have poorer emotional regulation than normal children. Firstly, some children with cerebral palsy may have difficulties in expressing their needs and emotions due to language and cognitive disorders, which may lead to frustration and anger. Secondly, some children with cerebral palsy have brain abnormalities, making it difficult for them to achieve good emotional control, and they are more prone to irritability and uncontrollable behaviours. Moreover, children with cerebral palsy have poorer ability to adapt to changes in the environment, and

they are prone to nervousness and fearfulness in case of sudden changes in the environment, which may lead to uncontrollable and fluctuating emotions. Thirdly, a large number of children with cerebral palsy have strong social disorder, and are often unable to establish a good communication relationship with others, which will gradually lead to loneliness and frustration. As analysed above, children with cerebral palsy may not be able to regulate their emotions due to a number of factors, and poor emotions not only have a negative impact on the effectiveness of rehabilitation treatment, but also bring mental and emotional stress to family caregivers. Therefore, exploring how to improve the emotion regulation ability of children with cerebral palsy based on psychosocial treatment model is of great value in promoting the effectiveness of rehabilitation treatment and reducing the burden of family carers.

2. Overview of Psychosocial Therapy Model

The psychosocial therapy model, as a therapeutic approach that integrates the theories and practices of psychology and social sciences, aims to provide comprehensive treatment and support to patients based on a comprehensive consideration of the individual's psychological state and social environment. The psychosocial treatment model places great emphasis on the interaction between psychological and social factors. It is believed that mental health is not only determined by an individual's internal psychological mechanisms, but also influenced by external environmental factors such as the family, school, and community in which the individual lives. Therefore, the psychosocial treatment model, not only focuses on the individual's psychological problems, but also focuses on the integrated use of social relationships and social support systems [1].

3. Factors Affecting the Emotional Regulation Efficacy of Children with Cerebral Palsy

Emotion regulation ability of children with cerebral palsy originates from emotion regulation efficacy. According to the Emotion Regulation Self-Efficacy Scale [2] compiled by Dou Kai, Nie Yengang, Wang Yujie and other scholars, combined with the Psychological Developmental Characteristics of Children with Cerebral Palsy Adjustment Scale, the factors affecting emotion regulation self-efficacy can be sorted out, covering the positive emotion experience, the negative emotion experience, the ability to regulate emotion, the stability of emotion, and the social support.

3.1. Positive emotional experience

Positive emotional experiences have a significant contribution to the emotional regulation efficacy of children with cerebral palsy. Positive emotions, such as happiness, contentment, and hope, can enhance the psychological resilience of children with cerebral palsy, as well as their ability to cope with problems and difficulties. Positive emotional experiences will enhance children's self-confidence and social adaptability, and effectively improve their mental health status.

3.2. Negative emotional experience

Negative emotional experiences have a negative impact on the emotional regulation of children with cerebral palsy. Negative emotions such as anxiety, depression, and anger not only aggravate the psychological stress of children with cerebral palsy, but also affect the development of cognitive functions and behavioural patterns, leading to

emotional loss and social difficulties. If they are exposed to negative emotions for a long period of time, children may develop a habitual sense of helplessness, which may further weaken their ability to cope with challenges and stress, and aggravate their emotional distress.

3.3. Emotional regulation

Emotional regulation ability is a key factor in managing the emotional status of children with cerebral palsy, determining how they cope with and manage emotional changes under the influence of internal and external environments. Effective emotion regulation helps children to better cope with difficulties and challenges in life and reduce the impact of negative emotions. Usually, emotion regulation involves several dimensional elements, such as emotion recognition, self-control, and emotion expression. Children with cerebral palsy may face more challenges and difficulties under these dimensions due to limitations in physical and cognitive dimensions.

3.4. Emotional Stability

Emotional stability means that individuals can maintain a relatively calm and consistent emotional state in the face of external and internal stressful situations. Emotional stability is particularly important for children with cerebral palsy, as they face physical barriers and cognitive challenges far beyond those of normal children, and are more likely to experience emotional fluctuations, which can further impede the development of their mental health and social skills.

3.5. Social support

Social support is an external factor that affects the emotional regulation of children with cerebral palsy. Wide-ranging and high-quality social support will significantly enhance the emotion regulation ability of children with cerebral palsy. Social support usually includes emotional, informational and material support from families, schools, medical institutions and social organisations. Good social support can provide spiritual comfort and psychological guidance to children with cerebral palsy, and help children with cerebral palsy and their families to better cope with challenges and stress [3].

4. Application of Psychosocial Therapy Model During the Enhancement of Emotional Regulation in Children with Cerebral Palsy

4.1. General Materials

The subjects of this study, selected from 60 children with cerebral palsy in grades 1 to 3 of a special education school in Jiangsu Province, all of the study subjects met the clinical diagnostic requirements for children with mild cerebral palsy, and at the same time, all of them were children with no serious intellectual deficiencies, visual impairments, or speech disorders. The basic data of the study subjects are shown in Table 1:

Table 1. Basic data of the study population.

Data items	Sub-item	Number of people	Percentage
Gender	Male	37	61.67%
	Female	23	38.33%
Grade	Year 1	22	36.67%
	Grade 2	25	41.67%
	Third grade	13	21.66%
Whether the child is an only child	Yes	48	80%
	No	12	20%

4.2. Psychosocial treatment strategies

4.2.1. Family Support

Family support, i.e. training and guidance for 60 parents of children with cerebral palsy in grades 4 to 6 in special schools, aims to enhance the effectiveness of family support and the care, understanding and positive response of parents of children with cerebral palsy to their children. Firstly, parents were trained to recognise and respond to the emotional needs of their children and to provide appropriate emotional support, as well as to help establish positive patterns of family interaction. Secondly, family therapy is conducted, whereby each child is arranged to attend counselling sessions with family members to resolve communication barriers and conflicts within the family and to enhance the overall functioning of the family. During the above two sessions, the psychotherapist is responsible for providing personalised guidance to parents to help them understand the special needs of their children with cerebral palsy, so that they can support their children's emotional regulation more effectively.

4.2.2. Individual Psychotherapy

Cognitive Behavioural Therapy (CBT) was conducted for 60 children with cerebral palsy, which is a commonly used individual psychotherapeutic approach to help children with cerebral palsy learn how to adjust their negative thinking patterns and develop positive emotions and coping strategies for problems. In addition, play therapy and art therapy are used as complementary methods to help children release their emotions and reduce psychological pressure through non-verbal expressions such as sand tray games and music teaching. In this process, the psychotherapist is required to fully consider the individual case characteristics and formulate a personalised treatment plan according to the specific situation of each child.

4.2.3. Social skills training

For the 60 children with cerebral palsy, a multi-dimensional approach of group activities, role-playing and simulation was adopted to achieve the teaching objectives. During the training process, psychotherapists were responsible for providing specific guidance and feedback to help the children with cerebral palsy master and apply various social skills. In addition, extracurricular activities on social skills are organised periodically with the cooperation of school teachers, so that children with cerebral palsy can practise and consolidate the social skills they have acquired in real-life situations.

4.2.4. School Intervention

In terms of school intervention, firstly, the school provided 60 children with cerebral palsy with individualised rehabilitation education plans, and formulated learning objectives and teaching methods that were in line with the cognitive and physical abilities of each child with cerebral palsy according to their specific conditions. Secondly, social interaction is an important driving factor for the psychological development of children with cerebral palsy. The school regularly cooperated with the psychotherapist to organise the 60 children with cerebral palsy to participate in different forms of social activities, such as group discussions, debates and team games, in order to promote in-depth communication and interaction between children with cerebral palsy and their peers, and to create a friendly and supportive environment for children with cerebral palsy in their learning and social interaction, so as to promote the psycho-social functioning of the children with cerebral palsy, Emotional regulation effect.

4.2.5. Occupational therapy

Occupational therapy, as a comprehensive rehabilitation therapy, aims to help children with cerebral palsy to improve their daily living skills, and then meet the goal of promoting independence and quality of life of children with cerebral palsy. In the occupational therapy phase for 60 children with cerebral palsy, firstly, the psychotherapist assessed the children's physical, cognitive and emotional status for data collection and analysis. Secondly, a rehabilitation programme was developed to improve the children's fine motor skills, cognitive functioning, and self-management skills, using specially designed training tools and activities to help children with cerebral palsy develop hand-eye coordination, perception, and cognitive skills. Thirdly, organise emotional expression and stress management training for 60 children with cerebral palsy to enhance their emotional regulation and control skills and mental toughness. During the implementation of the above three strategies, a WeChat cooperation platform was established among occupational therapists, parents, and teachers to ensure the sharing of psychosocial treatment plans, data, and progress, and to jointly improve the standard of psychosocial treatment for children with cerebral palsy [4].

4.3. Self-efficacy Test for Emotion Regulation of Children with Cerebral Palsy after Staged Psychosocial Treatment

After carrying out stage-specific psychosocial treatment for 60 children with cerebral palsy in special schools, the Emotion Regulation Self-Efficacy Scale prepared by scholars such as Dou Kai, Nie Yengang, and Wang Yujie was quoted, while scale questions were regulated in conjunction with the characteristics of the psychological development of children with cerebral palsy. In the investigation stage, the Likert five-point integral form was adopted, with a full score of 10 points and a minimum score of 1 point. The results of the scale consistency test Cronbach $\alpha = 0.8566$, reliability 0.789, in line with the requirements of the survey work. Table 2 and 3 show the results of the test of regulatory self-efficacy of children with cerebral palsy before the stage psychosocial treatment:

Under the results of the pre-test survey, most of the 60 children with cerebral palsy were concentrated in the score of 1~6, indicating that most of the children believed that they felt fewer positive emotions in life and study, and the corresponding negative emotions, and most of the children believed that the negative emotions they experienced were much higher than the positive ones, and that the things they usually

experienced made them feel less happy, and more negative mentalities such as sadness and helplessness. In the dimension of emotional regulation ability, close to half of the 60 children scored 3~4, and 12 scored 1~2. Most of the students did not have good emotional regulation ability, and the emotional stability was also mainly concentrated in scores of 1~6, with only 6 scoring 7~10. In terms of social support, the number of people with a score of 1 to 6 accounted for 48 people, or 80 per cent, and these children believed that they did not receive good help and care from their relatives, friends, schools and even society.

Table 2. *Emotion regulation self-efficacy scores for children with cerebral palsy on the pre-test of stage-specific psychosocial treatment (N=60).*

Test Factors	Frequency of scores				
	1~2points	3~4points	5~6points	7~8points	9~10points
Positive Emotional Experiences	17	15	23	5	0
Negative Emotional Experiences	23	16	11	6	4
Emotional regulation	12	29	14	5	1
Emotional stability	12	19	21	7	1
Social support	18	14	16	10	2

Table 3. *Emotion regulation self-efficacy scores for children with lateral cerebral palsy after staged psychosocial treatment (N=60).*

Test Factors	Frequency of scores				
	1~2points	3~4points	5~6points	7~8points	9~10points
Positive Emotional Experiences	0	4	14	28	14
Negative Emotional Experiences	16	12	28	4	0
Emotional regulation	0	7	8	31	14
Emotional stability	3	7	12	27	9
Social support	2	9	15	21	13

After the stage of psychosocial treatment, the overall positive emotional experience scores of the 60 children under the data of posterior emotional regulation self-efficacy were significantly improved, with most of the scores centred on 7-10 points, corresponding to the overall decrease of the negative emotional experience scores. At the same time, the children's emotional regulation ability, emotional stability, and social support scores were significantly improved, and the significance of each data before and after comparison was <0.05, indicating that psychosocial treatment, for children with cerebral palsy to improve emotional regulation ability can play a positive positive effect [5].

5. Discussion

Psychosocial therapy, which is of great theoretical and practical significance to enhance the emotional control ability of children with cerebral palsy, can be analysed in three dimensions: emotional support, cognitive reconstruction and behavioural training. First of all, emotional support as the core element of psychosocial therapy, according to the social support theory, good emotional support can relieve people's psychological pressure and improve their emotional stability. Emotional support comes not only from family, but also from school, peers, and professional therapy. Multi-level emotional support can help children with cerebral palsy to establish a

sense of security and trust, and effectively reduce the sense of loneliness and helplessness, in order to achieve the promotion of improving their emotional control ability. Secondly, cognitive restructuring is a commonly used tool in psychosocial therapy, aiming to change the person's negative perceptions of the situation and themselves. Cognitive restructuring of cerebral palsy through psychosocial therapy can help children to identify and change erroneous ways of thinking, behavioural patterns and beliefs, and to develop positive emotional responses as well as behavioural styles, which in turn can improve emotional regulation. Finally, behavioural training helps children with cerebral palsy learn to effectively express and manage their emotions through systematic behavioural shaping. For example, in the individual and occupational therapies for 60 children, positive reinforcement can be used to reward appropriate emotional expression and behavioural responses, thus helping children with cerebral palsy to gradually build up and consolidate good habits of emotional control. Therefore, psychosocial therapy for children with cerebral palsy is an effective means to promote the enhancement of children with cerebral palsy's ability to control their emotions, and to promote the continuous improvement of self-efficacy in emotional control.

6. Conclusions

In conclusion, this paper conducted a study on the application of psychosocial therapy model in enhancing the emotional regulation ability of children with cerebral palsy, and 60 children with cerebral palsy in grades 1~3 of special education schools were used to formulate and implement the psychosocial therapy programme. After comparing the pre-test and post-test data of the 60 children, it was demonstrated that the psychosocial therapy model could improve the positive emotional experience and reduce the negative emotional experience of the children with cerebral palsy in terms of their self-efficacy in emotion regulation, and at the same time, improve the children's ability to regulate their emotions, their emotional stability, and their level of social support. Therefore, special education schools and rehabilitation institutions can learn from this article and try to apply the psychosocial therapy model to the rehabilitation programme for children with cerebral palsy while grasping the value of the psychosocial therapy model, so as to provide effective treatment for children with cerebral palsy in terms of their ability to regulate their emotions and support the implementation of rehabilitation treatment and education based on the children's good level of emotional control, as well as to reduce the burden and pressure on family caregivers.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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