

Review of Young Children's Mental Toughness: Family, School, and Peer Factors

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Abstract: Mental toughness is of great significance to individual development. Young children are the key period for the formation and development of mental toughness. Research on the factors affecting the development of mental toughness of young children can intervene in the development of mental toughness of children, so as to help their future development. Factors affecting mental toughness are classified into three categories: Family factors, school factors, peer factors, and the existing literature and research were summarized. The scale used to assess mental toughness and other methods were introduced. Family factors, such as cumulative risk of family, parenting style, marital conflict have an important impact on children's mental toughness. A good teacher-child relationship in school factors can protect and regulate family cumulative risk in family factors, and the relationship between children and peers will be affected by the relationship between children and parents. Family factors, school factors and peer factors are not separate, but need to coordinate the whole, the three need to cooperate with each other. Finally, some suggestions and future research directions are put forward.

Keywords: mental toughness, young children, family factors, school factors, peer factors

1. Introduction

"In ancient times, those who made great achievements had not only extraordinary talents, but also perseverance." It reveals the vital role of human Mental toughness for personal growth and success, and the most important measure of human mental toughness is Mental toughness (MT). Mental resilience is an individual's ability to consistently and successfully cope with difficult life circumstances, including dimensions such as control over ones' lives and moods, dedication to personal targets and accomplishments, seeing variations in one's life to be challenge rather than a threat, and confidence in one's own and others' abilities [1]. Resilience can also be summarized as a cognitive-emotional process that is closely related to stress relief, motivation, promotion of self-esteem, responses to emergencies and social situations.

Behavior problems are harmful to individual life and mental health, and also an important aspect of children's social adjustment. Research shows that based on prior findings, a significant positive correlation between mental toughness and positive indicators of mental health was witnessed, and

better mental toughness can significantly negatively predict the behavior problems of preschool children. Follow-up studies also show that effective intervention of psychological resilience in early childhood can significantly cushion the negative impact of adverse experiences in early childhood on children's social emotions and school adaptation level, and promote the development of adolescent adaptation [2]. In addition, mental resilience is particularly important for disadvantaged children. Children with good mental resilience can still show good social adaptability despite experiencing adverse stimuli or adversity. In conclusion, as a protective element, process and mechanism for individuals to cope with negative events, mental toughness acts as an important part to children's physical and mental health and future development. Exploring the various factors that affect mental toughness is a popular research direction in academia. We categorize mental toughness into family factors, school factors and peer factors, and make a summary based on the latest literature and research, at the same time, put forward views and suggestions.

2. An introduction to the Mental Toughness of Young Children

2.1. Definition

Mental toughness is the good adaptability of an individual in the face of life pressure or adversity. It is important to predict and control mental toughness. Preschool stage is a critical and sensitive period for the formation of behavior habits, personality, ability and mental toughness in people's life [1].

2.2. Measurement Method

2.2.1. Scale

Children's mental resilience is closely related to other psychological concepts. The evaluation of children's mental toughness is usually done by scale. The Devereux Early Childhood Assessment (DECA) was developed by Neglieri in 1996 and revised into a second edition in 2012. DECA is suitable for the assessment of mental resilience among kids between 3 and 5 years old. The scale is composed of 21 items, including three dimensions as initiative perspective, self-regulation perspective, and attachment/relationship perspective. Likert 5 scale (0-4) was used. Scores are given by parents or teachers who have close contact with young children [3]. Prior studies which examine the relation between resilience and other psychological concepts were shown in Figure 1.

Concept	Authors	Mental toughness			
		Control	Commitment	Confidence	Challenge
Resilience	Skala and Bruckner, 2014			X	X
Hardiness	Kobasa et al., 1982	X		X	X
Cognitive appraisal of stress	Lazarus and Folkman, 1984	X			X
Perceived Stress Scale	Cohen et al., 1983	X		X	X
Self-esteem	Rosenberg, 1965			X	
Self-efficacy	Bandura, 1977	X		X	
Self-regulation	Sameroff and Rosenblum, 2006; Keefer et al., 2013	X		X	X
Intrinsic motivation	Ryan and Deci, 2000	X	X	X	
Expectancy-value theory	Wigfield and Eccles, 2000		X	X	

Figure 1: The connection between resilience and other psychological concepts [4].

2.2.2. Measures Outside the Scale

In addition to the scale, there are other measurement methods for the assessment of children's mental toughness, such as the observation and behavior record of children by parents or teachers, or the assessment of children's mental toughness by means of electroencephalogram (EEG) [5]. In EEG measurements, focus on parietal alpha oscillations associated with recognition, as this correlates with the level of effort and mental toughness associated with recognition. Teachers and parents should truthfully record the performance of children in school and family, such as the degree of effort of children when they encounter difficulties, and score their degree of effort.

3. Impact Factors for Children's Mental Toughness

3.1. Family Factor

Family factors contribute to the growth of children's mental toughness levels during critical periods of development because it provides the most primitive resources and environment for the promotion of positive psychological factors. Family is crucial in shaping a child's mental toughness. On the one hand, family can act as a protective part in their mental toughness; on the other hand, family may become a dangerous factor and threaten their mental toughness. Protective factors can help children cope better with adversity and be able to resist factors that adversely affect them. In general, the number of protective factors children receive from their families is positively correlated with their ability to withstand setbacks and stress, as well as with the strength of their psychological resilience [6]. However, poor parenting in the family environment will have adverse effects on the development of children, and will become a risk factor for the development of their mental toughness, which often leads to low level of mental toughness. The cumulative effect theory of risk factors, which explains complex relationships in real life, holds that children exposed to multiple risk factors at the same time will increase the likelihood of adverse growth outcomes [5]. There are also different risk factors for the development of resilience in prosperous children, which also need attention. Adversity itself also has certain positive effects, which can transform or restructure children's mental toughness [8].

There are many studies on family factors pertinent to children's mental resilience growth. Based on family system theory, cumulative risk model and existing studies, Sparks et al. conducted cumulative calculation of household risk factors from the perspective of family structure risk, family resource risk and family relationship risk and shaped into a family cumulative risk function to investigate the complex connection between family cumulative risk and preschool children's mental toughness [9]. By using the family cumulative risk questionnaire and DECA for assessment, using SPSS 24.0 to conduct descriptive statistics, analysis of variance, correlation analysis and common method deviation test, it is found that family is an important growth environment for individuals in the early stage, in which risk factors are not independent from each other [3]. Cumulative family risk more negatively affects the growth of adaptability in kids [9]. Niu et al. observed and studied the developmental characteristics and laws of mental toughness of 3-5 years old children by DECA (questionnaire) method, measured temperament of children by child behavior questionnaire, and measured parenting style and dimension questionnaire [10]. Further exploring the relationship between children's temperament, parents' upbringing and mental toughness will provide some reference for the theoretical basis and practice of the developmental study of mental toughness. A structural equation model showed that temperament negative emotion (discomfort, fear, sadness, anger, anxiety, etc.) and effort control dimensions not only directly predicted toughness in young children, but also indirectly predicted toughness through authoritative parenting. Temperament and parenting styles may contribute to the mental toughness of young children by reducing risk factors and enhancing protective factors, i.e. any psychological characteristic of an individual is influenced

by both genetics and environment [10]. In addition, Hao et al. explored the impact of marital strife and children's performance. The Strengths and Difficulties Questionnaire (SDQ), Parents' Perceptions of Coparenting Relationship, marital Conflict Scale and DECA were utilised, using Harman's single factor test, the researchers conducted relevant studies on mothers' perceived co-parenting, marital conflict, psychological humanity and children's behavioral problems, and drew the following conclusions: Mothers' perceived co-parenting has a significant negative correlation with marital conflict and children's behavioral problems. Psychological resilience moderates the latter half of the path in which mothers' perceived co-parenting affects children's behavioral problems through marital conflict [11].

3.2. School Factor

Generally, school subsystem and family are considered to have a synergistic effect on the development of young children. Teacher-child relationship is one of the important interpersonal relationships in the early stage of children. This relationship is the psychological relationship formed between children and teachers in kindergarten, which is mainly manifested by the communication of emotion, cognition and behavior. Contextual Systems Model (CSM) denotes that the relationship between teachers and kids is central to kids' overall system, family and school and acts as an important part to the behavioural development and socio-emotional of the child [12]. In a good relationship between teachers and children, teachers can give timely and supportive responses to children, and children can get recognition and care from teachers, which takes on a significant role in children's good habits cultivation, and also contributes to the growth of kids' self-cognitive ability and the establishment of positive self-awareness. It is of great significance for children to adapt to society well and develop communication ability. A good relationship between teacher and child is important for the development of toughness of young children, even children in disharmonious family environments. If the teacher-student relationship is positive, then the bad part of the parent-child relationship can be compensated. [13]. A good teacher-child relationship can take on a moderating role in the association between family risk and young children's mental toughness [9].

Sparks et al. used the teacher and children relationship scale, by the children in the class of teachers to assess the relationship between themselves and the tested children, set the Cronbach's coefficient in this table is 0.887, SPSS 24.0 was used to describe the data line statistics, variance analysis, correlation analysis and common method deviation test. The adjustment effect was tested using the PROCESS V3.5 macro program. The research shows that the increased relationship between teachers and children can continuously weaken the negative predictive effect of family cumulative risk on children's mental toughness, and can effectively cushion the passive effect of family cumulative risk on children's mental toughness. However, high family cumulative risk will weaken the protection of the interface between teachers and children, and the protective effect of the interface between teachers and children will weaken or disappear with the increase of family cumulative risk. Although the interface between teachers and children plays a protective role in the of young children's psychological resilience, when family cumulative risk of the is too high, children will have various adaptability problems, which makes it difficult to receive support from teachers. At this time, the role of the interface between teachers and children is limited [9].

3.3. Peer Relationship Factor

The influence of peer relationship on children does not exist alone. In middle childhood, there is a connection between the family system and peers, and peer relationship is related to children's security sense when children interact with their mothers. The study of Kerns et al. shows that kids with more secure mother-child relationship tend to be easier to be accepted by their peers. Have better

interpersonal relationships and peer friendships [14]. Although there are significant differences between children-peer relationship and children-parents relationship, parents have an indirect effect on interface between children and peers, the quality of their interactions and attachment behaviors, it has an important effect on children's expectations and interaction modes in peer relationships [15]. The influence of peer relationships varies at different times in a child's development, with peer interfaces in middle childhood and adolescence having a greater impact on children than those in early childhood [16]. In addition, Kim et al. investigated abused and non-abused children from low-income families and analyzed their emotional regulation and peer acceptance by using the data equation model, indicating that emotional regulation as a risk or protection mechanism has a huge impact on peer relationships. And emotion regulation exerts a crucial influence in the interface between early childhood maltreatment and later psychopathology [17]. Parker et al. discussed and examined child-peer interaction and potential peer disorder process models by examining the theoretical framework of the importance and impact of peer interfaces in early childhood and adolescence. The interaction of children's social cognition and behavior, peer evaluation and response in the development of peer adjustment and dissonance was clarified. Children's social cognition and behavior will affect their adjustment to peers, which in turn will have a negative impact on their concurrent and subsequent psychological disorders. Therefore, research need to pay more attention to and consider the problem of children's peer adaptation [18].

4. Suggestions

As the first environment that children come into contact with during their growth, family acts as a significant part on kids' physical and mental growth. The family environment created by parents and the corresponding cumulative risks in the family could exert a crucial effect on kids' mental toughness. A good children-parents relationship plays a positive role in the construction of kids mental resilient, while adverse environment will have a negative effect on children's mental toughness. However, for some groups, according to the operational process model of toughness, the interaction between adversity and individuals will lead to positive conversion results. If parents can guide children correctly under adverse conditions, adversity will also be transformed into conditions that enhance children's mental toughness.

As a platform for children to receive education, school also plays a non-negligible role in the growth of children. Teachers' attitudes and behaviors towards children act as an important part to the construction of children's psychological toughness. In addition, the relationship between teachers and children can be used as a protective factor and, to some extent, take on a regulating role in the risk factors for children in the family environment. Therefore, teachers can use cumulative risk method to identify high-risk children more accurately, so as to suggest comprehensive intervention of family risk.

In order to study the influence of children's moods in the growth of adjustment and disorder in the children-peers relationship, children's social anxiety can be used to demonstrate the principle of developmental psychopathology to guide peer disorders.

To sum up, families have the greatest influence on the building of children's mental toughness. Secondly, teachers also have an important part on the building of children's mental toughness. In addition, the relationship between children and their peers also has a certain impact on children's social cognition, behavior and mental toughness. Therefore, it is necessary to clarify the responsibilities of family education, build effective collaboration between family and school, and measure children's mental toughness performance. If there are some children with poor mental toughness performance, families and schools need to cooperate with additional detection, support and early intervention. In addition, since family, school and peers are three important factors that children are exposed to at the same time in their growth environment, and there is an inevitable relationship

between these factors, it is also a valuable direction to conduct joint research on the above three factors.

In addition, in the current literature and research, the method of DECA scale is mostly used to measure the mental toughness of children, while other methods were used less frequently. Since DECA is mainly used by teachers or parents to grade children's performance, it is indirect and may cause deviation in measurement and practice. Therefore, in practice, other ways other than the scale can be considered for auxiliary measurement in the future, such as the direct measurement of children by means of EEG. In a word, longitudinal research on the measurement of mental toughness should be carried out, and attention should be paid to supplement and improve the measurement methods.

5. Conclusion

Mental toughness is of great significance for a person's growth and success, and early childhood is an important period for the formation of mental toughness. It is of great significance for the growth of young children to study the influencing factors of mental toughness in early childhood and to correctly intervene children with mental toughness. The present study classifies the influencing factors of mental toughness according to family factors, school factors and peer factors, and systematically summarizes and summarizes the existing research literature and studies. Among the family factors, cumulative family risk, parenting and marital conflict all have different effects on the growth of kids' mental toughness. Among school factors, the children-teachers relationship plays an important role in the mental toughness of children. A good interface between children and teachers can regulate the adverse effects of family factors to a certain extent. Among peer factors, the relationship between children and their peers is affected by the relationship between children and their parents. A good family environment and school environment are of significant influence on the development of good peer relationship, and peer relationship acts as an important part on the growth of children's mental toughness, social cognition and behavior. In short, these three factors complement each other and influence each other: good family distribution and positive and healthy teacher-student relationship can provide children with a good sense of belonging at home and school, and also have a positive effect on the establishment of peer relationship. Finally, constructive suggestions and future research directions are given.

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