

Assessing Parenting Self-Efficacy of Preschoolers' Parents During The COVID-19 Pandemic in China

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Abstract. During the COVID-19 epidemic, 3-6 aged children became extremely vulnerable, and the situation of their parents remained to be explored. As prior studies have confirmed the positive correlation between parenting self-efficacy and early child development, this paper is aimed at establishing the psychometric properties of parenting self-efficacy (PSE) during-covid parenting and ascertaining the core factors that impact PSE in the Chinese educational environment. The study sample consisted of parents from central China who have children aged 3-6. The sense of self-efficacy was measured by the Parenting Sense of Competence Scale adjusted for the Chinese parenting context. The outcomes showed that the average scores maintain at a reasonably good level while the skill/knowledge domain was lower than the perceived valuing/comfort domain. Demographic variables regarding children's characters, parents' features and social support statistically influence the results. Practical intervention and outlook for further research are proposed to settle new challenges for parents of Chinese preschoolers.

Keywords: Parenting; Self-efficacy; Assessment; COVID-19 pandemic.

1. Introduction

Since the emergency of COVID-19 and the announcement of the coronavirus disease 2019 epidemic by the World Health Organization (WHO) in 2020, the Chinese government has implemented a package of timely measures to impede the rapid spread of the virus. In a country that took strict quarantine measures at the beginning of the pandemic, Chinese 3-6 aged children and their parents have faced different challenges, some of those including online courses, long-term quarantine life and the uncertainty of the environment. At the same time, the combination of workload, full-time caregiving responsibilities and the risk of unemployment may trigger seriously stressful elements that had implications on the general well-being of parents [1].

The prior research study on the influence of the COVID-19 epidemic on parents and their children implies that risks brought by the novel pandemic, such as living in a red zone or living in a risky environment did not have a statistically direct negative impact on families' well-being. Instead, parents' psychological well-being, regarding social support, parenting stress and depression may have a significant direct link to negative childcare [2].

Parenting self-efficacy (PSE) is a dynamic psychological structure of the individual and is derived from general self-efficacy, which is described as beliefs in one's ability to successfully conduct a specific behavior or collection of related behaviors [3]. Applying the concept to the parenting domain, PSE is received as one's confidence in their capabilities to successfully undertake the character of the parent [4]. PSE usually comprises parents' competence to care for a specific child of a certain age (domain-specific PSE) and their capacity to execute a variety of parenting activities that are always changing (task-specific PSE), as well as their confidence in their overall parenting role (domain-general PSE) [5].

Previous studies have found out that parenting self-efficacy is one of the determinants of positive parenting behaviors and closely relates to Early Child Development (ECD) in the domains of cognitive and language, as well as to elevated parenting skills and positive parenting practices [6-8]. Faced with challenges caused by the COVID-19 pandemic, a better sense of parenting self-efficacy can ease psychological tolls with regard to lack of motivation, sadness, and parenting stress, which may lead to a higher quality of childcare [9].

It is reasonable to assume that the anxiety experienced by young children's parents during the pandemic may stimulate parenting stress and negatively impact their capability to attend to the children, but the influence of the COVID-19 epidemic on parenting self-efficacy of parents has not been fully explored. At the same time, the flowing aspects of PSE can be evidently significant for parents of young children, for the association between parenting tasks and individualized needs of children in different stages of rapid development. It is, therefore, of great importance to conduct an investigation on PSE aiming to assess parents' psychological well-being in the adversities during the COVID-19 pandemic and fully grasp how parents carry out their responsibilities of caregiving.

2. Method

2.1. Research Object

The present study was implemented in central China with an online scale in 2022 when the lockdown was strictly conducted. Properly speaking, Chinese parents who had a 3-6 aged child were recruited by snowball sampling to fill out the online questionnaire. In the process, a QR code on the scale was shared among subjects, also asking them to share the code with their social network. The same procedure was repeated on social networks and other online groups.

2.2. Research Tool

The Parenting Sense of Competence Scale (PSOC) comprises 17 items including two scales, Skill-Knowledge and Value-Comforting, which respectively referred to satisfaction, an emotional dimension measuring parenting frustration, uneasiness, and motivation; and efficacy, an instrumental dimension indicating competence, emergency response, and capability of playing parenting role [10]. Answers to positive items (Items 1, 6, 7, 10, 11, 13, 15, and 17) ranged from 1 (strongly disagree) to 6 (strongly agree). Scores for negative items were reversely rated (Items 2, 3, 4, 5, 8, 9, 12, 14, and 16) in order that a higher sense of PSE could be implied directly from higher scores.

In previous studies, the Chinese Version of the Parenting Sense of Competence Scale(C-PSOC) has been developed and its reliability and validity were demonstrated to be well [11, 12]. In the present study, in the face of the COVID-19 pandemic, Chinese family living habits have been introduced based on the feedback of the pretest. Meanwhile, some linguistic adjustments are also conducted so that the parents could answer with their latest feeling in their parenting life.

3. Results

3.1. Sample Characteristics

The age of subjects was mainly ranging from 30 to 40, with 54% between 35-40 years. 66% had a college education level while only 4% graduated with a high school or junior education level. About 36% were engaged in government or education institutions with lifelong employment, 40% were working in private companies, and 24% were in trade or individual business. Concurrently, the income, measured by the current per capita monthly household income, varied from 3000 RMB to 9000 RMB, with over 60% of the subjects gaining more than 9000RMB per person.

3.2. Descriptive Statistics of the PSOC Scale

The grand average score was 67.22 (SD=9.94). After scanning each subscale, the skill/ knowledge score from 21 to 41 with a mean average of 28.52 (SD=4.52) and the valuing/comfort score varied from 26 to 52 with a mean average of 38.7 (SD=6.53).

3.3. Demographic Character of Parenting Sense of Efficacy

Variables in this study involve demographic characteristics such as children's characteristics (gender, age, etc.) and caregivers' characteristics (income, education level, occupation), as well as

non-social factors such as the form of kindergarten teaching activities, parental time, social parenting support, etc. None of these demographic variables has any mutual influence. The following will discuss the parenting efficacy of parents with different infant characteristics, caregiver characteristics and social characteristics.

3.3.1 Children's characteristics

In terms of children's characteristics, parents of older children have lower parenting efficacy than parents of younger children, and the proportion of parents with above-average parenting efficacy gradually declines from 57% of parents with 3-year-old children to 42% of parents with 6-year-old children with the increase of children's age, showing an obvious negative correlation between the two. In terms of gender variables, the parenting efficacy of parents of boys and parents of girls is very close, and there is no significant difference in efficacy and satisfaction.

3.3.2 Characteristics of nurturers

In terms of the characteristics of nurturers, on the whole, occupation, educational background, income and other factors have a significant impact on children's parenting efficacy. In terms of occupational variables, parents working in enterprises show lower parenting efficacy than those working in public institutions, and the number of parents above the average is only 35%. Self-employed parents, on the other hand, showed a very good sense of parenting efficacy, with more than 67 percent of respondents having a good sense of satisfaction and efficacy.

3.3.3 Variable of education level

In terms of the variable of education level, there is an obvious positive correlation between education background and children's parenting efficacy. Parents with high school education are not higher than the average in terms of parenting efficacy. Parents with bachelor's degrees or college degrees show better performance in the data, about 46% of parents have above-average parenting efficacy. Parents with a master's degree or above have the strongest sense of efficacy, and more than half of parents have a good sense of parenting efficacy and have a balanced performance in the two dimensions of satisfaction and efficacy. In terms of income, considering the influence of spouse income and family number, the current per capita monthly income of the family is selected as a variable for data collection. It is worth noting that, according to the questionnaire results, income does not have a significant impact on the parenting efficacy of young children. Parents with per capita monthly income of less than 3,000-yuan, 3,000 yuan to 6,000-yuan, 6,000 yuan to 9,000 yuan, and more than 9,000 yuan do not show a difference in parenting efficacy caused by the income gap. The scores of satisfactions and efficacy were also consistent.

3.3.4 Social characteristics

In terms of social characteristics, this study starts from the situation of early childhood education, parent-child interaction, and parenting support. In terms of early childhood education, due to the impact of the epidemic, many kindergartens have not started offline education activities, but mainly online activities guided by parents at home. Based on data statistics, this study found that the form of kindergarten education activities did not have a significant impact on children's parenting efficacy, and the proportion of parents above the average level of parenting efficacy remained at about half. However, in terms of efficacy, the parents of children who carry out kindergarten activities offline have a significantly lower sense of parenting efficacy, with only 37.6% of parents reporting a better sense of efficacy, while the parents of children who carry out kindergarten activities online are 55.6%. In terms of parent-child interaction, the time spent with children every day is a good predictor of parenting efficacy, and there is a positive correlation between the two. At the same time, in terms of efficacy, about 60% of parents who spend 0-2 hours with their children everyday report that their performance is below the average level, while only 47.4% and 43.8% of parents whose children spend 2-4 hours or 4 hours or more. In terms of parenting support, this study subdivides it into two parts: family support and social support and investigates the situation of family parenting assistants and government parenting support. In terms of family support, given the small sample size of relatives

and other auxiliary caregivers, this study mainly compared the influence of the parent's spouse as the primary auxiliary caregiver with that of the parent. The data show that the parents (including the parents-in-law) play an important role in assisting in the rearing of young children. The subjects whose parents are the main assistants account for 56% of the total survey samples, and 57.14% of the subjects show average child-rearing efficacy, which is in sharp contrast to the 40.1% of the subjects whose spouses are the main caregivers. In terms of social support, people should pay close attention to the results. During the epidemic period, nearly 75% of parents who received community and government support showed above-average efficacy, while only 45.23% of parents who did not receive similar support showed such performance. Unfortunately, the number of parents receiving government and community support only accounts for about 16% of the total sample, and the coverage of social support is still relatively narrow.

4. Discussion

4.1. The Parenting Efficacy of Young Children Was Not Significantly Affected During the Epidemic

Contrary to expectations, despite challenges such as virus transmission, large-scale lockdown and kindergarten closure, parents' parenting efficacy was not significantly affected during the epidemic period, with an overall average score of 67.22. On the one hand, it is due to the good cultural quality of the parents and the good income performance under the epidemic situation. Moreover, it depends on external support such as the innovative model of kindergarten education, the active participation of the grandparents, and the effective actions of the government and the community. According to the social ecosystem theory, children's growth environment at all levels has an impact on their growth. Empirical studies have also shown that social support has an effect on improving the emotional level of caregivers and alleviating negative emotions brought about by the epidemic. It can be seen that improving the parenting efficacy of young children under uncertain risks such as the epidemic is not only the work of parents themselves, but also a holistic project requiring the participation of the whole society.

Satisfaction mainly evaluates the emotional factors such as frustration, anxiety and motivation encountered by parents in taking care of their children; the sense of efficacy reflects the parents' energy and problem-solving ability in the role of parenting [13]. Although the overall situation remained good, parents of young children were far less satisfied in terms of efficacy, with more than 75% of parents responding positively to the question "If childcare were fun, I would be more motivated to be a parent than I am now." In response to this phenomenon, some parents interviewed by the author agree that taking care of children is a loving and warm joy, but some parents say that the greater pressure of work and parenting can easily lead to emotional instability, causing them to experience negative emotions when their children make mistakes or behave in ways that do not meet expectations. This reflects that parent of young children need to continuously improve their ability of emotional regulation and parent-child interaction, as well as their ability to solve problems in specific parenting scenarios.

4.2. Paradox Between Occupation and PSE

The data show that parental occupation is a core factor affecting parents' sense of parenting efficacy, and there are both coincidences and conflicts between the data results and traditional cognition.

In the situation of China, employees in private enterprises are affected by unemployment risk and have great work pressure, especially when facing the impact of the novel coronavirus epidemic, which may be partly explained by the low score of parents' child-rearing efficacy in all kinds of jobs in private enterprises. But similarly situated self-employed people show a very different sense of parenting efficacy, performing even better than the traditional perception of unemployed parents in government or school jobs. Whether it is affected by the benefit of the enterprise or the interference

of parents' personal stress resistance, this contradiction may indicate that there are mediating variables between parents' occupation and their parenting efficacy, and its action path needs to be further explored.

4.3. Parent-child Interaction Has a Significant Impact on the Parenting Efficacy of Young Children

Parent-child interaction is commonly perceived as the interaction between parents and children. High-quality parent-child interaction can not only actively boost the early development of children, but also stir the emotional level of parents.

During the COVID-19 pandemic, children and parents often stay at home together due to such factors as working at home, closing kindergartens and raising the price of childcare services. The parent-child interaction time is extended, which provides a good time guarantee for high-quality parent-child interaction and allows both children and parents to spend more time experiencing the pleasure of companionship. Therefore, under the COVID-19 epidemic, family education guidance from the government or professional institutions should be more committed to improving the quality of parent-child interaction, so as to effectively improve the parenting efficacy of young children's parents.

5. Conclusion

On the basis of previous studies, this study modified the measurement tool locally and made a beneficial exploration of the current situation and influencing factors of parenting efficacy of young children under the background of the COVID-19 epidemic. The survey found that the parenting efficacy of young children did not decrease significantly due to many external factors during the epidemic, but maintained a good state on the whole. On the one hand, this benefits from parents' own cultural literacy, economic level and occupational training, but also related to children's age, social support, and kindergartens' innovation in caregiving. All the above factors have a positive role in promoting the resistance of children's parents during the epidemic situation, improving children's family education, and caring for the early development of children.

The present study draws the samples mainly by snowball sampling, and distributing online questionnaires to parents. Although the regional representation of urban and rural was considered in the early stage, due to limited labor and material resources, parents in central China were contacted, resulting in a limited representation of parents. In addition, through the demographic background information survey of the parents, it was found that the socioeconomic status of the parents surveyed was mainly in the middle level, which may be caused by the lack of differences. In the future, people can further contact more parenting in multiple regions with the high and low socioeconomic status of parents to carry out investigations, so as to improve sample representativeness.

Up to now, the COVID-19 pandemic restricting policy in China has seen a rapid adjustment. New factors, such as kindergarten resuming, higher risk of infection and a growing sense of uncertainty, maybe the upcoming determinant impacting on PSE of Chinese parents. Hence, in the context of a continuously changing environment, long-term psychological tracks on both parents and young children are desired to integrally grasp the dynamic of parents' mentality situation and they'll perceive to be a qualified father or mother.

To constructively support parents of 3-6 aged children, accessible community services and professional family intervention are desired to be enriched to improve their PES for delivering high-quality parenting. Aiming at the well-being of parents and children, future studies should pay attention to parenting training and intervention programs which provided them with the knowledge or individualized experience to elevate their parenting capabilities. Also, more light should be shed on the role of government in this social engineering.

References

- [1] Brooks' S K, Webster R K, Smith L E, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence[J]. *The Lancet*, 2020, 395(10227): 912-920.
- [2] Spinelli M, Lionetti F, Pastore M, et al. Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy[J]. *Frontiers in Psychology*, 2020, 11: 1713.
- [3] Bandura A. Self-efficacy: toward a unifying theory of behavioral change[J]. *Psychological Review*, 1977, 84(2): 191. *Psychological Review*, 1977, 84(2): 191.
- [4] Jones T L, Prinz R J. Potential roles of parental self-efficacy in parent and child adjustment: A review[J]. *Clinical psychology review*, 2005, 25(3): 341-363.
- [5] Coleman P K, Karraker K H. Self-efficacy and parenting quality: Findings and future applications[J]. *Developmental Review*, 1998, 18(1): 47-85.
- [6] Albarran A S, Reich S M. Using baby books to increase new mothers' self-efficacy and improve toddler language development[J]. *Infant and child development*, 2014, 23(4): 374-387.
- [7] Hess C R, Teti D M, Hussey-Gardner B. Self-efficacy and parenting of high-risk infants: The moderating role of parent knowledge of infant development[J]. *Journal of applied developmental psychology*, 2004, 25(4): 423-437.
- [8] Weaver C M, Shaw D S, Dishion T J, et al. Parenting self-efficacy and problem behavior in children at high risk for early conduct problems: The mediating role of maternal depression[J]. *Infant Behavior and Development*, 2008, 31(4): 594-605.
- [9] Lin H C, Zehnah P L, Koire A, et al. Maternal Self-Efficacy Buffers the Effects of COVID-19-Related Experiences on Postpartum Parenting Stress[J]. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 2022, 51(2): 177-194.
- [10] Gibaud-Wallston J, Wandersman L P. Parenting sense of competence scale[J]. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 1978.
- [11] Xiao Y, Lingling G, Zhenxiang Z, et al. The reliability and validity of the Chinese version of parenting sense of competence scale[J]. *Chin J Nurs*, 2014, 7: 881-885.
- [12] Li X Y, Mao K N, Mi X Y, et al. Reliability and validity of the Chinese version of parenting sense of competence scale in mothers of preschool children[J]. *Beijing da xue xue bao. Yi xue ban= Journal of Peking University. Health Sciences*, 2021, 53(3): 479-484.
- [13] Yang Yufeng. *Developmental Behavioral Psychological Rating Scale for Children* [M]. Beijing: People's Medical Publishing House, 2016, 538-541