

The Effect of a Multi-Component Positive Psychological Intervention on Promoting Wellbeing of Left-Behind Children in China

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Abstract. The parental separation among left-behind children in China imposes a huge burden on their mental health and well-being. These children, living alone while their parents migrate for work, suffer from severely undermined health and interpersonal relationships, including increased susceptibility to depression, emotional and behavioral problems, anxiety, and aversive states such as loneliness. Fortunately, extensive research has identified protective factors against these negative impacts, such as resilience, self-esteem, and psychological capital. Positive psychology, a field of study that focuses on promoting the “goods” to increase the flourishing of people, can be a breakthrough source of solution that boosts these factors. This research protocol aims to examine a multi-component positive psychological intervention – InJoy – on promoting the well-being of middle-school-aged left-behind children in China through measuring subjective well-being, depressive symptoms, mental health, self-esteem, resilience, and psychological capital before and after the implementation of the eight-week internet-based intervention.

Keywords: Left-behind children; Mental health; positive psychological intervention; Research and analysis.

1. Introduction

The rapid economic growth and urbanization of China give rise to a special group of minors - left-behind children. They are children who live without their parents in their rural communities while the parents go to work in the cities. This is a prevalent phenomenon in the country as one third of the Chinese working population are those that migrate from rural regions. LBC suffer from severe mental health burdens and difficulties in their individual development and social interactions, which is a problem that is currently overlooked. This paper will examine the mental health problems LBC in rural China suffers from past literature, identify protective factors against these difficulties, and introduce a new solution - positive psychological interventions - to promote their wellbeing and prepare them for a flourishing life. It specifically proposes a research protocol examining the efficacy of an internet-based multi-component positive psychological interventions, InJoy, in strengthening positive characteristics such as subjective well being and psychological capital, and reducing negative characteristics such as difficulties in emotional regulation.

2. Brightening Up the Lonely Souls: The Effect of a Multi-Component Positive Psychological Intervention on Promoting Wellbeing of Left-Behind Children in China

In rural China, there are over 69 million children who are living without their parents in rural communities while the parents go to work in the cities (UNICEF, 2018).

These children are called “left-behind children” (LBC). LBC is defined as “children aged under 18 years old who were left in their rural communities when one or both of their parents migrated to cities to work” (Duan, 2005). This is a prevalent phenomenon caused by the rapid economic growth and urbanization of China, where 31% of the working population are those that migrate from rural regions (National Bureau of Statistics of China, 2016).

These LBCs usually live with their grandparents, while some have to take care of themselves (Chai et al, 2019). Meeting with parents is a rare event for most LBCs, usually happening one time a year. When separated, LBC usually talk with their parents through telephone or sending messages via social media. In these conversations, practical things are more often discussed than the emotions and growth of the children (Ye and Pan, 2011).

Extensive research has investigated the negative impacts of this unique form of parental separation on the mental well-being of LBC. For this research, they can be divided into two main categories - mental health and interpersonal relationships, with the latter category covering child-parental communication issues and loneliness.

3. Mental Health of LBC

Most evidence has shown the impact of LBC's situation on their mental health. In a study conducted by Fellmeth et al., LBC had an increased risk of depression, suicidal ideation, and anxiety (Fellmeth et al., 2018). That LBC are more likely to experience depressive symptoms and suicidal ideation is supported by other studies (He et al., 2012, Liang et al., 2017; Zhao et al., 2022). LBC are significantly more prone to problems when it comes to mental health, which includes emotional and behavioral issues and hyperactivity (Wang et al., 2019). They are also more likely to develop psychosocial dysfunction and psychopathology, (Fan et al., 2010) with the overall prevalence of behavioral/emotional problems being nearly 50% among LBC (Zeng et al. 2009). In particular, LBC who are the only children of the family tend to have greater expectations, leading to higher susceptibility to behavioral, mental, and even academic issues (Wang and Guo, 2010). LBC also tend to experience heavier social anxiety (Wu et al., 2019; Li et al., 2019; Yang et al., 2022). Research on the separation of LBC also demonstrated that those who were left behind earlier in their life are more prone to depression and anxiety(Liu et al., 2009), with the impacts being greater when the mother migrates.

4. Interpersonal Relationships of LBC and Loneliness

Aside from examining the mental health impacts on the individual, much research also studied how LBC suffer from difficulties in terms of interpersonal relationships. One important and extensively studied subject under interpersonal relationships is communication between LBC and their parents, including non-verbal interactions(Barnes et al, 1985). Such communication plays a critical role in the growth of children, where a higher level of parent-child communication indicates better life satisfaction and happiness (Su et al, 2013). In a study conducted by Wang et al, LBC are significantly less open and experience more difficulties in terms of parent-child communication. It was also found that, among the LBC, increased issues in parental communication correlates strongly to emotional and behavioral difficulties including hyperactivity (Wang et al, 2019). Zhao et al. further confirmed that maternal communication difficulty for LBC had negative association with self-reported health and positive association with intention to commit suicide and depression (Zhao et al, 2022). In addition to parent-child communication, LBC are more likely to engage in deviant peer affiliation (Yang et al, 2021), which is shown to be a strong predictor of antisocial behavior (Lee, 2011). On the contrary, they are less likely to perform pro-social behaviors than Non-LBC (Fan et al., 2010). In a study by Zhao et al, LBC reported less perceived care from teachers and friends compared with Non-LBC (Zhao et al, 2022).

As shown, poor interpersonal relationships resulted in many difficulties for LBC, among which one example has particularly been widely studied: loneliness. Loneliness is an unpleasant state caused by a mismatch between desired and actual interpersonal connections (Peplau and Perlman, 1982). LBC are found to be more prone to such an aversive psychological state (Shen et al., 2015). Loneliness potentially increases risk for depression (Cacioppo et al., 2015), withdrawal from society, and suicidal intention (Schinka et al., 2013). Extensive evidence has shown that LBC experience

loneliness more often profoundly than non-LBC (Yin, 2014, Jia and Tian, 2010, Chen et al, 2017) due to prolonged separation from their parents. A meta-analysis of 51 studies conducted by Chai et. al. looked at various factors that correlate with loneliness for LBC in China and found that loneliness correlates with social anxiety (Chai et al., 2019).

5. Factors that Promote the Wellbeing of LBC

Extensive research demonstrates the problems LBC experiences, but evidence has also shown certain protective factors can improve the well-being of this population. According to Chai et al., for instance, self-esteem, resilience, and extroversion is protective against loneliness (Chai et al., 2019).

Liao et al. found that social anxiety and loneliness among LBC are negatively correlated with their coping strategies: those who use positive coping strategies are less likely to experience social anxiety and loneliness (Liao et al, 2014).

In addition, psychological capital, a factor of psychological resources which consists of hope, efficacy, resilience, and optimism is of importance for LBC (Youssef and Luthans, 2007). By definition, psychological capital, upon development and management, is able to insert great influence on the growth and wellbeing of children (Zhu et al., 2021). A positive association between psychological capital and the mental and behavioral adaptiveness of Chinese children was found by Fan et al. (2015) after implementing a psychological-capital-based-intervention in Chinese schools. Zhu et al. (2021) measured the difficulties of LBC and found that children with lower psychological capital experienced more psychological difficulties including emotional and behavioral problems, impulsivity, and issues interacting with peers; while they performed less prosocial behavior. (Zhu et al., 2021)

While there is an increasing prevalence of and attention drawn to the mental burdens of LBC, not much research has focused on examining interventions or strategies aimed at alleviating these burdens. It is evident that interventions that would promote the well-being and positive development of this vulnerable population are needed. One potential source of solution is Positive Psychology.

6. Positive psychology and Positive Psychological Interventions

Positive psychology, proposed by Seligman, focuses on promoting the flourishing of humans. (Seligman, 2011) This theory and its interventions aim to increase well-being through improving the five elements that construct it: positive emotion, engagement, relationships, meaning, and achievement. The extending characteristics of flourishing involve self-esteem, optimism, resilience, vitality, self-determination, and positive relationships (Huppert and So, 2013).

7. Gratitude Interventions

One set of positive psychological interventions that aim to promote meaning is gratitude interventions. Gratitude is defined as an attribution-dependent state (Weiner, 1985) that results from a two-step cognitive process: (a) recognizing that one has obtained a positive outcome, and (b) recognizing that there is an external source for this positive outcome. Gratitude correlates with extensive benefits in terms of psychology and relationships (Emmons & McCullough, 2003; McCullough et al., 2001). For instance, McCullough et al (2004) found that gratitude as a disposition can increase subjective well-being. Such efficacy has also been shown in other research (Watkins et al., 2003). Importantly, gratitude promotes positive social interactions (McCullough et al., 2001), as it was discovered to be correlated with empathetic and forgiving characteristics, as well as the inclination to give help to other individuals. According to McCullough et al., individuals that reported having a grateful disposition tended to believe they had more prosocial characteristics, such as empathetic behavior and emotional support for friends (McCullough et al., 2002). As aforementioned, this will be effective in promoting the wellness of LBC through improving interpersonal relationships and providing protection against loneliness. A study by Seligman et al (2005) examined the effects

of six singular-component positive psychology interventions, including the “Gratitude Visit” exercise, where participants wrote a letter to someone who had done something nice for them, but who they never formally thanked and the “Three Good Things in Life” exercise, where participants wrote down three positive things that happened to them and their causes every day for one week. The result is that both the Three Good Things Log and the Gratitude Visit significantly increased happiness and decreased depressive symptoms at post-test, while the former had more long-lasting effects of up to six months after (Seligman et al, 2005).

8. Character Strength Interventions

Another set of interventions surrounding character strengths focuses on promoting achievement and engagement. Character strengths are positively valued traits (Peterson and Seligman, 2004) of an individual that could be exercised to improve one’s well-being through their contribution to individual fulfillment. It is considered that each person possesses strengths that characterize the person best. In the study by Selgiman et al. (2005), one group of participants did the “Using Signature Strengths in a New Way” exercise, where they were asked to use their top five strengths more frequently over the next week. In comparison with the control group, participants who took the intervention reported greater levels of happiness, as well as reduced depressive symptoms soon after the test (Seligman et al., 2005). Extensive research has shown the positive influence of strengths-based interventions on different indicators of subjective well-being (Park and Peterson, 2006; Peterson et al., 2007; Gander et al., 2012; Berthold and Ruch, 2014). In specific, many studies have investigated the effect of strength-based measures on promoting resilience (Nickerson et al., 2013, Zimmerman, 2013, Howell, 2021), a key protective factor that increases the wellbeing of LBC as aforementioned. In a meta-analysis conducted by Nickerson et al., it was shown that strength-based approaches highlight resources, assets, and positive adaptive health behaviors. Resilience has been frequently a central concept supporting strength-based interventions (Nickerson et al., 2013).

9. Multi-Component Positive Psychological Interventions as a Potential Solution

In their study in 2005, upon examining different positive psychological interventions, Seligman et al. suggested that using multiple exercises at once might be better than using any of the exercises individually. Multi-Component Positive Psychological Interventions might thus be more effective in promoting the well-being of a population (Seligman, 2005). Therefore, this research directs its attention to a multi-component intervention called the InJoy Program (Redzic, 2011). Redzic (2011) developed this internet-based multi-component intervention universally for adolescents at risk of depression based on positive psychology and cognitive-behavioral theory. The components of the program were selected to address four key modifiable factors of depression: (1) cognitive factors (cognitive distortions, negative automatic thoughts, low self-esteem, negative attributional style) (2) stress (3) depressive symptoms, and (4) poor interpersonal relationships. The eight-session program involves positive psychological interventions that focus on the elements of gratitude, pleasure, meaning, strengths, and relationships.

There is currently only one research done to examine its effect on preventing depression, which showed that the InJoy program was effective in slowing down the progression of depressive symptoms in low-risk individuals and improving emotional and behavioral regulation (Redzic, 2011). However, as aforementioned, many of the traits and elements that these positive psychological interventions aim to improve are associated with better well-being of the LBC in China. Without the essential attention and care from their parents, these children would be helped by an intervention that 1) educates children about how to maintain well-being and guide them to boost their happiness; 2) has them do activities that are designated to increase multiple components of happiness. An intervention like Injoy will likely be effective in boosting the wellness of LBC in China.

10. Study Aim & Hypothesis

This research thus aims to study the effect of InJoy - a multi-component positive psychological intervention - on left-behind middle school adolescents in rural China. The hypothesis includes the following:

The positive psychological intervention will increase the subjective well-being, psychological capital, and resilience of the participants.

The positive psychological intervention will decrease the depressive symptoms and perceived difficulties of the participants.

The positive psychological intervention will improve the emotional regulation of the participants by decreasing difficulty in emotional regulation.

11. Method Participants

Children of Grade 6- Grade 8 from two junior high schools in Zhongjiang county, Sichuan province will be targeted as potential participants. Present LBC in the group will participate in the study after screening during the recruitment process.

12. Recruitment

Local approvals will be obtained from county authorities and participating schools through email. Permission to perform the study will be acquired from the teachers of the participants in person by the researcher. The parental migration status of all students of Grade 6 - Grade 8 will be investigated by their head teachers in class through the distribution of a two-question form (See Appendix A). The first question is “Has one or both of your parents migrated to work in the urban areas?” and “Has either of them no longer resided with you for the past twelve months?” (considering the magnified impact of prolonged parental separation). If the answer is no to both, the participant will be categorized into “non-LBC”; if the answer is yes for both, the participant will be categorized into “present-LBC”; if the answer is yes to the first one and no to the second one, the participant will be categorized into “former-LBC”. Students who are defined as “present-LBC” will be further identified as potential study participants. Children who are orphans or belong to a single-parent family will not be included.

Current LBC students will be communicated with about the purpose and procedure of the 2 months study by the researcher in school at lunch (handout being the first introduction of the InJoy program (See Appendix D for the InJoy Program)). A consent form will be sent home or via email to acquire informed consent from the children and their parents (See Appendix B).

Upon their consent, the information and parental migration status of the participants will be further examined with a more detailed survey (See Appendix C), distributed in class by the head teachers of the participants. Participants will be assigned unique identification numbers by the researcher. An online account will be created for each participant, containing usernames and passwords. Participants will be randomly assigned to one of the two programs - InJoy or an online journaling program as the control group. On the first day of the study, instruction will be given by the researcher at school to the participants on accessing the program. Once logged in, participants will be asked to complete the pre-intervention assessments in the classroom.

Pre-intervention, participants of both groups’ subjective well-being, depressive symptoms, mental health (conduct problems, etc.), self-esteem, resilience, psychological capital, and difficulties in emotional regulation will be measured.

Participants will be encouraged to use the program for at least 30 minutes each week and to post to its discussion board once per week.

During the week following the last day of the intervention, participants will be given instructions about how to complete the post-intervention assessments by the researcher. They will then be asked

to complete the post-intervention assessment online in school during lunch with the company of the researcher. At post-intervention, the same measurements will be taken from both groups.

13. The InJoy Program

The InJoy program (See Table1) is an eight-week multi-component psychological intervention primarily designed for depression prevention in adolescents developed by Redzic (2011). The sessions and the logs take place weekly online. The following table summarizes the topics covered and intervention of each session.

Table1. The Injoy program

Session	Topics Covered	Intervention
Session 1	<p>program introduction</p> <p>regulating negative emotions</p> <p>things to do when dealing with difficulties (ex. including asking others for help)</p>	<p>- The Three Good Things Log:</p> <p>Participants will list three positive events from their day, and identify their part in those events and other individuals that contributed to the good thing.</p>
Session 2	<p>pleasure and meaning as components of happiness</p> <p>identifying what happiness means to me and the things that give me meaning</p> <p>increasing pleasure in different areas of life</p> <p>coping with stress</p> <p>two relaxation exercises with audio</p>	<p>-The Three Good Things Log</p> <p>-The Pleasure and Meaning Log:</p> <p>Participants will record their daily events and consider if the activities involved pleasure or meaning.</p>
Session 3	<p>identifying signature strengths and learning how to use them</p> <p>signature strengths that might be developed in the future</p> <p>the relationship between signature strengths and meaning</p>	<p>- The Three Good Things Log</p> <p>-The Pleasure, Meaning, and Strengths Log:</p> <p>This is similar to the Pleasure and Meaning Log, with an addition of requiring the participants to record strengths they used in their activities.</p>
Session 4	<p>healthy vs. unhealthy coping strategies</p> <p>identifying and understanding emotions</p> <p>challenging critical negative thoughts (ex.thoughts that are one-sided or extreme)</p> <p>a progressive muscle relaxation exercise</p>	<p>- The Three Good Things Log</p> <p>-The Pleasure, Meaning, and Strengths Log</p> <p>-Challenging Your Critical Thoughts Log:</p> <p>Participants will practice questioning their thoughts in a situation that made them feel bad.</p>
Session 5	<p>the power of gradual (working on something bit by bit each day to result in a large outcome in the long run vs. trying to do things all at once or not at all)</p> <p>coping with emotions and stress, including emotions such as fear, shame, sadness, and anger</p> <p>challenging critical thoughts with the help of others</p> <p>positive self-talk and originating empowering thoughts</p>	<p>- The Three Good Things Log</p> <p>-The Pleasure, Meaning, and Strengths Log</p> <p>-Challenging Your Critical Thoughts Log</p>

	<p>habits and rituals</p> <p>identifying a ritual and making a plan for it to happen</p>	
Session 6	<p>how relationships relate to well-being and happiness</p> <p>identifying different types of relationships, including informational support, tangible support, instrumental support, and emotional support</p> <p>sentence completion exercise</p> <p>the impact of social relationships on mood</p> <p>identifying relationships and relationships I want to work on improving</p> <p>dealing with relationship endings</p>	<p>- The Three Good Things Log</p> <p>-The Pleasure, Meaning, and Strengths Log</p> <p>-Challenging Your Critical Thoughts Log</p> <p>- The Gratitude Letter as used by Seligman et al. (2005)</p>
Session 7	<p>handling problems in relationships</p> <p>communication skills</p> <p>introduction to mindfulness skills</p> <p>the idea of flow and how it relates to goals</p> <p>guided imagery relaxation techniques with audio</p>	<p>- The Three Good Things Log</p> <p>-The Pleasure, Meaning, and Strengths Log</p> <p>-Challenging Your Critical Thoughts Log</p> <p>- a Mindful Eating Exercise</p>
Session 8	<p>“My Roadmap” – a record of things I have accomplished in the program</p> <p>preparing for lapses by identifying potential barriers and solutions;</p> <p>reflection on what activities I enjoyed most and ones I want to continue using in the future</p>	/

14. The Control Group

The control group will take part in an online program that asks them to write down three things that happen to them once a week for eight weeks.

15. Measures

The Chinese version of the Children's Depression Inventory (CDI) (Kovacs, 1985) will be used to measure the depressive symptoms of participants (See Appendix E). It is an extensively used instrument for determining the depressed symptoms of children around the globe. The CDI contains 27 items, and is a self-reported measure that focuses on symptoms of depression. Each item has a three-point Likert scale. Higher scores indicate more serious depressive symptoms. The total score ranges from 0 to 54. The CDI score is used as a continuous variable, and the mean is calculated as a measure of children's predisposition for depression (Wang et al, 2019). A score of 19 or higher identifies depression. In the Chinese context, the Chinese version of the CDI has strong construct validity and internal consistency (Wang et al, 2019).

The Strengths and Difficulties Questionnaire (Goodman, 1997) will be used to measure participants' mental health (See Appendix F), which has been widely used and validated in the Chinese context (Wang et al, 2019). The student version of the SDQ is believed to be the most appropriate for this age group, in comparison with the adult versions (Mazzucato et al, 2015). 25 mental health-related items make up the SDQ's five subscales, which include conduct issues, peer issues, emotional symptoms, pro-social behaviors, and hyperactivity. Each item is rated on a Likert

scale of 0 to 2, with 0 denoting uncertainty and 2 denoting absolute certainty. The total of each subscale's five items yields the score for that subscale. The pro-social subscale was excluded from the calculation of the total problems score, which ranged from 0 to 40. Higher scores on any subscale (with the exception of the pro-social conduct subscale) indicate a lower sense of wellbeing and more difficulties experienced.

The General Well-being Schedule (GWBS) (Dupuy, 1978) will be used to measure the subjective well-being of the participants (See Appendix G). It is an 18-item, self-administered questionnaire that includes positive and negative questions across six dimensions: positive well-being, self-control, vitality, depression, anxiety, and general health. A meta-analysis of 796 papers that studied the subjective well-being of Chinese populations showed that the GWS is the most frequently used measurement to measure happiness or subjective well-being in China (Cheng and Davy, 2008). The first 14 questions employ 6-point Likert scales reflecting intensity or frequency. The remaining 4 questions employ 6-point rating scales defined by adjectives at each end. Lower scores indicate distress and higher scores indicate wellness.

The Chinese version of the Piers-Harris Children's Self-Concept Scale ((PHCSCS) will be used to measure the self-esteem of children (See Appendix H). The tool consists of 60 items that require the respondent to respond by circling "Yes" or "No." It has been widely used as a research tool to monitor changes in self-concept over time. A study that examined the reliability and validity of the Chinese version of PHCSC demonstrated adequate internal consistency and score stability, as well as its strong association with the results of the Elementary School Children's Self-Concept Scale and the Behavioral and Emotional Rating Scale.

The 14-Item Resilience Scale (RS14) will be used to measure the resilience of the participants (See Appendix I). It includes 14 questions answered via a 0-7 scale ranging from "Strongly Disagree" to "Strongly Agree". The RS14 has been used widely and translated into various languages. An analysis of the psychometric properties of the Chinese RS14 among Chinese young people displayed that the measurement had adequate construct validity, excellent degree of reliability, and good stability upon confirming its applicability in the Chinese context (Chen et al., 2020).

The Psychological Capital Questionnaire (PCQ) will be used to measure the psychological capitals of the participants (See Appendix J). The inventory consists of 24 items examining hope, self-efficacy, optimism, and resilience through a 6-point Likert Scale. Four studies conducted by Luthans et al. (2007) to assess the overall PsyCap construct yielded internal consistency and reliability of the overall construct (Luthans et al., 2007). Lee et al. (2016) developed the Chinese-version Psychological Capital Questionnaire and found good reliability and validity of the questionnaire in the Chinese context (Lee et al., 2016).

The emotional regulation of participants will be examined through the Difficulties in Emotional Regulation (DERS) questionnaire (See Appendix K). The 36-item self-report scale consists of questions on how respondents deal with their emotions, yielding scores on the following subscales: nonacceptance of emotional responses, difficulty engaging in goal-directed behavior, difficulties with impulse control, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. The DERS was discovered to have high internal consistency, decent test reliability, satisfactory construct and predictive validity (Gratz & Roemer, 2004).

16. Predicted Results

Upon taking the measurements, the data pre- and post- interventions of either group will be compared.

It is hypothesized that the InJoy group will have increased measures of subjective well-being, psychological capital, self esteem, and resilience; and reduced measures of depressive symptoms, difficulty index, and difficulty in emotional regulation index post-intervention than pre-intervention. For the control group, changes in these measurements are hypothesized to be less significant compared to those of the InJoy group. It is also hypothesized that the measurements of the Injoy group

post-intervention will reflect more satisfying results than that of the control group in terms of promoting wellbeing and reducing negative characteristics, reflecting the efficacy of the InJoy intervention in boosting the mental wellness of LBC in rural China.

References

- [1] Chai, X., Du, H., Li, X., Su, S., & Lin, D. (2019). What really matters for loneliness among left-behind children in rural China: A meta-analytic review. *Frontiers in psychology*, 10,774. <https://doi.org/10.3389/fpsyg.2019.00774>.
- [2] Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. *Journal of personality and social psychology*, 84(2), 377. <https://doi.org/10.1037/0022-3514.84.2.377>.
- [3] Fan, F., Su, L., Gill, M. K., & Birmaher, B. (2010). Emotional and behavioral problems of Chinese left-behind children: a preliminary study. *Social psychiatry and psychiatric epidemiology*, 45(6), 655-664.
- [4] Fellmeth, G., Rose-Clarke, K., Zhao, C., Busert, L. K., Zheng, Y., Massazza, A., & Devakumar, D. (2018). Health impacts of parental migration on left-behind children and adolescents: a systematic review and meta-analysis. *The Lancet*, 392(10164), 2567-2582.
- [5] Liao, C., Liu, Q., & Zhang, J. (2014). The correlation between social anxiety and loneliness of left-behind children in rural China: effect of coping style. *Health*, 2014. DOI:10.4236/health.2014.614204.
- [6] Nickerson, A. B., & Fishman, C. E. (2013). Promoting mental health and resilience through strength-based assessment in US schools. *Educational and Child Psychology*.
- [7] Redzic, N. M. (2011). The effects of an internet-based psychoeducational program on reducing depressive symptoms in adolescents. (Publication No.3591870) [Doctoral dissertation, Palo Alto University]. ProQuest Dissertations and Theses database.
- [8] Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive Psychology Progress: Empirical Validation of Interventions. *American Psychologist*, 60(5), 410–421. <https://doi.org/10.1037/0003-066X.60.5.410>.
- [9] Shen, J., Liu, X., Zhao, J., and Shi, B. (2015). The psychological development of Chinese left-behind children and migrant children in urbanization process. *Psychol. Dev. Educ.* 31, 108–116. <http://www.devpsy.com.cn/EN/Y2015/V31/I1/108>.
- [10] Wang, F., Lin, L., Xu, M., Li, L., Lu, J., & Zhou, X. (2019). Mental Health among Left-Behind Children in Rural China in Relation to Parent-Child Communication. *International journal of environmental research and public health*, 16(10), 1855.
- [11] Wang, X., & Guo, Q., (2010). Analysis of the frequency of negative life events and the influencing factors among left-behind children in a mountainous rural area in Guizhou province. *Chinese Journal of Social Medicine* 27, 351–353.
- [12] Yang, Y., & Lu, X. (2022). Social anxiety and subjective quality of life among Chinese left-behind children: the mediating role of social support. *Frontiers in Psychology*, 13.10.3389/fpsyg.2022.836461.
- [13] Zeng, R., Zhang, L. L., Luo, J. Y., Gong, W. J., Du, Q. Y., & Wu, H. (2009). Study on emotional, behavioral problems and related determinants among stranded children aged 4 to 7 years in the rural areas of China. *Zhonghua liu Xing Bing xue za zhi= Zhonghua Liuxingbingxue Zazhi*, 30(7), 706-709.
- [14] Zhao, G., Wang, M., Xu, J., Lu, J., Akezhuoli, H., & Wang, F. (2022). Health Status and Association With Interpersonal Relationships Among Chinese Children From Urban Migrant to Rural Left-Behind. *Frontiers in Public Health*, 10.
- [15] Zhu, C., Yin, X., Li, Z., & Zhou, L. (2021). Psychological Capital Differs Among Rural Left-Behind Children and Is Associated With Emotional and Behavioral Problems. *Frontiers in Psychology*, 12, 2742. <https://doi.org/10.3389/fpsyg.2021.565385>.