The Effects of a Post-Traumatic Stress and Post-Traumatic Growth Group Program for Children at Childcare Facilities

Kim, Minkyeong

[1]*Department,Child Welfare, Namseoul University, 91 Daehak-ro, Seunghwan-eup, Seobuk-gu, Cheonan-city, Chungnam, Korea. Email: ilu35@naver.com*

KEYWORDS
Traumatic experience, Post-traumatic stress, Post-traumatic growth, Group program, Childcare facilities, Children

ABSTRACT
The purpose of this study was to investigate the effects of post-traumatic stress and post-traumatic growth program for children at childcare facilities. And for hypothesis verification, Mann-Whitney U analysis and Wilcoxon signed rank test were conducted. The major findings were as; The group program had the effect of the reducing the post-traumatic stress and enhancing the post-traumatic growth of children in child care facilities. It was also found to be effective for changes in self-perception, enhancement of interpersonal relationships, discovery of new possibilities, and increase in spiritual and religious interest, which are sub-factors of children's post-traumatic growth. This study has significance in terms that it proved the importance on the improvement of children's post-traumatic growth at childcare facilities.

1. Introduction

Traumatic experiences in childhood are experienced more seriously. As a result of meta-analysis on the prevalence of post-traumatic stress, the prevalence of post-traumatic stress in adults was 24%, while it was 27% in adolescents and 33% in children. It can be seen that the rate of occurrence of stress increases (Fletcher, 1994).

The experience of a traumatic event has a negative impact on an individual's mental health, and the impact may last a lifetime (Solomon & Siegel, 2003). On the other hand, the effects of trauma experiences are not only negative, but also include positive aspects that promote individual potential (Joseph & Linley, 2006). Life's challenges, such as trauma, also provide an opportunity to grow as a human being (Kim & Shin, 2010). Regarding this, Tedeschi and Calhoun (2004) introduced the term Post-Traumatic Growth (PTG) to the positive psychological changes that a person gets as a result of struggling against challenging and difficult adversity experienced in life, Learn to appreciate life more, discover new possibilities and strengths that were not recognized before, and pay attention to growth that changes more positively and adaptively in interpersonal relationships.

Post-traumatic growth (PTG) has empirical findings that show that many people gain meaningful life lessons, renew their assessment of life, and feel more personal strength after experiencing a traumatic experience (Tedeschi, Park, & Calhoun, 1998).

In particular, it has been reported that even in the case of children who have experienced interpersonal trauma, if the level of psychological pain perception is low, they show high PTG (Calhoun & Tedeschi, 2004; Kendall & Kessler, 2002). In this way, regardless of the objective intensity and type of trauma experience, it is necessary to lower the individual's pain perception level in the early stage of the trauma experience and to intervene to enhance PTG. In addition, individuals who reported initial growth after a traumatic experience showed significantly lower post-traumatic stress symptoms in the follow-up for 2 years compared to the group that did not (Fletcher, 1994). This suggests that post-traumatic growth experiences can play a role in suppressing or alleviating symptom expression in the future adaptation process. Therefore, the experience of growing up after trauma can lead to a more adaptive state when faced with another trauma or strong stress, and it is possible to promote positive and active changes from traumatic experiences through growth-promoting interventions in people who have experienced trauma. I think intervention is needed.

Lastly, children in child care facilities are likely to have a negative impact on psychological adaptation and development as group life is emphasized and stigma is accompanied (Avery & Freundlich, 2009), and they experience a sense of shrinkage and maladjustment in terms of psychological aspects compared to general children. You are likely to experience In addition, since they are separated from

their parents and do not have deep sympathy with their parents, an intervention program must be established to recover and grow their difficulties and problems.

Therefore, this study developed a post-traumatic growth group program for children in child care facilities and verified its effectiveness by providing an effective group program for post-traumatic growth of children in child care facilities to reduce post-traumatic stress and improve post-traumatic growth. There is a purpose of research to do.

2. Literature Review

Post Traumatic Stress Disorder

Individuals who have experienced trauma may experience a variety of psychological maladjustment symptoms. A prime example is post-traumatic stress disorder (PTSD). According to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-V), the diagnostic criteria for PTSD are infiltration and re-experiencing of trauma-related thoughts, avoidance symptoms, arousal and reactions lasting for more than 4 weeks after experiencing trauma. refers to the case of In the recent DSM-V, negative changes in cognition and mood were added. Negative changes in cognition and mood are related to memory problems for events, negative beliefs about self, others, and the world, distorted perceptions of cause and effect of events, self-blame, feelings of distance or alienation from others, and persistent negative emotions. Otherwise, it is described as a lack of positive emotion (APA, 2013).

Psychological problems caused by experiencing traumatic events were classified and presented under the category of Trauma- and Stressor-Related Disorders. Sub-factors of this disorder include post-traumatic stress disorder (PTSD), acute stress disorder, reactive attachment disorder, disinhibited social engagement disorder, and adjustment disorder (Calhoun & Tedeschi, 2006).

However, since the concept of post-traumatic stress disorder was created based on soldiers who experienced a one-time trauma, victims of abuse of repeated, prolonged, interpersonal violence such as rape trauma syndrome and beaten wife syndrome. There is a limitation that it does not include psychological symptoms that occur specifically to individuals (Courtois, 2004). Therefore, accurate diagnosis criteria including psychological symptoms of persistent post-traumatic stress of abuse or domestic violence should be expanded.

Eventually, many researchers insisted on the need for a new diagnosis for PTSD (Kroll et al., 1989; Spitzer et al., 1989). Herman (1997) pointed out the limitations of the existing diagnosis of post-traumatic stress disorder, and described Simple Post Traumatic Stress Disorder (hereinafter referred to as simple PTSD), in which discontinuous and one-time traumatic events were experienced according to the type of trauma. It has been suggested that it should be divided into Complex Post Traumatic Stress Disorder (PTSD), in which people experience repetitive interpersonal trauma (Ahn, 2007). In addition, with various names such as Type II trauma (Terr, 1985), developmental trauma, and attachment trauma (Allen, 2005), continuous interpersonal violence trauma experience is classified as an independent concept. The need for new diagnostic criteria was required (Ahn, 2007).

In particular, in the differential diagnosis of childhood post-traumatic stress (PTSD), symptoms of avoidance or re-experiencing are similar to those of attention deficit hyperactivity disorder. Externalizing symptoms such as anger, irritability, and aggression are similar to those of oppositional defiant disorder or conduct disorder, so care must be taken in the differential diagnosis.

A Study on Post-Traumatic Growth of Children in Child Care Facilities

There are children in child care facilities who adapt well without showing any developmental problems despite poor environments. Even when exposed to the same risk factors, it can be seen that emotional and behavioral coping styles can vary depending on how individuals perceive, interpret, and accept (Yoo, 2000). As they share their difficult experiences, they help each other and have a positive experience, resulting in a healing effect (Malchiodi, 2000). and can recognize oneself as a meaningful

being (Kim & Kim, 2001).

According to studies that focus on the factors that drive growth, the factors that buffer the negative effects of trauma and the factors that lead to growth after a traumatic experience are the same (Tedeschi & Calhoun, 1996; McMillen, 1999).

Regarding the emotional control method to deal with unpleasant emotions about traumatic experiences, cognitive and emotional processing are more important than anything else because traumatic experiences are intense emotional experiences (McMillen, 1998). It was also found that emotional variables such as emotional processing or emotional expression had an effect on post-traumatic growth (Morris & Shakespeare-Finch, 2011).

In addition to the studies presented above, there is a meta-analysis result by Helgeson, Reynolds, and Tomich (2006) that reveals the relationship between post-traumatic growth and mental health. In this study, the perception of post-traumatic growth was found to be significantly related to depressive symptoms and positive well-being, as well as to an increase in invasive thoughts (Morris & Shakespeare-Finch, 2011). The significant relationship between perception of post-traumatic growth and invasive thinking is consistent with the theory of Tedeschi and Calhoun (2004), confirming that rumination is an essential process leading to post-traumatic growth and that cognitive processing of traumatic experiences is an essential process. will be.

Therefore, repetitive thinking and rumination on the traumatic experience can lead to post-traumatic growth, reduce depressive symptoms and negative emotions, and experience positive well-being. In addition, post-traumatic growth can lead to a more adaptive state, and the application of growth-promoting interventions to people who have experienced trauma can promote positive and positive change as well as recovery from traumatic experiences. will be. It is said that irrational thoughts such as negative emotions that children in child care facilities have been abandoned can be corrected, and the ability to understand others as well as oneself can be improved through interaction among members (LeCroy, 1987).

3. Methodology

Subjects

This study targeted a total of 28 children, 14 in the experimental group and 14 in the control group, who were currently residing in child care facilities in two child care facilities located in area C. There were 16 13-year-olds, and the proportion of children in the upper grades was higher than in the lower grades of elementary school.

The reasons for the selection of study subjects are: First, using the post-traumatic stress diagnostic scale, a total score of 10 or less is clinically evaluated as mild, 11 to 20 points as moderate, and 21 points or more as severe. It is possible (Ahn, 2005). Therefore, 28 children with a scale score of 10 or higher were selected, and 14 children in the experimental group and 14 children in the control group were selected. The average score for each group was 21 points or more. Second, considering the developmental stage, school-age children were selected as children who were cognitively suitable for expressing their opinions enough to clearly express and conceptualize their thoughts and feelings. Third, this study was selected as the age at which communication with peers and younger siblings who share the same room with friends while living and living in a child care facility, and at which interaction and influence with life guidance counselors increase.

Scale

To measure PTSD symptoms, the Posttraumatic Diagnostic Scale (PDS) developed by Foa et al. (1997) was adapted and used. The PDS consists of several chapters that comprehensively ask about trauma events, time and frequency of experiences, PTSD symptom levels, and disability levels, but only 17 items asking about PTSD symptom levels were extracted and used. The sub-factors of the PTSD symptom scale are re-experiencing, avoidance, and hyperarousal based on the diagnostic criteria of the

DSM-V. The PTSD symptom scale measures the severity of the symptoms experienced during the past month on a 4-point Likert scale. The reliability of the post-traumatic stress scale (Cronbach's α) is .915.

To measure the level of post-traumatic growth, the Post-traumatic Growth Inventory (PTGI) developed by Tedeschi and Calhoun (1996) was used. K-PTGI consists of a total of 16 questions in four sub-factors: change in self-perception, change in interpersonal relationships, discovery of new possibilities, and increase in spiritual/religious interest. It is composed of a Likert 5-point scale, and the higher the sum, the higher the level of post-traumatic growth. The reliability (Cronbach's α) of the post-traumatic growth scale in this study was .957.

Data Processing and Analysis

Mann-Whitney U analysis were performed to verify the homogeneity between groups, and descriptive statistical analysis was performed to show the average value of each group. And for hypothesis verification, Mann-Whitney U analysis and Wilcoxon signed rank test were conducted.

Procedure used to carry out this study comprised four phases. These phases are as follows: data gathering, data cleaning, data visualization, data analysis and report writing.

4. Results and discussion

Comparison of Post-Traumatic Stress Homogeneity between the Experimental Group and the Control Group

Table 1 shows the result of verifying the homogeneity of post-traumatic stress and its sub-factors. As a result of the analysis, the average rank of the experimental group for total post-traumatic stress was 15.34, which was not statistically different from 15.68 in the control group. And looking at the sub-factors, the average rank of the experimental group for re-experience was 15.34, which was not statistically different from 15.68 in the control group. Even in the case of avoidance, the average rank of the experimental group was 15.13, showing no statistical difference from 15.93 of the control group. In addition, the average rank of the experimental group was 15.44 in hyperarousal, which was not statistically different from 15.77 of the control group. In other words, it can be seen that post-traumatic stress and its sub-factors are homogeneous between the experimental group and the control group.

Table 1: Verification of homogeneity among groups of post-traumatic stress

	Group	M	SD	M Order	U	Z
post traumatic stress	experiment(14) control(14)	1.25 1.24	0.49 0.35	15.34 15.68	109.50	-.10
re-experience	experiment(14) control(14)	1.31 1.29	0.90 0.67	15.34 15.68	109.50	-.10
evasion	experiment(14) control(14)	1.09 1.08	0.54 0.43	15.13 15.93	106.00	-.25
hyperarousal	experiment(14) control(14)	1.41 1.43	0.53 0.42	15.44 15.57	111.00	-.04

Comparison of post-traumatic growth homogeneity between the experimental group and the control group

Table 2: Verification of homogeneity among groups of post-traumatic growth

	Group	M	SD	M order	U	Z
post traumatic growth	experiment(14) control(14)	2.77 2.83	0.65 0.77	14.73 16.39	99.50	-.52
change in self perception	experiment(14) control(14)	2.86 2.90	0.76 0.77	15.35 15.68	108.50	-.10
changes in interpersonal relationships	experiment(14) control(14)	2.79 2.96	0.83 0.80	14.48 16.68	96.50	-.69

discovery of new possibilities	experiment(14) control(14)	2.65 2.64	0.81 1.08	15.54 15.46	112.50	-.02
spiritual. growing Religious Interest	experiment(14) control(14)	2.57 2.61	0.86 0.94	15.29 15.75	109.50	-.15

Table 2 shows the result of verifying the homogeneity of post-traumatic growth and its sub-factors. As a result of the analysis in Table 1, the average rank of the experimental group was 14.73 for total post-traumatic growth, which was not statistically different from that of the control group, 16.39. And looking at the sub-factors, the change in self-perception showed that the average rank of the experimental group was 15.35, which was not statistically different from the 15.68 of the control group. Even in the case of interpersonal changes, the average rank of the experimental group was 14.48, which was not statistically different from the control group's 16.68. Also, in the discovery of new possibilities, the average rank of the experimental group was 15.54, showing no statistical difference from the control group's 15.46. showed no difference. In other words, it can be seen that post-traumatic growth and its sub-factors are homogeneous between the experimental group and the control group.

Change of Post-Traumatic Stress

Table 3: Comparison of post-traumatic stress change between the experimental group and the control group

	Group	**M**	**SD**	**M Order**	**U**	**Z**
post traumatic stress	experiment(14) control(14)	-0.64 -0.01	0.40 0.12	9.64 22.14	18.50	-3.89***
re-experience	experiment(14) control(14)	-0.80 -0.06	0.72 0.21	10.17 21.55	27.00	-3.64***
evasion	experiment(14) control(14)	-0.48 0.03	0.48 0.17	9.48 22.34	16.00	-4.02***
hyperarousal	experiment(14) control(14)	-0.70 -0.03	0.48 0.15	9.92 21.82	23.00	-3.75***
*** p<.001						

As a result of the Table 3, first of all, the average rank of the experimental group for post-traumatic stress was 9.64, lower than that of the control group, 22.14, and there was a significant difference at the p<.001 level. This average rank means that the post-traumatic stress change in the experimental group was lowered more significantly than the control group's post-pre change. This shows that this program is effective in reducing post-traumatic stress.

And in the verification of the sub-factors of post-traumatic stress, the changes in the experimental group were lowered more significantly than those in the control group at the p<.001 level for all sub-factors of re-experiencing, avoidance, and over-arousal.

Change of Post-Traumatic Growth

Table 4: Comparison of post-traumatic growth change between the experimental group and the control group

	group	**M**	**SD**	**M order**	**U**	**Z**
post trauma growth	experiment(14) control(14)	1.20 0.10	0.68 0.23	21.67 8.46	13.50	-4.10***
change in self perception	experiment(14) control(14)	1.08 0.05	0.85 0.29	21.29 8.89	19.50	-3.86***
changes in interpersonal relationships	experiment(14) control(14)	1.13 0.04	0.87 0.28	20.70 9.57	29.00	-3.47**
discovery of new possibilities	experiment(14) control(14)	1.39 0.21	1.01 0.46	20.32 10.00	35.00	-3.23**
Spiritual. growing Religious	experiment(14) control(14)	1.38 0.21	1.20 0.38	20.13 10.21	38.00	-3.15**

Interest						
**** p<.01, *** p<.001**						

Table 4 shows the post-traumatic growth rate of children in child care facilities. As a result of the analysis, the average rank of the experimental group was 21.67 for post-traumatic growth, which was higher than that of the control group, 8.46, and there was a significant difference at the p<.001 level. This average rank means that the post-traumatic growth rate of the experimental group increased more significantly than that of the control group. This shows that this program is effective in improving post-traumatic growth.

Also, in the verification of the sub-factors of post-traumatic growth, the change in self-perception, change in interpersonal relationships, discovery of new possibilities, and increase in spiritual/religious interest sub-factors were all statistically larger in the amount of change in the experimental group than in the control group. was shown to be elevated.

5. Conclusion and future scope

The group program was found to be effective in the verification of sub-factors of post-traumatic stress caused by traumatic experiences of children in child care facilities. Post-traumatic stress re-experiencing, avoidance, and hyperarousal symptoms are not distinct factors, but occur simultaneously or multiple times, so they need to be dealt with comprehensively. In particular, it is because the importance of emotional regulation and stabilization is emphasized in children's trauma experiences. Exposing traumatic memories in an unsafe state not only reduces the child's traumatic experiences and therapeutic effects, but may actually exacerbate them (Cloitre et al., 2010). However, in this group program, it was found that the experimental group's changes in the sub-factors of post-traumatic stress re-experiencing, avoidance, and hyperarousal were significantly lower than those in the control group by securing a sense of emotional safety.

The group program had the effect of enhancing the post-traumatic growth of children in child care facilities. It was also found to be effective for changes in self-perception, enhancement of interpersonal relationships, discovery of new possibilities, and increase in spiritual and religious interest, which are sub-factors of children's post-traumatic growth. It seems that children's psychological, emotional, and cognitive memories have positively changed their self-perception by expanding their understanding of themselves through emotional expression and cognitive processing experiences in activities.

The fact that this study reported a positive effect in promoting post-traumatic growth in children in a relatively early developmental state has important implications for the development of an overall growth program beyond post-traumatic growth and overcoming in the future. The post-traumatic growth group program showed changes and growth in the perception and expression skills of one's own emotions and cognitive situations after the traumatic experience, considering the child's developmental stage.

Ackwledgements

Funding for this paper was provided by Namseoul University

Reference

[1] Ahn, H. (2007), Concept and empirical evidence of complex trauma. Journal of the Korean Psychological Association: General, 26(1), 105-119.
[2] Allen, J. G.(2005). Coping with trauma: Hope through understanding (2nd ed.). Washington D.C.:American Psychiatric Association. (Kwon Jung-hye, Kim Jung-beom, Cho Yong-rae, Choi Hye-kyung, Choi Yoon-kyung,and Kwon Ho-in) (2010). healing of trauma Seoul: Hakji Branch Office.
[3] Allen, J. G.(2005). Coping with trauma: Hope through understanding(Second Edition).Washington, D.C.: American

Psychiatric Publishing.
[4] American Psychological Association. (2013). Diagnostic and statistical manual of mental disorders DSM-5 (5th Ed.). American Psychiatric Association.
[5] Calhoun, L.G., & Tedeschi, R. G.(2004). The foundation of posttraumatic growth: New considerations. PsychologicalInquiry, 15, 93-102.
[6] Cloitre, M., Stovall-McClough, K. C., Nooner, K., Zorbas, P., Cherry, S., Jackson, C. L., Gan, W., & Petkova, E. (2010). Treatment for PTSD related to childhood abuse: a randomized controlled trial. The American Journal of Psychiatry, 167(8), 915-24.
[7] Courtois, C. A. (2004). Complex trauma, complex reactions: Assessment and treatment. Psychotherapy: Theory, Research, Practice, Training, 41, 412-425.
[8] Fletcher, K. E. (1994). Childhood posttraumatic stress disorder. In handbook of psychotherapy and behavior change. Allen & Bergin (Eds.). New York: Wiley.
[9] Foa, E. B., Cashman, L., Jaycox, L., & Perry, K.(1997). The validation of a self-report measure of posttraumatic stress disorder: The posttraumatic Diagnosis Scale. Psychological Assessment, 9(4), 445-451. http://doi.org/10.1037/1040-3590.9.4.445
[10] Herman, J. L.(1997). Trauma and recovery: The aftermath of violence-from domestic abuse to political terror (Vol. 551). Basic books.
[11] Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). Ameta-analytic review of benefit finding and growth. Journal of consulting and Clinical Psycholog 74(5),797-816.
[12] Joseph, S., & Linley, P. A.(2005). Positive adjustment to threatening events: an organismic valuing theory of growth through adversity. Review of General Psychology: 9(3), 262-280.
[13] Kendall, P. C., & Kessler, R. C. (2002). The impact of childhood psychopathology interventions on subsequent substance abuse: policy implications, comments, and recommendations. Journal of Consulting and Clinical Psychology, 70(6), 1303-1306.
[14] Kim, B. Shin, H. (2010). The effects of ego resilience and meaning in life on post-traumatic growth. Journal of the Korean Psychological Association: Counseling and Psychotherapy, 22, 117-136.
[15] Kim, G. Kim, M. (2001). "Life of institutionalized children (phenomenological approach)", 『East-West Nursing Research Journal』, 6(1): 23-36.
[16] Kroll, J., Habenicht, M., & Mackenzie, T. (1989). Depression and post-traumatic stress disorder in southeast Asian Refugees. American Journal of Psychiatry, 146, 1592-1597.
[17] Landreth, G. L. (2012). Play Therapy: the art of the relationship. Routledge.
[18] LeCroy, C. W.(1987). Teaching Children Social Skills : A Game Fromat. Social Work. 32.
[19] Malchiodi C. A. (2000). The Art Therapy Sourcebook. Choi. Jinyoung airspace, art therapy. Seoul: hakjisa.
[20] McMillen, J. C., & Fisher, R. H. (1998). The Perceived Benefit Scales: Measuring perceived positive life changes after negative events. Social Work Research, 22(3), 173-187.
[21] McMillen, J. C.(1999). Better for it: How people benefit from adversity. Social work, 44(5), 455-468.
[22] Morris, B. A., & Shakespeare-Finch, J.(2011). Rumination, posttraumatic growth, and distress: Structural equation modelling with cancer survivors. Psycho-Oncology, 20, 1176-1183.
[23] Solomon, M. F., & Siegel, D. J.(2003). Healing trauma: Attachment, mind, bodyandbrain. New York: Norton and Company.
[24] Spitzer, R., Kaplan, S., & Pelcovitz, D. (1989). Victimization disorder. New York: New York Psychiatric Institute.
[25] Tedeschi ,R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. Journal of traumatic stress, 9(3), 455-471.
[26] Tedeschi, R. G., Park,C., & Calhoun, L. G.(1998). Posttraumatic growth : Positive changes in the aftermathof crisis. New Jersey： Lawrence
[27] Tedeschi, R. G., & Calhoun, L., G. (2004). Posttraumatic growth: Conceptual foundation and empirical evidence. Psychological Inquiry, 15, 1-18.
[28] Terr, L. C. (1985b). Psychic trauma in children and adolescents. Psychiatric Clinics of North America, 8, 815-835.
[29] Yoo, S. (2000). 『Youth Runaway from Home: Research Report on Youth Counseling Issues』. Korea Youth Counselor, 1-152.