Korean Journal of Clinical Psychology
2024. Vol. 43, No. 1, 19-32
OPEN ACCESS

Brief Report

https://doi.org/10.15842/kjcp.2024.43.1.012
eISSN 2733-4538

A Meta-Analysis on Effects of Post-Intervention Program for Adolescent Victims of School Bullying: Focusing on Cognitive-Behavioral Treatment

Jie-Won Kim Hyun-Soo Kim†

Department of Child Psychotherapy, Hanyang University, Seoul, Korea

This study is a meta-analysis on the effectiveness of Cognitive-Behavioral Treatment (CBT) within post-intervention programs for adolescent victims of school bullying in the Republic of Korea (Korea). Fourteen dissertations and journals, published in Korea between 2000 and 2021, were selected based on the PICOS standards, and effect sizes were calculated using Comprehensive Meta-Analysis (CMA) Version 3. The results indicated an overall effect size of 1.00, suggesting substantial effects. CBT for adolescent victims demonstrated large effect sizes on self-concept, self-esteem, peer relationship, and school adjustment outcomes, while its effects on emotion outcomes, showed median effect size. Finally, this study investigated optimal CBT conditions for better effects, indicating that CBT was most effective when conducted with five to nine participants in 10 to 14 sessions, lasting 60 minutes, twice a week. Notably, smaller group sizes, more sessions, shorter session times, and frequent interventions seemed to enhance the efficacy of CBT programs. This implies that the intensity and frequency of interventions are pivotal in maximizing the impact of CBT for bullied adolescents. Overall, post-intervention programs employing CBT demonstrated mostly substantial effect sizes, providing valuable insights for future CBT implementations by identifying program components for enhanced effectiveness.

Keywords: meta-analysis, school bullying, adolescent, victim, post-intervention program, cognitive-behavioral treatment

Introduction

Globally, school bullying is a significant crisis that adversely affects the development of adolescents (UNESCO, 2019). Variations in school bullying across countries arise from diverse factors, including culture, legal systems, social environments, and socioeconomic status (Katsantonis, 2021; Lee, 2016; Rajamanickam et al., 2019; Tippett & Wolke, 2014). In the case of Republic of Korea (Korea), school bullying emerged as a social concern in the early 1990s, gained public attention around 1995, yet substantial attention and support only began after 2000 (Park, 2012). However, the school bullying victimization rate peaked at 18.3% in 2011 (Yoon, 2013). According to statistics from 2017 to 2021, the victimization rate was higher in elementary schools compared to middle and high schools, and the proportion of emotional bullying, such as verbal bullying and mobbing, was higher than physical bullying (Ministry of Education, 2021). This suggests that school bullying is manifesting at a younger age and becoming more complex. Additionally, students and teachers emphasized the necessity for continued implementation of measures, such as pre-allocated financial aid for victimized students, augmentation of specialized counseling personnel, emotional and behavioral assessments of students, and

†Correspondence to Hyun-Soo Kim, Department of Child Psychotherapy, Hanyang University, 222 Wansimni-ro, Seongdong-gu, Seoul 04763, Korea; E-mail: hyunsookim1004@daum.net

Received Jul 20, 2023; Revised Dec 14, 2023; Accepted Jan 5, 2024

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as potential conflicts of interest.

subsequent support, highlighting a growing demand for post-intervention (Chung et al., 2014). Thus, since the significant onset of interventions against school bullying since 2000, it is essential to compare the effectiveness of post-interventions over the subsequent decade after the peak in victimization rates in 2011. Specifically, reflecting the current trend of school bullying and the varying degrees of victimization with age (Chang, 2013; Chung & Chun, 2012), it appeared necessary to explore the effects of interventions across different age groups.

The experience of being victimized by school bullying has a negative impact on the psychological and emotional problems of the victims, as well as their self-esteem, social skills, and school adjustment (Choi, 2017; Jun, 2008; Kim, 2013; Lee, 2017; Seo, 2014). Kim (2018) found that adolescent victims faced psychological issues like inattention, aggression, somatic symptoms, withdrawal, and anxiety in early adulthood due to prior bullying experiences. It has also been reported that youth victims of bullying may reproduce the perpetrator's behavior (Lee, 2018; Lee & Jun, 2011) and later exhibit problem behaviors such as delinquency and deviance (Cho, 2012; DeCamp & Newby, 2015; Lee et al., 2019; Sansone et al., 2013). The experience of school bullying not only negatively affects the short and long-term growth of adolescents but can also lead to social problems. Therefore, it is necessary not only to focus on preventing bullying but also to provide evidence-based therapeutic post-interventions.

Given the increasing significance of interventions addressing school bullying, various programs have been developed and validated in Korea for youths who have encountered such experiences (Cheon et al., 2015; Do et al., 2011; Kim, 2016; Kim & Jin, 2019; Kim & Yang, 2012; Lee & Kim, 2013; Park & Kim, 2012; Park et al., 2013). Specifically, Cognitive-Behavioral Treatment (CBT) interventions have proven effective not only in Korea but also in other countries (Berry & Hunt, 2009; Do et al., 2011; Fung, 2018; Kim, 2014; Kim, 2003; Lee et al., 2006; Son & Hong, 2009). Meta-analysis has primarily been used to evaluate the clinical effectiveness of these studies to date. Previous meta-analyses in Korea focused on prevention (Cheon, 2015; Kim, 2016; Lee, 2020; Yoon et al., 2014; Yun, 2018). While others incorporated post-intervention programs for adolescent perpetrators or victims of school bullying (Choi & Cho, 2016; Kim et al., 2021; Na, 2016). However, studies that select both perpetrator and victim experiences and integrate multiple interventions lack clarity on determining the most effective intervention for adolescent victims.

Considering the detrimental impact of school bullying on adolescent development, this study emphasizes victims more strongly compared to previous meta-analysis studies. The study specifically highlights research that utilized Cognitive-Behavioral Therapy (CBT), a method proven effective for addressing problem behaviors in children and adolescents among other approaches (Choi, 2018; Shin, 2018). Furthermore, to provide clinically applicable information, we conducted a comprehensive analysis of the overall effect sizes of these programs and examined differences between program components or dependent variables. Additionally, this study compared the differences in effect size across dependent variables by age, considering the trend that bullying victims tend to be in younger age groups.

For this purpose, we selected studies that have examined the effectiveness of CBT in post-intervention programs for adolescent victims of school bullying in Korea between 2000 and 2021. Therefore, the current study aimed to comprehensively analyze: (1) the overall effect size of the program, (2) the effect sizes of CBT interventions concerning dependent variables (peer relationship, self-concept and self-esteem, emotion, school adjustment), (3) the effect sizes of CBT interventions for victims across different age groups on the dependent variables, and (4) the effect sizes of CBT interventions concerning moderating variables (Age, Gender, Group size, Total number of sessions, Number of sessions per week, Duration of one session, Setting). This study aims to provide valuable clinical insights for designing effective CBT group programs tailored to adolescent victims of school bullying in the future.

Methods

To conduct a meta-analysis, Korean dissertations and journals were selected based on the PICOS format (Higgins et al., 2021). Excluding grey literature from meta-analysis may lead to potential overestimation of intervention effects (McAuley et al., 2000). By incorporating grey literature, our aim was to enhance the diversity in the meta-analysis, exercising caution through the verification of homogeneity or random allocation, thereby providing more sig-

https://doi.org/10.15842/kjcp.2024.43.1.012

nificant insights. The study subjects ranged from the 4th grade of elementary school to the 3rd grade of high school, comprising individuals who had experienced victimization due to school bullying, limited to ages 9 to 18 within the youth definition of the Framework Act on Youth. Among the post-intervention programs, CBT was administered specifically for adolescent victims of school bullying, and studies with quantitative evaluations were selected to assess effectiveness. We confirmed whether cognitive-behavioral techniques (e.g., addressing automatic thinking, relaxation training, problem-solving training, social skills training, etc.) were included in the manual. The comparison group consisted of either a control group that did not undergo any intervention program or a group that received a different program. Research outcomes included studies reporting results after conducting a CBT program for adolescents who had experienced school bullying. In terms of research design, priority was given to studies employing pre and post-tests in a control group. However, considering the challenges of artificial control and manipulation in experimental design, studies with a nonequivalent control group design were also included.

Data Collection and Selection

As depicted in this Supplementary Figure 1, a total of 14 dissertations and journals published in Korea and meeting the PICOS standards and Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) criteria were selected for the final analysis.

Data Analysis

This study utilized Comprehensive Meta-Analysis (CMA) Version 3 for data analysis. The specific procedures employed are outlined below. Firstly, we conducted a Test of Homogeneity across studies. Generally, heterogeneity is deemed significant if the ratio of true variance to total variance (I^2) exceeds 50% and the p-value is less than .10 (Higgins et al., 2021). In cases of heterogeneity, we utilized values obtained from the Random Effects Model. Secondly, a publication bias test was performed using Funnel plot, Trim-and-Fill, and Egger's Regression Test to verify the validity of the data. Thirdly, the average effect size was calculated based on individual studies. In this study, Hedges' g was used for analysis due to the tendency of Cohen's d to overestimate when the sample size is small (Borenstein et al., 2009). Additionally, to prevent overestimation of effect size due to duplication, we calculated the average for subdomains of the dependent variables. Next, an overall effect size of CBT post-interventions was determined. Subsequently, further analyses were conducted to assess potential differences in CBT interventions concerning the dependent variables. Referencing previous studies (Cook et al., 2010; Kljakovic & Hunt, 2016), the selected study variables were categorized into individual psychological factors, self-perception, school environment, and peer environment (Lee et al., 2013). These dependent variables encompassed peer relationships (e.g., social skills, interpersonal relationships, self-expression skills, friendships, interpersonal anxiety, social isolation), self-concept and self-esteem, emotion (e.g., depression, anxiety, hostility, withdrawal, emotional regulation), and school adjustment outcomes (e.g., school bullying (victimization, frequency of victimization, harassment from peers), school adjustment). In relation to school adjustment, peer relationships or peer interactions were classified as peer relationship variable. Moreover, we investigated whether these results varied according to age. Additionally, analyses were carried out to identify differences based on moderator variables.

Results

Homogeneity Test

A homogeneity test was conducted to select a method for calculating the average effect size. Supplementary Table 1 indicates the presence of heterogeneity ($k = 35$, $Q = 71.23$, $df = 34$, $p < .001$, $I^2 = 52.27$), hence, the total effect size was measured using a random effect model in this study.

Publication Bias and Sensitivity Analysis

To analyze the publication bias of individual study results, this study used a Funnel plot to identify errors (Borenstein et al., 2009). The asymmetry of both sides in Supplementary Figure 2 suggests the possible existence of publication bias. Consequently, an Egger's Regression Test was conducted for further statistical analysis, revealing statistical evidence of Funnel plot asymmetry, indicative of publication bias ($p < .001$). To address this bias in the overall effect size, a Trim-and-Fill method (Duval & Tweedie, 2000) was

employed. As depicted in Supplementary Figure 3 and Supplementary Table 3, the adjusted mean effect size was .94 (95% CI .72 to 1.16), differing from the observed mean effect size of 1.00 (95% CI .78 to 1.21) obtained in the original analysis. Upon comparison between the observed and adjusted values, the effect sizes were slightly reduced from their original values. However, considering the potential for publication bias, the adjusted mean effect size remains significant, indicating a large effect size. Therefore, it is suggested that publication bias is unlikely to significantly impact the results, suggesting their significance.

Effect Sizes of CBT Post–Intervention for Adolescent Victims of School Bullying

According to the Table 1, the overall effect size was 1.00 ($k = 35$, $ES = 1.00$, 95% CI .78 to 1.21, $Z = 9.12$, $p < .001$). In Cohen's standard, an effect size of .20 or less indicates a small effect, .50 denotes a medium effect, and .80 or more signifies a large effect size (Cohen, 1988). Therefore, the CBT post-intervention for adolescent victims of school bullying exhibited a large effect size. The outcomes of CBT post-intervention were categorized into Peer Relationship, Self-concept and Self-esteem, Emotion, and School Adjustment to determine the effective dependent variables.

Upon verifying the homogeneity of the effect size, no differences were found between the dependent variables ($Q = 6.13$, $p > .05$, ns.). However, Self-concept and Self-esteem ($ES = 1.41$), Peer Relationship ($ES = 1.17$), and School Adjustment ($ES = .93$) displayed large effect sizes. In contrast, Emotional outcomes ($ES = .58$) showed a medium effect size.

Further detailed analyses were conducted to assess differences among dependent variables based on age groups. The effect size analysis of the dependent variables by age revealed no significant differences between outcome groups ($p > .05$, ns.).

To determine the effective formats of CBT post-intervention, we analyzed them considering moderator variables. According to the Table 2, differences between Age, Gender, and Setting were not statistically significant ($p > .05$, ns.). However, Group size, Total

Table 1. *Effect Sizes of CBT Post-Intervention for Adolescent Victims of School Bullying*

1-1. Overall effect size

	k	*ES*	*SE*	*95% CI*		*Z*	*p*
				Lower	*Upper*		
Random	35	1.00	.11	.78	1.21	9.12	.000

1-2. Effect size according to the dependent variables

Outcomes	*k*	*ES*	*SE*	*95% CI*		*Q*	*df*	*p*
				Lower	*Upper*			
PR	10	1.17	.21	.70	1.58	6.13	3	.17
SC & SE	7	1.41	.25	.92	1.91			
E	6	.58	.25	.09	1.08			
SA	7	.93	.24	.46	1.40			

1-3. Effect size according to the dependent variables by age (School level)

Age	Outcomes	*k*	*ES*	*SE*	*95% CI*		*Q*	*df*	*p*
					Lower	*Upper*			
Child	PR	3	1.25	.31	.64	1.85	.51	2	.78
	SC & SE	2	1.49	.40	.71	2.26			
	E	-	-	-	-	-			
	SA	2	1.57	.35	.87	2.26			
Adolescent	PR	2	1.57	.35	.87	2.26	5.45	3	.14
	SC & SE	5	1.38	.30	.79	1.97			
	E	6	.58	.26	.07	1.09			
	SA	5	.69	.29	.11	1.26			

PR = Peer Relationship; SC & SE = Self-concept and Self-esteem; E = Emotion; SA = School Adjustment; Child = Elementary school students; Adolescent = Middle school and High school students; k = Number of Effect Sizes; ES = Effect Size (Hedges' g); SE = Standard Error; 95% CI = 95% Confidence Interval; Z = Test Statistic; Q = Homogeneity Test Statistic; df = The Degree of Freedom; p = Significance Probability.

https://doi.org/10.15842/kjcp.2024.43.1.012

number of sessions, Number of sessions per week, and Duration of one session showed statistical significance ($p < .05$). The CBT post-intervention program demonstrated its greatest effectiveness when five to nine individuals participated in sessions held 10 to 14 times, each lasting 60 minutes, conducted twice a week.

Discussion

Utilizing meta-analysis, this study investigated the effects of post-interventions focusing on CBT targeting adolescent victims of school bullying that could potentially exert negative impacts on human development. Additionally, it analyzed effective conditions applicable in clinical settings. The results of this study are summarized and discussed as follows.

Firstly, the effectiveness of CBT approaches in post-intervention programs has been confirmed for adolescent victims of school bullying. The overall effect size of CBT post-intervention for adolescent victims of school bullying was 1.00, similar to the large effect sizes of .97 (Kim & Park, 2017) and 1.00 (Im, 2016) observed in programs involving participants who had experienced school bullying trauma. Experiencing negative life events alone in the case of school bullying may not fully account for the relationship between health and psychosocial issues (Moore et al., 2017). Instead, it appears to influence internalization and externalization issues through cognitive interpretation of the situation (Ferraz de Camargo et al., 2023). This suggests the effectiveness of psychotherapy, particularly CBT, when children and adolescents experience trauma such as school bullying.

Comparing the aforementioned results with programs aimed at addressing school bullying perpetrators and prevention, Park (2013) reported a large effect size of 1.76 for a program targeting bullying perpetrators, whereas a program focused on bullying prevention exhibited a medium effect size of .78. Other studies investigating the effectiveness of bullying prevention programs generally indicated medium overall effect sizes (Cheon, 2015; Kim, 2016; Lee, 2020; Yoon et al., 2014; Yun, 2018). Post-intervention programs tended to demonstrate larger effect sizes compared to preventive programs. It appears that the motivation of victims in post-intervention has been

Table 2. *Effect Sizes of CBT Post-Intervention for Adolescent Victims of School Bullying according to the Moderator Variables*

Moderator variables		*k*	*ES*	*SE*	*95% CI*		*Q*	*df*	*p*
					Lower	*Upper*			
Age (School level)	Elementary	7	1.42	.25	.93	1.90			
	Middle	26	.88	.12	.64	1.11	4.04	2	.13
	High	2	1.17	.45	.29	2.05			
Gender	Male	-	-	-	-	-			
	Female	5	1.20	.28	.66	1.74	2.29	1	.13
	Both	22	.75	.13	.52	.98			
Group size	5-9	8	1.63	.21	1.21	2.04			
	10-14	22	.94	.12	.71	1.17	15.32	2	.00
	15-19	5	.46	.21	.05	.87			
Total number of sessions	5-9	16	.69	.14	.41	.97			
	10-14	19	1.27	.14	1.00	1.54	8.55	1	.00
Number of sessions per week	Once	14	.861	.15	.57	1.15			
	2 times	11	1.54	.18	1.18	1.90	16.30	3	.00
	3 times	3	1.08	.31	.47	1.69			
	Continuous	6	.47	.20	.08	.87			
Duration of one session	60 m or less	7	1.58	.22	1.15	2.01			
	61-90 m	20	.92	.13	.66	1.18	10.43	2	.01
	91 m or more	8	.67	.19	.31	1.03			
Setting	School	22	1.00	.14	.72	1.27	.11	1	.74
	Out of School	2	1.15	.45	.27	2.04			

Out of School = Youth Center, Youth Counseling Center; k = Number of Effect Sizes; ES = Effect Size (Hedges' g); SE = Standard Error; 95% CI = 95% Confidence Interval; Z = Test Statistic; Q = Homogeneity Test Statistic; df = The Degree of Freedom; p = Significance Probability.

influenced by experiences of school bullying, with this motivation significantly impacting adaptation and well-being in interpersonal relationships through interaction with emotional responses and cognitive processing (Kim, 2011).

In other countries, meta-analysis has taken precedence in the examination of anti-bullying programs (Gaffney et al., 2019; Guzman-Holst et al., 2022; Torgal et al., 2023). Fraguas et al. (2021) found that anti-bullying interventions had small effect sizes in reducing school bullying and improving mental health outcomes. Considering the substantial differences in effect sizes between the Korean sample and samples from other countries regarding school bullying, future research should aim to compare both Korean and other cultures from a post-intervention perspective.

Secondly, CBT demonstrated a substantial effect size among adolescent victims of school bullying, regardless of dependent variables and some moderator variables (e.g., age, gender, or setting). CBT has consistently been recognized as an effective evidence-based treatment across various disorders (Choi et al., 2020; David-Ferdon & Kaslow, 2008; Dorsey et al., 2017; Silverman et al., 2008). In this study, factors such as Peer Relationship, Self-concept and-Self-esteem, and School Adjustment outcomes, acknowledged for their moderating role in mitigating the adverse effects of school bullying experiences on children and adolescents, exhibited large effect sizes (Kim & Nam, 2013; Lim et al., 2015; Nansel et al., 2003; Norrington, 2021). These findings imply a greater potential for recovery among adolescent victims of school bullying through CBT intervention. Despite the considerable challenges posed by school bullying, resulting in psychological conflicts such as role confusion, the application of CBT techniques among adolescent victims can significantly contribute to fostering self-esteem, a pivotal developmental milestone during adolescence. Furthermore, CBT interventions encompassing comprehensive training in communication, social skills, and daily problem-solving demonstrate notable efficacy in enhancing peer relationships and facilitating school adjustment.

Thirdly, after examining the effect size based on moderator variables, the CBT post-intervention program demonstrated its highest effectiveness when attended by groups of five to nine in sessions lasting 60 minutes, conducted 10 to 14 times, twice a week. When considering the age group comprising elementary school students, longer sessions tended to result in lower effect sizes (Choi & Ahn, 2013). The study's examination of moderator variables emphasized crucial elements influencing the effectiveness of CBT interventions. Notably, smaller group sizes, more sessions, shorter session times, and frequent interventions seemed to enhance the efficacy of CBT programs. This implies that the intensity and frequency of interventions are pivotal in maximizing the impact of CBT for bullied adolescents.

Although this study provides valuable insights into designing group CBT programs for adolescent victims of school bullying, certain limitations need consideration. The small sample size and the focus on programs solely from Korea restrict the generalizability of the findings. Therefore, it is needed to activate intervention studies for adolescent victims of school bullying for future research to increase the level of evidence. Since this study only included programs implemented in Korea, there is a necessity to conduct a comprehensive comparison between Korean studies and those from other cultures.

To bolster the evidence base, future research should involve larger and more diverse datasets, including international studies. Additionally, exploring the effectiveness of interventions across different cultural contexts may offer a more comprehensive understanding of the impact of CBT on bullied adolescents worldwide. Overall, this study's findings support the efficacy of CBT in post-intervention programs for bullied adolescents, emphasizing the need for tailored, evidence-based interventions and encouraging further research to expand the understanding of effective intervention strategies against school bullying.

Author contributions statement

JWK: graduate student at Hanyang University, collected and analyzed data, and led manuscript preparation; HSK: professor at Hanyang University, supervised the research process. All authors provided critical feedback, participated in revision of the manuscript, and approved the final submission.

References

Publications marked with an asterisk were included in the meta-anal-

https://doi.org/10.15842/kjcp.2024.43.1.012

ysis.

Berry, K., & Hunt, C. J. (2009). Evaluation of an intervention program for anxious adolescent boys who are bullied at school. *Journal of Adolescent Health, 45*, 376-382. https://doi.org/10.1016/j.jadohealth.2009.04.023

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to meta-analysis.* John Wiley & Sons, Ltd. https://doi.org/10.1002/9780470743386

*Byeon, J. (2015). *The effects of emotional regulation program on emotion regulation, self-esteem and peer relationships of the bullying trauma youth analysis*. [Master's Dissertation, Kyungsung University].

Chang, A. (2013). The developmental trajectories of school violence victimization. *Journal of Korean Criminological Association, 7*, 61-82. UCI: I410-ECN-0102-2015-300-000247905

Cheon, G. (2015). *Meta-analysis on the effect of group counseling for preventing school violence.* [Master's Dissertation, Gwangju National University of Education].

Cheon, S., Choi, Y., & Kim, M. (2015). Effect of optimism enhancement programs on self-esteem and stress coping styles of middle school students victimized by school violence. *The Korean Journal of Rehabilitation Psychology, 22*, 341-356. UCI: G704-SER000009521.2015.22.2.006

Cho, Y. (2012). A study on the relationships between school violence victimization and adolescent delinquency. *Korean Journal of Victimology, 20,* 511-534. UCI: G704-001605.2012.20.1.020

Choi, E. (2017). The effect of school violence to child's school adjustment: Moderating effect of ego-strength. *Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology, 7*, 473-485. https://doi.org/10.35873/ajmahs.2017.7.4.045

*Choi, G. (2001). *A study of effects of group counseling on the self-concept of the isolated from their fellow students.* [Master's Dissertation, Hannam University].

Choi, H., Lee, W., Heo, S., & Kim, J. (2020). The efficacy of psychological interventions for complex trauma: A systematic review and meta-analysis. *Korean Journal of Clinical Psychology, 39,* 164-185. https://doi.org/10.15842/KJCP.PUB.39.2.164

Choi, J. (2018). Evidence-based treatments of traumatized children. *Korean Journal of Clinical Psychology, 37,* 605-620. https://doi.org/10.15842/kjcp.2018.37.4.012

Choi, S., & Ahn, I. (2013). Meta analysis about group counseling for improvement of self-esteem for elementary school students. *Korean Journal of Elementary Counseling, 12,* 13-32. UCI: G704-SER000003102.2013.12.1.004

Choi, T., & Cho, J. (2016). A meta-analysis on the trend of arts therapy program for the school violence and its effect. *Journal of Arts Psychotherapy, 12*, 189-216. UCI: G704-SER000010492.2016.12.2.004

Chung, H., & Chun, J. (2012). Risk factors of adolescents victimization by school violence. *Korean Journal of Youth Welfare, 14*, 195-212. UCI: I410-ECN-0102-2012-330-003225107

Chung, J., Park, J., Kim, S., & Sun, M. (2014). An analysis of the effectiveness and importance of the national plan for school violence preventing and eradicating. *The Korean Educational Administration Society, 32*, 1-25. UCI: G704-000511.2014.32.2.002

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates. https://doi.org/10.4324/9780203771587

Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly, 25*, 65-83. http://doi.org/10.1037/a0020149

David-Ferdon, C., & Kaslow, N. J. (2008). Evidence-based psychosocial treatments for child and adolescent depression. *Journal of Clinical Child and Adolescent Psychology, 37,* 62-104. http://doi.org/10.1080/15374410701817865

DeCamp, W., & Newby, B. (2015). From bullied to deviant: The victim- offender overlap among bullying victims. *Youth Violence and Juvenile Justice, 13*, 3-17. http://doi.org/10.1177/1541204014521250

*Do, G., Oh, J., & Shin, J. (2011). The effectiveness of the group program for empowering and enhancing self-esteem of school violence victims in high school girls. *Korean Journal of Youth Studies, 18*, 149-174. UCI: I410-ECN-0102-2012-330-001857345

Dorsey, S., McLaughlin, K. A., Kerns, S. E. U., Harrison, J. P., Lambert, H. K., Briggs, E. C., Revillion Cox, J., & Amaya-Jackson, L. (2017). Evidence base update for psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child and Adolescent Psychology, 46,* 303-330. http://doi.org/10.1080/15374416.2016.1220309

Duval, S., & Tweedie, R. (2000). Trim and fill: A simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics, 56*, 455-463. http://doi.org/10.1111/j.0006-341x.2000.00455.x

Ferraz de Camargo, L., Rice, K., & Thorsteinsson, E. B. (2023). Bullying victimization CBT: A proposed psychological intervention for adolescent bullying victims. *Frontiers in Psychology, 14.* http://doi.org/10.3389/fpsyg.2023.1122843

Fraguas, D., Diáz-Caneja, C. M., Ayora, M., Durán-Cutilla, M., Abregú-Crespo, R., Ezquiaga-Bravo, I., Martín-Babarro, J., & Arango, C. (2021). Assessment of school anti-bullying interventions: A meta-analysis of randomized clinical trials. *JAMA Pediatrics, 175,* 44-55. http://doi.org/10.1001/jamapediatrics.2020.3541

Fung, A. Lc. (2018). Cognitive-behavioural group therapy for pure victims with internalizing problems: An evidence-based one-year longitudinal study. *Applied Research in Quality of Life, 13*, 691-708. http://doi.org/10.1007/s11482-017-9553-4

Gaffney, H., Farrington, D. P., & Ttofi, M. M. (2019). Examining the effectiveness of school-bullying intervention programs globally: A meta-analysis. *International Journal of Bullying Prevention, 1,* 14-31. http://doi.org/10.1007/s42380-019-0007-4

Guzman-Holst, C., Zaneva, M., Chessell, C., Creswell, C., & Bowes, L. (2022). Research review: Do antibullying interventions reduce internalizing symptoms? A systematic review, meta-analysis, and meta-regression exploring intervention components, moderators, and mechanisms. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 63,* 1454-1465. http://doi.org/10.1111/jcpp.13620

Higgins, J. P. T., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (2021). *Cochrane handbook for systematic reviews of interventions version 6.2* [eBook edition]. Cochrane. https://training.cochrane.org/handbook

Im, H. (2016). *Meta-analysis of intervention studies of psychotherapy for children with psychological trauma*. [Master's Dissertation, Hanyang University].

Jun, M. (2008). The comparison between the self-conception of group-bulling students and that of victimized students according to the subject of recognition. *Journal of Counseling Psychology, 8*, 71-89. https://www.earticle.net/Article/A103693

*Jung, Y. (2002). *The effects of interpersonal training program on psychological readjustment of victimized students of group bullying.* [Master's Dissertation, Yeungnam University].

*Kang, I. (2003). *A study on the effectiveness of the group counselling program on enhancement of self-concept of the alienated students.* [Master's Dissertation, Yonsei University].

Katsantonis, I. G. (2021). Cross-cultural comparison of students' exposure to bullying across 32 countries. *Electronic Journal of Research in Educational Psychology, 19*, 465-490. http://doi.org/10.25115/EJREP.V19I55.3741

*Kim, D. (2014). *The effects of MBSP-T on the reduction of complex PTSD and suicide ideation of the adolescent victims of school violence and the promotion of helping behavior of the peer group*. [Doctoral dissertation, Jeonbuk National University].

Kim, E. (2016). The effects of the career counseling program on the resilience and the career decision self-efficacy of the middle school violence victims. *The Journal of Career Education Research, 29,* 111-133. UCI: G704-001285.2016.29.4.001

Kim, H. (2011). A review of the role of motivation in psychotherapy. *Journal of Human Understanding and Counseling, 32,* 37-52. UCI: I410-ECN-0102-2012-370-002999475

Kim, H. (2013). An effect of persistent school violence victimization experience on youths' physical, socioemotional, and cognitive development. *Journal of Adolescent Welfare, 15*, 121-143. UCI: I410-ECN-0102-2014-300-001644613

Kim, H., & Park, S. (2017). Meta-analysis on effects of domestic psychotherapy intervention on childhood trauma. *Korean Journal for Infant Mental Health, 10*, 1-27. http://doi.org/10.47801/KJIMH.10.1.1

*Kim, J. (2003). The comparison of effectiveness between extensive social skills training program and intensive social skills training program on self-esteem, interpersonal relations, and self-expression of the rejected children. *Korea Journal of Counseling, 4,* 479-497. UCI: G704-001281.2003.4.3.005

Kim, J., Kang, M., & Hur, M. (2021). A multi-level meta analysis on the effect of group counseling program for bullies and victims in school violence. *Journal of the Korean Society for Wellness, 16,* 139-145. http://doi.org/10.21097/ksw.2021.05.16.2.139

Kim, J., & Nam, Y. (2013). The influence of school-violence victimization experience on suicide behavior in early adolescents: Focusing on the moderating effects of protective factors. *Korean Journal of Youth Welfare, 15*, 83-104. UCI: I410-ECN-0102-2014-300-001644926

Kim, K. (2016). Meta-analysis on the effect of school violence intervention program. *Journal of Digital Convergence, 14*, 33-43. https://doi.org/10.14400/JDC.2016.14.10.33

Kim, K., & Yang, G. (2012). The effects of a forgiveness counseling program on forgiveness and self-concept of elementary school bullying victims. *The Korea Journal of Youth Counseling, 20,* 175-192. http://doi.org/10.35151/kyci.2012.20.1.011

*Kim, M. (2004). *A study on the group consulting program using children's playing-its efficiency in curing and readjusting the victim child of "bullying" to his/her school life.* [Master's Dissertation, Chuncheon National University of Education].

Kim, M., & Jin, M. (2019). The effects of the Gestalt Relationship Improvement Program (GRIP) on interpersonal anxiety and peer relationships amongst elementary school students experiencing school violence. *Korean Journal of Play Therapy, 22*, 81-103. http://doi.org/10.17641/KAPT.22.1.5

Kim, S. (2018). The long-term effects of being bullied or a bully in adolescence on development outcomes in early adulthood. *Forum For Youth Culture, 54*, 39-66. http://doi.org/10.17854/ffyc.2018.04.54.39

*Kim, Y. (2005). *The effects of a social skill training program on victimized middle school students' social skill, interpersonal anxiety and friendship.* [Master's Dissertation, Keimyung University].

Kljakovic, M., & Hunt, C., (2016). A meta-analysis of predictors of bullying and victimization in adolescence. *Journal of Adolescence, 49,* 134-145. http://doi.org/10.1016/j.adolescence.2016.03.002

*Ko, H. (2000). *The effect of a group counseling program for victimized middle school students of group bullying.* [Master's Dissertation, Keimyung University].

Lee, B., Park, H., Seo, W., & Lee, C. (2019). The effect of domestic violence experiences and school violence experiences on youth's delinquency: Moderating effect of self-esteem. *Korean Association of Public Safety and Criminal Justice Review, 28*, 307-344. http://

https://doi.org/10.15842/kjcp.2024.43.1.012

doi.org/10.21181/KJPC.2019.28.3.307

Lee, C., Kim, D., Sim, Y., Lee, M., Jeon, S., & Cha, J. (2013). Meta-analysis of adolescent crisis factors: Focus on school violence influence factors. *Korea Youth Counselling & Welfare Institute, 172*, 1-73. https://www.kyci.or.kr/fileup/lib_pdf/2013-107.pdf

Lee, H. J. (2017). A longitudinal study of bullying victimization and depression: Mediating effects of self-esteem and self-resilience. *Journal of the Korean Society of School Health, 30*, 274-283. https://doi.org/10.15434/kssh.2017.30.3.274

Lee, H. S. (2016). Comparison of violence occurring within the school in Korea, China and Japan. *Korean Law Association, 16,* 143-165. UCI: G704-001305.2016.16.1.002

*Lee, M. (2004). *The effects of a social skill training program on social skill, friendship, school adjustment, self-esteem of victimized middle school students of group bullying.* [Master's Dissertation, Keimyung University].

Lee, S., & Jun, S. (2011). Victim-offender link in bullying and its gender difference. *Korean Journal of Victimology, 19*, 207-227. UCI: G704-001605.2011.19.1.013

Lee, S., & Kim, C. (2013). The effects of the strengths-based literatherapy program on the improvement of psychological well-being and the reduction of internalizing behavior problems of the victims who have been bullied. *Journal of Children's Literature and Education, 14*, 157-180. UCI: G704-001817.2013.14.2.022

Lee, W. (2018). A study of the longitudinal mechanism on the school violent offenders and victims: Focused on causal relationship between offenders and victims. *The Korean Association of Police Science Review, 20*, 269-291. http://doi.org/10.24055/kaps.20.1.10

Lee, W. (2020). *A meta-analysis on the effect of peer counseling on prevention of school violence.* [Master's Dissertation, Inje University].

*Lee, Y., Kwon, J., & Lee, S. (2006). The effect of problem-solving group therapy for bullies and victims of bullying. *Korean Journal of Clinical Psychology, 25*, 881-898. UCI: G704-000007.2006.25.4.004

Lim. J., Lee. S., & Park, J. (2015). The impact of school violence victimization on school adjustment: The moderating effect of interpersonal relationships. *Studies on Korean Youth, 26,* 5-34. http://doi.org/10.14816/sky.2015.26.2.5

McAuley, L., Ba'Pham, MSc., Tugwell, P., & Moher, D. (2000). Does the inclusion of grey literature influence estimates of intervention effectiveness reported in meta-analyses?. *The Lancet, 356*, 1228-1231. http://doi.org/10.1016/S0140-6736(00)02786-0

Ministry of Education. (2021, September 07). *Results of the 2021 1st School Bullying Survey*. Ministry of Education. https://www.moe.go.kr/boardCnts/viewRenew.do?boardID=294&lev=0&statusYN=W&s=moe&m=020402&opType=N&boardSeq=88940

Moore, S. E., Norman, R. E., Suetani, S., Thomas, H. J., Sly, P. D., & Scott, J. G. (2017). Consequences of bullying victimization in childhood and adolescence: A systematic review and meta-analysis. *World Journal of Psychiatry, 7*, 60-76. http://doi.org/10.5498/wjp.v7.i1.60

Na, J. (2016). Meta-analysis of school violence postvention group programs. *Journal of School Social Work, 35,* 1-19. UCI: G704-SER000009000.2016.35..009

Nansel, T. R., Haynie, D. L., & Simonsmorton, B. G. (2003). The association of bullying and victimization with middle school adjustment. *Journal of Applied School Psychology, 19*, 45-61. https://doi.org/10.1300/J008v19n02_04

Norrington, J. (2021). Adolescent peer victimization, self-concept, and psychological distress in emerging adulthood. *Youth & Society, 53,* 273-295. http://doi.org/10.1177/0044118X20910938

*Oh, S. (2003). *The effects of peer relationship group counseling on socially isolated children.* [Master's Dissertation, Daegu National University of Education].

Park, H. (2012). *The achievements and challenges in eradicating school violence* (OR2012-05-20-21). Korean Educational Development Institute. https://www.kedi.re.kr/khome/main/research/selectPubForm.do?plNum0=8817

Park, H., & Kim, C. (2012). The effects of an Animal-Assisted Therapy (AAT) program on depression and self-esteem of adolescents as victims of school violence. *Korean Journal of Veterinary Service, 35*, 327-332. UCI: G704-001952.2012.35.4.011

Park, S. (2013). *A meta-analysis of effects of psychological treatment program for school violence perpetrators and school violence prevention program*. [Master's Dissertation, Dongguk University].

Park, S., Kim, H., & Park, B. (2013). The effect of group sandplay therapy on self-expression and school adjustment of school violence victims. *Korean Journal of Youth Studies, 20,* 175-202. UCI: G704-000387.2013.20.8.003

Rajamanickam, R., Ramli, F. S., Na'aim, M. S. M., Hassan, M. S., & Hashim, H. (2019). Defining bullying among students from criminal law perspective: Comparison between Malaysia and the Philippines. *Universal Journal of Educational Research, 7*, 1643 - 1649. http://doi.org/10.13189/ujer.2019.070803

Sansone, R. A., Lam, C., & Wiederman, M. W. (2013). Victims of bullying in childhood, criminal outcomes in adulthood. *International Journal of Psychiatry in Clinical Practice, 17*, 69-72. http://doi.org/10.3109/13651501.2012.693185

Seo, Y. (2014). An effect of persistence and degree of exposure to school violence victimization experience on socioemotional development in youths. *Korean Journal of Youth Studies, 21*, 223-253. UCI: G704-000387.2014.21.6.007

Shin, K. (2018). Evidence-based treatments for depression in children and adolescents. *Korean Journal of Clinical Psychology, 37*, 595-604. https://doi.org/10.15842/kjcp.2018.37.4.011

Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., & Amaya-Jackson, L. (2008). Evidence-based

psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child and Adolescent Psychology, 37*, 156-183. http://doi.org/10.1080/15374410701818293

*Son, J., & Hong, J. (2009). Development of group counseling program for adolescent victims of bullying and investigation of its effect. *Korea Journal of Counseling, 10*, 1013-1033. http://doi.org/10.15703/kjc.10.2.200906.1013

Tippett, N., & Wolke, D. (2014). Socioeconomic status and bullying: A meta-analysis. *American Journal of Public Health, 104*, 48-59. http://doi.org/10.2105/AJPH.2014.301960

Torgal, C., Espelage, D. L., Polanin, J. R., Ingram, K. M., Robinson, L. E., El Sheikh, A. J., & Valido, A. (2023). A meta-analysis of school-based cyberbullying prevention programs' impact on cyber-bystander behavior. *School Psychology Review, 52*, 95-109. https://doi.org/10.1080/2372966X.2021.1913037

UNESCO. (2019). *Behind the numbers: Ending school violence and bullying.* UNESCO. https://doi.org/10.54675/TRVR4270

Yoon, C., Park, S., & Shin, I. (2014). A meta-analysis of the effects of school violence prevention programs in Korea. *Asian Journal of Education, 15*, 189-215. https://doi.org/10.15753/aje.2014.15.1.009

Yoon, J. (2013, April 24). 44% of students who are victims of school violence "consider suicide". *Segye Ilbo*. https://www.segye.com/newsView/20130422004915

Yun, S. (2018). *The effects of school violence and bullying prevention programs on social and emotional competencies in South Korea: A meta-analysis.* [Master's Dissertation, Ewha Womans University].

https://doi.org/10.15842/kjcp.2024.43.1.012

Supplementary Table 1. *Homogeneity Test*

k	*Q*	*df*	*p-value*	I^2
35	71.23	34	.000	52.27

k = Number of Effect Sizes; Q = Homogeneity Test Statistic; df = The Degree of Freedom; p = Significance Probability; I^2 *= Actual Variance Ratio.*

Supplementary Table 2. *Egger's Regression Test*

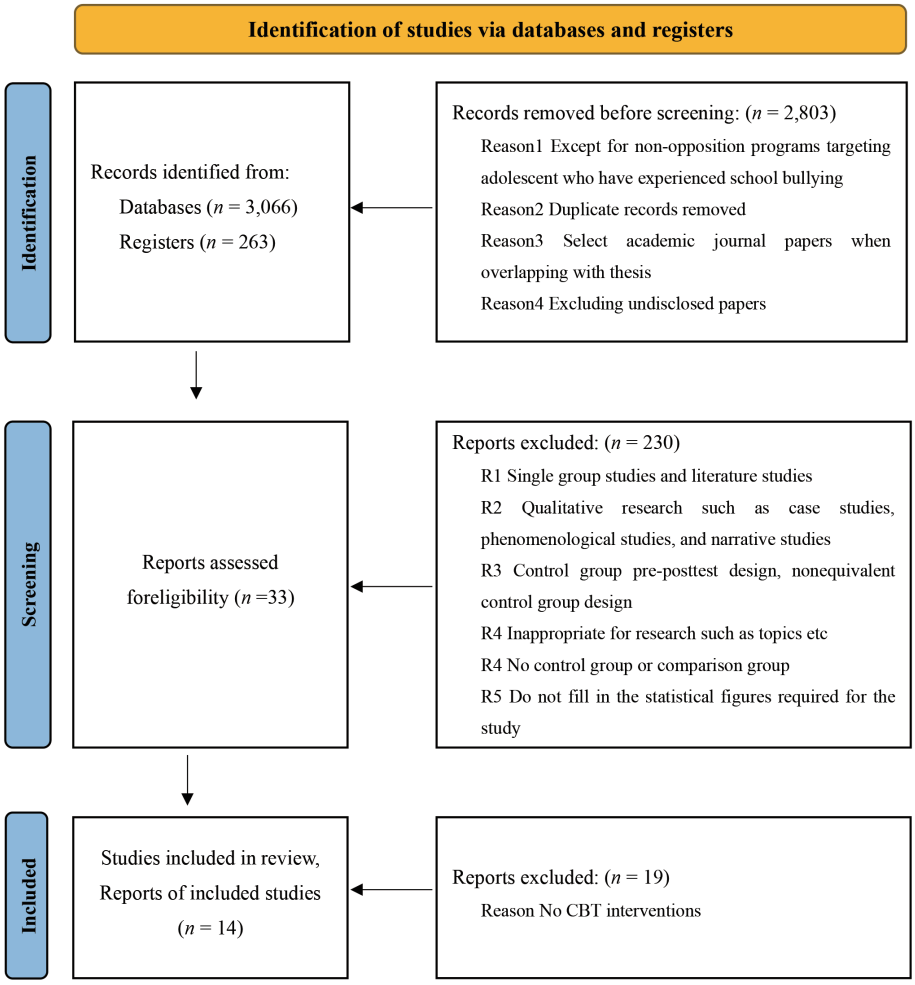
Intercept	*SE*	*95% CI*		*t*-value	*df*	*p* (2-tailed)
		Lower	*Upper*			
6.52	1.32	3.84	9.20	4.95	33.00	.000

SE = Standard Error; 95% CI = 95% Confidence Interval; Z = Test Statistic; Q = Homogeneity Test Statistic; df = The Degree of Freedom; p = Significance Probability.

Supplementary Table 3. *Trim-and-Fill*

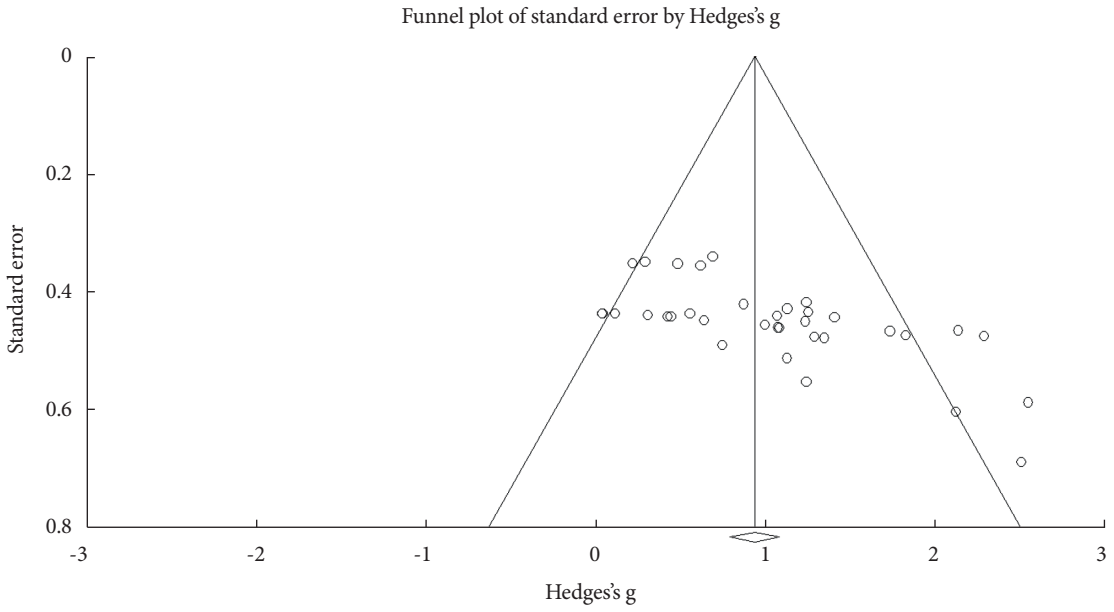
	Studies Trimmed	*ES*	*95% CI*		*Q*
			Lower	*Upper*	
Observation Value		1.00	.78	1.21	71.23
Adjusted Value	2	.94	.72	1.16	83.89

ES = Effect Size (Hedges' g); 95% CI = 95% Confidence Interval; Q = Homogeneity Test Statistic.

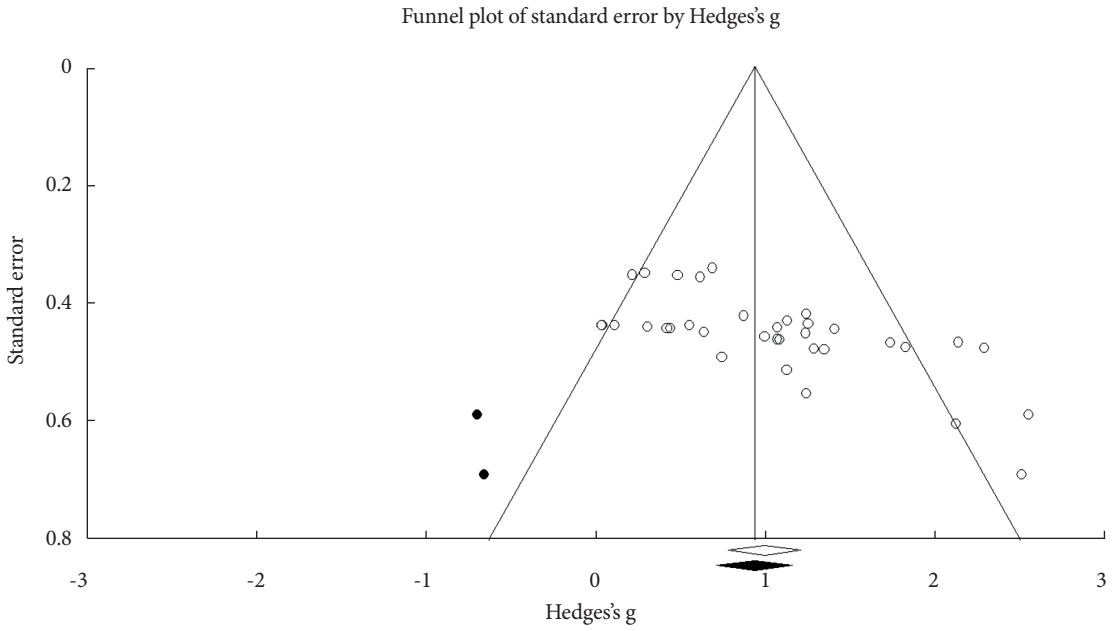


Supplementary Figure 1. *PRISMA flow diagram.*

https://doi.org/10.15842/kjcp.2024.43.1.012



Supplementary Figure 2. *Funnel plot.*



Supplementary Figure 3. *Funnel plot after Trim-and-Fill.*

https://doi.org/10.15842/kjcp.2024.43.1.012