

Management of Anxiety Using Bricks Block Play Distraction Therapy in School-Aged Children Undergoing Hospitalization

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ABSTRACT

Introduction: Hospitalization in school-age children often causes anxiety due to the unfamiliar hospital environment, medical procedures, and separation from their daily activities and surroundings. Untreated anxiety may hinder the healing process, reduce children's cooperation during treatment, and negatively affect their growth and development. One non-pharmacological intervention that can be implemented is distraction therapy using *Bricks Block* play.

Objective: This scientific paper aimed to describe the management of anxiety through *Bricks Block* distraction play therapy in a hospitalized school-age child.

Methods: This study employed a descriptive case study approach involving an 8-year-old child hospitalized at Dr. Gondo Suwarno Ungaran Regional Hospital for three days. Data were collected through interviews, observations, physical examinations, documentation, and the nursing process, including assessment, nursing diagnosis, intervention, implementation, and evaluation. The nursing diagnosis established was anxiety related to situational crisis. The intervention consisted of *Bricks Block* distraction play therapy for 20–30 minutes per session, once daily for three consecutive days.

Results: The evaluation demonstrated a reduction in the child's anxiety, as evidenced by increased calmness, improved cooperation, decreased sadness, better concentration, and greater participation in the nursing care process.

Conclusions: *Bricks Block* distraction play therapy proven affective in diverting anxiety non-pharmacological nursing intervention for reducing anxiety in hospitalized school-age children while supporting their adaptation to the hospital environment.

Keywords: anxiety, distraction, school-age children, hospitalization, *bricks block*

INTRODUCTION

School-aged children are in a critical stage of rapid growth and development. Therefore, illnesses requiring hospitalization may adversely affect not only their physical health but also their psychological well-being (Marpaung et al., 2022). The unfamiliar hospital environment, exposure to medical procedures, and restrictions on play and learning activities frequently trigger anxiety in children (Solikhah, 2015). If left unmanaged, anxiety may delay the recovery process, reduce children's cooperation during treatment, and interfere with their overall growth and developmental outcomes. Consequently, appropriate non-pharmacological interventions are needed to facilitate children's adaptation to the hospital environment through developmentally appropriate activities (Mohammadi et al., 2024).

One such intervention is Bricks Block play distraction therapy, a structured play activity involving the construction of interlocking building blocks to divert children's attention from fear, anxiety, and discomfort experienced during hospitalization (Saputra et al., 2026). In addition to providing an enjoyable play experience, this therapy may enhance children's concentration, creativity, and fine motor skills, thereby contributing to a reduction in anxiety levels (Pujiati et al., 2021).

This study employed a descriptive case study approach through the nursing care process, including assessment, nursing diagnosis, intervention planning, implementation, and evaluation, involving a school-aged child undergoing hospitalization (Lutfianti et al., 2022). The aim of this study was to describe the management of anxiety through Bricks Block play distraction therapy in a school-aged child during hospitalization and to evaluate changes in anxiety levels following the intervention as an alternative non-pharmacological nursing strategy (Chodidjah & Syahreni, 2015). The findings of this study are expected to provide practical evidence regarding the benefits of Bricks Block play therapy in promoting children's adaptation to the hospital environment and reducing anxiety during hospitalization (Ningsih et al., 2022).

MATERIAL AND METHODS

This study employed a descriptive case study design using the nursing care process approach (Koten et al., 2021). Case management was conducted through five sequential stages: nursing assessment, nursing diagnosis, intervention planning, implementation, and evaluation. This approach was used to describe the management of anxiety in a school-aged child undergoing hospitalization through Bricks Block play distraction therapy. The study was conducted in the Amarilis Ward of Dr. Gondo Suwarno Regional General Hospital, Ungaran, Indonesia, from April 15 to 17, 2026.

The variable of interest was the management of anxiety through Bricks Block play distraction therapy in a school-aged child undergoing hospitalization. As this study adopted a case study design, no study population or sampling technique was applied, unlike quantitative research (Mohammadi et al., 2024). The study participant was one school-aged child (6–12 years) who experienced anxiety during hospitalization, was fully conscious (*compos mentis*), and whose parent or legal guardian provided informed consent for participation and data collection (Sitorus et al., 2020).

Data were collected through interviews (autoanamnesis and alloanamnesis), direct observation, physical examination, documentation review, and the implementation of the nursing care process (Koten et al., 2021). The research instruments consisted of standardized nursing assessment forms, nursing diagnosis documentation (PPNI, 2017), nursing intervention plans (PPNI, 2018), implementation records, and nursing evaluation forms in accordance with the nursing practice standards (PPNI, 2019). Data trustworthiness was ensured through prolonged observation, persistent data collection, triangulation, negative case analysis, the use of relevant references, and member checking to enhance the credibility and accuracy of the findings (Hosseini & Soltanian, 2022).

Data were analyzed descriptively by organizing and interpreting information obtained from interviews, observations, and documentation according to the stages of the nursing process (Solikhah, 2015). The analysis followed the sequence of nursing assessment, formulation of nursing diagnoses, intervention planning, implementation of nursing interventions, and evaluation of outcomes to

describe changes in the child's anxiety following the administration of Bricks Block play distraction therapy (Koten et al., 2021).

Ethical approval for this study was obtained from the Research Ethics Committee of Universitas Ngudi Waluyo (Approval No. 188/KEP/EC/UNW/2026). The study was conducted in accordance with established ethical principles, including informed consent, anonymity, confidentiality, beneficence, and non-maleficence. Information regarding fit testing was not included because it was not relevant to the study design or the intervention implemented.

RESULT

The findings demonstrated that Bricks Block play distraction therapy administered for 20–30 minutes per day over three consecutive days reduced anxiety in a school-aged child undergoing hospitalization. Following the intervention, the child appeared calmer, demonstrated greater cooperation during nursing procedures, was no longer withdrawn, showed improved concentration, and adapted more effectively to the hospital environment. The expected nursing outcome of anxiety reduction was achieved, as evidenced by decreased restless behavior and improved participation in the nursing care process.

The initial assessment identified the participant as an 8-year-old boy hospitalized with a medical diagnosis of nausea and vomiting accompanied by fever. During hospitalization, the child reported feeling bored, expressed a desire to return home, appeared withdrawn, and exhibited signs of anxiety. Vital signs at baseline were as follows: heart rate (HR), 112 beats/min; respiratory rate (RR), 25 breaths/min; body temperature, 37.5°C; and peripheral oxygen saturation (SpO₂), 100%. Based on the assessment findings, the nursing diagnosis was **anxiety related to situational crisis** (Indonesian Nursing Diagnosis Standard [SDKI], Code D.0080).

Table 1. Baseline Characteristics of the Participant and Initial Assessment Findings

Variable	Findings
Age	8 years
Sex	Male
Medical diagnosis	Nausea and vomiting with fever
Chief complaints	Boredom, withdrawn behavior, desire to return home
Heart rate	112 beats/min
Respiratory rate	25 breaths/min
Body temperature	37.5°C
SpO ₂	100%
Nursing diagnosis	Anxiety related to situational crisis (SDKI Code D.0080)

Note. The table summarizes the participant's demographic characteristics, baseline clinical condition, and nursing diagnosis that served as the basis for implementing Bricks Block play distraction therapy.

The intervention consisted of distraction therapy, beginning with the observation and identification of the child's preferred distraction technique. In this case, the child was offered a choice of *Bricks Block* character designs to encourage active participation and engagement. The therapeutic intervention involved distraction through play, while the educational component included an explanation of the benefits and types of distraction techniques involving the five senses. These interventions were implemented in accordance with the Indonesian Nursing Intervention Standards

(Standar Intervensi Keperawatan Indonesia/SIKI), with the expected outcome being a reduction in the level of anxiety.

After three days of intervention, the evaluation demonstrated a reduction in verbal expressions of worry related to the child's condition, decreased restless behavior, improved concentration, and increased cooperation during nursing procedures. These findings indicate that *Bricks Block* play-based distraction therapy may be an effective non-pharmacological intervention for reducing anxiety among school-aged children undergoing hospitalization.

DISCUSSION

The findings of this study indicate that Bricks Block play distraction therapy contributed to reducing anxiety in a school-aged child undergoing hospitalization (Pujiati et al., 2021). Hospitalization is a stressful experience for children because it involves an unfamiliar environment, restricted daily activities, and exposure to medical procedures, all of which may provoke fear and anxiety (Chen, 2025). During the school-age period, children have developed logical thinking and problem-solving abilities. Therefore, play activities that encourage creativity, concentration, and problem-solving are developmentally appropriate strategies to facilitate adaptation to the hospital environment (Ningsih et al., 2022).

Bricks Block play distraction therapy provides children with an opportunity to redirect their attention from anxiety-provoking experiences to an enjoyable and age-appropriate activity (polopadang & Hidayah, 2019). While engaged in constructing block models, children focus on the play activity rather than on nursing procedures or the unfamiliar hospital environment (Saputra et al., 2026). This shift in attention may attenuate emotional responses to stress, resulting in calmer behavior, greater cooperation during nursing care, and improved participation in treatment (Chodidjah & Syahreni, 2015). Thus, play therapy serves not only as a recreational activity but also as a therapeutic nursing intervention that promotes psychological adaptation during hospitalization (Rohmah, 2018).

These findings are consistent with previous studies demonstrating that play therapy is effective in reducing anxiety among hospitalized children (Pujiati et al., 2021). Earlier research has shown that play-based interventions alleviate emotional distress, enhance comfort, improve mood, and increase children's cooperation during nursing procedures (Saputra et al., 2026). The consistency of these findings supports the role of play therapy as an effective non-pharmacological intervention for mitigating the psychological impact of hospitalization in school-aged children (Nuliana et al., 2022).

From a theoretical perspective, the effectiveness of Bricks Block play distraction therapy can be explained by the distraction mechanism, whereby attention is redirected from anxiety-inducing stimuli toward a more engaging activity (Maryani et al., 2024). As children become cognitively and physically involved in constructing block models, their perception of stressful stimuli is reduced (Gusneti et al., 2025). Furthermore, successfully completing a structure or model may enhance children's self-confidence and perceived sense of control, both of which facilitate psychological adaptation to hospitalization and contribute to the achievement of the desired nursing outcome, namely anxiety reduction (Gusneti et al., 2025).

Overall, the findings suggest that Bricks Block play distraction therapy is an appropriate intervention for school-aged children because it is consistent with their cognitive and psychosocial developmental characteristics (Pujiati et al., 2021). Although this descriptive case study does not permit causal inference or hypothesis testing, the results support the proposition that developmentally appropriate play interventions tailored to children's interests may enhance their adaptation to hospitalization and reduce anxiety (Hermalinda, 2024). Accordingly, Bricks Block play distraction therapy may be considered a valuable non-pharmacological nursing intervention for managing anxiety in school-aged children undergoing hospital care (Saputra et al., 2026).

CONCLUSIONS

This study demonstrated that anxiety management through Bricks Block play distraction therapy yielded positive outcomes in a school-aged child undergoing hospitalization. The implementation of this play-based intervention as part of the nursing care process contributed to reduced anxiety, improved adaptation to the hospital environment, and enhanced cooperation during nursing procedures. These findings indicate that Bricks Block play distraction therapy may serve as a beneficial non-pharmacological nursing intervention for supporting the psychological well-being of school-aged children during hospitalization. Furthermore, the results suggest that this intervention functions not only as a recreational activity but also as a therapeutic strategy that facilitates psychological adaptation throughout the hospitalization process.

Based on these findings, nurses are encouraged to consider incorporating Bricks Block play distraction therapy into non-pharmacological nursing interventions for managing anxiety in school-aged children undergoing hospitalization. Future research should involve larger sample sizes and employ more rigorous study designs, such as randomized controlled trials or quasi-experimental studies, to further evaluate the effectiveness of this intervention and generate higher levels of scientific evidence.

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Availability of data and materials

The data supporting the findings of this study are available from the corresponding author upon reasonable request for the purposes of verification or further research development. Access to the data is provided in accordance with research ethics principles, particularly those concerning the confidentiality of patients' identities and personal information. Any data shared will be limited to the specific needs of the requester and will exclude information that could directly or indirectly identify the patient.

Authors' contributions

ACR was responsible for the conceptualization of the study, including formulating the research focus and objectives and determining the methodological approach. The author was also responsible for data collection, implementation of nursing care for the patient, and analysis of the data obtained throughout the study. In addition, the author prepared the manuscript based on the assessment findings, implementation of nursing interventions, evaluation results, and data analysis.

EA was responsible for supervising the research process to ensure that the study and nursing care were conducted in accordance with the established procedures and objectives. The author also provided guidance and feedback during manuscript preparation, reviewed the content and organization of the manuscript, and approved the final version prior to publication.

Conflict of Interest

The authors declare that there are no personal, professional, or financial conflicts of interest that could have influenced the conduct of the study, data analysis, manuscript preparation, or publication of this article. The research process was conducted objectively and independently, without any interests or relationships with external parties that could have influenced the findings or interpretation of the study. Accordingly, the authors confirm that this article was prepared and published transparently and in accordance with academic and scientific ethical principles.

REFERENCES

- Chen, L. (2025). Effectiveness of the Roy adaptation model-based nursing intervention in improving physiological, psychological, and social outcomes in patients with Parkinson's disease. *BMC Neurology*, 25(1). <https://doi.org/10.1186/s12883-025-04232-2>
- Chodidjah, S., & Syahreni, E. (2015). PENGALAMAN HOSPITALISASI ANAK USIA SEKOLAH. In *Jurnal Keperawatan Indonesia* (Vol. 18, Number 1).
- Deswita, & Nursiam, Y. (2023). *Kenali Kecemasan Anak Usia Sekolah Yang Mengalami Hospitalisasi Dan Perawatannya* (N. Duniawati, Ed.; Cetakan Pertama). Penerbit Adab. <https://books.google.co.id/books?id=WNGvEAAAQBAJ&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Gusneti, I., Nurazila, A., Nelvi, M., Yeni, Z., Hidayat, H., & Dasar, P. S. (2025). Pertumbuhan Fisik Anak Usia Sekolah Dasar: Tantangan dan Strategi Pengelolaannya di Sekolah. *Pendidikan Tambusai*, 9(Aktivitas Fisik, Gizi, Pertumbuhan Fisik, Sekolah Dasar), 1738–1745. https://jptam.org/index.php/jptam/article/view/24462?utm_source=chatgpt.com
- Hermalinda. (2024). *Terapi Bermain Di Rumah Sakit* (U. Arsa, Ed.; 1st ed., Vol. 1). PT. Adab Indonesia.
- Hosseini, M., & Soltanian, M. (2022). Application of Roy's Adaptation Model in Clinical Nursing: A Systematic Review. In *Journal of Iranian Medical Council* (Vol. 5, Number 4, pp. 540–556). Islamic Republic of Iran Medical Council. <https://doi.org/10.18502/jimc.v5i4.11327>
- Imbiri, E. M., Rhomandoni, M., & Nampo, R. S. (2021). Hubungan Hospitalisasi Dengan Kecemasan Anak Usia Sekolah (6-12 Tahun) Di Ruang Kanak-Kanak RSUD Abepura. *Sentani Nursing Journal*. <https://ejournal.stikesjypr.ac.id/>
- Koten, E., Afriani, T., Dewi, S., Yatnikasari, A., & Novieastari, E. (2021). Optimalisasi Kualitas Dokumentasi Asuhan Keperawatan Dengan Pendekatan SOAP Di Rawat Jalan Anak: Pilot Study. *Jurnal Of Telenursing*, 3. <https://journal.ipm2kpe.or.id/index.php/JOTING/article/view/2229/1403>
- Lutfianti, A., Anggraeni, L., Saputra, M., Susilaningsih, E., Elvira, M., Fatsena, R., Dewi, D., Sensussiana, T., & Novariza, R. (2022). *Ilmu Dasar Keperawatan Anak* (D. Mulyasari, Ed.; 1st ed., Vol. 1). CV. Pradina Pustaka Grup.
- Marpaung, R., Sirait, S., Sitorus, S., Silaen, S., Tambunan, W., & Widiastuti, M. (2022). Pediaqu : Jurnal Pendidikan Sosial dan Humaniora Volume 1 Nomor 4 (2022) 318. *Jurnal Pendidikan dan Humaniora*, 318–324. <https://publisherqu.com/index.php/pediaqu>
- Maryani, R., Supriyadi, & Rahayu, W. (2024). The Pengaruh permainan balok dan permainan lego terhadap kemampuan motorik halus anak usia dini di RA Darul Huda. *BEMAS: Jurnal Bermasyarakat*, 5(1), 155–163. <https://doi.org/10.37373/bemas.v5i1.1337>
- Mohammadi, K., Mehralian, H. A., Abolhassani, S., & Kheiri, S. (2024). The Effect of a Program Based on Roy's Adaptation Model on Coping Skills of Children of People with Multiple Sclerosis. *Iranian Journal of Nursing and Midwifery Research*, 29(6), 703–708. https://doi.org/10.4103/ijnmr.ijnmr_231_22

- Muhammadiyah, U., Pekalongan, P., Aliyah, H., & Rusmariansa, A. (2021). Gambaran Tingkat Kecemasan Anak Usia Pra Sekolah Yang Mengalami Hospitalisasi: Literatur Review. In *Seminar Nasional Kesehatan*. <https://www.scilit.net/statistic-journal>
- Ningsih, N., Mufidah, A., Wilujeng, A., Pratiwi, E., Sudiarti, P., Huru, M., & Albayani, M. (2022). *Keperawatan Anak* (A. Munandar, Ed.; pp. x-468). Media Sains Indonesia. www.penerbit.medsan.co.id
- Nuliana, W., Keperawatan, P., Poltekkes, M., & Maluku, K. (2022). Pengaruh Terapi Bermain Terhadap Penurunan Kecemasan Pada Anak Usia Prasekolah Selama Hospitalisasi: Literatur Review. In *Jurnal Keperawatan Indonesia Timur (East Indonesian Nursing Journal)*. <https://jbi.global/critical-appraisal-tools>
- polopadang, V., & Hidayah, N. (2019). *Buku Proses Keperawatan* (Fitriyani, Ed.). Yayasan Pemberdayaan Masyarakat Indonesia Cerdas. https://repositori.uin-alauddin.ac.id/14154/1/Buku_Proses%20Keperawatan.pdf
- PPNI. (2017). *Standar Diagnosis Keperawatan Indonesia: Definisi dan Indikator Diagnostik* (III, Vol. 1). Dewan Pengurus Pusat Persatuan Perawat Nasional Indonesia.
- PPNI. (2018). *Standar Intervensi Keperawatan Indonesia: Definisi dan Tindakan Keperawatan: II* (1st ed.). Dewan Pengurus Pusat Persatuan Perawat Nasional Indonesia.
- PPNI. (2019). *Standar Luaran Keperawatan Indonesia: Definisi dan kriteria Hasil Keperawatan: II* (1st ed.). Dewan Pengurus Pusat Persatuan Perawat Nasional Indonesia.
- Pujiati, W., Julia Dolok Saribu, H., Stikes Hang Tuah Tanjungpinang, M., & Stikes Hang Tuah Tanjungpinang, D. (2021). Terapi Bermain Lego Terhadap Kecemasan Masa Hospitalisasi Anak Usia Sekolah Di Rumkital Dr. Midiyato Suratani Tanjung Pinang. *Jurnal Ilmiah Cerebral Medika*, 3(2). <https://jurnal.akperkesdam-padang.ac.id/index.php/JICM/article/view/82/64>
- Rohmah, N. (2018). *Terapi Bermain* (F. Izzati, Ed.; 1st ed.). LPPM Universitas Muhammadiyah Jember.
- Rukiyati, R. (2020). Upaya Meningkatkan Kreativitas Membentuk Balok Bangunan Melalui Metode Praktik Langsung pada Anak Kelompok A TK Negeri Kabupaten Temanggung. *Media Penelitian Pendidikan: Jurnal Penelitian Dalam Bidang Pendidikan Dan Pengajaran*, 14(1), 6-16. <https://doi.org/10.26877/mpp.v14i1.5522>
- Saputra, R., Hijrianti, U. R., & Ahmad, M. D. (2026). Pengaruh permainan blok bongkar pasang terhadap kemampuan mental rotation pada dewasa awal. *Cognicia*, 14(1). <https://doi.org/10.22219/cognicia.v14i1.43893>
- Sitorus, M., Utami, T. A., & Prabawati, F. D. (2020). Hubungan hospitalisasi dengan tingkat stres pada anak usia sekolah di unit rawat inap RSUD Koja Jakarta Utara. *Health Information Jurnal Penelitian*, 12. <https://myjurnal.poltekkes-kdi.ac.id/index.php/HIJP>
- Solikhah, U. (2015). Efektifitas Lingkungan Terapeutik Terhadap Reaksi Hospitalisasi Pada Anak. *Jurnal Keperawatan Anak*, 1. <https://jurnal.unimus.ac.id/index.php/JKA/article/view/899/953>