

The Perceived Importance of Clinical Observation Skills for Pediatric Therapists

¹Blair Carsone, PhD, MOT, OTR/L, BCP*, ¹Maie Grisham, OTD, OTR/L, ²Bryce Smith, OTD, OTR/L

¹Gannon University

²Carsone KIDS, Inc.

DOI: <https://doi.org/10.51584/IJRIAS.2026.11080125>

Received: 31 August 2026; Accepted: 05 September 2026; Published: 17 September 2026

ABSTRACT

Objectives: Clinical observation is a crucial component in pediatric rehabilitation, allowing therapists to assess a child's abilities, monitor progress, and adjust interventions accordingly. Despite its significance, research on how clinical observation is used across different pediatric therapy settings remains limited. This quantitative study investigated the association between pediatric therapy practice settings, the perceived importance of clinical observation skills, and the frequency of clinical observation skill utilization.

Methods: An anonymous web-based survey was utilized to collect data relevant to the research questions. The chi-square test for independence was used to analyze the data.

Results: 398 of the 409 participants met the inclusion criteria and were included in the study. An overwhelming majority of the participants (80.9%) perceived clinical observation skills as "important" or "very important." After statistical analysis of the data, it was found that there was a statistically significant association between setting and the perceived importance of clinical observation skills. Approximately 49% of participants reported daily use of clinical observation skills in pediatric therapy, followed by weekly (34.6%), monthly (11.6%), rarely (4.5%), and never (0.3%).

Conclusions: Overall, setting was statistically associated with the perceived importance of clinical observation skills.

Keywords: Child; rehabilitation; judgment

INTRODUCTION

Pediatric rehabilitation is a specific field that specializes in enhancing the quality of life for children experiencing developmental, emotional, and cognitive challenges (Wade et al., 2023). Successful pediatric therapy requires a multidisciplinary team to ensure each child receives a comprehensive treatment plan tailored to their specific needs, addressing all aspects of their development (Wasserman & Fiks, 2020). This team typically comprises healthcare professionals from fields such as occupational therapy, physical therapy, and speech-language pathology, who work together to support the child.

Pediatric rehabilitation focuses on holistic treatment. The Person-Environment-Occupation-Performance embodies this top-down, client-centered approach primarily utilized by occupational therapists. Both intrinsic and extrinsic factors are considered while a focus on the child's abilities, function, and goals remains at the forefront of clinical reasoning (Bass et al., 2024).

Clinical reasoning is the nonlinear thought process that therapists use to continuously reflect on holistic patient care (Araujo et al., 2022). The ability to reason clinically is imperative for pediatric therapists as it is a multifaceted construct that requires the practitioner to consider patient-specific variables, contextual

variables, and the variability of growth and development in children (Academy of Pediatric Physical Therapy, 2021; Young et al., 2022). Clinical reasoning is required of all healthcare professionals, especially those who work in pediatrics, as underdeveloped clinical skills can impede effective treatment (Diepeveen et al., 2020; Gordon et al., 2022; Law et al., 2024).

Central to clinical reasoning is clinical observation, a crucial tool that allows therapists to evaluate a child's abilities, monitor their progress, and make necessary adjustments to their interventions (Gordon et al., 2022). Clinical observation requires a deep understanding of a child's physical presentation, behaviors, and responses to their environment, and interactions within the therapeutic setting. Through this process, therapists can draw informed conclusions and provide evidence-based interventions that are attuned to each child's unique needs.

Clinical observation skills are essential to successfully evaluating, treating, and discharging pediatric patients. Limited research exists regarding the importance and utilization of clinical observation in pediatric therapies. Most research regarding clinical observation focuses on observational assessments (i.e., Hypothesis-Oriented Pediatric Focused Algorithm, Clinical Reasoning Assessment Tool, Speech Language Pathology Script Concordance Test), most of which have insufficient evidence (Eddy et al., 2020; King et al., 2019). Understanding the level of importance that those practicing in pediatrics place on clinical observation skills is the first step in better understanding this elusive phenomenon.

Objectives

This quantitative study was designed to address the current knowledge gap by investigating the association between pediatric therapy practice settings, the perceived importance of clinical observation skills, and the frequency of clinical observation skill utilization. The tentative implications of this research can be applied by supervisors, clinicians, and educators to guide expectations, standards, and opportunities for mentorship.

METHODS

Before recruitment and data collection, this study was approved by an institutional review board committee (GUIRB-2024-7-7292). The following research questions guided this study.

R1: Is there an association between pediatric therapy practice setting and the perceived importance of clinical observation skills?

The null hypothesis (H0) posits no association between the setting and perceived importance of clinical observation skills while the alternative hypothesis (H1) posits an association between the setting and perceived importance of clinical observation skills.

R2: Is there an association between pediatric therapy practice setting and the frequency of use of clinical observation skills?

The null hypothesis (H0) posits no association between the setting and frequency of use of clinical observation skills while the alternative hypothesis (H1) posits an association between the setting and frequency of use of clinical observation skills.

The chi-square test for independence, also called Pearson's chi-square test or the chi-square test of association, was used to discover if there was a relationship between two categorical variables (Wagner, 2020). The study's ideal sample size was determined for both chi-square tests based on G*Power. G*Power calculated the total sample size for both research questions to be 146 (Kang, 2021). Snowball sampling was utilized to recruit participants. Flyers were distributed via email to pediatric sites and on social media, including Facebook, to advertise the study. Participants were entered to win one of two \$25 Amazon gift cards funded by the Gannon University Professional Development grant.

An anonymous web-based survey was utilized to collect data relevant to the research questions. Three pediatric experts developed and reviewed the web-based survey to ensure the questions were valid, reliable, clear, and appropriate for the target audience before participant recruitment. Informed written consent was obtained from each individual prior to participating in the research. The survey questions included demographic information, the subject's work setting, their frequency of using clinical observation skills, and a Likert-scale question rating their perceived importance of clinical observation skills. The 5-point Likert scale question asked participants, "How important do you believe clinical observation skills are for pediatric therapists to possess?" A score of 1 on the Likert scale was "not important," and 5 was considered "very important."

Data collection spanned July 2024 to August 2024, giving participants about three weeks to respond. Once 409 surveys were submitted, the study closed because it reached a sample size exceeding the G*Power calculation. Participants were included in the study if they were licensed occupational therapists, licensed physical therapists, or licensed speech-language pathologists who practiced in the United States and treated pediatric clients at the time of the survey. If participants met the inclusion criteria, their data were collected and utilized for the study.

RESULTS

398 of the 409 participants met the inclusion criteria and were included in the study, meeting the sample size requirements for statistical significance. Nine participants did not meet the inclusion criteria because they were not currently working as therapists or were retired from their profession. Most participants were occupational therapists (61.6%), followed by physical therapists (25.1%) and speech language pathologists (13.3%). The majority of participants had worked as a pediatric therapist for 4-6 years (37.4%), followed by 7-10 years (26.9%), 1-3 years (14.8%), 11-15 years (12.6%), 16-20 years (3.3%), less than 1 year (2.8%), 21-25 years (1.7%), and over 25 years (.5%). Most participants at the time of the study worked in the hospital (35.9%), followed by private practice/outpatient (24.6%), school system (12.8%), home health (9.3%), telehealth (7.3%), early intervention (5.3%), and community (4.8%), as shown in Figure 1. An overwhelming majority of the participants (80.9%) perceived clinical observation skills as "important" or "very important" regardless of setting, as illustrated in Figure 2.

Figure 1. Pediatric Therapist Current Setting

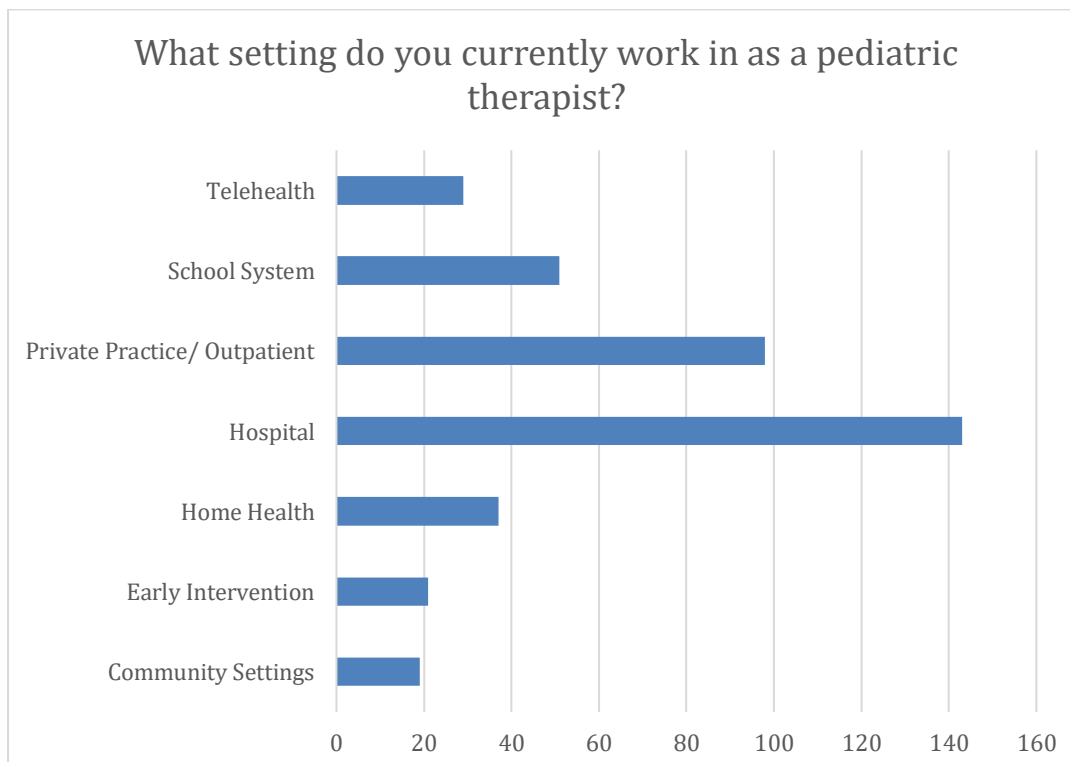
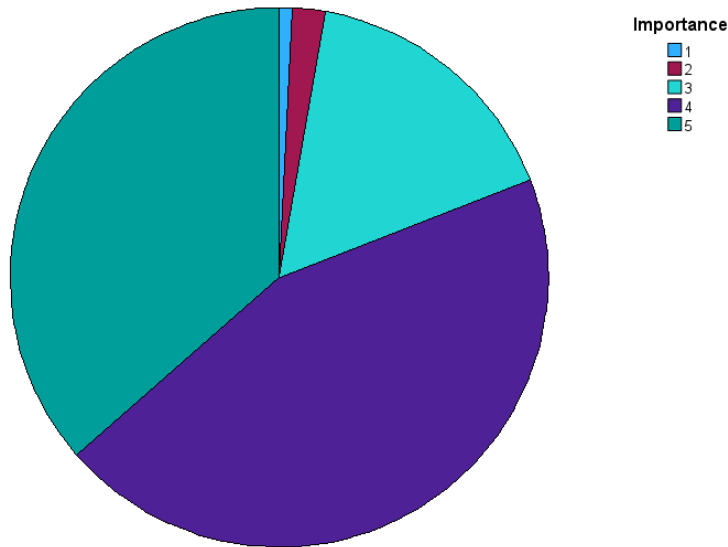


Figure 2. Importance of Clinical Observation Skills



The first research question of the study investigated the potential association between the pediatric therapy practice setting and the perceived importance of clinical observation skills. The chi-square test results in the "Pearson chi-square" row showed $\chi(24) = 50.032$, $p = .001$, indicating a statistically significant association between setting and perceived importance of clinical observation skills, as shown in Table 1. Phi and Cramer's V both test the strength of association. The strength of association between the variables was modest, as shown in Table 2. Based on the results of the first research question, the null hypothesis was rejected.

Table 1. Practice Setting and Perceived Importance of Clinical Observation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	50.032 ^a	24	.001
Likelihood Ratio	52.258	24	<.001
N of Valid Cases	398		
a. 17 cells (48.6%) have expected count less than 5. The minimum expected count is .14.			

Table 2. Phi and Cramer's V for the First Research Question

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.355	.001
	Cramer's V	.177	.001
N of Valid Cases		398	

The second question of the study investigated the potential association between the pediatric therapy practice setting and the frequency of use of clinical observation skills. Approximately 49% of the participants reported daily use of clinical observation skills in pediatric therapy regardless of setting. After daily, weekly use was the next most frequent answer with 34.6%, followed by monthly at 11.6%, rarely at 4.5%, and never at 0.3%. Practice settings where daily use was reported by more than 50% of participants

included: hospital and private practice/outpatient. Clinical observation frequency across settings is shown in Figure 3 and Table 3.

Figure 3. Frequency of Use of Clinical Observation Skills

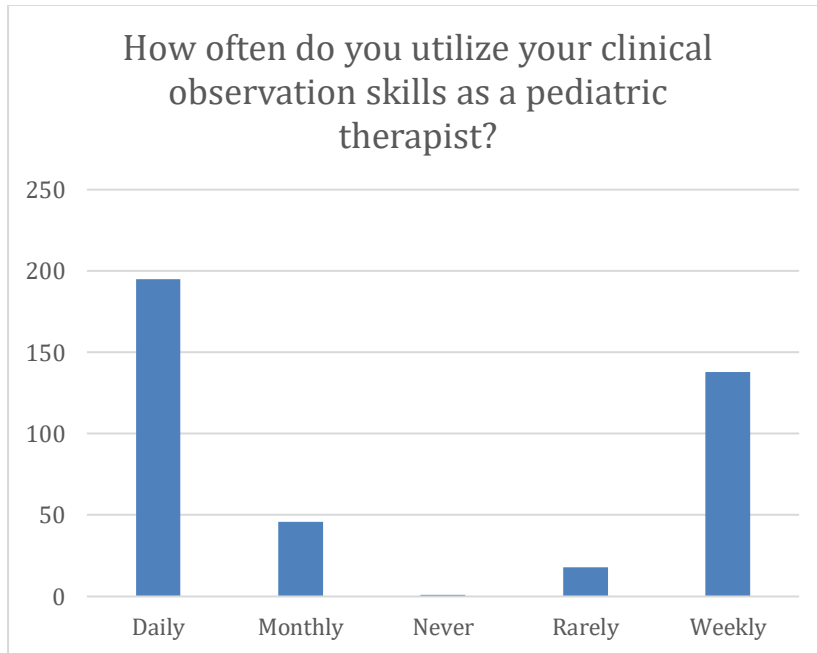


Table 3. Clinical Observation Frequency Across Settings

Setting	Daily	Weekly	Monthly	Rarely	Never
Community	42.1% (8 participants)	42.1% (8 participants)	10.5% (2 participants)	5.3% (1 participant)	0
Early Intervention	38.1% (8 participants)	33.3% (7 participants)	23.8% (5 participants)	5.7% (1 participant)	0
Home Health	24.3% (9 participants)	46.0% (17 participants)	21.6% (8 participants)	5.4% (2 participants)	2.7% (1 participant)
Hospital	53.8% (77 participants)	37.8% (54 participants)	7.0% (10 participants)	1.4% (2 participants)	0
Private Practice/Outpatient	65.3% (64 participants)	24.5% (24 participants)	5.1% (5 participants)	5.1% (5 participants)	0
School System	39.2% (20 participants)	35.3% (18 participants)	19.6% (10 participants)	5.9% (3 participants)	0
Telehealth	31.0% (9 participants)	34.5% (10 participants)	20.7% (6 participants)	13.8% (4 participants)	0

The chi-square tests table results of the "Pearson chi-square" row illustrated that $\chi(24) = 54.978$, $p = <.001$, indicating there was a statistically significant association between setting and frequency of use of clinical observation skills as shown in Table 4.

Phi and Cramer's V are both tests of the strength of association. The strength of association between the variables was modest as shown in Table 5. Based on the results of the second research question, the null hypothesis was rejected.

Table 4. Practice Setting and Frequency of Clinical Observation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	54.978 ^a	24	<.001
Likelihood Ratio	49.411	24	.002
N of Valid Cases	398		
a. 17 cells (48.6%) have expected count less than 5. The minimum expected count is .05.			

Table 5. Phi and Cramer's V for the Second Research Question

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.372	<.001
	Cramer's V	.186	<.001
N of Valid Cases		398	

DISCUSSION

The tentative implications from this study highlight the perceived importance of clinical observation skills. An overwhelming majority of pediatric therapists indicated that clinical observation skills were “important” or “very important.” Approximately half of all pediatric therapists who participated in the study reported using their clinical observation skills daily.

Development of clinical observation skills typically begins during formal academic training. Although it is ideal to teach clinical observation skills in all settings, these tentative implications can help guide educators with limited time and resources. Although most educators and those in academic circles might assume that clinical observation skills are used daily across all settings this was found to be untrue in this study. This may be due to the participants’ lack of recognition of their use of observation, but we caution against that oversimplification. This finding may reveal a changing landscape in pediatric practice where therapists do not have direct access to the child (i.e., providing parent education during teletherapy). Additionally, some pediatric rehabilitation settings are moving towards therapists being in a more supervisory role while assistants provide the majority of the direct client care. Teachers and mentors should keep this finding in mind and prepare practitioners on what to do when observation may not be possible.

The tentative implications of this research can be applied by supervisors, clinicians, and educators to guide expectations, standards, and opportunities for mentorship. Supervisors may use this data to define expectations and opportunities for clinician growth in their setting. Practicing clinicians can mindfully use and improve their clinical observation skills based on their practice setting. Educators can ensure they are preparing future clinicians to effectively develop and hone their students’ clinical observation skills. Educators can focus on clinical observation skills in settings where they are most commonly used and prepare students for alternative methods in practice settings where clinical observation opportunities may be limited (e.g., telehealth).

The study had several limitations. First, all measures of clinical observation skills were obtained through self-report, which may have led to either overestimation or underestimation depending on contextual factors. Second, residual confounding is a potential issue in association studies, and the researchers could not rule out the possibility of unmeasured confounding variables, such as societal or lifestyle factors, that might influence the relationship between perceived clinical observation skills and pediatric setting. These

unmeasured variables could affect the strength of the reported associations. Finally, snowball sampling could have produced biased results due to potential homogeneity of responses. However, this was minimized due to achieving the necessary sample size needed to evaluate statistical significance.

CONCLUSIONS

The current research clearly illustrates the perceived importance of clinical observation skills for pediatric therapy. Researchers need to further investigate how to measure clinical observation skills in students and clinicians to promote best practices in pediatrics. As the field of pediatric rehabilitation advances, the cultivation of strong clinical observation skills is crucial in ensuring therapists can continue to provide high-quality, individualized care to children. By addressing the gaps identified in this study and focusing on the ongoing development of these skills, the future of pediatric rehabilitation will be well-positioned to meet the needs of children and their families.

Future research should investigate the role of formal and informal education factors and their interactions with clinical observation skills. This approach could offer a more comprehensive understanding of how to effectively support current and future pediatric therapists. Additionally, researchers need to further investigate how to measure clinical observation skills in students and clinicians to promote best practices in pediatrics. If a formal, reliable, and valid measure could be developed for use in pediatric practice, educators, mentors, and researchers would have a tool to assess and support the necessary clinical observation skills.

Acknowledgments

This work was supported by the Gannon University Professional Development Grant.

Conflicts of Interest and Source of Funding

Maie Grisham received the Gannon University Professional Development Grant which was utilized for the gift card prizes. For the remaining authors, none are declared.

Data Availability

Data are available from the first author upon reasonable request.

REFERENCES

1. Academy of Pediatric Physical Therapy. (2021). Fact sheet: Teaching, learning and assessment in clinical reasoning. <https://pediatricapta.org/includes/fact-sheets/pdfs/ClinicalReasoning-TeachingLearningAssessment.pdf?v=1.1#:~:text=Clinical%20reasoning%20%28CR%29%20is%20a%20foundational%20component%20of,variability%20in%20the%20growth%20and%20development%20of%20children.>
2. Araujo, A. da S., Kinsella, E. A., Thomas, A., Gomes, L. D., & Marcolino, T. Q. (2022). Clinical reasoning in occupational therapy practice: A scoping review of qualitative and conceptual peer-reviewed literature. *American Journal of Occupational Therapy*, 76, Article 7603205070. <https://doi.org/10.5014/ajot.2022.048074>
3. Bass, J. D., Marchant, J. K., de Sam Lazaro, S. L., & Baum, C. M. (2024). Application of the Person-Environment-Occupation-Performance Model: A scoping review. *OTJR*, 44(3), 521-540.
4. Diepeveen, S., van Haaften, L., Terband, H., de Swart, B., & Maassen, B. (2020). Clinical reasoning for speech sound disorders: Diagnosis and intervention in speech-language pathologists' daily practice. *American Journal of Speech-Language Pathology*, 29(3), 1529-1549. https://doi.org/10.1044/2020_AJSLP-19-00040
5. Eddy, L. H., Bingham, D. D., Crossley, K. L., Shahid, N. F., Ellingham-Khan, M., Otteslev, A., Figueredo, N. S., Mon-William, M., & Hill, L. J. B. (2020) The validity and reliability of observational

- assessment tools available to measure fundamental movement skills in school-age children: A systematic review. *PLOS ONE*, 15(8), e0237919. <https://doi.org/10.1371/journal.pone.0237919>
6. Gordon, D., Rencic, J. J., Lang, V. J., Thomas, A., Young, M., & Durning, S. J. (2022). Advancing the assessment of clinical reasoning across the health professions: Definitional and methodologic recommendations. *Perspectives on Medical Education*, 11, 108-114. <https://doi.org/10.1007/s40037-022-00701-3>
 7. Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, 18, 17. <https://doi.org/10.3352/jeehp.2021.18.17>
 8. King, G., Chiarello, L. A., Thompson, L., McLarnon, M. J. W., Smart, E., Ziviani, J., & Pinto, M. (2019). Development of an observational measure of therapy engagement for pediatric rehabilitation. *Disability and Rehabilitation*, 41(1), 86-97. <https://doi.org/10.1080/09638288.2017.1375031>
 9. Law, M., Baum, C., & Dunn, W. (Eds.). (2024). *Measuring occupational performance: Supporting best practice in occupational therapy* (3rd ed.). Routledge.
 10. Wade, S. L., Gies, L. M., Adlam, A.-L. R., Bardoni, A., Corti, C., Jones, K. M., Limond, J., & Williams, T. (2023). Pediatric rehabilitation. In G. G. Brown, B. Crosson, K. Y. Haaland, & T. Z. King (Eds.), *APA handbook of neuropsychology: Neuroscience and neuromethods* (pp. 375–392). American Psychological Association. <https://doi.org/10.1037/0000308-018>
 11. Wagner, W. E. (2020). *Using IBM SPSS statistics for research methods and social science statistics* (7th ed.). SAGE Publications, Inc.
 12. Wasserman, R. C., & Fiks, A. G. (2020). The future(s) of pediatric primary care. *Academic Pediatrics*, 21(2), 414-424. <https://doi.org/10.1016/j.acap.2020.10.015>
 13. Young, M. E., Thomas, A., Lubarsky, S., Gordon, D., Gruppen, L. D., Rencic, J., Ballard, T., Holmboe, E., Da Silva, A., Ratcliffe, T., Schuwirth, L., Dory, V., & Durning, S. J. (2022). Mapping clinical reasoning literature across the health professions: A scoping review. *BMC Medical Education*, 20(1), 107. <https://doi.org/10.1186/s12909-020-02012-9>