

# Evolution of Pediatric Psychology in Flanders, Belgium: Historical Roots to Future Trends

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## Keywords

Pediatric Psychology ; Multidisciplinary care ; Healthcare organization Flanders

## Abstract

Pediatric psychology is a dynamic and evolving field that involves both clinical practice and scientific research. It addresses a broad spectrum of physical and psychological aspects related to children's health, disease and development. This manuscript explores the evolution of pediatric psychology in Flanders, Belgium, by describing its historical development and investigating its current clinical practices through a review of existing literature, interviews and a survey of current practices. It highlights the growing recognition of psychological care within pediatric medicine and underscores the valuable contributions of pediatric psychologists, who are experienced and highly trained in psychological care. However, despite this recognition, pediatric psychology in Flanders has developed through decentralized, hospital-specific initiatives, resulting in variability in clinical practice. Fragmentation is further exacerbated by funding models that do not cover all pediatric conditions, a lack of formal coordination between hospitals and limited specialized training in the specific field of pediatric psychology. It is well proven that children with acute and chronic disease benefit from pediatric psychological care. Therefore, the provision of pediatric psychological services would benefit from coordinated efforts, inclusive funding models and increased collaboration across healthcare institutions, which would ensure more consistent, equitable and high-quality care for children with acute and chronic medical conditions in Flanders.

## Introduction

Pediatric psychology is a dynamic and growing field that involves both scientific research and clinical practice, addressing a broad spectrum of physical and psychological issues related to children's health, disease and development (1, 2). Collaborations between psychologists and pediatricians were first noted in the late 1890's by Lightner Witmer who established the first psychological clinic in the United States of America (USA) (2, 3). Although early collaborations between psychology and pediatrics were slow to grow, by the mid-20th century, the field gained more recognition. In 1965, Jerome Kagan referred to the collaboration between pediatrics and psychology as "the new marriage", highlighting the growing recognition of the need for these two fields to work closely together (4). This liaison was dedicated to understanding and enhancing the mental and physical health and well-being of children and adolescents with medical conditions. Soon after, in 1967, the term "pediatric psychology" was first coined by Logan Wright in his article "The Pediatric Psychologist: A Role Model" (5).

The gradual growth of pediatric psychology had led to the formalization of the field in both the USA and Europe. Nowadays, the Society of Pediatric Psychology (SPP) is well-established with various activities, such as distributing newsletters, specialized interest groups, sponsored conferences, training in pediatric psychology and the publication of two highly impactful and respected journals, named the *Journal of Pediatric Psychology* and *Clinical Practice in Pediatric Psychology* (2, 6). While pediatric psychology was formalizing in the USA, the development of a

professional identity in Europe emerged over time. Starting in 2010, several European countries established pediatric psychology networks within larger professional psychological associations, such as the Pediatric Psychological Network UK (PPN-UK) within the British Psychological Society (2). Most networks aim to integrate clinical experience with scientific knowledge and foster (inter)national collaboration among pediatric psychology professionals (2).

As the field became more formalized, the role of pediatric psychologists became clearer. A pediatric psychologist is any clinical psychologist or clinical educational psychologist who primarily works with children in a setting that is not psychiatric in nature. For consistency, we will further use the overall term 'pediatric psychologist' throughout the manuscript. They are ideally trained in both child development and the clinical area (5). Pediatric psychologists work with children, adolescents and their families, within settings of acute medical trauma, chronic diseases, physical complaints, developmental problems and emotional and/or behavioral issues that may arise during the different stages of a child's development. They contribute to both preventive and curative aspects of a child's mental and physical health by integrating strategies that support overall mental health and well-being (7-9).

As the field of pediatrics continues to evolve, so does the role of pediatric psychologists within it. Gaining insight into the historical development of the profession can help inform its future direction. This manuscript aims to explore the history of pediatric psychology in Flanders, Belgium, and to examine the current clinical landscape,

with a particular focus on the roles, responsibilities and tasks of pediatric psychologists.

## Methods

Three hospitals participated in this study: the University Hospitals of Leuven, the University Hospital of Ghent and Jessa Hospital in Hasselt. Data collection occurred through various methods.

The current clinical landscape of pediatric psychologists in Flanders was explored using a multi-step approach. The daily tasks of pediatric psychologists were first analyzed through a scoping literature review, which provided a theoretical foundation and insights into established practices in the field.

After reviewing the available literature, informal interviews were conducted with several pioneer pediatric psychologists in Flanders who played key roles in the early development of the field. A purposive sampling strategy was used to identify participants with extensive experience in establishing pediatric psychology within major hospitals (Ghent, Leuven and Hasselt). These participants were selected based on their direct involvement in shaping pediatric psychological care in their institutions. Interviews were conducted by the authors and followed a flexible interview guide to gather participants' reflections on the historical evolution of pediatric psychology in Flanders. Key topics included the origins of pediatric psychology in their hospitals, early collaborations between departments, important milestones, organizational challenges and the integration of psychological care within multidisciplinary teams. The informal nature of the interviews encouraged an open, narrative exchange of experiences.

Building upon these findings, a group discussion, focusing on the obtained information, was held by the authors. Relevant aspects were translated into a survey (attachment 1, available in the digital version of the article) to further assess them within the broader professional community. This survey further aimed to capture practical and substantive aspects of the function of a pediatric psychologist in different settings. The survey was piloted in a small sample of psychologists (n=4) and adapted according to feedback from these experts to improve clarity and comprehensiveness.

To conduct this survey, all hospitals in Flanders were contacted via written communication addressed to head nurses or directly to pediatric psychologists. In total, 51 hospitals were contacted. The survey link was distributed by the main authors, and two reminder emails were sent to increase response rates. There were no formal inclusion or exclusion criteria, as all hospitals in Flanders were invited to participate. When multiple respondents from the same hospital completed the survey, this was considered during data processing, recognizing that academic hospitals generally employ more pediatric psychologists than non-academic hospitals. Only completed surveys were included in the analysis.

The survey was collected between March and May 2022. The first part of this survey covers individual work circumstances, including the hospital of employment, tenure as a psychologist, years of experience in pediatric psychology, percentage of employment and educational background. The second section focuses on the employment of pediatric psychologists within the hospital, covering medical specializations, tenure within the hospital and partnerships within and outside the hospital. The third part addresses job content, such as tasks, pathologies, financing of services and instruments for psychodiagnostics. The fourth section details collaborations within pediatric psychology in Flanders, supplemented with statements where participants indicate their agreement or disagreement.

To analyze the survey responses, numerical scores were assigned to each answer category. For frequency-based questions, responses were coded and scored as follows: "Never" (=0), "Rarely"

(=1), "Sometimes" (=2), "Often" (=3) and "Very often" (=4). For agreement-based questions, responses were coded and scored from "Strongly disagree" (=1), "Disagree" (=2), "Neutral" (=3), "Agree" (=4), to "Strongly agree" (=5), with "Not applicable" coded as (=0). Once the responses were coded and scored, the mean values were calculated for each question to provide an overview of the data. All descriptive statistical analyses were conducted using SPSS version 28.0.0.0.

## Results

### History of Pediatric Psychology in Flanders, Belgium

The introduction of psychologists into pediatric care in Flanders was not the result of a centralized policy, but rather of locally driven initiatives that reflected a growing awareness of the need for multidisciplinary, biopsychosocial approaches to child health. In line with Engel's biopsychosocial model (1977) and emerging multidisciplinary care models, early collaborations sought to address not only the physical but also the emotional and developmental needs of pediatric patients.

In Ghent, collaboration between the departments of pediatrics and psychology began in the mid-1960s, initially through joint research on child development and perinatal complications. As these collaborations deepened, the department of pediatrics recognized the need for other research, and it became apparent that there was a need for psychodiagnostic assessments for patients admitted to the children's clinic. In 1967, Prof. W. de Coster and psychologist Marleen Dhont started a long-lasting collaboration to meet this growing demand of the children's clinic, laying the foundation for what would become the pediatric psychology department at Ghent University Hospital. Current, Dhont, along with psychologists Nady Van Broeck and Marleen Theunis, developed the child psychology department of the current Ghent University Hospital. Over time, the role of psychologists at the children's hospital expanded beyond research and psychodiagnostics to include guidance and psychotherapeutic work.

Similar developments occurred in Leuven, where collaborations between psychiatry and pediatrics, led by Staf Mertens, resulted in the first official appointments of pediatric psychologists in the early 1990s. Els Roeykens was appointed in 1990, followed by Trui Vercruyssen in 1991, both working independently from the psychiatric department. In addition to clinical work, psychologists also participated in research projects, such as Hans Daniëls' work with premature infants. In other hospitals psychologists were appointed at the request of individual physicians, as seen in the case of Astrid Indekeu in Virga Jessa in Hasselt, illustrating the various ways pediatric psychologists were gradually introduced into the pediatric field across different settings throughout the country. Recognizing the growing importance of psychological expertise within pediatric care, physicians played a significant role in recruiting psychologists.

The expansion of pediatric psychology gained momentum in the late 1990s when the Belgian National Institute for Health and Disability Insurance (RIZIV) introduced conventions for multidisciplinary care in chronic pediatric diseases, such as diabetes, and kidney disorders. This enabled hospitals to implement integrated care models by hiring pediatric psychologists. Unfortunately, financing in non-academic hospitals remains limited to this day.

In recent decades, collaborations between hospital-based pediatric psychologists and academic research groups, such as partnerships between the Ghent University Hospital and various departments at Ghent University have strengthened research and evidence-based practice. These partnerships mirror international frameworks emphasizing continuous interaction between research, clinical work and education. The creation of the European

Pediatric Psychology Network (EPPN) in 2018, a network still in development, exemplifies how locally initiated efforts have evolved into a coordinated, evidence-informed practice community that aligns with international models of integrated pediatric psychology, including preventive and psychosocial frameworks such as the Pediatric Psychosocial Preventative Health Model (PPPHM) (9). While there is not yet a formal pediatric psychology organization in Flanders, informal collaborations among pediatric psychologists are already in place.

## Current clinical landscape of pediatric psychology

### TASKS OF PEDIATRIC PSYCHOLOGISTS

The core task of pediatric psychologists is to support the psychological, emotional and developmental well-being of children and adolescents, particularly those with medical conditions or developmental challenges. However, the responsibilities of pediatric psychologists are broad and vary depending on their role and the type of hospital (academic vs. non-academic) they work in. Despite these variations, we can summarize nine different tasks as follows (7, 8, 10, 11).

#### 1. Follow-up of developmental and psychological aspects in acute and chronic pediatric conditions:

Both acute and chronic pediatric conditions can pose unique challenges to psychosocial development and mental health. In chronic conditions, pediatric psychologists monitor the psychosocial developmental trajectory of these children to assess whether the cognitive, emotional and social development aligns with age-appropriate milestones. They also monitor and support children through key developmental transitions, including the transition to adult healthcare. In acute conditions they support children during highly stressful or life-threatening situations caused by illness, injury or psychiatric crises (e.g., panic attacks, suicide attempts, psychosis). They engage in preventive screening and intervention to identify and address potential psychological issues before they escalate. Furthermore, they conduct formal psychological assessments, detect developmental challenges and psychological disorders, give advice for guidance and therapeutic plans and offer counseling and psychotherapy to address these challenges. They employ evidence-based treatments tailored to each child's unique needs. By providing personalized interventions, they help children cope with the emotional burden of their condition and to foster resilience. Their expertise also extends to providing psychoeducation about mental health, development and the psychological aspects of chronic diseases. In addition, pediatric psychologists provide support to the entire family alongside medical and nursing staff.

#### 2. Management of pediatric problems:

Children and adolescents often experience specific pediatric concerns, such as elimination disorders (e.g., enuresis and encopresis), regulatory problems (eating, sleeping, crying), obesity and more. These problems are often approached from a biopsychosocial model, in which the pediatric psychologist identifies and treats the psychological and environmental factors. In addition, pediatric psychologists are frequently involved in the assessment and management of functional somatic complaints, such as insufficiently explained pain, fatigue or other complaints. By addressing underlying emotional, cognitive and behavioral factors, they help children and families cope with these symptoms and improve daily functioning.

#### 3. Management of pediatric discomfort and distress due to medical interventions or procedures:

To help children and their families cope with medical procedures, pediatric psychologists provide developmentally appropriate information that prepares them for what to expect and how

to cope. Procedural preparation serves as a behavioral, non-pharmacological intervention for pain management. Clear communication with both the child and their parents, explaining when, what and how the procedure will occur, reduces parental anxiety, improves the child's experience and increases the likelihood of a successful outcome.

#### 4. Assessment and management of chronic pain and recurrent physical complaints:

By addressing both psychological and physiological factors, pediatric psychologists support children with chronic pain. Working within multidisciplinary teams, they ensure a holistic approach to pain management. Through evidence-based interventions, they help children develop coping strategies, decrease pain-related distress and reduce the impact of chronic pain on daily functioning, such as school absenteeism.

#### 5. Managing treatment adherence:

Pediatric treatment adherence is a multifaceted, behavioral health challenge with critical consequences for treatment efficacy, clinical decision-making, patient outcomes and healthcare costs. Effective intervention strategies used by pediatric psychologists often include educational, behavioral and cognitive approaches. A promising, often used approach is motivational interviewing (MI), which is a collaborative, goal-oriented communication style that focuses on the language of change. It aims to enhance personal motivation and commitment to a specific goal by exploring an individual's own reasons for change within a supportive and compassionate environment (12).

#### 6. Palliative care, end of life care and bereavement:

Palliative care at the end of a child's life focuses on managing a life-threatening condition while supporting the family through the final months. Pediatric psychologists guide families facing diverse life-limiting illnesses. They facilitate open communication between healthcare professionals and families, as well as between parents, the chronically ill child or adolescent and their siblings. They assist in coping with emotional challenges, support decision-making processes, guide advance care planning and provide education and emotional support to both families and medical staff.

#### 7. Multidisciplinary approach and collaboration with partners:

Collaboration with a multidisciplinary team is an essential part of the role of pediatric psychologists. They work to integrate psychological insights into the broader medical treatment plan, ensuring that both physical and mental health are addressed together. Furthermore, pediatric psychologists collaborate with the immediate environment of the child, such as schools and educators to support children's academic and social development. While most children with medical conditions and their families adapt well to abnormal situations, some may experience more significant problems such as neurodevelopmental disorders (e.g. intellectual disability, autism spectrum disorder, ...) and psychopathology (e.g. anxiety, depression, ...), requiring referral and collaboration with a specialized psychologist or child psychiatrist.

#### 8. Indirect clinical care:

Pediatric psychologists contribute not only through direct patient care but also by shaping the broader healthcare system in ways that optimize children's psychological well-being. Through advocacy, they influence hospital policies, ensuring that psychological factors are systematically integrated into pediatric care. By working closely with multidisciplinary teams, they provide a psychological lens to medical treatment, helping other healthcare professionals recognize the psychological impact of illness, hospitalization and medical interventions, equipping them with strategies to support children beyond their immediate medical needs.

## 9. Training and research:

In addition to the clinical aspect, pediatric psychologists are involved in the training of future professionals, offer educational support to medical staff and actively engage in research to advance the field of pediatric psychology. Through close collaboration with universities, they ensure that their clinical practice is grounded in the latest evidence, facilitating the continuous improvement of interventions and patient care strategies.

### Survey: clinical landscape of pediatric psychology in Flanders

#### PARTICIPANTS

Out of 51 hospitals contacted in Flanders, respondents of 25 completed the survey, totaling 79 participants (Table 1). Many of these participants (54%) had over a decade of experience within the pediatric psychology domain, with more than 70% dedicating more than 60% of their working hours to the pediatric field. Approximately 30% of the participants worked in settings with more than 15 psychologists, while 40% worked in settings with fewer than 5 psychologists. This highlights discrepancies in the working environment, with academic hospitals employing significantly more psychologists.

Forty-two participants (53%) expressed that the current number of pediatric psychologists in their respective settings fell short of meeting demand.

#### TRAINING

Seventy-five percent of participants hold a master's degree in clinical psychology/clinical educational psychology with a specialization in children, while 15% have a master's degree in psychology with a specialization in adults. Additionally, 85% have completed advanced postgraduate training in areas such as psychotherapeutic techniques, neuropsychology or infant mental health. Nineteen percent of the participants hold a doctoral degree.

#### TASKS AND COLLABORATIONS

In line with the tasks described above, Figure 1 illustrates participants' responses regarding the frequency of various tasks

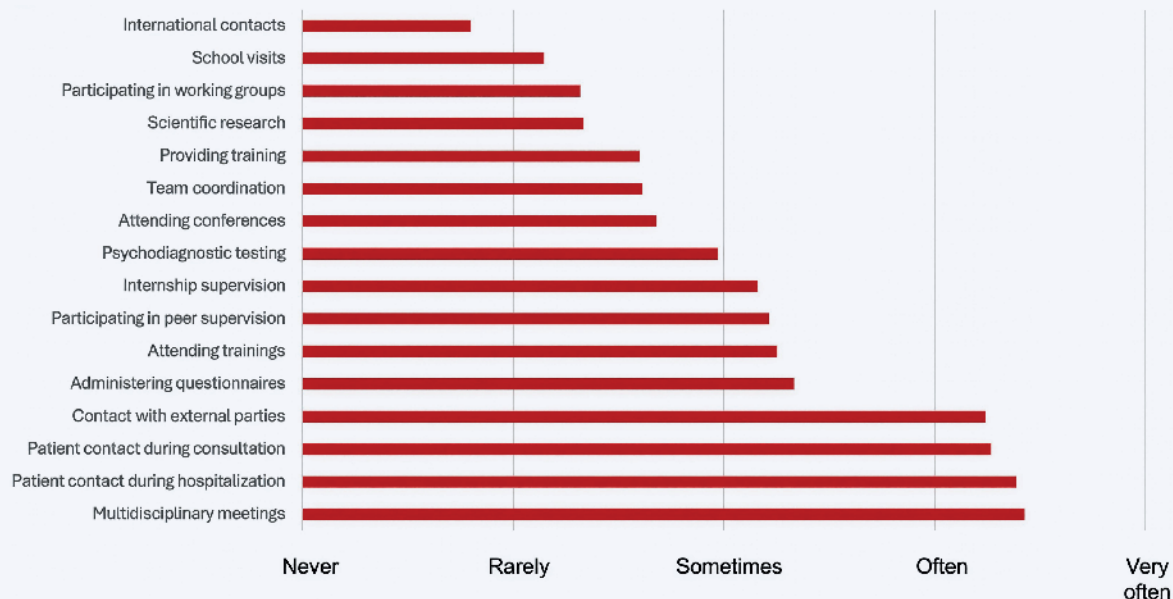
TABLE 1: Demographic and general information

VARIABLE	N
University hospitals	46 (58%)
General hospitals	21 (27%)
<b>Experience in pediatric psychology</b>	
1-5 years	20 (25%)
6-10 years	13 (16%)
11-15 years	17 (22%)
> 15 years	25 (32%)
<b>Current employment rate</b>	
< 50% FTE	10 (13%)
50% FTE	11 (14%)
60-80% FTE	21 (27%)
> 80% FTE	35 (44%)
<b>Number of pediatric psychologists</b>	
1-5	33 (42%)
6-10	7 (9%)
11-15	10 (13%)
15-20	9 (11%)
> 20	16 (20%)

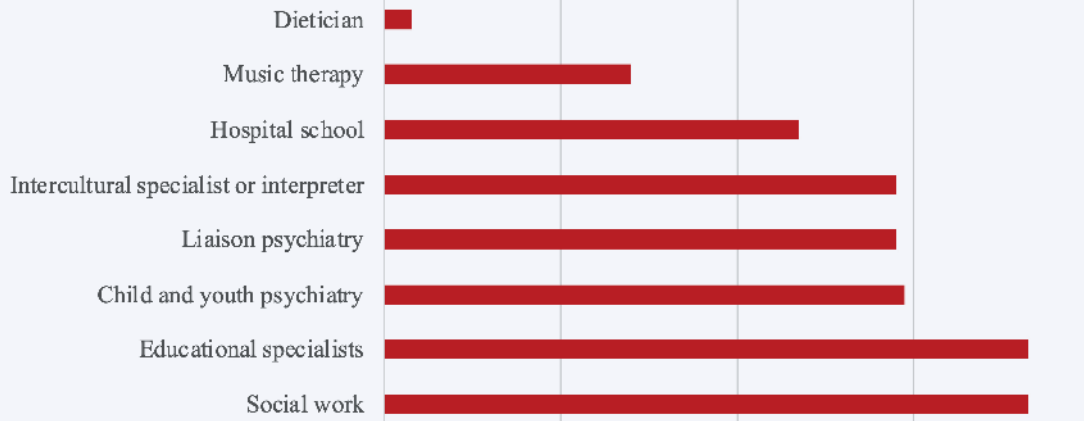
Note. FTE = full time equivalent

they perform. Most pediatric psychologists are predominantly engaged in patient contact and participate in multidisciplinary collaborations within hospitals as well as with external partners. Figure 2 shows the most common internal collaborations, while Figure 3 illustrates the frequency of collaborations with various initiatives within the Flemish (healthcare) landscape.

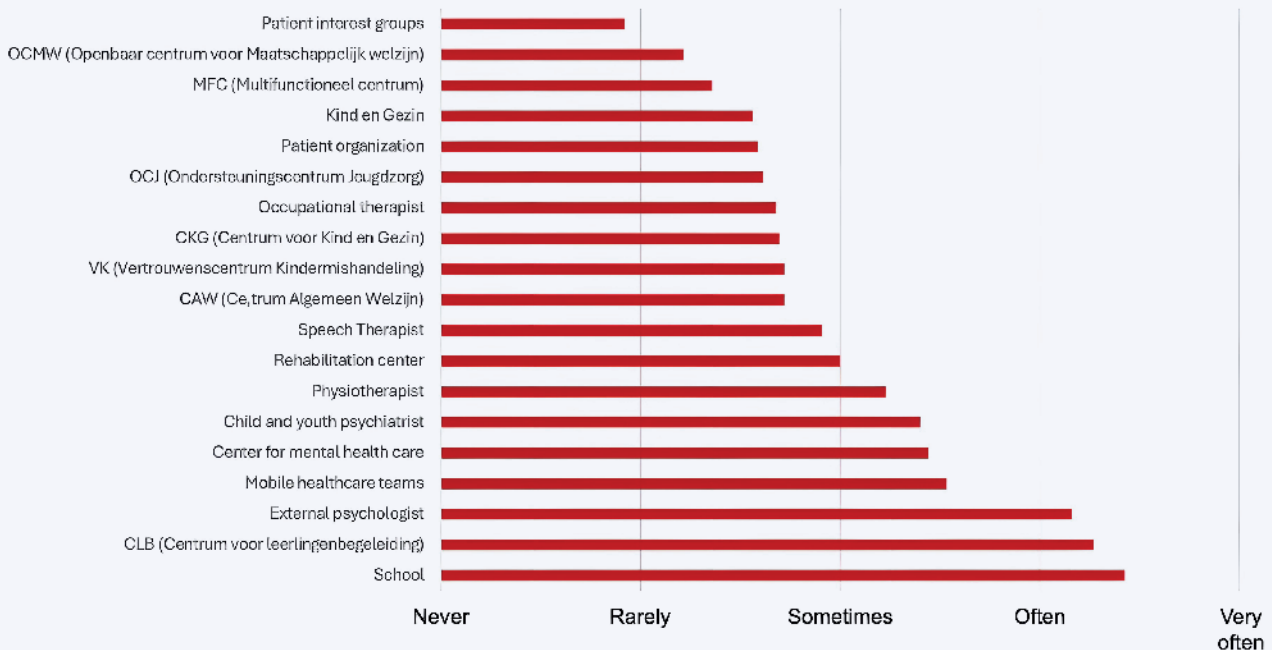
FIGURE 1: Tasks of a pediatric psychologist



**FIGURE 2: Internal collaborations**



**FIGURE 3: External collaborations**



**FINANCES**

Pediatric psychologists in different settings are financed through various sources. In most cases, personnel costs are covered by the hospital (67%), partially through RIZIV-conventions (54%). Less frequently, the position of a pediatric psychologist is funded by revenues from consultations (19%), patient organizations (9%), research grants (6%) or governmental funding (6%). Some psychologists are supported by a combination of these funding sources.

**STATEMENTS**

All participants were asked to indicate their level of agreement with 26 different statements about their work as pediatric psychologists. The average responses for each statement can be found in Figure 4.

**Discussion**

This study illustrates the development of pediatric psychology in Flanders and its current clinical landscape. This field has primarily grown through local initiatives driven by individual hospitals or

pioneers, rather than a coordinated regional or national plan. This decentralized evolution mirrors trends observed in other regions, where psychosocial care has emerged in an ad hoc manner (13). While this grassroots approach offers the flexibility to tailor services to local patient populations, it also results in significant variability in the availability and focus of psychological services across different hospitals (1, 13). The absence of a unified, strategic approach has led to disparities in service provision. Some hospitals have developed robust pediatric psychology services, while others are still in the early stages, highlighting the need for more coordinated efforts and knowledge transfer to ensure equitable access to psychological care for all children with medical conditions, regardless of location.

This uneven development not only affects the availability of services but also manifests in the diverse range of roles and responsibilities pediatric psychologists undertake across hospital settings. These tasks include, but are not limited to, patient-centered activities, team-related duties, and policy-related responsibilities (7, 8, 11, 13). In academic hospitals, professionals often focus on specific target groups and specialized activities such as comprehensive psychological assessments and research initiatives, aligning with literature that highlights the integration of research in clinical settings (14, 15). In contrast, non-academic

**FIGURE 4:** Average responses on statements about working as a pediatric psychologist



hospitals typically assign pediatric psychologists more general roles, addressing acute psychological issues such as panic attacks, suicidal attempts, severe pain or discomfort and psychosomatic complaints. These variations reflect differing hospital social responsibilities, but even among hospitals with similar public health missions, significant differences in resources, practices and needs persist due to the grassroots approach.

Such discrepancies in practices and responsibilities are further complicated by variations in funding and financial frameworks that underpin pediatric psychology services in Flanders (13, 16). RIZIV conventions are predominantly available for a limited set of medical conditions that are mainly treated in university hospitals. As a result, these hospitals can build psychological expertise and capacity, whereas many regional hospitals receive little to no structural funding. This creates systematic inequities and children with non-convention diagnoses do not receive the same opportunities for psychological support, even when their needs are comparable. Such diagnosis-based financing contrasts with international recommendations from the World Health Organization (WHO) and UNICEF, which emphasize an integrated biopsychosocial model of pediatric care and equitable access to psychosocial support irrespective of diagnosis or location (17-19). Although full and uniform implementation remains limited, many high-income countries identify the integration of pediatric psychological care into somatic hospital services as an important policy goal, supported by a substantial evidence base demonstrating benefits for prevention, early identification and equity. Achieving such integrated models largely depends on structural financing decisions and political prioritization rather than a lack of clinical rationale (17, 19-22). Our survey findings indicate that the current Belgian model contributes directly to staffing shortages, inconsistent service availability and the predominance of reactive rather than proactive care models. A more inclusive, diagnosis-independent funding framework is therefore essential to prevent further disparities and to align pediatric care in Flanders with international standards of holistic and equitable child health (13).

Beyond financial challenges, this study also demonstrates the need for formal collaboration between hospitals in Flanders to reduce fragmentation in service delivery. While some informal networks and partnerships exist, there is limited formal coordination among pediatric psychologists across institutions. However, within individual hospitals, there is often good collaboration among pediatric psychologists and other medical professionals, which promotes effective multidisciplinary teamwork and improves patient care. Establishing structured networks across hospitals would positively impact pediatric psychology by fostering consistent standards of care, enabling the sharing of

best practices and supporting collaborative research (13). This coordinated approach would also enhance advocacy efforts for the field, ultimately leading to improved patient outcomes and more efficient use of resources within hospitals. These findings align with observations from other regions, where the absence of structured networks has hindered the sharing of knowledge and the advancement of pediatric psychology through joint learning and research initiatives (13, 14).

Even though many survey participants are highly experienced and well-trained, often holding advanced postgraduate qualifications, there is no official pediatric psychology training within Belgian universities. Ghent University currently includes a dedicated course in medical psychology in its curriculum. At other institutions, related topics are covered more variably, often through locally initiated teaching activities such as guest lectures. These offerings are not yet uniformly or structurally integrated across curricula. As a result, becoming a pediatric psychologist relies mainly on personal expertise-building and individual career choices. Moreover, an officially recognized professional title 'pediatric psychologist' does not exist, even though the term is widely used in clinical practice to distinguish this profile from psychologists working in general mental health care.

As the number of children with chronic medical conditions grows, the lack of formal training poses significant challenges. Not only psychologists working in pediatric hospital departments require specialized knowledge, psychologists in more peripheral or community settings must also understand how pediatric conditions influence child development. The absence of official accreditation further complicates quality assurance within the field.

The existing expertise across various clinical and research settings could serve as a foundation to address this substantial gap in specialized training at the master's level in Flemish universities. Expanding the availability of pediatric psychology courses and integrating this specialty more systematically into university curricula would better prepare future professionals for the unique challenges of working with pediatric populations (23). This aligns with literature emphasizing the need for pediatric-focused training and targeted professional development opportunities within standard graduate psychology programs (13, 14).

In parallel with the need for improved training, a shift in perspective regarding the role of pediatric psychologists would benefit care for patients. A traditional perspective assumes that psychologists are only needed when psychological problems arise. However, a more effective and integrated approach within pediatric healthcare is the proactive service model, in which psychologists are an integral part of the medical team rather than being consulted only upon

request (8, 13, 16). This approach, successfully implemented in several pediatric departments since the 1980s, acknowledges that medical situations inherently pose cognitive, emotional and social challenges for children and families. By embedding psychologists into the daily workflow of medical teams by accompanying rounds, engaging with families proactively, being visibly present and more, psychological support becomes more accessible and less stigmatized. It lowers the threshold for seeking help and fosters prevention and early intervention, ensuring that all families benefit from psychological care. While practical and financial constraints currently challenge the feasibility of this model, it remains a crucial ideal for optimizing holistic pediatric care and addressing the psychosocial impact of medical conditions in a more inclusive and preventative manner.

Beyond their clinical and educational roles, pediatric psychologists in Flanders are also key advocates for their patients, working across multiple domains to ensure comprehensive care. Their advocacy work includes collaborating with multidisciplinary teams, schools and community services to ensure that children with psychological or developmental needs receive appropriate accommodations. By working with healthcare providers, educators and social services, pediatric psychologists play an essential role in providing indirect psychological care that supports the overall well-being of the child. This aligns with findings that emphasize the importance of advocating for patients' needs across various life domains (15, 24). Belgian research further emphasizes that advocacy for a child-friendly healthcare environment is an important component of pediatric psychological care, underscoring the need for clear policy frameworks to support these efforts (13).

Finally, it is evident from the survey responses that pediatric psychologists in Flanders feel valued and appreciated by their medical teams and colleagues. This mirrors findings from previous studies where pediatric psychologists reported satisfaction with their multidisciplinary collaborations but also noted the need for more formal recognition and support (13). The effectiveness of pediatric psychologists depends on close collaboration with a multidisciplinary team, integrating the expertise of medical, paramedical and socio-psychological professionals. Despite facing challenges, they have established themselves as essential members of pediatric care teams. To sustain and further develop their role, however, current limitations in funding, training and infrastructure need to be addressed. Future policy directions should focus on creating a more inclusive financial model, enhancing specialized training opportunities and fostering a culture of collaboration and mutual recognition within and between institutions to ensure the continued growth and effectiveness of pediatric psychology in Flanders.

Several limitations should be considered when interpreting the findings of this study. First, the survey relied on self-reported data, which may be subject to recall bias or social desirability bias. The survey was not psychometrically validated, limiting the ability to assess the reliability and validity of the responses. Second, the informal interviews were conducted in an unstructured manner, which may have introduced variability in the information collected and limited comparability across participants. Additionally, all hospitals involved and surveyed were in Flanders and results may not be generalizable to pediatric psychologists working in other regions, private practices, or ambulatory care settings. Finally, since no patients were included in this study, no formal medical ethics committee approval was sought for this study, which may pose a limitation regarding oversight and regulatory compliance.

## Conclusion

Pediatric psychology in Flanders has developed into a vital component of pediatric care, yet its growth has been uneven

and largely unstructured. Differences in roles, resources and funding, combined with the absence of formal training pathways or accreditation, limit consistency and equitable access to psychological care for children and families. Strengthening inter-hospital collaboration, integrating pediatric psychology into university curricula and moving toward more proactive, embedded care models are essential to support the further professionalization of the field. Addressing these gaps will help ensure that all pediatric patients receive high-quality, evidence-based psychosocial support.

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## Attachment

Attachment 1 is available in the digital version of the article, available on the Belgian Journal of Paediatrics website ( <https://www.belgjpaediatrics.com> ) or via Google Scholar.

### REFERENCES

1. Aylward BS, Lee J. Historical Developments and Trends in Pediatric Psychology. In: Roberts MC, Steele R, editors. Handbook of Pediatric Psychology. New York, USA: Guilford Press; 2018. p. 3-13.
2. Society\_of\_Pediatric\_Psychology. Washington, USA: American Psychological Association.; 2025 [cited 2025 Nov 24]. Available from: <https://www.apa.org/about/division/div54>.
3. Witmer L. Clinical Psychology. Psychol Clin. 1907;1(1):1-9.
4. Kagan J. The New Marriage: Pediatrics and Psychology. Am J Dis Child. 1965;110:272-8.
5. Wright L. The pediatric psychologist: a role model. Am Psychol. 1967;22(4):323-5.
6. Routh DK. Clinical psychology since 1917: Science, practice and organization: Springer Science & Business Media; 1994.
7. Roberts MC, Steele RG. Handbook of Pediatric Psychology. 5th ed. New York, USA: Guilford Press; 2009.
8. Van Broeck N, Van Rillaer J. L'accompagnement psychologique des enfants malades: Odile Jacob; 2012.
9. Kazak AE, Scialla M, Deatrick JA, Barakat LP. Pediatric psychosocial preventative health model: Achieving equitable psychosocial care for children and families. Fam Syst Health. 2024;42(1):76-89.
10. Van Broeck N, Vierstraete T, Benoit Y, Laureys G. Un étranger parmi nous: Le psychologue dans un service d'hémo-oncologie pédiatrique: Protocole psychologique. Neuropsychiatrie de l'enfance et de l'adolescence. 1996;44(6-7):295-308.
11. Van Broeck N. Behandeling van zieke kinderen: Bohn Stafleu Van Loghum; 1993.
12. Miller WR, Rollnick S. Motivational interviewing: Helping people change. New York, USA: Guilford press; 2012.
13. Vermeylen C, Van Hauthem H, Evrard J, Petry K, Raes M, Alliet P, et al. Psychopedagogische ondersteuning op de afdeling kinder-en jeugdgeneseskunde in algemene ziekenhuizen in België: Stand van zaken en beleidsopties. Tijdschrift voor Geneeskunde. 2018;74(18):1219-25.

14. Palermo TM, Janicke DM, McQuaid EL, Mullins LL, Robins PM, Wu YP. Recommendations for training in pediatric psychology: defining core competencies across training levels. *J Pediatr Psychol.* 2014;39(9):965-84.
15. Kazak AE, Schneider S, Didonato S, Pai AL. Family psychosocial risk screening guided by the Pediatric Psychosocial Preventative Health Model (PPPHM) using the Psychosocial Assessment Tool (PAT). *Acta Oncol.* 2015;54(5):574-80.
16. Spruyt R, Indekeu A, Swysen K, Raes M. Geestelijke gezondheidswerkers op een kindergeneeskundige afdeling: geen overbodige luxe. [Mental health workers on a paediatric ward: no superfluous luxury]. *Tijdschrift voor Geneeskunde.* 2008;64(1):1-6.
17. WHO. Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential. Geneva, Switzerland: World Health Organization, United Nations Children's Fund, World Bank Group; 2018 [cited 2025 Nov 24]. Available from: <https://iris.who.int/server/api/core/bitstreams/4d4a2e78-c587-408f-81e3-7ab2614d66f6/content>.
18. WHO. Guidelines on mental health promotive and preventive interventions for adolescents. Geneva, Switzerland: World Health Organization; 2020 [cited 2025 Nov 24]. Available from: <https://www.who.int/publications/i/item/guidelines-on-mental-health-promotive-and-preventive-interventions-for-adolescents>.
19. UNICEF. Mental Health and Psychosocial Support (MHPSS) Framework. New York, USA: United Nations Children's Fund; 2021 [cited 2025 Nov 24]. Available from: <https://www.unicef.org/eap/what-we-do/mental-health-and-psychosocial-support>.
20. Fazel M, Townsend A, Stewart H, Pao M, Paz I, Walker J, et al. Integrated care to address child and adolescent health in the 21st century: A clinical review. *JCPP Adv.* 2021;1(4):e12045.
21. WHO. Unknown [
22. Marshall KH, Pincus HA, Tesson S, Lingam R, Woolfenden SR, Kasparian NA. Integrated psychological care in pediatric hospital settings for children with complex chronic illness and their families: a systematic review. *Psychol Health.* 2024;39(4):452-78.
23. Drotar D. Training in pediatric psychology--current perspectives and future opportunities: introduction to the special section. *J Pediatr Psychol.* 2012;37(2):121-6.
24. Varni JW, Burwinkle TM, Lane MM. Health-related quality of life measurement in pediatric clinical practice: an appraisal and precept for future research and application. *Health Qual Life Outcomes.* 2005;3:34.