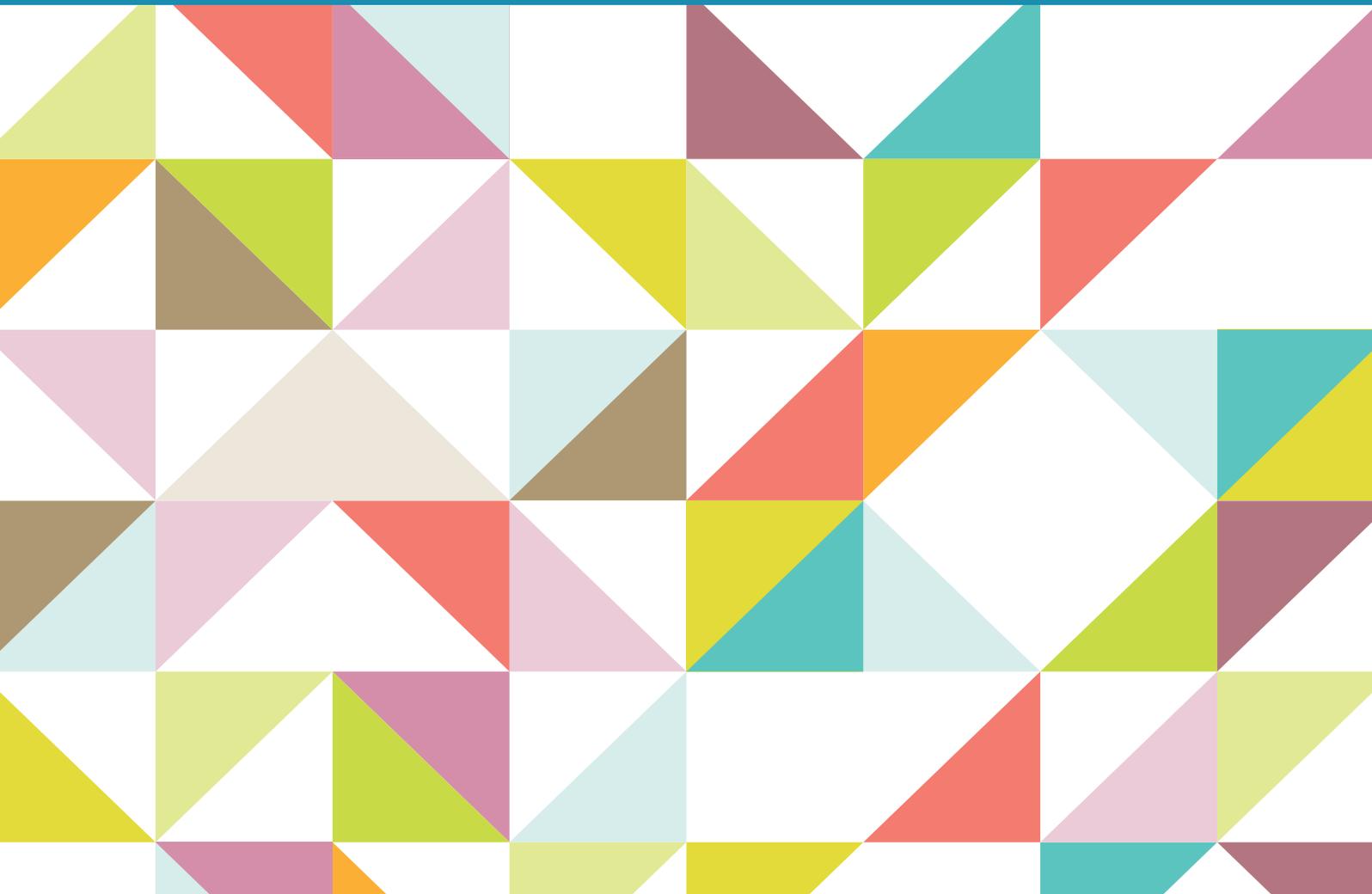




PSYCHOLOGISTS AT WORK IN BELGIUM

A national study into the
field of work of School and Educational Psychology

Research report



AUTHORS

Jantine L. Spilt*

Sofie Wouters*

Mariane Frenay**

Hilde Colpin*

* Faculty of Psychology and Educational Sciences, KU Leuven – University of Leuven

** Faculty of Psychology and Educational Sciences, UCLouvain – Université catholique de Louvain

Contact: jantine.spilt@kuleuven.be

All rights reserved. Please cite this report as: Spilt, J. L., Wouters, S., Frenay, M., & Colpin, H. (2021). Psychologists at work in Belgium: A national study into the field of work of School and Educational Psychology. Leuven: KU Leuven.

CONTENTS

PREFACE	5
ABSTRACT	7
CHAPTER 1: INTRODUCTION	9
1 Background	10
2 Aims of the research project	12
3 General approach of the study	15
CHAPTER 2: METHOD	17
1 Recruitment, sample selection and description	18
2 Recruitment and procedure	19
3 Instruments	20
CHAPTER 3: RESULTS	23
1 Education and specialization	24
2 Salaried and self-employed jobs	27
3 Professional roles and practices	34
4 Perceived competency of the workforce	49
5 Perceived challenges	72
6 Continuing professional development (CPD)	76
7 Professional registration and ethics	84
CHAPTER 4: DISCUSSION	89
1 Introduction	90
2 Summary of results	91
3 Summary of main differences between language communities	96
4 Summary of main differences between psychologists versus pedagogists	98
5 Research highlights and recommendations	99

ACKNOWLEDGEMENTS	103
REFERENCES	105
APPENDICES	107
Appendix 1: Supplementary results	108
Appendix 2: Psychological well-being and needs of children and youth in the Flemish and French Communities	110
Appendix 3: Project team & research partners	113

PREFACE

This research report is a synthesis of a national study on the work field of school and educational psychology in Belgium. The report describes the main characteristics, professional tasks, and competencies of the workforce. It also maps the needs and challenges that school and educational psychologists are facing and how psychologists in the work field employ professional development activities in response to these needs and challenges.

The research was conceived in 2017 when the Commission of Psychologists¹ launched a call for research into mental health care provided by (clinical) psychologists in Belgium. One main reason for this research call was the new law on mental health provision. The law on the practicing of health care professions (LHCP, 2015)² covers the mental health professions clinical psychologist (article 68/1), clinical orthopedagogue³ (article 68/2), and psychotherapy practitioner (article 68/2/1). This law regulates the quality, access, and reimbursement of psychological and orthopedagogical care in Belgium. To understand implications of the law, research was needed that would increase understanding of both the need of and provision of health care by psychologists.

In the same period, an Interuniversity Consortium was formed in response to the new law. The Interuniversity Consortium consists of representatives of Belgian universities who are responsible for the academic master programs in clinical psychology, educational sciences, and school psychology⁴. The Consortium is centrally concerned with the implications of the new law in terms of policy as well as education and training of future clinical psychologists, (ortho)pedagogists⁵, school psychologists, and psychotherapists. The Consortium aims to bring academic master programs in clinical and school psychology and educational sciences in line with the new law, and has developed policy papers concerning the implications of the new law on the proposed second year-long clinical internship, psychotherapy training, etc. Prompted by these developments in legislation and in response to the research call of the Belgian Commission of Psychologists, the Interuniversity Consortium has joined forces with the Commission of Psychologists to carry out a national survey study among psychologists and pedagogists in Belgium⁶.

1 The Commission of Psychologists is an independent federal government body with responsibility for all psychologists in Belgium (i.e., regulating the use of the title of psychologist and providing a professional code of ethics for psychologists).

2 In Dutch 'de wet over de uitoefening van de gezondheidszorgberoepen - WUG' or in French 'La loi sur l'exercice des professions de soins de santé'.

3 The law in Belgium defines the practice of orthopedagogy as the usual performance, within a scientific reference framework for special needs education, of independent actions that aim to prevent, review and screen educational, behavioural, development or learning problems in people and the care or support of such people. https://kce.fgov.be/sites/default/files/atoms/files/KCE_265_Psychotherapy_Report.pdf. For analyses of the field of work of orthopedagogues, see Noens et al. (in prep.).

4 Universiteit Gent, Vrije Universiteit Brussel, Université libre de Bruxelles, KU Leuven, Université catholique de Louvain, Université de Mons, and Université de Liège.

5 In Belgium, (ortho)pedagogists are (remedial) educationalists with a master's degree in Educational Sciences. As in the Netherlands, the profession of pedagogist ('pedagoog') is considered an academic discipline in its own right.

6 <http://ppatworkinbelgium.be>

The research call of the Commission of Psychologists covered two themes. The first theme, “Care need and provision in clinical psychology” concerned both the need and provision of psychological health care across the Belgian population in the different language communities (Luyten & Jeannin, 2021). The second theme, “Work field of school- and educational psychology” concerned the characteristics of the workforce of psychologists in the educational domain across different communities. Because of differences in study aims, two separate research projects were developed and the results of these twin projects are presented in separate research reports. The present report addresses the second theme “Work field of school- and educational psychology” and is primarily concerned with the description of the workforce of psychologists in the educational domain, including its employment settings, tasks, competencies, professional development, and perceived challenges.

The project team concerned with this second theme was directed by prof. dr. Spilt and prof. dr. Colpin who are chair and former chair respectively of the master program school psychology of the KU Leuven. The project team was guided by a steering committee consisting of representatives from different universities and professional organizations in the work field across language communities⁷.

7 See Acknowledgements and Appendix 3.

ABSTRACT

This report is a synthesis of a national study into the work field of school and educational psychology. Basic but essential questions were asked: who is working in the field, what are they doing, how competent are they, which challenges do they face, and how are they engaged in professional development? In addition, it was examined how many psychologists in the work field are registered by the Commission of Psychologists and are acquainted with the Code of Ethics for Psychologists.

Respondents were professionals in the domain of psychology and educational sciences who completed an online survey. A total of 939 professionals were identified as employed in the work field of school and educational psychology, which was 16% of the total sample⁸.

The results provide an overview of the educational level, employment settings, tasks, expertise, and challenges in the field. The results indicate that school and educational psychologists are generalists with a primary focus on the delivery of (preventive) first-line care (e.g., through prevention, assessment, counseling, and guidance) and a function as gatekeeper to second-line care (e.g., through diagnostics). Consistent with bioecological models of development, they provide their services both at the level of the individual (student) and at the system level (parents, teachers, and schools). Five focus areas for improvement were identified: cultural responsiveness, professional identity, scientist-practitioner skills, continuing professional development, and recognition of the position of psychologists in regular schools.

⁸ For analyses of the total sample, see the report of Luyten & Jeannin (2021). For analyses of the field of work of orthopedagogues, see Noens et al. (in prep.).

CHAPTER 1: INTRODUCTION

1 Background

Psychological (health) services in the educational context

The majority of Belgian young people are happy or even very happy with their life (HBSC, 2014). However, children today are living in an increasingly complex and rapidly changing society. Cultural diversity and the digitization of society are among the most challenging issues of today. Perhaps related to those changes, we observe alarming signs of increases in psychosomatic and psychological problems including for example emotional problems and sleep problems (Gisle, 2014). Prescription of antipsychotic medication for children and youth has also shown a steep increase in Belgium (Deboosere, Steyaert, & Danckaerts, 2017). Recent results of a national survey indicated that roughly 10% of the Belgian children has clinical levels and another 10% subclinical levels of behavioral, emotional, or social problems (Gisle et al., 2020).

These numbers signal an increased need for mental health support and psychological care⁹. However, not all children in need of psychological health support receive the services they need or receive the necessary services in time.

Easy access or entrance to mental health care implies that the care is general and non-stigmatizing, accessible for everyone (without prescription or diagnostic report), and without financial and geographical barriers (Kohn et al., 2016). Schools¹⁰ are key settings for providing first-line care that is easy accessible for children and adolescents and their parents (Kohn et al., 2016; Sheridan & Gutkin, 2000; WHO, 2003). First, early mental health problems often come to light at school, even if they already existed before or extend beyond the educational setting. Second, through schools, all children and adolescents can be reached, including those not easily reached by the (mental) health care system like ethnic minority groups. Third, the quality of the educational context itself directly impacts the learning and psychological well-being of children and can have a life-long impact on happiness and success in adulthood (e.g., Sheridan & Gutkin, 2000). For these reasons, the World Health Organization (2003) states that “school settings are the most effective agencies for promoting mental capacity of young people”.

Psychologists in educational contexts do not only support the mental health of students. Their services are much broader. They have a broad expertise in development and learning in educational contexts and are expected to guide and support development across four main domains, including: learning and cognitive development, psychosocial and behavioural development, school career and career choice processes, and health, physical and sexual development (Struyf, Verschueren, Vervoort, & Nijs, 2015). In addition, they provide services to families, teachers, and schools that indirectly benefit the student’s development. Importantly, psychologists in educational contexts do not only focus on problems in those domains but also on the reinforcement of positive development.

The importance of psychologists in educational contexts and the need to strengthen the provision of (first-line) care through school psychology services are increasingly recognized in Belgium. Driven by new legislation, there have been substantial changes in the organization of school psychology services (e.g., in the French Community: Lois/décrets relatifs à l’aide à la jeunesse, Le décret sur les élèves à besoins spécifiques 2017; in the Flemish Community: Integrale Jeugdhulp 2015, M-decreet

⁹ See appendix 2 for an overview of research reports that report on the psychological wellbeing and needs of children and youth in the French and Flemish Community.

¹⁰ For an analysis of the educational context of Belgium, see e.g., the Education Policy Outlook Belgium by the OECD: <http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Belgium.pdf>

2015, Decreet leerlingenbegeleiding 2018; in the German-speaking Community: Kaleido-Ostbelgien 2014, M-Dekret 2014). In further recognition of schools as key contexts for the delivery of easy accessible (first-line) services, the current project was conceived to examine the work of psychologists in educational contexts.

School and educational psychologists

There are several, largely overlapping definitions of the profession of school and educational psychology that emphasize the breadth of psychological services provided by psychologists in educational contexts. According to the International School Psychology Association (ISPA), school or educational psychologists are “professionals prepared in psychology and education and who are recognized as specialists in the provision of psychological services to children and youth within the contexts of schools, families, and other settings that impact their growth and development”¹¹. The National Association of School Psychologists (NASP) in the United States of America employs a more detailed but highly comparable definition: “School psychologists are uniquely qualified members of school teams that support students’ ability to learn and teachers’ ability to teach. They apply expertise in mental health, learning, and behavior, to help children and youth succeed academically, socially, behaviorally, and emotionally. School and educational psychologists partner with families, teachers, school administrators, and other professionals to create safe, healthy, and supportive learning environments that strengthen connections between home, school, and the community.”^{12,13}. Finally, the American Psychological Association (APA) uses the following definition: “School psychology is a general practice and health service provider specialty of professional psychology that is concerned with the science and practice of psychology with children, youth, families; learners of all ages; and the schooling process. The basic education and training of school psychologists prepares them to provide a range of psychological diagnosis, assessment, intervention, prevention, health promotion, and program development and evaluation services with a special focus on the developmental processes of children and youth within the context of schools, families and other systems. School psychologists are prepared to intervene at the individual and system level, and develop, implement, and evaluate preventive programs.”¹⁴

To summarize, these definitions describe school and educational psychologists as generalists who provide psychological care services to students and their primary environment (parents, teachers, schools) to promote the development of students in its broadest sense.

11 <https://www.ispaweb.org/a-definition-of-schoolpsychology/>

12 <https://www.nasponline.org/about-school-psychology/who-are-school-psychologists>

13 Inspired by definitions of the ISPA and the NASP, the VVSP defines school and educational psychologists as: “Schoolpsychologen zijn gedragswetenschappers werkzaam in diverse educatieve settings. Het doel van hun psychologisch handelen is de psychosociale ontwikkeling, het leren en de onderwijsloopbaan van kinderen en jongeren te ondersteunen en te bevorderen. Dit gebeurt door preventie en educatie, diagnostiek, directe en indirecte interventies. Schoolpsychologen werken samen met jongeren, ouders, school en de bredere hulpverleningscontext om deze doelen te bereiken.” <http://schoolpsychologie-vvsp.be/vvsp/wp-content/uploads/2018/01/Profiel-van-de-schoolpsycholoog.pdf>

14 <https://www.apa.org/ed/graduate/specialize/school>

2 Aims of the research project

The research project was part of a large national study on the work of mental health care providers with an academic degree in the domain of the psychology and educational sciences in Belgium. Additional to the larger project, the current study had an explicit focus on the work field of school and educational psychology. Although the entire work field was subject of research (including professionals from different disciplines like pedagogists), there was a special interest in the professionals with an academic master's in psychology.

Who is working in the field of educational and school psychology?

Student¹⁵ care and student guidance is not a profession that is linked to specific educational requirements or diplomas. Professionals from different academic disciplines (i.e., psychology, educational sciences) and with different majors (e.g., school and educational psychology, clinical psychology, ...) are employed in the work field. We therefore examined a) the percentages of psychologists and (ortho)pedagogists¹⁶ active in the field, as well as b) the specialized master's programs of psychologists including postmaster education. Many psychologists working in educational settings may have no specific specialization in school and educational psychology but may have a degree in clinical psychology. School and educational psychologists who have had specialized training may have completed a specialization in learning and development (e.g., psychologie de l'éducation, du développement et de l'apprentissage, UCLouvain) or may have completed a full master program in school psychology (KU Leuven). Irrespective of specialization or type of major within psychology, we refer to psychologists in the work field of school and educational psychologists as school and educational psychologists (unless specified otherwise).

Study aims

The study aims to advance insight in the work field of school and educational psychology by asking basic but essential questions: who is working in the field, what are they doing, how competent are they, which challenges do they face, and how are they engaged in continuing professional development. In addition, we also examined how many psychologists in the work field are registered by the Commission of Psychologists and comply with the Code of Ethics for Psychologists.

What are the main job characteristics and tasks of professionals in the work field of school and educational psychology?

Description of job characteristics and settings

We aimed to provide a description of the job characteristics of professionals in the work field of educational and school psychology. We provide an overview of the number of jobs, work settings, work hours, employment types and function titles in the field. We were also explicitly interested in the provision of student care and guidance in private practices (cf. Bodvin et al. 2017) and we therefore assessed salaried and self-employed jobs separately.

15 With students, we refer to (young) children, adolescents, and (young) adults enrolled in education or training

16 In Belgium, orthopedagogy or remedial education is mainly a master specialization within educational sciences (or in the Master of Psychology, as in UCLouvain since 20 years). The profession of orthopedagogy focuses on educational, learning, and development disabilities, and disorders in the context of (special needs) education and care.

Professional tasks and activities

We further aimed to describe the professional tasks, roles, and activities of school psychologists. Although the main task is the (direct or indirect) provision of care to (groups of) students and their environment (e.g., teachers, parents, ...), we also examined the practicing of other tasks including for example management, supervision, administration, governance, training and education, and research and policy.

For a more detailed examination of the care provided to individuals (and their environment), we assessed four specific domains of practice or core tasks that are typically included in profiles of school psychologists, including: prevention, diagnostic assessment, counseling/coaching, and treatment/therapy (Gutkin & Reynolds, 2009). In addition, we examined the focus of care across four developmental domains, including learning and cognitive development, psychosocial development, school career and career choice processes, and health, physical and sexual development.

Finally, we aimed to identify the targeted population including developmental stage (children, adolescents, adults, ...) and diversity (SES, disability, immigration, ...).

How competent are professionals in the work field of school and educational psychology?

To be successful in all the above-mentioned tasks and domains of care, different roles or competency areas have been identified and are expected from professionals. Most professional organizations distinguish between 7 areas or roles inspired on the CanMEDS framework (Royal College of Physicians and Surgeons of Canada, 2011). These roles include: Expert, Communicator, Collaborator, Organizer, Mental Health Advocate, Scientist-practitioner, and Professional^{17,18}. In this study, we examined perceived competency for each role using multiple items per role to assess sub-competencies. We also assessed the perceived importance of the (sub)competencies.

What challenges are professionals in the work field of school and educational psychology facing?

We aimed to identify the perceived challenges in the work field of School and Educational Psychology. We assessed structural challenges (work pressure, wait lists, ...), societal challenges (migration, diversity, special educational needs, ...) and themes (professional liability, legal position of minors, ...). We also examined concerns about new legislation and decrees. For example, given the growing diversity in disabilities and special educational needs in regular schools and growing cultural diversity due to global migration, we may expect an increased concern regarding special educational needs of the population and regarding refugee status or radicalization of (religious) ideas and extremism. Having identified challenges and competency needs, the next step is to examine how these needs can be met through professional development activities.

17 <https://ispa2016.org/images/ISPA-School-Psych-Skills-Model.pdf>

18 http://schoolpsychologie-vvsp.be/vvsp/?page_id=49

How are the professionals in the work field of school and educational psychology engaged in continuing professional development?

Acquiring and updating expertise in an ever-changing field like School and Educational Psychology is a lifelong endeavor. According to the Belgian ethical code for psychologists, a Belgian psychologist is obliged to keep up the highest level of professional competencies¹⁹. The EuroPsy²⁰ too emphasizes that professional development is a responsibility of the registered psychologist: A minimum of 40 hours of continuing professional development (CPD) per year is required, although a minimum of 80 hours is recommended. This is more than what the US-National Association of School Psychologists (NASP; 2010) expects from school psychologists, stipulating 75 hours of CPD every 3 years. In the French Community, psychologists employed at the pupil guidance centers²¹ are afforded a maximum of 10 days of training per year of which 3 days are compulsory²². In the Flemish Community, also a maximum of 10 days (for full-time employees) is afforded.

We aimed to provide a description of CPD in the field. We asked about both self-education and attendance of organized CPD activities, including time devoted to CPD, content of CPD, and format of CPD activities. Finally, we asked questions about membership of professional organizations that are expected to play an important role in the continuous professionalization of the workforce.

The overarching goal is to understand how both personal and public (employer) responsibility for CPD can be promoted, and how CPD needs to be adjusted to match the interests and challenges in the field to ensure accessibility and efficacy of CPD.

Are professionals in the work field of School and Educational Psychology registered at the Commission of Psychologist and do they adhere to the Code of Ethics?

The title 'Psychologist' is protected by law in Belgium²³. Hence, only psychologists who are registered by the Belgian Commission of Psychologists²⁴ may use this title. We therefore asked respondents with a master's in psychology whether they were registered and examined reasons for not registering.

In addition, we aimed to examine the respondents' compliance with the Code of Ethics for Psychologists²⁵. This Code is connected to the title of psychologist and not to a specific work field or function. Psychologists are legally obliged to adhere to the Code. We assessed whether the workforce was acquainted with the Code, adhered the Code, and we inquired reasons for (not) adhering to the Code. We also examined other ethical codes that are used in the field.

19 https://www.compsy.be/assets/images/uploads/deontologische_code_nl_2018.pdf

20 the European qualification standard for psychologists across Europe developed by the European Federation of Psychologists' Associations, EFPA: <http://www.europsy-efpa.eu/>

21 Centrum voor Leerlingenbegeleiding in Flemish Community, centre Psycho-Médico-Social in the French Community, Kaleido Zentrum für die gesunde Entwicklung von Kindern und Jugendlichen in der Deutschsprachigen Gemeinschaft in the German-speaking Community

22 art. 8 et art.9 du Décret 11/07/2002 « Décret relatif à la formation en cours de carrière dans l'enseignement spécialisé, l'enseignement secondaire ordinaire et les centres psycho-médico-sociaux et à la création d'un institut de la formation en cours de carrière »

23 The Act of 8 November 1993 for the protection of the title of psychologist (BS 31-05-1994) regulates the title of psychologist. It assigns the Belgian Commission of Psychologists to keep up to date the official list of registered psychologists in Belgium (Art. 2-8). <https://www.compsy.be/en/title-psychologist>

24 <https://www.compsy.be/en/>

25 www.compsy.be/en/read-entire-code-ethics

3 General approach of the study

To address the research questions outlined above, a survey was constructed aimed at individuals with an academic master in the domain of psychology and educational sciences. To identify the respondents working in the work field of school and educational psychology, we asked respondents whether their job activities were (fully or partially) focused on student care and/or the study or career guidance of students. With student, we refer to (young) children, adolescents, and (young) adults enrolled in education or training.

Study participants

Respondents employed job activities that were (fully or partially) focused on student care and/or the study or career guidance of students.

Being identified as employed in the work field, we asked respondents different blocks of questions with respect to demographics, education, current job activities, competencies, challenges, and life-long learning or CPD. In the assessment of job activities, we inquired for respondents' main job. With 'main job' we refer to the job that respondents spend most of their time on. Finally, we asked questions about the Belgian Commission of Psychologists and the Code of Ethics for Psychologists. The questionnaire is available upon request.

The study focused on professionals with an academic master's degree in psychology. Although a 5-year university training is required to be recognized as a psychologist by the Commission of Psychologists, the survey is constructed in such a way that it can be completed by professional bachelors²⁶ as well. In practice, school and educational psychology services are delivered by professionals with a bachelor's degree as well (e.g., a bachelor in applied psychology). For example, in the pupil guidance centers (CLB/CPMS/Kaleido²⁷), it is not required to have an academic master's degree: bachelors and masters perform similar professional tasks. In addition, in the Flemish Community, professional bachelors can become associate members of the Flemish Association of School Psychology (VVSP). Thus, although the recruitment procedure was primarily directed at academic masters, professional bachelors were not excluded beforehand.

To grasp the diversity in the work field, we conducted between group analyses²⁸. We investigated differences in job settings, activities and competencies based on academic disciplines (psychologists versus pedagogists). We also investigated different job contents and challenges based on employment status (salaried or self-employed), employment settings (pupil guidance centers, primary and secondary education, and higher education), and urban versus suburban areas (e.g., higher concerns about migration and radicalization of (religious) ideas, and a stronger need for cultural competencies in urban areas). Last but not least, we investigated differences between the language communities (Flemish, French, and German²⁹) because education is primarily regulated by the governments of the language communities (e.g., in the French Community, the domain of health, physical and sexual development receives more attention in CPMS).

26 In Belgium, there is distinction between a professional bachelor programme and an academic bachelor programme. An academic bachelor programme is offered at a university, focuses on broad academic education, and prepares the student for a master's programme. Professional bachelor programmes are offered at a university college and are aimed at practicing the profession.

27 Centrum voor Leerlingenbegeleiding in Flemish Community, centre Psycho-Médico-Social in the French Community, Kaleido Zentrum für die gesunde Entwicklung von Kindern und Jugendlichen in der Deutschsprachigen Gemeinschaft in the German-speaking Community

28 We would like to emphasize that not all analyses are reported and some analyses are described only briefly in order not to overload the reader with too much details. All analyses as well as details about the analyses are available upon request.

29 With respect to differences between language communities, there were too little German-speaking respondents to allow for separate analyses.

CHAPTER 2: METHOD

1 Recruitment, sample selection and description

Recruitment of respondents

The study was presented as a large-scale national study about the professional profile of psychologists and educationalists in Belgium (see www.ppatworkinbelgium.be). The recruitment procedure was primarily directed at professionals with an academic master degree but, as explained above, professional bachelors were not excluded beforehand.

Potential participants were recruited via the Commission of Psychologists, the alumni databases of students graduated at a faculty of Psychology and Educational Sciences of a Belgian university (irrespective of academic discipline), professional associations (including associations under the umbrella of the Belgian Federation of Psychologists (BFP-FBP)), and network organizations (e.g., networks of mental healthcare organizations, networks of schools and pupil guidance centers). Participants were also recruited via mailing lists, websites, magazines, and personal networks. Participants could participate irrespective of employment status (e.g., employed, unemployment), location of education (degree obtained in Belgium or abroad), or whether or not their current employment focused on improving (mental) health or wellbeing.

Sample selection

A total of 5829 respondents completed the online survey³⁰. To select participants working in the work field of school- and educational psychology, respondents were selected based on two criteria: 1) working in the educational sector, and additionally 2) job responsibilities focused (fully or partially) on the care for students and/or the study or career guidance of students. This resulted in a subsample of 939 participants, which is 16% of the total sample. Of these 939 participants, 899 participants' main jobs met the two inclusion criteria and were included in the analyses of main jobs (see Figure 2 for more details). Complete data were available for 81% of the 939 participants.

Sample characteristics

Most participants were female (90%; 10% male respondents) and between the age of 30 and 39 years (Figure 1; $M = 39$ years, $SD = 10$ years, range = 23-74 years³¹). Most participants were born in Belgium ($n = 908$; 96.7%), 2.3% ($n = 22$) were born in Europe, 0.5% ($n = 5$) were born in Africa, 0.3% ($n = 3$) were born in Asia, and 0.1% ($n = 1$) was born in North America. Likewise, most participants were Dutch speaking (73%; $n = 684$), 26% ($n = 245$) were French speaking, and the remaining 1% ($n = 10$) spoke German, Italian, English or indicated they were bilingual (i.e., speaking Dutch and French).

30 See the research report Luyten & Jeannin (2021) for more information on the total sample and representativeness of the population of psychologists in Belgium.

31 Age calculated based on the following formula: 2019 minus self-reported birth year.

Most participants (74%, n = 691) worked in the Flemish Community (including Brussels under Flemish legislation) and 26% (n = 248) in the French Community (including the German-speaking Community and Brussels under French Community legislation). More than half of the participants were working in small urban and rural areas (52% (n = 487) and 3% (n = 30) respectively), whereas 44% (n = 412) was working in large urban areas (1% missing data)³².

There are no official data of the number of care professionals with a degree in Psychology or Educational Sciences in the educational field. Therefore, the representativeness of the sample cannot be established. However, there is data available concerning the number of employees in the pupil guidance centers who constitute the largest group of professionals in the sample: Of the total Flemish population of 653.75³³ “psycho-pedagogisch consulenten”, 186 (28.5%) participated in the research. Of the total Flemish population of 273 “psycho-pedagogisch werkers”, 37 (13.5%) participated in the research. Of the total French population of 429 “conseillers psycho-pédagogiques”, 83 (19.3%) participated in the research. Of the total French population of 85 “auxiliaires psycho-pédagogiques”, 8 (9.4%) participated in the research.

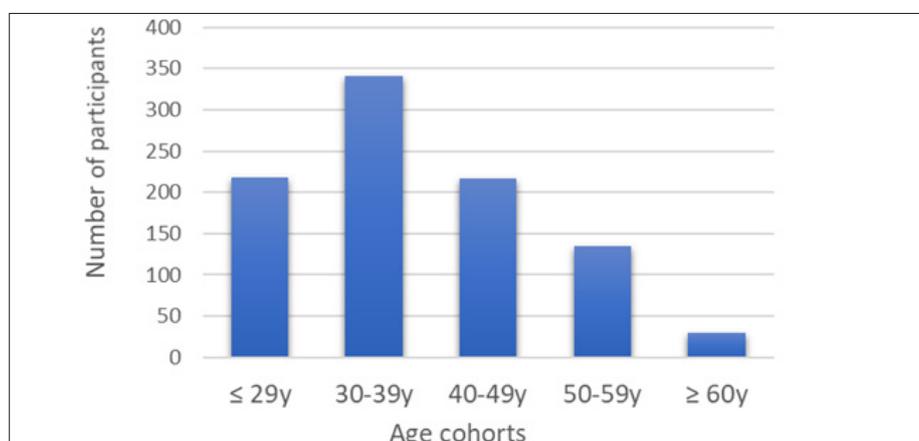


Figure 1. Age distribution.

2 Recruitment and procedure

Procedure

The survey was administered online via <http://ppatworkinbelgium.be/>. The actual data collection started on December 10, 2018 when the online questionnaire was made available and ended on February 22, 2019 when the questionnaire was taken off-line. To improve participation rates, we sent out reminders by e-mail after about one month (mid-January). Additionally, we regularly posted updates on the website reporting the increasing number of completed questionnaires.

³² The classification of those areas was based on data on population density provided by Eurostat (2012) with densely populated areas referred to as large urban areas, intermediate densely populated areas referred to as small urban areas (towns and suburbs), and thinly populated areas referred to as rural areas.

³³ full-time equivalent (FTE), CLB jaarcijfers 2016-2017

At the end of the survey, participants could indicate their interest in participating in small-group focus interviews. A focus group interview with Dutch-speaking psychologists was conducted at KU Leuven (May 27, 2019). Participants who were present at the meeting (n = 6) were rewarded with a small gift and were compensated for travel expenses. A focus group interview with French-speaking psychologists at the Université catholique de Louvain had to be cancelled up to two times due to an insufficient response.

3 Instruments

The methodology included a mix of quantitative and qualitative methods. First, respondents were presented an online survey to obtain quantitative data. Second, focus group interviews were conducted in a small subsample to obtain qualitative data.

Online survey

One large online survey was constructed to address the research goals of the twin projects “Provision and needs in the Clinical Psychology” and “Work field of School en Educational Psychology”. The survey comprised closed-ended (multiple-choice) questions pertaining to demographic characteristics, employment settings, education, professional practices, perceived competencies, needs, and challenges. The construction of the questions was done in close collaboration with the steering committee (see Appendix). In addition, a panel review of the survey was performed to establish content validity. The panel included members of the broader consortium and collaborators, members of the BFP board, and school psychologists from each language community. Finally, we performed several pilot tests before finalizing the questionnaire. The full survey is available upon request.

The survey was an online, web-based questionnaire constructed in Qualtrics. A web-based questionnaire makes it possible to automatically shift between different sets of blocks of questions. In this way, respondents could be asked specific questions based on their employment settings (e.g., there were different sets of questions for respondents with paid versus self-employed jobs, or for respondents in educational versus non-educational settings). As a consequence, the length of the questionnaire was different for each respondent. This flexibility in administration of questions prevents

Ethical approval for the research project was obtained from the KU Leuven Social and Societal Ethics Committee (SMEC, number G-2018 04 1202). Active informed consent was obtained from all participants.

unnecessary overload of respondents, but produces missing values by design (i.e., some sets of questions were not shown to certain groups of respondents).

The survey was administered in four languages: Dutch, French, German, and English. Translations were made by a professional translation agency. The translations were reviewed and, where necessary, further adapted to the work field terminology by native speakers from the work field.

Focus group interview

Focus group interviews were conducted to obtain a more in-depth understanding of some of the core findings (Savin-Baden & Howell Major, 2013; Tynan & Drayton, 1988). A subsample of respondents

was recruited who were interested in participating in a focus interview group using a purposeful sampling method (i.e., focusing on a balanced representation of several sectors and profiles, gender and age). Respondents were psychologists working in the field of school and educational psychology. Separate focus groups were planned at the KU Leuven and the Université catholique de Louvain for Dutch-speaking and French-speaking respondents respectively. However, due to a low response rate, the French-speaking focus group interview had to be cancelled.

The Dutch-speaking focus group initially consisted of nine participants. However, three participants were unavailable on the day of the focus group due to unforeseen circumstances (e.g., sickness); as they cancelled last-minute, we were not able to find replacements. All six participants (4 female, 2 male) had a master's degree in Psychology. Four participants had a major in School Psychology and two participants had a major in Clinical Psychology. Participants' age ranged from 27 to 62 years. Five participants were employed on a full-time basis; one participant was employed part-time (60%).

Four participants were employed in a pupil guidance center (CLB): two were "psycho-pedagogisch consulent", one was a director, one had a job function focused on quality coordination and policy/school support. One of these participants combined her work at the CLB with lecturing in higher education. The fifth participant was a director in a school that delivered both primary and secondary education. The sixth participant was a coordinator and staff member in higher education.

The focus group interview lasted two hours. Confidentiality of the data was emphasized. Participants signed informed consent forms.

The findings from the focus group will be used in the discussion of the results to provide in-depth interpretations of or illustrations for our quantitative findings.

CHAPTER 3: RESULTS

1 Education and specialization

Figure 2 depicts the diversity in educational degrees in our sample. Nearly all respondents (93.4%) had a master's degree in the broad domain of psychology and educational sciences³⁴; 5.8% had a professional bachelor's degree in the domain (without a master's degree); and for 0.9% data were missing. A minority of 11.1% had both a master's degree and a professional bachelor's degree.

Regarding the respondents with a master's degree in the broad domain of psychology and educational sciences, results showed that the majority of this group had a master in psychology (60%). Additionally, 37% had a master in educational sciences, 2% had a master in both³⁵ and 1% had another master within the broad domain (e.g., sociaal werk or sciences de la famille et de la sexualité). Those who had a master in psychology majored mostly in clinical psychology (61%) or in educational and school psychology (22%). An additional 2% majored in both clinical psychology and educational and school psychology, 2% in clinical psychology and another field, and 12% in another field (e.g., organizational psychology or neuropsychology) (1% missing data). Of the respondents with a master's degree in educational sciences who reported their major (n = 331), a majority of 57% majored in orthopedagogy.

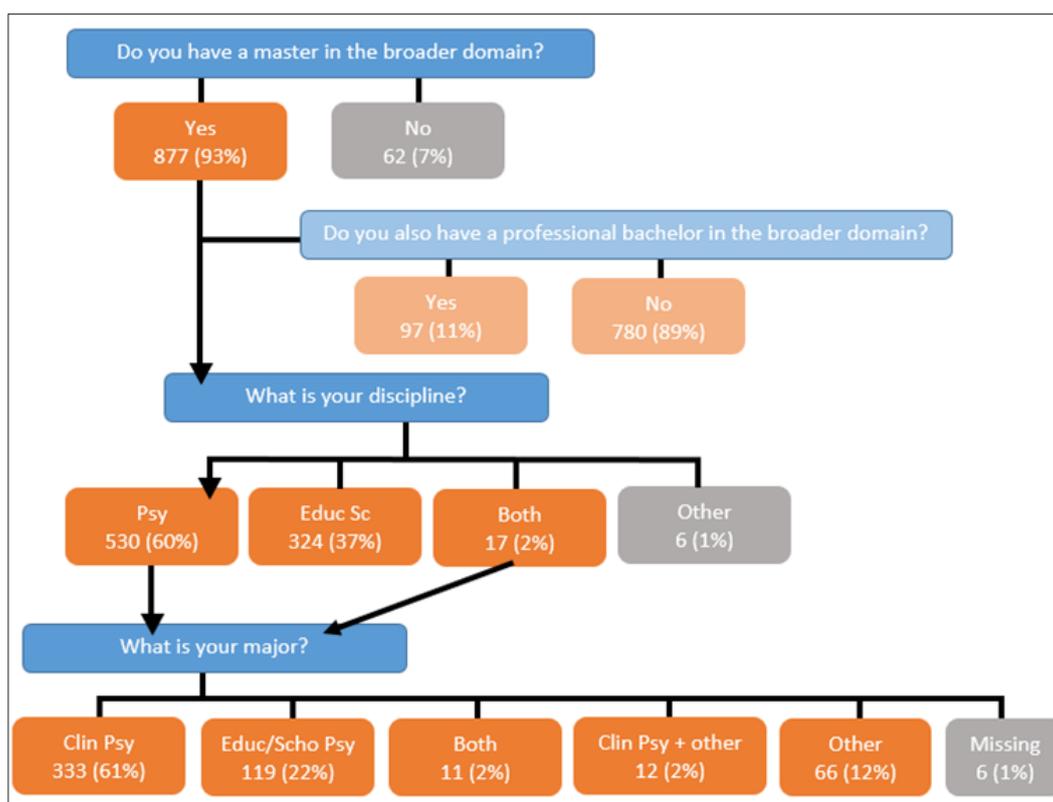


Figure 2. Flowchart of educational degrees.

Note. Psy = Psychology, Educ = Educational, Sc = Sciences, Scho = School, Clin = Clinical, Both = Clinical and Educational/School. Broad domain refers to the broad domain of psychology and educational sciences including for example sociaal werk or sciences de la famille et de la sexualité.

³⁴ With the term 'broad domain', we refer to all degrees linked to psychology and educational sciences, including educational programs such as social work or speech therapy.

³⁵ This may refer to respondents having completed both programs separately as well as respondents who completed a joint program, such as licence en psychologie et sciences de l'éducation. For the last group (n = 6), we do not have data on their major as they chose the option 'Other' to describe their master's degree.

When the participants were asked about additional specialized training³⁶, about one third of the sample (36%) had completed a teacher training and one third (33%) had taken one or more continuing courses with a duration of minimum one year. Respondents taking one or more continuing courses with a duration of minimum one year, most often indicated their course(s) was/were focused on psychotherapy (64%), psychological interventions (30%), counselling or coaching (26%), or psychological assessment (17%). Less often mentioned were pedagogical interventions (15%), option 'other' (13%), prevention (5%), mediation (4%), and consultancy (3%)³⁷. Additional findings on this topic are reported in Appendix 1.

Differences between language communities

Differences in educational degrees between language communities were explored³⁸. Respondents from both communities were equally likely to have a master's degree in the broad domain without a professional bachelor degree.

As can be seen in Figure 3, there was a significant relation between language community and academic discipline, $X^2(2) = 67.68, p < .001$. Respondents from the French Community were more likely to have a master in Psychology or a combined psychology and educational sciences master, but were less likely to have a master in educational sciences than respondents from the Flemish Community.

There was also a significant difference between language community and academic major in psychology, $X^2(3) = 58.00, p < .001$. Psychologists in the Flemish Community more often had a major in school and educational psychology, but were less likely to have another, non-clinical major than psychologists in the French Community.

Finally, chi square tests showed a significant relation between community and additional post-master training. Respondents from the French Community were more likely to take longer term continuing courses (47 vs. 29%, $X^2(1) = 28.58, p < .001$), but less likely to do a teacher training (23 vs. 40%, $X^2(1) = 24.81, p < .001$) than respondents from the Flemish Community.

Differences between small and large urban areas

We also explored differences in educational degrees between small and large urban areas. Only one significant difference was found with respect to respondents' major, $X^2(3) = 14.05, p < .01$. As shown in Figure 4, psychologists in large urban areas were more likely to have a major in clinical psychology or in a non-clinical subject, but less likely to have a major in school and educational psychology than psychologists working in small urban or rural areas.

36 Multiple types of specialized/continued training could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific answer or type of training versus those who did not tick it (because that option did not apply to them).

37 Multiple answers could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific answer versus those who did not tick it (because that option did not apply to them). Percentages were based on available data; depending on the option, 20 to 30 values were missing for each option.

38 Chi square results are only reported if significant and if no more than 20% of the cells had an expected count less than five (Stern, 2011).

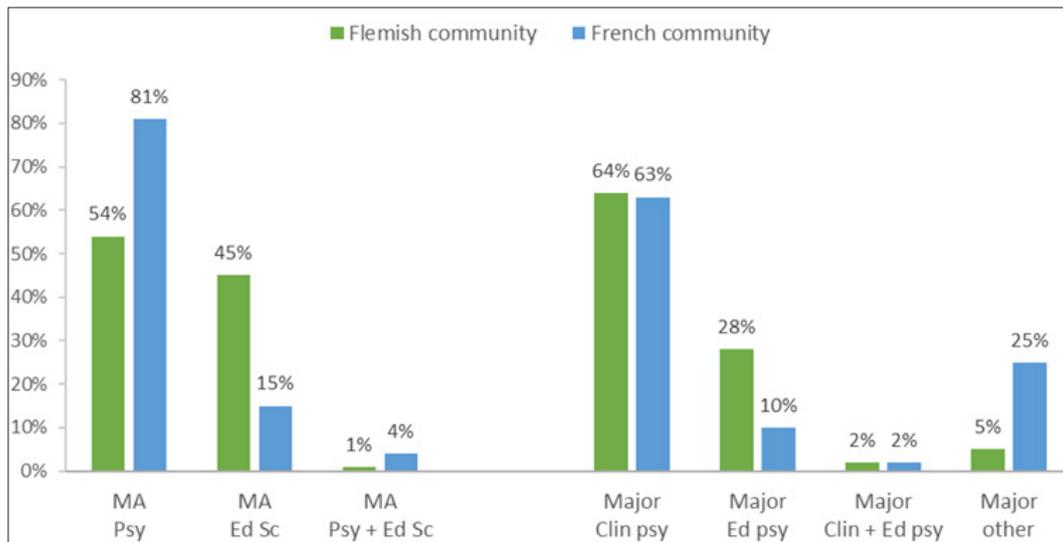


Figure 3. Differences in proportion of respondents having a specific type of master or major across language communities. Note. Clinical psychology percentages include respondents with a clinical and other major (excluding combinations with school and educational psychology). MA = Master's degree, Psy = Psychology, Ed = Educational/School, Sc = Sciences, Clin = Clinical.

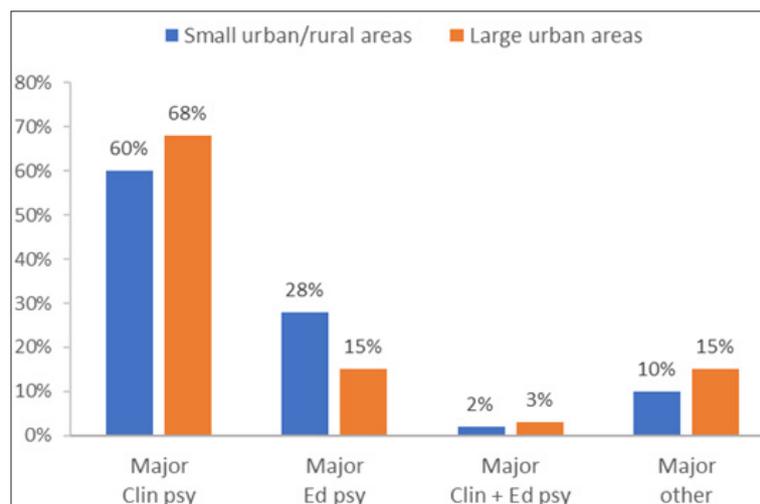


Figure 4. Differences in proportion of respondents having a specific type of major across degrees of urbanization. Note. Clinical psychology percentages include respondents with a clinical and other major (excluding the combination with school and educational psychology). Psy = Psychology, Clin = Clinical, Ed = Educational/School.

2 Salaried and self-employed jobs

The majority of the respondents (n = 668; 71%) reported that they performed paid work only, 54 (6%) worked self-employed only, and 217 (23%) combined paid and self-employed work. Hence, nobody was unemployed, but 12 respondents (1% of the total sample) reported that they were partially incapacitated, 21 (2%) identified themselves as a student, 6 (1%) as a home maker, 1 (0.1%) as retired (i.e., semi-retirement as it was combined with self-employed work)³⁹.

Number of jobs

Respondents could mention up to three paid jobs and up to three self-employed jobs in the online survey. As presented in Table 1⁴⁰, the majority of the respondents reported one paid job. About one third combines multiple jobs. A smaller proportion of the respondents is self-employed, most often in combination with a paid job.

Table 1. Number of current jobs

	Paid work		Self-employed work		Paid and self-employed work	
	n	%n	n	%n	n	%n
one job	601	65,3%	25	2,7%		
two jobs	57	6,2%	17	1,8%	138	15,0%
three or more jobs	10	1,1%	12	1,3%	61	6,6%

Working hours

As illustrated in Figure 5, most respondents worked full-time (54%; n = 508), more than one third worked part-time (36%; n = 339), and a smaller group (10%; n = 92) worked more than full-time (due to a combination of different jobs, thus excluding working extra hours or over-time). Additionally, 18% of the respondents (n = 168) were not satisfied with their percentage of working hours: 12% would like to work less hours and 6% would like to work more hours.

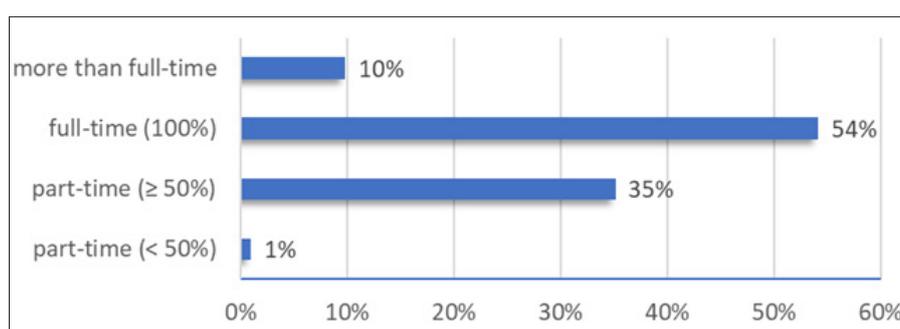


Figure 5. Working hours' distribution.⁴¹

39 Some respondents reported several characteristics at the same time, e.g., 1 respondent indicated she/he was partially incapacitated and a home maker.

40 Percentages are based on the available data (n = 921). There were 18 missing values: i.e., 18 respondents indicated they were self-employed but did not report the number of self-employed jobs.

41 The category 'more than full-time' was created for respondents combining multiple jobs who may exceed the 100% limit overall. It does not refer to extra work hours or over-time.

Employment characteristics

In this section, we describe the employment characteristics of the respondents' current job. We focus on the main or first job of the respondents. We distinguish between main paid and main self-employed jobs in the analyses⁴².

Remember that all 939 respondents worked in the educational field and had job responsibilities that focused (fully or partially) on the care for students and/or the study or career guidance of students. However, those two criteria did not in all cases apply to respondents' main jobs (see Figure 6)⁴³. In this section, we analyzed data of respondents' main jobs that were related to the broad domain of psychology and educational sciences⁴⁴ and focused on care for students and/or study or career guidance. This reduced the sample to 899 participants, i.e., 834 participants for the main salaried job (salaried respondents) and 77 participants for the main self-employed job (self-employed respondents)⁴⁵.

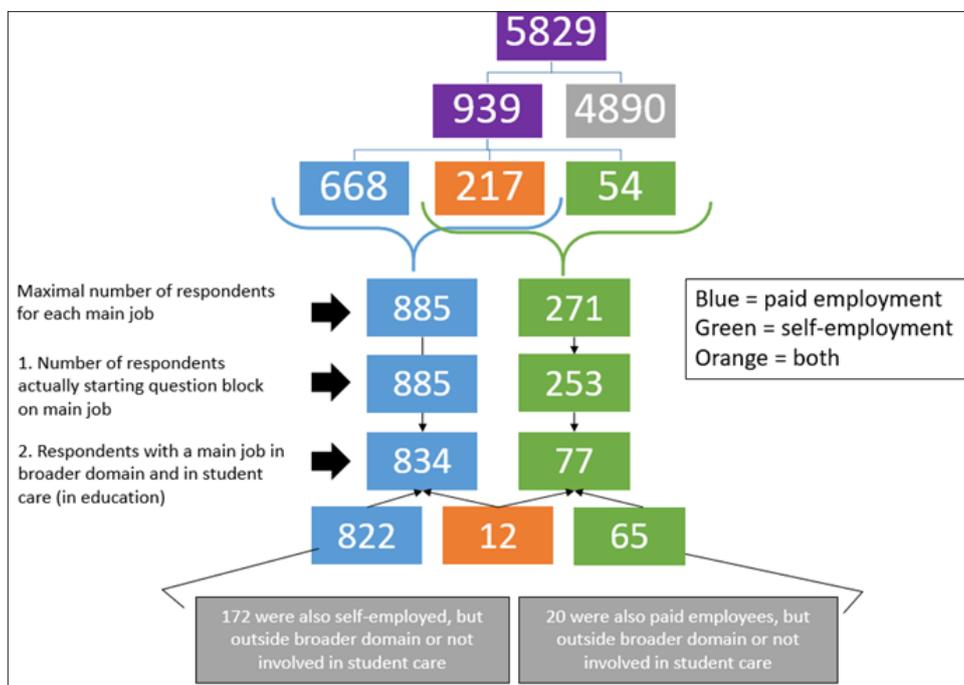


Figure 6. Flowchart data selections.

42 When respondents had more than one job (either paid or self-employed), the job on which they spend most of their time was considered their main job.

43 Although we already made a selection based on whether job responsibilities focused (fully or partially) on the care for students and/or the study or career guidance of students, there may be respondents who do not have these responsibilities in their main paid or self-employed job.

44 If there was no information for the main self-employed job with regard to relatedness to the broader domain, we used information from the previous broader question 'Do (does one of) your self-employed jobs relate to the broad field of psychology or educational sciences?' whenever available.

45 12 of the 834 respondents reporting on their main salaried job were also included in the analyses for the main self-employed job.

Description of the main salaried job

The distribution across provinces for respondents' main salaried job is illustrated in Figure 7⁴⁶.

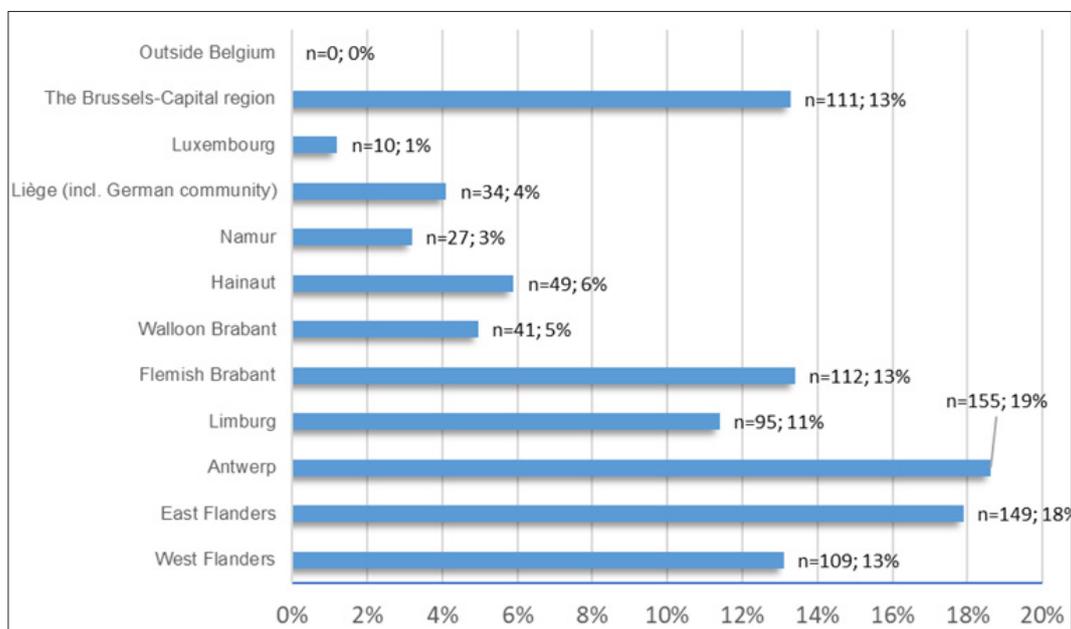


Figure 7. Percentage of salaried respondents in each province.

Work settings

As illustrated in Figure 8, nearly half of the respondents ($n = 377$) were working in a CLB (Flemish Community), CPMS (French Community), or Kaleido (German-speaking Community). In addition, almost one fifth of the respondents ($n = 143$) were working in schools for special education and also almost one fifth in higher education ($n = 134$), and one tenth in regular schools ($n=91$; two thirds of them in secondary schools, $n = 62$). Nearly 6% is employed in more than one setting ($n = 47$). Of all the people doing their main salaried job in special education ($n = 160$), either combined with working in another setting or not, 45 (28%) were part of an integration support network⁴⁷. In Appendix 1, the distribution across settings is reported separately for the language communities.

⁴⁶ Multiple answers could be given for this question, so percentages do not add up to 100% in total. Percentages refer to the proportion of individuals working in that specific province versus those who did not work in that province (e.g., 13% worked in Flemish Brabant and 87% did not; 5% worked in Walloon Brabant, 95% did not). There were no missing values.

⁴⁷ This refers to the so-called 'projets d'intégration' or 'ondersteuningsnetwerken' for students with specific educational needs, see <http://www.enseignement.be/index.php?page=25197&navi=2388> or <https://onderwijs.vlaanderen.be/nl/ondersteuningsmodel-voor-leerlingen-met-specifieke-onderwijsbehoeften>

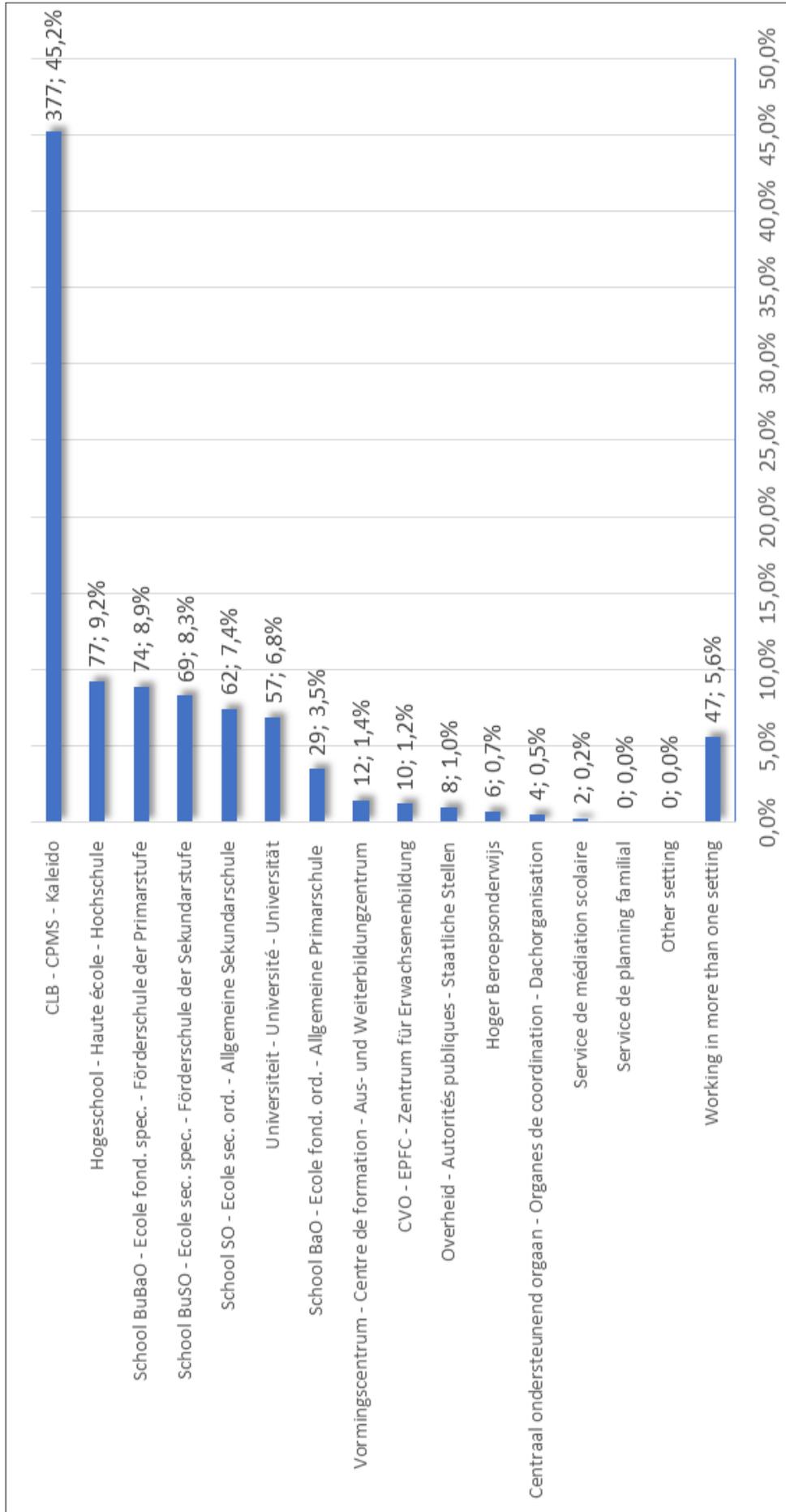


Figure 8. Distribution of salaried jobs across work settings.

Note. CLB = Centrum voor Leerlingenbegeleiding, CPMS = Centres Psycho-Médico-Sociaux, BuBaO = Buitengewoon Basisonderwijs, BuSO = Buitengewoon Secundair Onderwijs, SO = Secundair Onderwijs, BaO = Basisonderwijs, CVO = Centrum Volwassenenonderwijs, EPFC = Enseignement de Promotion et de Formation Continue.

Fixed or temporary employment of salaried respondents

Furthermore, results yielded that nearly all the respondents had an open-ended or fixed contract or appointment (n = 507; 61%) or a temporary employment with a chance of a permanent contract or appointment (n = 193; 23%). A smaller part of the sample had a temporary employment with no extension of contract (n = 20; 2%) or with no certainty regarding future contracts (n = 114; 14%).

Function titles and remuneration salaried respondents

Regarding the function titles, 267 respondents (32.0%) reported their contracts mentioned 'psychologist' as a function title, 152 (18.2%) mentioned 'pedagogue' and 3 mentioned both (0.4%); 26 respondents mentioned they did not know the title mentioned on their contract (3.1%). Moreover, in nearly half of the contracts for respondents' main paid job another title than 'psychologist' or 'pedagogue' was mentioned (n = 386, 46.3%). The most often mentioned other function titles were 'psycho-pedagogisch consulent/werker' or 'conseiller/auxiliaire psycho-pédagogique' (n = 174) and teacher (e.g., 'docent', 'formateur', 'leerkracht', etc.; n = 72).⁴⁸

Title 'psychologist'

For about half of the salaried psychologists in the work field (54%), the function title 'psychologist' is mentioned in their contract.

55 out of 61 (90%) self-employed psychologists use the function title 'psychologist' in their self-employed activities.

With regard to their remuneration, findings yielded that nearly all respondents (n = 685, 82.1%) were paid at the master's level, 117 (14.0%) were paid at the bachelor's level, and one (0.1%) at the level of a doctoral degree (PhD). Additionally, 31 respondents (3.7%) indicated another type of remuneration, which often entailed being paid in part at the bachelor's level and in part at the master's level or at a higher-than-master's pay level (i.e., a director).

Function titles across work settings

Looking at the most frequently mentioned settings in the dataset, we can further describe respondents' function titles. In the centers for pupil guidance, the CLB/CPMS/Kaleido, 72% were working as a psychoeducational consultant⁴⁹ (an extra 8% combined this with (an)other function(s) in the same setting), 12% as a psychoeducational assistant, 0.5% as a social assistant, 7% as a director, and 0.5% did policy work. In schools for special education, more than half of the sample (59%) worked either as a(n) (ortho)pedagogue or as a psychologist (an extra 19% combined one of these functions with another function in the same setting), 8% had another non-specified function, 6% worked as a teacher, 2% as a paramedic, 0.7% had a care-related function (or were a care coordinator), 0.7% worked as a social assistant, 0.7% did policy work (and another 3% combined more than one function, excluding combinations with functions of pedagogue or psychologist which were already reported). In regular schools, most respondents (41%) had a care-related function or were care coordinators, an additional 31% combined this function with another function in the same setting (most often a teaching position), an additional 8% combined more than one function (excluding combinations with care-related functions), 11% were directors, 4% worked as psychologists, 3% did policy work, and 2% had another non-specified function. Finally, in higher education, most respondents were involved in student care and/or study/career guidance: 27% were involved in student guidance alone and 54% performed one

⁴⁸ We considered respondents as part of the category 'Other' only if they did not cross any of the other answers; multiple titles could be indicated in this question.

⁴⁹ Chi square results are only reported if significant and if no more than 20% of the cells had an expected count less than five (Stern, 2011).

or both tasks in combination with other functions in the same setting. Additionally, 4% did policy work, 3% had other non-specified functions, and 2% were directors or heads of department (an additional 10% combined more than one function, excluding combinations with student guidance or care). In Appendix 1, the distribution of functions per work setting is also reported separately for the different language communities.

Education and specialized training of salaried professionals across work settings

We assessed whether different degrees and additional specialized training were linked to the specific main work settings⁵⁰.

Chi square tests indicated a significant relation between master discipline and work setting, $X^2(3) = 49.29$, $p < .001$. When looking at the ratio of respondents having a master in psychology versus in educational sciences, analyses indicated this ratio was 74 to 26 in CLB/CPMS/Kaleido, whereas it was more like 50-50 in the other main settings (45:55, 47:53, and 52:48 in schools for special education, regular schools and higher education respectively).

We also found a significant association between teacher training and work setting, $X^2(3) = 60.95$, $p < .001$. Having a specialized teacher training was least likely in CLB/CPMS/Kaleido (22%), but most likely in regular schools (62%). In special education and higher education, the percentages were 40% and 43% respectively.

No significant differences were found between work settings with respect to taking one or more longer term continuing courses.

Description of the main self-employed job

As mentioned above, a minority of 77 respondents had a main self-employed job focused on student care or on study and career guidance of students. The distribution across provinces for respondents' main self-employed job is illustrated in Figure 9⁵¹.

Function titles and work hours of self-employed respondents

With regard to the function titles respondents use in their self-employed jobs (whether or not considered as their main self-employed job⁵²), 56 respondents (73%) indicated that they used the title of psychologist. Of these 56 respondents, 27% used this title alone, whereas 73% used it in combination with (an)other title(s). The most often mentioned other professional titles were psychotherapist ($n = 31$; 40%), pedagogue ($n = 17$; 22%), coach ($n = 9$; 12%), counselor ($n = 5$; 6%), behavioral therapist ($n = 3$; 4%), psychodiagnosticus/psychopédagogue ($n = 3$; 4%), and trainer ($n = 2$; 3%)⁵³.

50 Chi square results are only reported if significant and if no more than 20% of the cells had an expected count less than five (Stern, 2011).

51 Multiple answers could be given for this question, so percentages do not add up to 100% in total. Percentages refer to the proportion of individuals working in that specific province versus those who did not work in that province (e.g., 22% worked in Flemish Brabant and 78% did not; 9% worked in Walloon Brabant, 91% did not). There were no missing values.

52 This is the only question in this chapter asking after respondents' self-employed activities in general, not only on their main self-employed job.

53 A few respondents worked in other sectors in addition to the educational sector. The largest subgroup (64%) worked in both the educational and the mental health care sector (most provided primary and secondary health care (43%), 29% only primary care, 14% only secondary care (14% missing data)).

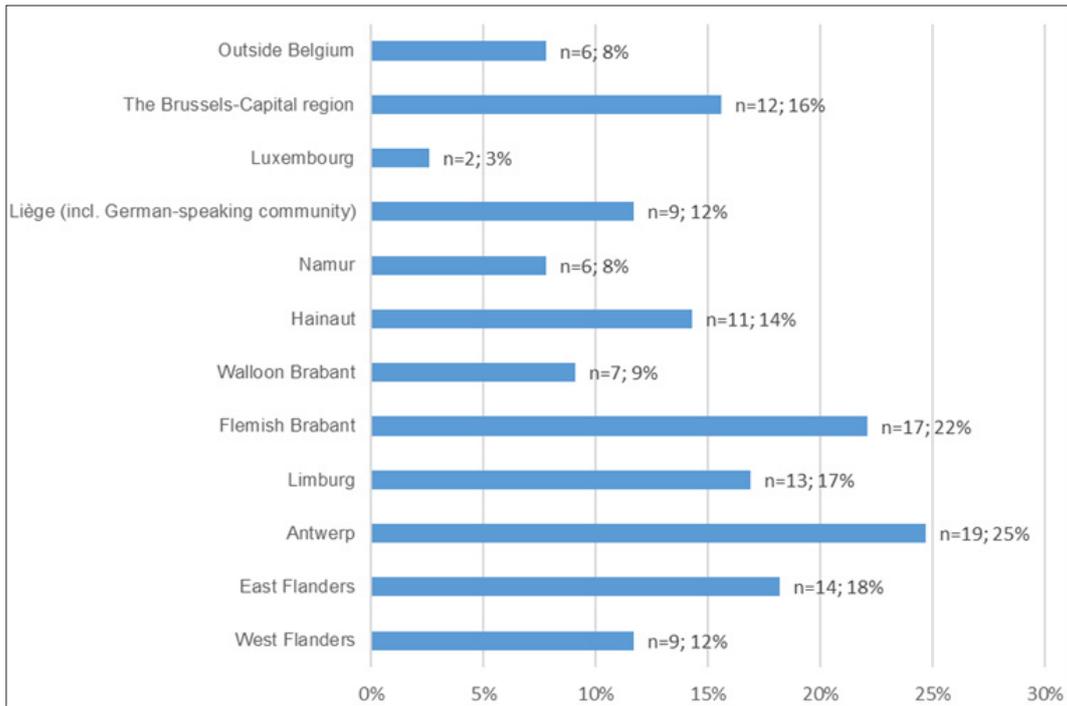


Figure 9. Percentage of self-employed respondents in each province (n = 77).

Regarding respondents' main self-employed job, we also asked them how many hours per week they spent on this job on average (including administrative tasks). About one third (n = 25) reported that they worked between 21 and 40 hours per week, one fourth (n = 19) worked between 11 and 20 hours per week, and about one fifth (n = 15) worked 5 hours per week or less for this main self-employed job (see Figure 10).

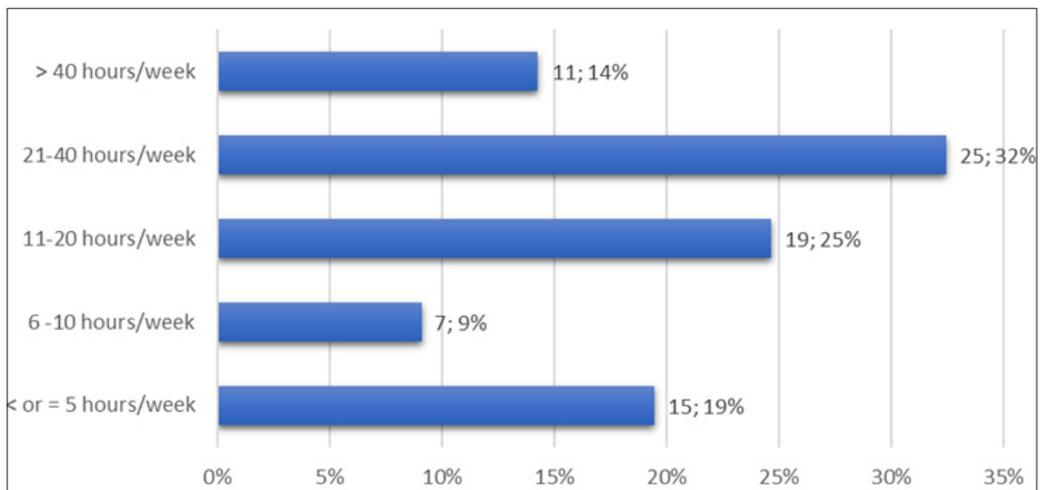


Figure 10. Working hours.

Work setting

As mentioned before, all respondents in the subsample were working in the educational sector⁵⁴ – as this was a specific criterion for being included in the present analyses. Nearly half of the respondents (47%) worked in a private practice (individually), whereas 17% worked in a multidisciplinary group practice (including a General Practitioner [GP] practice, a community health center, ...), 12% in a group practice in which only their specialization was practiced, 8% in an organization or a welfare/care/educational institution (e.g., self-employed in a clinic or school, connected to a mental health care center, etc.) and 17% in a combination of the previously mentioned contexts or another context.

3 Professional roles and practices

Description of professional tasks

Respondents were asked to indicate how frequently they performed the following eight tasks in their main jobs: Supporting individuals and their environment, supporting organizations, providing training and education, supervising the work of colleagues or trainees, policy tasks and governance, scientific research, managerial tasks, and administrative tasks. This was measured with a 5-point rating scale ranging from 1 (never) to 5 (very often). As expected, respondents were mostly involved in supporting individuals and their environment (Table 2). Interestingly, they seemed least engaged in managerial tasks and scientific research, both in their main salaried employment and/or self-employed job. However, descriptive statistics suggest that respondents were less involved with administrative tasks and supporting organizations in main self-employed jobs than in main salaried jobs.

Those who indicated they supported individuals and their environment in their main paid or self-employed job (n = 780 and n = 71 respectively)⁵⁵ were also asked what proportion of their time they spent with the person in question or his/her close environment (family, teachers, etc.). Results indicated that most respondents had about as many direct client contact as contacts with the client's close environment or more direct client contacts than contacts with the client's close environment (Table 3). In general, the descriptive statistics suggest that respondents have more direct client tasks in self-employed jobs than in paid jobs.

54 A few respondents worked in other sectors in addition to the educational sector. The largest subgroup (64%) worked in both the educational and the mental health care sector (most provided primary and secondary health care (43%), 29% only primary care, 14% only secondary care (14% missing data)).

55 Those who indicated they 'never' supported individuals and their environment were not asked the follow-up question (n=32 for main salaried job and n=3 for main self-employed job).

Table 2. Professional tasks for salaried vs. self-employed job

	Main salaried job M (SD) n = 812	Main self-employed job M (SD) n = 71-75
Supporting individuals and their environment ¹	4.09 (1.01)	4.11 (0.96)
Administrative tasks	3.73 (0.96)	2.36 (1.25)
Supporting organizations ²	3.46 (1.26)	2.74 (1.16)
Training and education	3.08 (1.26)	3.09 (1.39)
Supervision of colleagues' or trainees' tasks	2.81 (1.20)	2.52 (1.43)
Policy and governance ³	2.79 (1.31)	2.01 (1.17)
Managerial tasks	2.55 (1.33)	1.94 (1.15)
Scientific research	1.61 (0.88)	1.63 (0.94)

Note. Respondents provided answers using a 5-point scale ranging from 1 (never) to 5 (very often). ¹ Includes diagnosis and treatments, for individuals or groups, in various settings. ² E.g., schools, institutions, child day care centers, ... ³ E.g., developing vision texts, quality assurance, supporting the operation of an organization, ...

Table 3. Direct or indirect supporting activities

	Main salaried job % (n)	Main self-employed job % (n)
Only direct client contact	9.6% (75)	16.9% (12)
More direct client contacts than contacts with the client's close environment	33.8% (264)	50.7% (36)
About as many direct client contact as contacts with the client's close environment	37.2% (290)	26.8% (19)
More contact with the client's close environment than direct client contacts	14.5% (113)	0.0% (0)
Only contact with the client's close environment	1.2% (9)	1.4% (1)
Not applicable	2.4% (19)	2.8% (2)
Missing data	1.3% (10)	1.4% (1)

Differences in professional tasks of salaried respondents related to language community, urbanization, education, and work setting

Furthermore, we examined whether significant differences existed in the frequency of professional tasks between language communities, urbanization areas, respondents working in different settings or with different demographic backgrounds (see tables 4 to 7). For the main salaried job, each of the four independent variables (i.e., language community, degree of urbanization, work setting, academic discipline) were included in a MANOVA to test for significant effects on the eight dependent variables (eight professional tasks) at once.

Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁵⁶) was significant, we further investigated significant univariate effects. As an indication of effect size, we also report the partial eta squared; values of .01, .06, and .14 are approximately consistent with small, medium and large effects respectively (Stern, 2011). There was a statistically significant difference in frequency of care tasks based on respondents' language community, Pillai's Trace $V = 0.17$, $F(8, 803) = 19.79$, $p < .001$, $n = 812$, partial $\eta^2 = .17$, degree of urbanization, Pillai's Trace $V = 0.03$, $F(8, 798) = 2.87$, $p < .01$, $n = 807$, partial $\eta^2 = .03$, work setting, Pillai's Trace $V = 0.62$, $F(24, 2154) = 23.52$, $p < .001$, $n = 727$, partial $\eta^2 = .21$, and academic discipline, Pillai's Trace $V = 0.12$, $F(16, 1484) = 5.69$, $p < .001$, $n = 751$, partial $\eta^2 = .06$.

Differences between communities

It was found that salaried respondents in the Flemish Community were significantly less engaged in supporting individuals and their environment, but more engaged in managerial tasks and activities with regard to policy and governance than salaried respondents in the French Community (Table 4).

Differences between small and large urban areas

Salaried respondents in large urban areas provided significantly more training and education and were more engaged in scientific research than salaried respondents in small urban or rural areas (Table 5).

Differences between work settings

With regard to work setting, results yielded that salaried respondents in the CLB/CPMS/Kaleido were more engaged in supporting individuals and their environment than salaried respondents in schools or higher education; respondents working in schools also were significantly more engaged in these tasks than respondents in higher education. Similarly, salaried respondents in the CLB/CPMS/Kaleido were more engaged in supporting organizations than salaried respondents in schools or higher education; respondents working in special schools were significantly more engaged in these tasks than respondents in higher education. Alternatively, respondents in schools were significantly more engaged in managerial tasks than respondents in the CLB/CPMS/Kaleido or higher education. Respondents working in the CLB/CPMS/Kaleido were also significantly less involved in supervision or policy and governance as compared to respondents working in schools or higher education. Provision of training and education was significantly more frequently performed by respondents working in regular schools and higher education as compared to respondents working in special schools and the CLB/CPMS/Kaleido, and it was significantly less frequent in the CLB/CPMS/Kaleido as compared to special schools. Finally, respondents in higher education were significantly more engaged in scientific research than respondents in the other three main settings and significantly less engaged in administrative tasks than respondents in special schools and the CLB/CPMS/Kaleido (Table 6).

Differences between master disciplines

Next, salaried respondents with a psychology master were significantly more engaged in supporting individuals, but significantly less engaged in supervision, policy and governance, training and education, and scientific research than salaried respondents with a master's in educational sciences. Additionally, salaried respondents with a psychology master (in combination with a master in educational sciences or not) were significantly more engaged in supporting organizations than salaried respondents with a master in educational sciences and salaried respondents with a psychology master were also significantly less engaged in managerial tasks than salaried respondents with a master in educational sciences (in combination with a psychology master or not) (Table 7)⁵⁷.

56 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

57 Given that assumptions were sometimes broken (non-normality, inequality of variances) and considering the ordinal nature of the dependent variable, we also performed Kruskal-Wallis tests. These analyses showed virtually identical results as the ANOVAs.

Table 4. Differences in tasks of salaried respondents between language communities

Tasks	Flemish Community	French Community	F (1,810) [†]	partial η^2
	M (SD)	M (SD)		
Supporting individuals & their environment	4.01 (1.06)	4.35 (0.82)	16.61***	.02
Supporting organizations	3.43 (1.26)	3.57 (1.27)	1.77	.00
Managerial tasks	2.64 (1.28)	2.27 (1.44)	10.35**	-
Supervision	2.79 (1.16)	2.84 (1.32)	0.19	-
Policy and governance	3.02 (1.23)	2.10 (1.30)	82.58***	.09
Training and education	3.09 (1.23)	3.05 (1.35)	0.19	-
Scientific research	1.60 (0.84)	1.64 (0.97)	0.30	-
Administrative tasks	3.75 (0.93)	3.64 (1.07)	1.81	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for managerial tasks, supervision, training and education, scientific research, and administrative tasks; hence, we report the robust Brown-Forsythe F-ratio for these tasks (df were (1, 309.41), (1, 307.17), (1, 313.40), (1, 303.08), and (1, 303.64) respectively; Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 5. Differences in tasks of salaried respondents between areas of varying urbanisation

Tasks	Small urban/ rural areas	Large urban areas	F (1,805) [†]	partial η^2
	M (SD)	M (SD)		
Supporting individuals & their environment	4.14 (0.94)	4.04 (1.09)	1.86	-
Supporting organizations	3.53 (1.22)	3.37 (1.31)	3.14	-
Managerial tasks	2.56 (1.29)	2.52 (1.38)	0.20	.00
Supervision	2.77 (1.16)	2.86 (1.26)	1.07	.00
Policy and governance	2.72 (1.29)	2.88 (1.32)	3.03	.00
Training and education	2.97 (1.23)	3.22 (1.28)	8.30**	-
Scientific research	1.53 (0.81)	1.71 (0.95)	9.01**	-
Administrative tasks	3.78 (0.95)	3.66 (0.99)	3.01	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for supporting individuals, supporting organizations, training and education, scientific research, and administrative tasks; hence, we report the robust Brown-Forsythe F-ratio for these tasks (df were (1, 721.91), (1, 750.31), (1, 763.82), (1, 718.77), and (1, 761.68) respectively; Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 6. Differences in Tasks of Salaried Respondents Between Work Settings

Tasks	CLB/CPMS/ Kaleido				F (3, 723)†	partial η^2
	M (SD)	Special schools	Regular schools	Higher education		
Supporting individuals & their environment	4.45 _a (0.62)	4.06 _b (0.92)	3.92 _b (1.14)	3.41 _c (1.33)	30.83***	-
Supporting organizations	4.08 _a (0.81)	3.04 _b (1.28)	2.94 _{bc} (1.36)	2.63 _c (1.26)	60.74***	-
Managerial tasks	2.22 _a (1.22)	3.06 _b (1.30)	3.06 _b (1.31)	2.53 _a (1.32)	21.14***	.08
Supervision	2.55 _a (1.07)	3.02 _b (1.17)	3.20 _b (1.18)	2.99 _b (1.34)	12.33***	.05
Policy and governance	2.24 _a (1.13)	3.17 _b (1.33)	3.34 _b (1.26)	3.30 _b (1.21)	41.00***	-
Training and education	2.52 _a (1.13)	3.17 _b (1.03)	3.70 _c (1.21)	3.84 _c (1.17)	58.14***	.19
Scientific research	1.42 _a (0.67)	1.58 _a (0.76)	1.53 _a (0.70)	2.25 _b (1.19)	28.95***	-
Administrative tasks	3.93 _a (0.88)	3.73 _a (0.86)	3.66 _{ab} (1.10)	3.32 _b (0.96)	13.16***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for supporting individuals, supporting organizations, policy and governance, scientific research and administrative tasks; hence, we report the robust Brown-Forsythe F-ratio (df = (3, 340.43), (3, 366.85), (3, 435.56), (3, 356.56), (3, 379.98) respectively) for these five tasks. Hochberg's GT2 post hoc test was used for all tasks except the five for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 7. Differences in tasks of salaried respondents between academic disciplines

Tasks	Ma psy		Ma educ sc		Ma psy + educ sc		F (2, 748)†	partial η^2
	M (SD)		M (SD)		M (SD)			
Supporting individuals & their environment	4.23 _a (0.89)		3.86 _b (1.17)		4.31 _{ab} (1.11)		10.49***	-
Supporting organizations	3.54 _a (1.20)		3.22 _b (1.36)		3.92 _a (0.86)		8.54***	-
Managerial tasks	2.34 _a (1.26)		2.86 _b (1.38)		3.38 _b (1.39)		16.48***	.04
Supervision	2.62 _a (1.16)		3.03 _b (1.24)		3.15 _{ab} (1.14)		11.14***	.03
Policy and governance	2.57 _a (1.26)		3.21 _b (1.25)		2.54 _{ab} (1.39)		23.44***	.06
Training and education	2.88 _a (1.23)		3.42 _b (1.22)		3.00 _{ab} (1.00)		16.82***	.04
Scientific research	1.53 _a (0.84)		1.74 _b (0.94)		1.85 _{ab} (0.99)		5.17**	.01
Administrative tasks	3.72 (0.96)		3.72 (0.99)		3.77 (0.83)		0.02	.00

Note. *p < .05, **p < .01, ***p < .001. †The assumption of homogeneity of variance was violated for supporting individuals and supporting organizations; hence, we report the robust Brown-Forsythe F-ratio (df = (2, 44.99) and (2, 120.22) respectively) for these two tasks. Hochberg's GT2 post hoc test was used for all tasks except the two for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (never) to 5 (very often).

Differences in professional tasks of self-employed respondents related to language community, urbanisation and demographics

Furthermore, for the main self-employed job we examined whether significant differences existed in this frequency of professional tasks between language communities, areas of varying urbanisation, or respondents with different demographic backgrounds. Each of the three independent variables (i.e., language community, degree of urbanization, academic discipline) were included in a MANOVA to test for significant effects on the eight dependent variables (eight professional tasks) at once. Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁵⁸) was significant, we further investigated significant univariate effects. However, no significant difference was found for any of the independent variables based on the multivariate test.

Supporting individuals and their environment: Taking a closer look at primary care tasks of prevention, diagnostics, counseling, and treatment

We asked how frequently respondents performed four primary care tasks including prevention, diagnostic assessment, counseling/coaching, and treatment/therapy. Respondents rated the frequency on a 5-point rating scale ranging from 1 (never) to 5 (very often).

First, descriptive statistics showed that the primary care tasks of salaried respondents, in general, most often included counseling or coaching (incl. consultation) (i.e., mean was above middle scale point 'sometimes'; $M = 4.15$, $SD = 0.85$). Prevention (e.g., health promotion and disease prevention, prevention of psychosocial problems at school, etc.) and diagnostics/assessment (incl. consultation) were sometimes part of the job (i.e., mean was around scale point 3 - 'sometimes'; $M_{prevention} = 3.10$, $SD = 1.07$; $M_{diagnostics} = 3.10$, $SD = 1.35$), whereas treatment or therapy (incl. consultation) seemed less frequently included in their job (i.e., mean was below middle scale point; $M = 2.40$, $SD = 1.29$; $n = 802$; missing data for 32 respondents).

In addition, the primary care tasks of self-employed respondents most often included counseling or coaching (incl. consultation) and treatment or therapy (incl. consultation; i.e., mean was above middle scale point 'sometimes'; $M_{counseling} = 4.01$, $SD = 1.03$; $M_{treatment} = 4.05$, $SD = 1.20$). Prevention (e.g., health promotion and disease prevention, prevention of psychosocial problems at school, etc.) and diagnostics/assessment (incl. consultation about diagnostics) were sometimes part of the job (i.e., mean was around scale point 3 - 'sometimes'; $M_{prevention} = 2.79$, $SD = 1.24$; $M_{diagnostics} = 3.30$, $SD = 1.33$; $n = 76$; missing data for 1 respondent).

Differences in primary care tasks of salaried respondents

Furthermore, we examined whether significant differences existed in this frequency of primary care tasks between language communities, areas of varying urbanization, respondents with different demographic backgrounds or working in different settings. For the main salaried job, each of the four independent variables (i.e., language community, urbanization, work setting, academic discipline) were included in a MANOVA to test for significant effects on the four dependent variables (four care tasks) at once. Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁵⁹) was significant, we further investigated significant univariate effects.

58 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

59 If Box's M-test of the assumption of equality of covariance matrices was significant ($p < .001$) and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

There was a statistically significant difference in frequency of primary care tasks based on respondents' language community, Pillai's Trace $V = 0.10$, $F(4, 797) = 22.56$, $p < .001$, $n = 802$, partial $\eta^2 = .10$, work setting, Pillai's Trace $V = 0.49$, $F(12, 2136) = 34.56$, $p < .001$, $n = 717$, partial $\eta^2 = .16$, and academic discipline, Wilks' $\Lambda = 0.94$, $F(8, 1472) = 5.37$, $p < .001$, $n = 742$, partial $\eta^2 = .03$. No significant difference was found for urbanization using the multivariate test.

Table 8. Differences in tasks of salaried respondents between language communities

Tasks	Flemish Community		French Community	
	M (SD)	M (SD)	F (1, 800)†	partial η^2
Prevention	3.00 (1.03)	3.39 (1.14)	17.40***	-
Diagnostics/ assessment	2.94 (1.33)	3.58 (1.27)	35.77***	.04
Counseling/ coaching	4.21 (0.81)	3.97 (0.96)	12.51***	.02
Treatment/therapy	2.31 (1.28)	2.70 (1.29)	14.14***	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for prevention; hence, we report the robust Brown-Forsythe F-ratio for prevention ($df = (1, 306.70)$; Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 9. Differences in tasks of salaried respondents between work settings

Tasks	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 713)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Prevention	3.18 _a (0.96)	3.03 _{ab} (1.05)	3.33 _a (1.09)	2.80 _b (1.17)	5.92***	.02
Diagnostics/ assessment	3.99 _a (0.92)	2.48 _b (1.05)	2.48 _{bc} (1.21)	2.05 _c (1.15)	139.94***	-
Counseling/ coaching	4.17 (0.74)	4.14 (0.86)	4.14 (0.95)	4.02 (1.05)	0.85	-
Treatment/ therapy	2.40 _a (1.19)	2.91 _b (1.34)	2.25 _{ac} (1.25)	2.01 _c (1.29)	12.21***	.05

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for diagnostics and counseling; hence, we report the robust Brown-Forsythe F-ratio ($df = (3, 379.78)$ and $(3, 390.26)$) for these two variables. Hochberg's GT2 post hoc test was used for all tasks except the five for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 10. Differences in tasks of salaried respondents between academic disciplines

Tasks	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 739)	partial η^2
	M (SD)	M (SD)	M (SD)		
Prevention	3.18 _a (1.07)	2.97 _b (1.06)	3.69 _{ab} (0.95)	5.39**	.01
Diagnostics/ assessment	3.28 _a (1.27)	2.77 _b (1.38)	3.15 _{ab} (1.34)	12.93***	.03
Counseling/ coaching	4.16 (0.84)	4.15 (0.88)	4.15 (0.90)	0.03	.00
Treatment/ therapy	2.55 _a (1.30)	2.16 _b (1.24)	2.69 _{ab} (1.03)	8.47***	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Hochberg's GT2 post hoc test was used for all tasks (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (never) to 5 (very often).

Differences between language communities

As displayed in Table 8, the findings indicate that the care tasks of salaried respondents in the Flemish Community included counseling/coaching more frequently, but included prevention, diagnostics/assessment and treatment/therapy less frequently as compared to salaried respondents in the French Community.

Differences between work settings

Prevention was significantly more common in the CLB/CPMS/Kaleido and regular schools as compared to higher education. Assessment was significantly more common in the CLB/CPMS/Kaleido than in any of the other three main settings and it was also more common in special schools than in higher education. Treatment/therapy was significantly more common in special schools than in any of the other three main settings and it was also more common in the CLB/CPMS/Kaleido than in higher education (Table 9).

Differences between master disciplines

Finally, salaried respondents' main tasks included prevention, assessment, and treatment more frequently when respondents had a master's degree in psychology as compared to when they had a degree in educational sciences.

Differences in primary care tasks of self-employed respondents

For the main self-employed job, each of the three independent variables (i.e., language community, degree of urbanization, academic discipline) were included in a MANOVA to test for significant effects on the four dependent variables (four care tasks) at once. Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁶⁰) was significant, we further investigated significant univariate effects. However, no significant differences were found for any of the independent variables based on the multivariate test.

Supporting individuals and their environment: Taking a closer look at care domains

Finally, respondents were asked to indicate the focus of their professional activities considering their care tasks in four key domains identified in international review studies (e.g., Struyf et al., 2015), including (1) educational learning processes and cognitive development, (2) psychosocial development and functioning, (3) school career and career choice processes, and (4) health, physical & sexual development⁶¹. This was done separately for salaried respondents and self-employed respondents.

60 If Box's M-test of the assumption of equality of covariance matrices was significant ($p < .001$) and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

61 Also see <http://schoolpsychologie-vvsp.be/vvsp/wp-content/uploads/2018/01/Profiel-van-de-schoolpsycholoog.pdf>
<https://data-onderwijs.vlaanderen.be/edulex/document.aspx?docid=15236>

Description of care domains of salaried respondents

First, we report how frequently salaried respondents performed care tasks in these four domains in their main paid job, using a 5-point scale ranging from 1 (never) to 5 (very often). Descriptive statistics show that, in general, care tasks were relatively often performed in the first three domains (i.e., means were above the middle scale point 'sometimes'; MDomain1 = 4.03, SD = 0.98; MDomain2 = 4.19, SD = 0.94; MDomain3 = 3.67, SD = 0.98), but less often in the domain of health, physical and sexual development (i.e., mean was below the middle scale point 'sometimes'; MDomain4 = 2.73, SD = 1.05) (n = 827; missing data for seven respondents). Frequencies are reported in Figure 11.

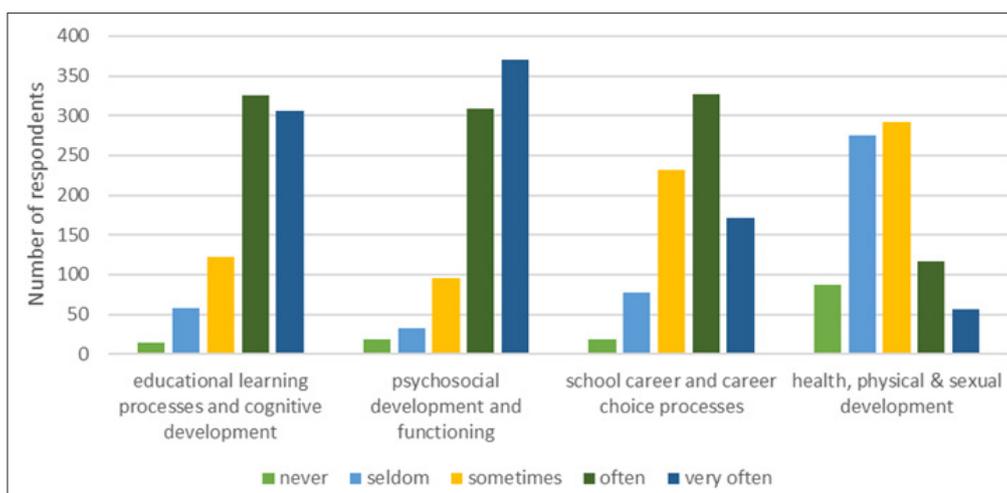


Figure 11. Frequency of care tasks of salaried respondents across four domains (n = 827).

Differences in care domains related to language community, urbanisation, demographics, and work setting for salaried respondents' main jobs

Additionally, we examined whether there were significant differences in this frequency of care tasks across domains between language communities, areas of varying urbanisation, respondents with different demographic backgrounds or working in different settings. For each of the four independent variables (i.e., language community, degree of urbanization, work setting, academic discipline) a MANOVA was conducted to test for significant effects on the four dependent variables (four domains) at once. Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁶²) was significant, we further investigated significant univariate effects. As an indication of effect size, we also report the partial eta squared; values of .01, .06, and .14 are approximately consistent with small, medium and large effects respectively (Stern, 2011).

There were statistically significant differences in care domains based on respondents' language community, work setting, master discipline, and type of major; for language community, Pillai's Trace $V = 0.09$, $F(4, 822) = 19.55$, $p < .001$, $n = 827$, partial $\eta^2 = .09$, for work setting, Pillai's Trace $V = 0.25$, $F(12, 2202) = 16.43$, $p < .001$, $n = 739$, partial $\eta^2 = .08$, and for academic discipline, Wilks' $\Lambda = 0.97$, $F(8, 1516) = 3.40$, $p < .001$, $n = 764$, partial $\eta^2 = .02$. No significant differences were found based on degree of urbanization using the multivariate test. The results are reported in Tables 11 to 13⁶³.

62 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

63 Given that assumptions were sometimes broken (non-normality, inequality of variances) and considering the ordinal nature of the dependent variable, we also performed Kruskal-Wallis tests. These analyses showed virtually identical results as the ANOVAs.

Differences between language community

With respect to language community (Table 11), it was found that salaried respondents working in the Flemish Community performed significantly more care tasks with regard to psychosocial development and functioning, but significantly less care tasks with regard to (school) career choice processes and health, physical, and sexual development than respondents working in the French Community (Table 11).

Differences between work settings

With respect to work settings (Table 12), salaried respondents working in the CLB/CPMS/Kaleido performed significantly more care tasks with regard to learning processes and cognitive development than respondents working in any of the other work settings. Respondents working in higher education performed significantly less tasks in the domains of psychosocial development and functioning and of health, physical, and sexual development than respondents working in any of the other settings. Respondents working in CLB/CPMS/Kaleido also performed significantly less care tasks in the health, physical and sexual development domain than respondents working in schools for special education. Additionally, respondents working in CLB/CPMS/Kaleido performed significantly more care tasks in the domain of (school) career choice processes than respondents working in special or regular schools.

Differences between academic disciplines

When considering academic discipline (Table 13), salaried respondents with a psychology master performed significantly more care tasks with regard to psychosocial development and functioning than those with a master's in educational sciences. Respondents with a psychology master (in combination with educational sciences or not) also performed significantly more tasks with regard to health, physical, and sexual development than respondents with a master's in educational sciences.

Table 11. Differences in care domains of salaried respondents between language communities

Care domains	Flemish Community	French Community	F (1, 825)	partial η^2
	M (SD)	M (SD)		
Learning processes & cognitive development	4.00 (0.98)	4.10 (0.99)	1.59	.00
Psychosocial development & functioning	4.25 (0.90)	3.99 (1.05)	12.05***	.01
(school) Career choice processes	3.57 (0.96)	3.97 (0.98)	25.81***	.03
Health, physical & sexual development	2.67 (1.02)	2.93 (1.11)	9.73**	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Scale range: 1 (never) to 5 (very often).

Table 12. Differences in care domains of salaried respondents between work settings

Domains	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F†	df
	M (SD)	M (SD)	M (SD)	M (SD)		
Learning processes & cognitive development	4.30 _a (0.75)	3.85 _b (0.97)	3.85 _b (1.13)	3.69 _b (1.18)	14.89***	(3, 382.24)
Psychosocial development & functioning (school)	4.42 _a (0.68)	4.34 _a (0.80)	4.24 _a (0.93)	3.56 _b (1.17)	28.72***	(3, 379.44)
Career choice processes	3.89 _a (0.84)	3.35 _b (1.00)	3.51 _b (0.99)	3.63 _{ab} (1.08)	11.62***	(3, 434.68)
Health, physical & sexual development	2.76 _a (0.88)	3.08 _b (1.08)	2.97 _{ab} (1.08)	2.27 _c (1.13)	14.86***	(3, 428.69)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated; hence, we report the robust Brown-Forsythe F -ratio and use the robust Games-Howell post hoc test for group comparisons (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (never) to 5 (very often).

Table 13. Differences in care domains of salaried respondents between academic disciplines

Domains	Psy	Educ sc	Psy + educ sc	F (2, 761)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Learning processes & cognitive development	3.96 (1.01)	4.06 (0.94)	3.85 (0.90)	0.95	.00
Psychosocial development & functioning (school)	4.27 _a (0.88)	4.03 _b (1.03)	4.08 _{ab} (1.12)	4.50*	-
Career choice processes	3.66 (0.99)	3.65 (0.97)	3.62 (0.96)	0.03	.00
Health, physical & sexual development	2.80 _a (1.01)	2.58 _b (1.07)	3.38 _a (1.12)	6.63**	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for the psychosocial domain; hence, we report the robust Brown-Forsythe F -ratio (df = (2,37.84)). Hochberg's GT2 post hoc test was used for group comparison in the health domain, but in the psychosocial domain, we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Psy = psychology, educ = educational, sc = sciences. Scale range: 1 (never) to 5 (very often)

Description of care domains for self-employed respondents

Furthermore, we report how frequently self-employed respondents performed activities in the four care domains of student development in their main job. This was measured using a 5-point rating scale ranging from 1 (never) to 5 (very often). In general, care tasks were relatively often performed in the first two domains (i.e., means were above the middle scale point ‘sometimes’; MDomain1 = 3.66, SD = 1.27; MDomain2 = 3.60, SD = 1.20), but less often in the last two domains (i.e., mean was around or below the middle scale point ‘sometimes’; MDomain3 = 2.92, SD = 1.13; MDomain4 = 2.52, SD = 1.17) (n = 77; no missing data). Frequencies are presented in Figure 12.

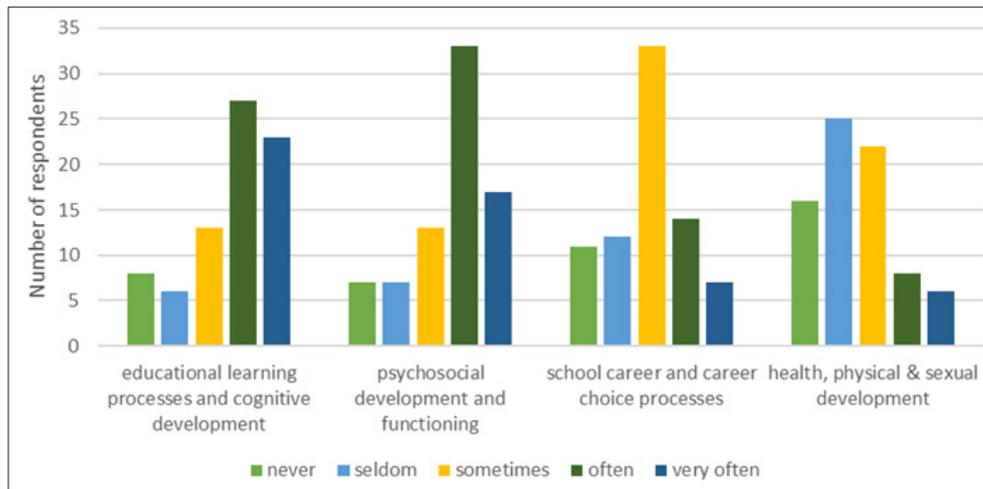


Figure 12. Frequency of care tasks of self-employed respondents across four domains (n = 77).

Differences in care domains of self-employed respondents related to language community, urbanisation, and demographics

In addition, we examined whether there were significant differences in this frequency of care tasks across domains between language communities, degree of urbanization, and respondents with different demographic backgrounds. For each of the three independent variables (i.e., language community, degree of urbanization, academic discipline) a MANOVA was conducted to test for significant effects on the four dependent variables (four domains) at once. Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁶⁴) was significant, we further investigated univariate effects. As an indication of effect size, we also report the partial eta squared; values of .01, .06, and .14 are approximately consistent with small, medium and large effects respectively (Stern, 2011). No significant differences were found based on degree of urbanization or academic discipline using the multivariate test.

Differences between language communities

There was a statistically significant difference in frequency of care tasks based on self-employed respondents' language community, Wilks' $\Lambda = 0.76$, $F(4, 72) = 5.79$, $p < .001$, $n = 77$, partial $\eta^2 = .24$.

64 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

When further examining these differences (see Table 14), it was found that self-employed respondents working in the Flemish Community performed significantly more care tasks with regard to learning processes, cognitive and psychosocial development than self-employed respondents working in the French Community⁶⁵.

Table 14. Differences in care domains of self-employed respondents between language communities

Domains	Flemish Community	French Community	F (1, 75)†	partial η^2
	M (SD)	M (SD)		
Learning processes & cognitive development	3.93 (1.18)	3.26 (1.32)	5.54*	.07
Psychosocial development & functioning	4.07 (0.93)	2.90 (1.22)	20.21***	-
(school) Career choice processes	2.98 (1.04)	2.84 (1.27)	0.26	-
Health, physical & sexual development	2.61 (1.13)	2.39 (1.23)	0.67	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for the psychosocial and (school) career choice process domains; hence, we report the robust Brown-Forsythe F-ratio (df was (1, 52.62) and (1, 55.88) respectively; Stern, 2011). Scale range: 1 (never) to 5 (very often).

Characteristics of the targeted population

Age of the targeted population

We asked respondents to which age group(s) they provide care services. Most salaried respondents⁶⁶ served children ($n = 441$; 56%; 3-12 years) and/or adolescents ($n = 429$; 55%; 12-18 years). Some salaried respondents (also) served young adults ($n = 314$; 40%; 18-25 years), adults ($n = 134$; 17%; 25-65 years), toddlers up to three years ($n = 66$; 8%), and/or the elderly ($n = 6$; 1%; +65 years) (one respondent indicated the question did not apply to him). Additionally, most self-employed respondents⁶⁷ served young adults ($n = 57$; 77%; 18-25 years) and/or adolescents ($n = 56$; 76%; 12-18 years). Some self-employed respondents (also) served children ($n = 45$; 61%; 3-12 years), adults ($n = 43$; 58%; 25-65 years), toddlers up to three years ($n = 10$; 14%), and/or the elderly ($n = 17$; 23%; +65 years).

65 Given that assumptions were sometimes broken (non-normality, inequality of variances) and considering the ordinal nature of the dependent variable, we also performed Kruskal-Wallis tests. These analyses showed virtually identical results as the ANOVAs.

66 Multiple answers could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific answer versus those who did not tick it (because that option did not apply to them). Percentages were based on available data; 48 values were missing for each option (5 respondents indicated that their job did not contribute to peoples' well-being and development and, hence, did not receive this question; the rest were missing due to incomplete responses).

67 Multiple answers could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific answer versus those who did not tick it (because that option did not apply to them). Percentages were based on available data; 3 values were missing for each option (missing due to incomplete responses).

Diversity of the targeted population

With regard to specific target groups, results showed that 68% of the salaried respondents provided care to populations with a low socioeconomic status, 55% to populations with a disability, and 47% to populations with an immigration background⁶⁸. In addition, 25% of the respondents provided care to a population with a refugee status, 11% to populations with a homosexual or bisexual orientation, and 5% to populations with a non-binary gender identity. However, 17% of the salaried respondents did not provide care services to any of these populations.

Of the self-employed respondents, 20% provided care to populations with a disability, 19% to populations with a low socioeconomic status, 12% to populations with a homosexual or bisexual orientation, 8% to populations with an immigration background, 5% to populations with a refugee status, and 3% to populations with a non-binary gender identity. However, 64% of the self-employed respondents did not provide care services to any of these populations.

Differences in diversity in targeted population related to language community and urbanization

Differences between language communities

Investigating differences in providing care to specific target groups across language communities for salaried respondents, we found a significant relation between language community, on the one hand, and providing care to individuals with a disability, $\chi^2 (1) = 38.57$, $p < .001$, and to individuals with a migration background, $\chi^2 (1) = 7.18$, $p < .01$, on the other. Specifically, the proportion of respondents providing care to individuals with a disability or migration background was larger for salaried respondents in the Flemish Community (61% and 50% respectively) than for salaried respondents in the French Community (35% and 38% respectively).

There were no differences between language communities for self-employed respondents.

Differences between small and large urban areas

Next, we investigated differences in providing care to specific target groups for salaried respondents across areas of varying urbanisation. Results showed a significant relation between degree of urbanization, on the one hand, and providing care to individuals with a migration background, $\chi^2 (1) = 3.84$, $p < .05$, and to individuals with a low socioeconomic status, $\chi^2 (1) = 11.40$, $p < .001$. Specifically, and not surprisingly, the proportion of respondents providing care to individuals with a migration background was smaller for salaried respondents in small urban or rural areas (44%) than salaried respondents in large urban areas (51%). Additionally, the proportion of respondents providing care to individuals with a low socioeconomic status was larger for salaried respondents in small urban or rural areas (73%) than for salaried respondents in large urban areas (61%).

There were no differences between small urban/rural and large urban areas for self-employed respondents.

⁶⁸ Multiple answers could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific answer versus those who did not tick it (because that option did not apply to them). Percentages were based on available data; 82 values were missing for each option (37 respondents did not receive this question (as it did not apply to their situation); the rest were missing due to incomplete responses).

4 Perceived competency of the workforce

To be successful in the provision of psychological services, different roles or competency areas have been identified and are expected from professionals in education. Several professional organizations in education (e.g., Vlaamse Vereniging voor Schoolpsychologie (VVSP); the world-wide International School Psychology Association (ISPA)) distinguish between seven areas or roles inspired on the CanMEDS framework (Royal College of Physicians and Surgeons of Canada, 2011). These roles are Expert, Communicator, Collaborator, Organizer, Mental Health Advocate, Scientist-practitioner, and Professional⁶⁹.

In the present study, we asked respondents about how competent they felt in each role and how important each competency was for their professional duties. Respondents rated multiple items per competency area on a 5-point scale ranging from 1 (not at all competent or important) to 5 (very competent or important). An overview of items is provided in Table 15.

Correlations between corresponding items for perceived level of competency and perceived importance were all significant at $p < .001$ and ranged from .32 (“Op een open en respectvolle manier communiceren met leerlingen, ouders en leerkrachten/Communiquer de manière ouverte et respectueuse avec les élèves, les parents et les enseignants”) to .67 (“Vorming en onderwijs geven over onderwerpen binnen het eigen vakgebied/Donner des formations et enseigner sur des sujets dans son propre domaine d’expertise”). Most correlations (76%) ranged between .50 and .67, which can be considered as high (Cohen, 1988). Descriptive statistics of perceived competency and perceived importance of each competency are reported in Tables 15 and 16 respectively.

Most and least competent

Overall, respondents perceived themselves as competent (average score above the middle scale point of 3) on 27 of the 34 competencies (Table 15). More specifically, they felt rather or very competent for all competencies of the roles of Collaborator and Professional, all but one competency of the roles of Mental Health Advocate, Organizer, and Communicator, and all but two competencies of the roles of Expert and Scientist-practitioner.

The top-five competencies in which respondents felt most competent were communicating with students, parents, and teachers in an open and respectful way ($M = 4.52$, $SD = 0.58$; Communicator), oral and written reporting, tailored to clients ($M = 4.20$, $SD = 0.74$; Communicator), reflecting on their own strengths and weaknesses ($M = 4.14$, $SD = 0.67$; Professional), having knowledge about the cognitive, social, and emotional development of students ($M = 4.04$, $SD = 0.67$; Expert), and collaborating effectively with external psychologists or educational scientists ($M = 4.00$, $SD = 0.85$; Collaborator). Average scores for those five competencies (only) were 4 or higher, suggesting high perceived competency.

The five competencies in which respondents felt least competent were communicating with foreign-language clients in their language ($M = 2.38$, $SD = 1.10$; Communicator), having knowledge of biological processes that correlate with psychological functioning ($M = 2.63$, $SD = 1.06$; Expert), critically evaluate psychometric properties of instruments (validity, reliability) ($M = 2.66$, $SD = 1.19$; Scientist-practitioner), having knowledge of health education ($M = 2.79$, $SD = 1.02$; Expert), and

⁶⁹ For explanations of the 7 professional roles, see this link in Dutch for more information: <http://schoolpsychologie-vvsp.be/vvsp/wp-content/uploads/2018/01/Profiel-van-de-schoolpsycholoog.pdf> or see this link in English: <https://ispa2016.org/images/ISPA-School-Psych-Skills-Model.pdf>

judging the quality of scientific research and critically evaluate scientific findings ($M = 2.79$, $SD = 1.19$; Scientist-practitioner). The average scores were somewhat lower than the middle point of 3, suggesting that the respondents experienced shortages in their competencies in these areas. Other competencies for which the average was lower than 3, were culture-sensitive assessment, counselling, and treatment (Mental Health Advocate), and supporting schools/organization in selecting, implementing, and evaluation of innovations (Organizer).

Most and least important

Overall, respondents labelled 30 of the 34 competencies as rather or very important (average score above the middle scale point of 3, Table 16). More specifically, all competencies of the roles of Mental Health Advocate, Organizer, Collaborator, Communicator, and Professional were perceived to be important. In addition, four out of six Expert competencies and two out of four competencies of the role of Scientist-practitioner were reported to be important.

The five competencies which were reported to be the most important (average scores above 4 on the 5-point scale) were communicating with students, parents, and teachers in an open and respectful way ($M = 4.83$, $SD = 0.47$; Communicator), having knowledge about the cognitive, social, and emotional development of students ($M = 4.69$, $SD = 0.68$; Expert), reflecting on own strengths and weaknesses ($M = 4.50$, $SD = 0.65$; Professional), oral and written reporting, tailored to clients ($M = 4.48$, $SD = 0.81$; Communicator), and providing appropriate information and psycho-education to students, parents, teachers, and schools ($M = 4.48$, $SD = 0.88$; Mental Health Advocate). Four of these overlap with the highest perceived competencies (cf. supra). Average scores above 4 were also found for having knowledge about the structure of education and educational law (Expert), having knowledge about inclusive education for students with special educational needs and/or disabilities (Expert), counseling students to solve/prevent problems (Mental Health Advocate), helping a client (student, parents ...) to take control (again) of his own development (Mental Health Advocate), involving the student's context (home, teachers ...) in prevention, assessment, and counselling or treatment (Collaborator), taking into account students' and parents' cultural background and educational beliefs (Collaborator), dealing constructively with differences within the own team (Collaborator), efficient collaboration with external psychologists or pedagogists (Collaborator), realizing professional growth (Professional), and being able to make a thoughtful decision and to justify that decision when faced with moral/ethical dilemmas (Professional).

The competencies which were perceived to be least important were being able to critically evaluate psychometric properties of instruments (validity, reliability) ($M = 2.60$, $SD = 1.36$; Scientist-practitioner), judging the quality of scientific research and critically evaluate scientific findings ($M = 2.64$, $SD = 1.34$; Scientist-practitioner), having knowledge of biological processes related to psychological functioning ($M = 2.89$, $SD = 1.18$), and having knowledge of health education ($M = 2.96$, $SD = 1.14$; Expert). Average scores were a little lower than 3, suggesting that, on average, respondents perceive those competencies as relatively less important.

Differences in competencies related to language community, urbanization, age, work setting, and academic discipline

Furthermore, we examined differences in competency levels between language communities, areas of varying urbanisation, and work settings. In addition, as competency beliefs may increase with age due to an increase in experience, we also examined differences between younger (≤ 39 years) vs. older (≥ 40 years) respondents.

Each of the five independent variables (i.e., language community, degree of urbanization, age group, work setting, and academic discipline) were included in a MANOVA to test for significant effects on competency levels (items were grouped in one MANOVA per competency category). Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁷⁰, see Table 17) was significant, we further investigated significant univariate effects. As an indication of effect size, we also report the partial eta squared; values of .01, .06, and .14 are approximately consistent with small, medium and large effects respectively (Stern, 2011).

70 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

Table 15. Perceived levels of competency for each of the seven professional roles

Kennis hebben over... (Expert)	Avoir des connaissances sur... (Expert)	n	M	SD
Cognitieve, sociale en emotionele ontwikkeling van leerlingen	Le développement cognitif, social et émotionnel des élèves	813	4.04	0.67
Gezondheidseducatie	L'éducation à la santé	813	2.79	1.02
Biologische processen die samenhangen met psychisch functioneren (bv. erfelijkheid, neurologische processen ...)	Les processus biologiques liés au fonctionnement psychique (p.ex. hérédité, processus neurologiques...)	813	2.63	1.06
Structuur van het onderwijs en onderwijswetgeving	La structure de l'enseignement et la législation en matière d'enseignement	813	3.84	0.94
Inclusief onderwijs voor leerlingen met specifieke onderwijsbehoeften of een functiebeperking	L'enseignement pour les élèves ayant des besoins éducatifs spécifiques ou souffrant d'un handicap	813	3.67	1.00
Jeugd-, verzijns- en gezondheidsvoorzieningen in mijn regio	Les services d'Aide à la Jeunesse, d'Aide Sociale et des Soins de Santé dans ma région	813	3.19	1.02
Hulpverlening kunnen bieden (Mental Health Advocate)				
Gepaste informatie en psycho-educatie geven aan leerlingen*, ouders, leerkrachten en scholen	Fournir un soutien psychopédagogique et des informations appropriées aux élèves*, aux parents, aux enseignants et aux écoles	813	3.98	0.79
Resultaten van diagnostisch onderzoek omzetten in handelingsgerichte adviezen	Convertir les résultats de la recherche diagnostique en conseils orientés vers l'action	813	3.53	1.09
Begeleiding bieden aan leerlingen* om problemen te verhelpen/voorkomen	Offrir un accompagnement aux élèves* afin de résoudre/prévenir les problèmes	813	3.91	0.84
Een cliënt (leerling*, ouders ...) ondersteunen om zijn/haar eigen ontwikkeling (weer) in handen te nemen.	Soutenir un client (élève*, parents...) pour qu'il puisse (re)prendre en main son propre développement	813	3.84	0.86
Groepsprocessen (bv. socialisatieprocessen, pestgedrag ...) bijsturen en verbeteren	Adapter et améliorer les processus de groupe (par ex. les processus de socialisation, le harcèlement, etc.)	813	3.16	0.96
Omgaan met verontrustende situaties (bv. vermoeden mishandeling...)	Faire face aux situations préoccupantes (par ex. soupçons de maltraitance...)	813	3.23	0.98
Omgaan met crisissituaties (bv. zelfdoding ...)	Faire face aux situations de crise (par ex. suicide...)	813	3.16	1.04
Cultuursensitieve diagnostiek, begeleiding en behandeling	Diagnostic, accompagnement et traitement en respectant la culture des clients	813	2.83	1.06
Systeemondersteuning kunnen bieden (Organizer)				
Bijdragen aan het (zorg)beleid van een school/instelling	Contribuer à la politique (de soutien et d'accompagnement) d'une école/institution	795	3.50	0.95
Scholen/instellingen ondersteunen bij het selecteren, implementeren en evalueren van vernieuwingen	Soutenir les écoles/institutions dans la sélection, l'implémentation et l'évaluation des innovations	795	2.98	1.07
Bijdragen aan de ontwikkeling van mijn eigen team	Contribuer au développement de ma propre équipe	795	3.55	0.96

1 (not at all competent) to 5 (very competent)

Table 15. Continued - Perceived levels of competency for each of the seven professional roles

Samenwerken (Collaborator)	Collaborer (Collaborator)	n	M	SD
De omgeving van leerlingen* (thuisomgeving, leerkrachten ...) betrekken bij preventie, diagnostiek, en begeleiding of behandeling	Impliceren l'entourage des élèves* (entourage à la maison, enseignants...) afin de prévenir, diagnostiquer et traiter les problèmes	795	3.91	0.87
Rekening houden met de culturele achtergrond en opvoedingsovertuiging van leerlingen* en ouders	Tenir compte du contexte culturel des élèves* et des parents et de leurs convictions concernant l'éducation	795	3.56	0.91
Constructief omgaan met verschillen binnen het eigen team	Faire face de manière constructive aux différences au sein de sa propre équipe	795	3.77	0.87
Doeltreffend samenwerken met externe psychologen of pedagogen	Collaborer de manière efficace avec des psychologues et pédagogues externes	795	4.00	0.85
Doeltreffend samenwerken met hulpverleners uit andere disciplines (arts, logopedist, politie ...)	Collaborer de manière efficace avec des intervenants émanant d'autres disciplines (médecin, logopède, police...)	795	3.88	0.90
Communiceren (Communicator)	Communiquer (Communicator)			
Op een open en respectvolle manier communiceren met leerlingen*, ouders en leerkrachten	Communiquer de manière ouverte et respectueuse avec les élèves*, les parents et les enseignants	795	4.52	0.58
Mondeling en schriftelijk verslag uitbrengen, afgestemd op de doelgroep	Rédiger des rapports, aussi bien oraux qu'écrits, en fonction du groupe cible	795	4.20	0.74
Communiceren met anderstalige cliënten in de taal van de cliënt	Communication avec des clients de langue étrangère dans la langue du client	795	2.38	1.10
Vorming en onderwijs geven over onderwerpen binnen het eigen vakgebied	Donner des formations et enseigner sur des sujets dans son propre domaine d'expertise	795	3.23	1.25
Eigen professionele ontwikkeling en professioneel handelen (Professional)	Développement professionnel propre et action professionnelle (Professional)			
Stilstaan bij mijn eigen sterktes en zwaktes	Réfléchir sur ses propres forces et faiblesses	788	4.14	0.67
Eigen professionele groei realiseren	Réaliser sa propre avancée professionnelle	788	3.81	0.82
Bij morele/ethische dilemma's een weloverwogen beslissing nemen en deze kunnen verantwoorden	Prendre une décision réfléchie en cas de dilemmes moraux/éthiques et pouvoir la justifier	788	3.72	0.84
Geven van supervisie aan collega's	Superviser des collègues	788	3.11	1.11
Wetenschapper-Onderzoeker (Scientist-practitioner)	Scientifique-Chercheur (Scientist-practitioner)			
Een wetenschappelijke, probleemoplossende cyclus van hypothesevorming en -toetsing gebruiken bij diagnostiek en interventies	Utiliser un cycle de formulation et de test des hypothèses qui soit scientifique et apte à résoudre les problèmes dans le cas de diagnostics et d'interventions	788	3.12	1.12
De uitvoering van interventies systematisch monitoren en evalueren	Contrôler et évaluer l'exécution des interventions de manière systématique	788	3.03	1.05
De kwaliteit van wetenschappelijk onderzoek beoordelen en wetenschappelijke bevindingen kritisch evalueren	Juger la qualité de la recherche scientifique et évaluer les résultats scientifiques de manière critique	788	2.79	1.19
Psychometrische kwaliteiten (validiteit, betrouwbaarheid) van instrumenten kritisch beoordelen	Évaluer de manière critique les qualités psychométriques (validité, fiabilité) des instruments	788	2.66	1.19

1 (not at all competent) to 5 (very competent)

Table 16. Perceived levels of importance of competencies for each of the seven professional roles

Kennis hebben over... (Expert)	Avoir des connaissances sur... (Expert)	n	M	SD
Cognitieve, sociale en emotionele ontwikkeling van leerlingen	Le développement cognitif, social et émotionnel des élèves	813	4.69	0.68
Gezondheidseducatie	L'éducation à la santé	813	2.96	1.14
Biologische processen die samenhangen met psychisch functioneren (bv. erfelijkheid, neurologische processen ...)	Les processus biologiques liés au fonctionnement psychique (p.ex. hérédité, processus neurologiques...)	813	2.89	1.18
Structuur van het onderwijs en onderwijswetgeving	La structure de l'enseignement et la législation en matière d'enseignement	813	4.40	0.97
Inclusief onderwijs voor leerlingen met specifieke onderwijsbehoeften of een functiebeperking	L'enseignement pour les élèves ayant des besoins éducatifs spécifiques ou souffrant d'un handicap	813	4.24	1.13
Jeugd-, verzijns- en gezondheidsvoorzieningen in mijn regio	Les services d'Aide à la Jeunesse, d'Aide Sociale et des Soins de Santé dans ma région	813	3.81	1.25
Hulpverlening kunnen bieden (Mental Health Advocate)				
Gepaste informatie en psycho-educatie geven aan leerlingen*, ouders, leerkrachten en scholen	Fournir un soutien psychopédagogique et des informations appropriées aux élèves*, aux parents, aux enseignants et aux écoles	813	4.48	0.88
Resultaten van diagnostisch onderzoek omzetten in handelingsgerichte adviezen	Convertir les résultats de la recherche diagnostique en conseils orientés vers l'action	813	3.88	1.39
Begeleiding bieden aan leerlingen* om problemen te verhelpen/voorkomen	Offrir un accompagnement aux élèves* afin de résoudre/prévenir les problèmes	813	4.39	0.94
Een cliënt (leerling*, ouders ...) ondersteunen om zijn/haar eigen ontwikkeling (weer) in handen te nemen.	Soutenir un client (élève*, parents...) pour qu'il puisse (re)prendre en main son propre développement	813	4.27	0.97
Groepsprocessen (bv. socialisatieprocessen, pestgedrag ...) bijsturen en verbeteren	Adapter et améliorer les processus de groupe (par ex. les processus de socialisation, le harcèlement, etc.)	813	3.71	1.14
Omgaan met verontrustende situaties (bv. vermoeden mishandeling...)	Faire face aux situations préoccupantes (par ex. soupçons de maltraitance...)	813	3.91	1.27
Omgaan met crisissituaties (bv. zelfdoding ...)	Faire face aux situations de crise (par ex. suicide...)	813	3.81	1.28
Cultuursensitieve diagnostiek, begeleiding en behandeling	Diagnostic, accompagnement et traitement en respectant la culture des clients	813	3.52	1.35
Systeemondersteuning kunnen bieden (Organizer)				
Bijdragen aan het (zorg)beleid van een school/instelling	Contribuer à la politique (de soutien et d'accompagnement) d'une école/institution	795	3.96	1.08
Scholen/instellingen ondersteunen bij het selecteren, implementeren en evalueren van vernieuwingen	Soutenir les écoles/institutions dans la sélection, l'implémentation et l'évaluation des innovations	795	3.33	1.26
Bijdragen aan de ontwikkeling van mijn eigen team	Contribuer au développement de ma propre équipe	795	3.98	1.11

1 (not at all important) to 5 (very important)

Table 16 Continued - Perceived levels of importance of competencies for each of the seven professional roles

Samenwerken (Collaborator)	Collaborer (Collaborator)	n	M	SD
De omgeving van leerlingen* (thuisomgeving, leerkrachten ...) betrekken bij preventie, diagnostiek, en begeleiding of behandeling	Impliceren l'entourage des élèves* (entourage à la maison, enseignants...) afin de prévenir, diagnostiquer et traiter les problèmes	795	4.18	1.19
Rekening houden met de culturele achtergrond en opvoedingsovertuiging van leerlingen* en ouders	Tenir compte du contexte culturel des élèves* et des parents et de leurs convictions concernant l'éducation	795	4.20	1.00
Constructief omgaan met verschillen binnen het eigen team	Faire face de manière constructive aux différences au sein de sa propre équipe	795	4.26	0.91
Doeltreffend samenwerken met externe psychologen of pedagogen	Collaborer de manière efficace avec des psychologues et pédagogues externes	795	4.02	1.10
Doeltreffend samenwerken met hulpverleners uit andere disciplines (arts, logopedist, politie ...)	Collaborer de manière efficace avec des intervenants émanant d'autres disciplines (médecin, logopède, police...)	795	3.97	1.17
Communiceren (Communicator)	Communiquer (Communicator)			
Op een open en respectvolle manier communiceren met leerlingen*, ouders en leerkrachten	Communiquer de manière ouverte et respectueuse avec les élèves*, les parents et les enseignants	795	4.83	0.47
Mondeling en schriftelijk verslag uitbrengen, afgestemd op de doelgroep	Rédiger des rapports, aussi bien oraux qu'écrits, en fonction du groupe cible	795	4.48	0.81
Communiceren met anderstalige cliënten in de taal van de cliënt	Communication avec des clients de langue étrangère dans la langue du client	795	3.23	1.35
Vorming en onderwijs geven over onderwerpen binnen het eigen vakgebied	Donner des formations et enseigner sur des sujets dans son propre domaine d'expertise	795	3.19	1.35
Eigen professionele ontwikkeling en professioneel handelen (Professional)	Développement professionnel propre et action professionnelle (Professional)			
Stilstaan bij mijn eigen sterktes en zwaktes	Réfléchir sur ses propres forces et faiblesses	788	4.50	0.65
Eigen professionele groei realiseren	Réaliser sa propre avancée professionnelle	788	4.27	0.85
Bij morele/ethische dilemma's een weloverwogen beslissing nemen en deze kunnen verantwoorden	Prendre une décision réfléchie en cas de dilemmes moraux/éthiques et pouvoir la justifier	788	4.26	0.87
Geven van supervisie aan collega's	Superviser des collègues	788	3.14	1.30
Wetenschapper-Onderzoeker (Scientist-practitioner)	Scientifique-Chercheur (Scientist-practitioner)			
Een wetenschappelijke, probleemoplossende cyclus van hypothesevervorming en -toetsing gebruiken bij diagnostiek en interventies	Utiliser un cycle de formulation et de test des hypothèses qui soit scientifique et apte à résoudre les problèmes dans le cas de diagnostics et d'interventions	788	3.21	1.42
De uitvoering van interventies systematisch monitoren en evalueren	Contrôler et évaluer l'exécution des interventions de manière systématique	788	3.34	1.27
De kwaliteit van wetenschappelijk onderzoek beoordelen en wetenschappelijke bevindingen kritisch evalueren	Juger la qualité de la recherche scientifique et évaluer les résultats scientifiques de manière critique	788	2.64	1.34
Psychometrische kwaliteiten (validiteit, betrouwbaarheid) van instrumenten kritisch beoordelen	Évaluer de manière critique les qualités psychométriques (validité, fiabilité) des instruments	788	2.60	1.36

1 (not at all important) to 5 (very important)

Table 17. Omnibus tests for MANOVAs testing differences in competencies

	Wilks' Lambda	Pillai's Trace	F-test	df	partial η^2	n
Expert						
Community	-	0.03	4.70***	(6, 806)	.03	813
Urbanization	-	0.02	2.33*	(6, 798)	.02	805
Age	-	0.03	4.61***	(6, 806)	.03	813
Work setting	-	0.24	9.25***	(18, 1935)	.08	652
Academic discipline	-	0.09	6.07***	(12, 1512)	.05	763
Mental health advocate						
Community	-	0.11	12.51***	(8, 804)	.11	813
Urbanization	-	0.04	3.94***	(8, 796)	.04	805
Age	0.95	-	5.57***	(8, 804)	.05	813
Work setting	-	0.30	8.81***	(24, 1929)	.10	652
Academic discipline	-	0.08	3.78***	(16, 1508)	.04	763
Organizer						
Community	-	0.03	6.71***	(3, 791)	.03	795
Urbanization	0.99	-	2.21	(3, 783)	.01	787
Age	0.98	-	6.16***	(3, 791)	.02	795
Work setting	-	0.12	8.80***	(9, 1905)	.04	639
Academic discipline	0.94	-	7.49***	(6, 1480)	.03	745
Collaborator						
Community	0.98	-	3.13**	(5, 789)	.02	795
Urbanization	-	0.04	5.75***	(5, 781)	.04	787
Age	0.99	-	0.97	(5, 789)	.01	795
Work setting	-	0.21	9.49***	(15, 1899)	.07	639
Academic discipline	-	0.03	2.33*	(10, 1478)	.02	745
Communicator						
Community	-	0.07	15.35***	(4, 790)	.07	795
Urbanization	0.99	-	2.83*	(4, 782)	.01	787
Age	-	0.05	9.71***	(4, 790)	.05	795
Work setting	0.77	-	14.50***	(12, 1672.41)	.08	639
Academic discipline	0.98	-	1.95*	(8, 1478)	.01	745
Professional						
Community	-	0.05	9.76***	(4, 783)	.05	788
Urbanization	0.98	-	4.00**	(4, 775)	.02	780
Age	0.91	-	20.02***	(4, 783)	.09	788
Work setting	-	0.09	4.95***	(12, 1887)	.03	634
Academic discipline	-	0.02	1.78	(8, 1468)	.01	739
Scientist-practitioner						
Community	-	0.09	20.43***	(4, 783)	.09	788
Urbanization	-	0.02	3.79**	(4, 775)	.02	780
Age	-	0.00	0.36	(4, 783)	.00	788
Work setting	-	0.18	10.01***	(12, 1887)	.06	634
Academic discipline	0.97	-	3.34***	(8, 1466)	.02	739

Differences in competency levels between language communities, areas of varying urbanization, older vs. younger respondents (i.e., 40 years and older vs. 39 years and younger), work settings and academic discipline are described in more detail in the following tables (Tables 18 to 48)⁷¹.

Results yielded that respondents working in the French Community felt more competent as an expert (Table 18 to 22) regarding health education, but less competent as an expert with regard to educational structure and legislation, and inclusive education than respondents working in the Flemish Community. Respondents working in small urban or rural areas also felt more competent as an expert in youth, welfare and health facilities than respondents working in large urban areas. Additionally, younger respondents felt less competent as an expert regarding cognitive, social, and emotional development, health education, and biological processes than older respondents. Several significant differences across work settings in feelings of competency as an expert are reported in Table 21. Finally, psychologists reported higher levels of competency in health education, knowledge of biological processes, and knowledge of youth, welfare and health facilities (Table 22), whereas pedagogists felt more competent in knowledge of educational structure and legislation.

Results further showed that respondents working in the French Community generally felt more competent as a mental health advocate (Table 23 to 27) than respondents working in the Flemish Community. Respondents working in small urban or rural areas primarily felt less competent with regard to culture-sensitive diagnostics, guidance, and treatment than respondents working in large urban areas. Additionally, younger respondents felt less competent as a mental health advocate (Table 25) as compared to older respondents. Several significant differences across work settings in feelings of competency as a mental health advocate are reported in Table 26. Finally, psychologists felt more competent in their role of mental health advocate than pedagogists.

Next, findings indicated that respondents working in the French Community felt less competent as an organizer (Table 28 to 31) in contributing to the care policy of a school or institution than respondents working in the Flemish Community. Also, younger respondents felt less competent as an organizer (see details in Table 29) as compared to older respondents. Additionally, respondents in regular schools felt most competent in contributing to the care policy of a school or institution and respondents in higher education also felt more competent regarding this topic than respondents in the CLB/CPMS/Kaleido. Respondents in the CLB/CPMS/Kaleido also felt significantly less competent in supporting schools or institutions in selecting, implementing and evaluating innovations than respondents in any of the other settings and respondents in higher education felt more competent in contributing to the development of their own team than respondents in the CLB/CPMS/Kaleido or in special schools. Finally, pedagogists felt more competent in their role of organizer than psychologists (Table 31). No differences were found based on urbanization.

Results also showed that respondents working in the French Community felt more competent as a collaborator (Table 32 to 35) than respondents working in the Flemish Community. Respondents working in small urban or rural areas also felt less competent as a collaborator taking into account the cultural background/parenting beliefs of students and parents and with regard to dealing constructively with differences within their own team than respondents working in large urban areas. Finally, several significant differences across work settings in feelings of competency as a collaborator are reported in Table 34. No other consistent differences were found.

Findings further showed that respondents working in the French Community felt less competent as a communicator (Table 36 to 40), specifically in communicating with foreign-language individuals in their language, than respondents working in the Flemish Community. Respondents working in

71 Given that assumptions were sometimes broken (non-normality, inequality of variances) and considering the ordinal nature of the dependent variables, we also performed Kruskal-Wallis tests. These analyses generally showed virtually identical results as the ANOVAs.

small urban or rural areas also felt less competent as a communicator, specifically in communicating with foreign-language individuals in their language and in providing training and education, than respondents working in large urban areas. Additionally, younger respondents felt less competent as a communicator, specifically in providing training and education, as compared to older respondents. Also, respondents working in the CLB/CPMS/Kaleido felt less competent in providing training and education than respondents working in any of the other settings; respondents working in special schools also felt less competent in providing training and education than respondents working in regular schools or higher education (Table 39). There were few differences in communicator competencies between psychologists and pedagogists, but pedagogists felt primarily more competent in oral and written reporting adjusted to a target audience.

Furthermore, mixed differences were found across language communities in the feelings of competency as a professional (Table 41 to 44). In addition, respondents working in small urban or rural areas felt less competent as a professional, specifically in reflecting on their own strengths and weaknesses, realizing their own professional growth and making well-considered decisions regarding moral or ethical dilemmas and justifying them, than respondents working in large urban areas. Also, younger respondents felt less competent as a professional, specifically in making well-considered decisions regarding moral or ethical dilemmas and justifying them and in giving supervision to colleagues, as compared to older respondents. Several significant differences across work settings in feelings of competency as a professional are reported in Table 44. There were no differences between psychologists and pedagogists.

Finally, results showed that respondents working in the French Community felt less competent as a Scientist-practitioner (Table 45 to 48) than respondents working in the Flemish Community. Respondents working in small urban or rural areas also felt less competent as a Scientist-practitioner, specifically in assessing the quality of scientific research, than respondents working in large urban areas. In addition, respondents working in the CLB/CPMS/Kaleido felt less competent in systematically monitoring and evaluating the implementation of interventions than respondents working in special schools or higher education; respondents working in the CLB/CPMS/Kaleido also felt less competent in assessing the quality of scientific research than respondents working in regular schools or higher education and respondents in special schools felt less competent in this regard than respondents in higher education. Finally, of the four competencies, psychologists felt more competent than pedagogists in assessing psychometric properties of instruments. There were no differences between younger and older respondents.

Table 18. Differences in competencies between language communities (Expert role)

Expert	Flemish Community	French Community		
	M (SD)	M (SD)	F (1, 811)†	partial η^2
Cognitive, social and emotional development	4.05 (0.65)	4.02 (0.73)	0.22	.00
Health education	2.72 (1.02)	3.00 (1.00)	11.96***	-
Biological processes	2.63 (1.04)	2.63 (1.14)	0.01	.00
Educational structure and legislation	3.89 (0.88)	3.68 (1.09)	6.11*	-
Inclusive education	3.72 (0.98)	3.55 (1.05)	4.14*	-
Youth, welfare and health facilities	3.17 (1.01)	3.27 (1.05)	1.71	.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2, 4 and 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 365.72)$, $(1, 306.12)$, and $(1, 338.03)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 19. Differences in competencies between areas of varying urbanization (Expert role)

Expert	Large urban areas	Small urban/rural areas	F (1, 803)†	partial η^2
	M (SD)	M (SD)		
Cognitive, social and emotional development	4.04 (0.73)	4.06 (0.60)	0.21	-
Health education	2.84 (1.04)	2.74 (1.00)	1.88	.00
Biological processes	2.68 (1.10)	2.58 (1.03)	1.83	.00
Educational structure and legislation	3.86 (0.97)	3.83 (0.91)	0.28	.00
Inclusive education	3.67 (1.05)	3.70 (0.94)	0.18	-
Youth, welfare and health facilities	3.10 (0.99)	3.28 (1.03)	6.60*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1 and 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 707.01)$ and $(1, 746.12)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 20. Differences in competencies between age groups (Expert role)

Expert	Aged below 40 years	Aged 40 years and older	F (1, 811)†	partial η^2
	M (SD)	M (SD)		
Cognitive, social and emotional development	3.96 (0.63)	4.16 (0.72)	15.63***	-
Health education	2.72 (0.96)	2.89 (1.10)	5.82*	.01
Biological processes	2.56 (1.01)	2.73 (1.12)	5.16*	.01
Educational structure and legislation	3.80 (0.88)	3.88 (1.03)	1.24	-
Inclusive education	3.70 (0.92)	3.63 (1.11)	0.95	-
Youth, welfare and health facilities	3.18 (0.94)	3.21 (1.13)	0.20	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 1 and Items 4-6; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 644.34)$, $(1, 633.67)$, $(1, 618.40)$, and $(1, 625.09)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷²

72 The Kruskal-Wallis test indicated a significant difference between age groups in their competency as an expert with regard to educational structure and legislation (Kruskal-Wallis H test (1) = 4.06, $p < .05$; with a mean rank for older respondents of 425.75 and a mean rank for younger respondents of 394.12), where the ANOVA did not.

Table 21. Differences between work settings (Expert role)

Expert	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 648)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Cognitive, social and emotional development	4.06 _{ab} (0.58)	3.96 _a (0.66)	4.25 _b (0.57)	3.94 _a (0.77)	4.07**	-
Health education	2.59 _a (0.92)	2.78 _a (1.00)	3.16 _b (1.00)	2.74 _a (1.05)	7.20***	.03
Biological processes	2.54 (0.94)	2.75 (1.06)	2.78 (1.16)	2.52 (1.08)	2.29	.01
Educational structure and legislation	4.04 _a (0.79)	3.75 _b (0.86)	3.79 _{ab} (0.85)	3.96 _{ab} (0.90)	4.27**	-
Inclusive education	3.93 _a (0.73)	3.70 _{ab} (0.97)	3.59 _b (1.00)	3.54 _b (1.09)	6.38***	-
Youth, welfare and health facilities	3.58 _a (0.79)	3.12 _b (0.96)	3.12 _b (1.03)	2.65 _c (1.05)	28.21***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1 and 4-6; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (3, 389.37)$, $(3, 383.70)$, $(3, 346.56)$ and $(3, 348.53)$ respectively). Hochberg's GT2 post hoc test was used for all tasks except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 22. Differences between academic disciplines (Expert role)

Expert	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 760)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Cognitive, social and emotional development	4.05 (0.65)	4.00 (0.73)	4.25 (0.58)	1.44	.00
Health education	2.93 _a (0.96)	2.53 _b (1.06)	3.19 _a (0.98)	14.76***	-
Biological processes	2.74 _a (1.07)	2.47 _b (1.03)	3.06 _{ab} (0.85)	7.09***	.02
Educational structure and legislation	3.71 _a (1.02)	4.01 _b (0.80)	4.06 _{ab} (1.00)	9.85***	-
Inclusive education	3.62 (1.03)	3.75 (0.96)	3.81 (0.91)	1.84	.01
Youth, welfare and health facilities	3.27 _a (0.95)	3.01 _b (1.11)	3.38 _{ab} (1.03)	6.33**	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2 and 4; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (2, 66.12)$ and $(2, 49.46)$ respectively). Hochberg's GT2 post hoc test was used for all items except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 23. Differences between language communities (Mental health advocate role)

Mental health advocate	Flemish Community	French Community	F (1, 811)†	partial η^2
	M (SD)	M (SD)		
<i>Provide appropriate information/psycho-education</i>	3.95 (0.79)	4.06 (0.80)	2.77	.00
<i>Convert the results into action-oriented advice</i>	3.57 (1.08)	3.40 (1.11)	3.72	.01
Provide guidance	3.88 (0.86)	4.00 (0.77)	3.97*	-
Supporting a client to take control of his / her own development (again)	3.79 (0.87)	3.97 (0.80)	7.00**	.01
Adjust and improve group processes	3.13 (0.97)	3.24 (0.93)	1.91	.00
Dealing with troubling situations	3.14 (0.99)	3.50 (0.92)	21.89***	.03
Dealing with crisis situations	3.10 (1.05)	3.31 (0.98)	6.02*	.01
Culture-sensitive diagnostics, guidance and treatment	2.67 (1.03)	3.30 (1.00)	59.12***	.07

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 3; hence, we report the robust Brown-Forsythe F-ratio for these variables (df = (1, 396.39); Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷³

Table 24. Differences between areas of varying urbanization (Mental health advocate role)

Mental health advocate	Large urban areas	Small urban/rural areas	F (1, 803)†	partial η^2
	M (SD)	M (SD)		
Provide appropriate information/psycho-education	3.98 (0.81)	3.98 (0.76)	0.01	.00
Convert the results into action-oriented advice	3.44 (1.17)	3.61 (0.99)	4.74*	-
Provide guidance	3.93 (0.89)	3.90 (0.79)	0.25	-
Supporting a client to take control of his / her own development (again)	3.88 (0.89)	3.79 (0.82)	2.27	.00
Adjust and improve group processes	3.17 (0.99)	3.14 (0.93)	0.19	.00
Dealing with troubling situations	3.26 (1.00)	3.21 (0.96)	0.38	.00
Dealing with crisis situations	3.13 (1.04)	3.17 (1.02)	0.35	.00
Culture-sensitive diagnostics, guidance and treatment	2.96 (1.09)	2.72 (1.02)	11.18***	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2 and 3; hence, we report the robust Brown-Forsythe F-ratio for these variables (df = (1, 722.41) and (1, 742.28) respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷⁴

73 The Kruskal-Wallis test indicated a significant difference between communities in their competency as a mental health advocate converting results into action-oriented advice (Kruskal-Wallis H test (1) = 4.39, $p < .05$; with a mean rank for Flemish respondents of 416.64 and a mean rank for French respondents of 378.97), where the ANOVA did not. Additionally, the significant difference between communities in providing guidance was not significant at $p < .05$ when examined with the Kruskal-Wallis test (H test (1) = 3.07, $p < .10$).

74 The significant difference between areas varying in urbanization in their competency as a mental health advocate converting results into action-oriented advice was not significant when examined with the Kruskal-Wallis test (Kruskal-Wallis H test (1) = 2.59, $p = .108$).

Table 25. Differences between age groups (Mental health advocate role)

Mental health advocate	Aged below 40 years	Aged 40 years and older	F (1, 811)†	partial η^2
	M (SD)	M (SD)		
Provide appropriate information/psycho-education	3.90 (0.74)	4.09 (0.84)	10.66**	.01
Convert the results into action-oriented advice	3.49 (1.04)	3.59 (1.15)	1.72	.00
Provide guidance	3.86 (0.83)	3.98 (0.85)	4.45*	.01
Supporting a client to take control of his / her own development (again)	3.70 (0.83)	4.04 (0.85)	32.48***	-
Adjust and improve group processes	3.03 (0.93)	3.34 (0.97)	20.93***	-
Dealing with troubling situations	3.14 (0.94)	3.37 (1.03)	11.26***	-
Dealing with crisis situations	3.06 (1.00)	3.30 (1.08)	10.44**	-
Culture-sensitive diagnostics, guidance and treatment	2.77 (1.03)	2.92 (1.09)	4.12*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 4-7; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 701.87)$, $(1, 689.03)$ $(1, 664.05)$, and $(1, 671.56)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷⁵

Table 26. Differences between work settings (Mental health advocate role)

Mental health advocate	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 648)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Provide appropriate information/psycho-education	4.01 (0.68)	3.93 (0.74)	4.01 (0.68)	3.86 (0.99)	1.17	-
Convert the results into action-oriented advice	3.81 _a (0.89)	3.49 _b (0.98)	3.56 _{ab} (1.03)	2.97 _c (1.35)	17.43***	-
Provide guidance	3.80 _a (0.76)	3.98 _{ab} (0.75)	4.12 _b (0.80)	3.99 _{ab} (0.92)	4.69**	.02
Supporting a client to take control of his / her own development (again)	3.75 (0.81)	3.74 (0.85)	3.96 (0.79)	3.96 (0.91)	2.92*	.01
Adjust and improve group processes	2.99 _a (0.89)	3.25 _b (0.86)	3.73 _c (0.71)	2.98 _{ab} (1.05)	15.58***	-
Dealing with troubling situations	3.39 _a (0.90)	3.29 _a (0.94)	3.38 _a (0.94)	2.91 _b (1.05)	8.02***	.04
Dealing with crisis situations	3.25 (0.95)	3.06 (0.97)	3.26 (1.04)	2.99 (1.15)	2.58	.01
Culture-sensitive diagnostics, guidance and treatment	3.10 _a (0.96)	2.65 _b (1.04)	2.75 _b (1.02)	2.44 _b (1.05)	14.29***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1,2,5 and 8; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (3, 367.36)$, $(3, 350.79)$, $(3, 415.12)$ and $(3, 385.36)$ respectively). Hochberg's GT2 post hoc test was used for all tasks except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

⁷⁵ The Kruskal-Wallis test indicated a significant difference between age groups in their competency as a mental health advocate with regard to converting results into action-oriented advice (Kruskal-Wallis H test $(1) = 4.56$, $p < .05$; with a mean rank for older respondents of 427.21 and a mean rank for younger respondents of 393.12), where the ANOVA did not.

Table 27. Differences between academic disciplines (Mental health advocate role)

Mental health advocate	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 760)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Provide appropriate information/ psycho-education	4.05 _a (0.72)	3.83 _b (0.89)	4.38 _a (0.62)	10.15***	-
Convert the results into action-oriented advice	3.61 _a (1.02)	3.32 _b (1.18)	3.75 _{ab} (1.00)	6.90**	-
Provide guidance	3.98 _a (0.78)	3.79 _b (0.92)	4.19 _{ab} (0.66)	6.65**	-
Supporting a client to take control of his / her own development (again)	3.90 _a (0.81)	3.71 _b (0.93)	4.25 _a (0.58)	7.89***	-
Adjust and improve group processes	3.14 (0.93)	3.13 (1.01)	3.44 (0.81)	0.78	.00
Dealing with troubling situations	3.30 _a (0.90)	3.03 _b (1.07)	3.94 _c (0.57)	16.10***	-
Dealing with crisis situations	3.29 _a (0.96)	2.88 _b (1.10)	4.06 _c (0.68)	27.89***	-
Culture-sensitive diagnostics, guidance and treatment	2.91 _a (1.01)	2.63 _b (1.08)	3.38 _a (0.89)	9.75***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for all items except for Item 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (2, 112.40)$, $(2, 76.54)$, $(2, 111.18)$, $(2, 154.12)$, $(2, 205.31)$, $(2, 154.48)$ and $(2, 86.54)$ respectively). The robust Games-Howell post hoc test was used (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 28. Differences between language communities (Organizer role)

Organizer	Flemish Community	French Community	F-test†	partial η^2
	M (SD)	M (SD)		
Contributing to the (care) policy of a school / institution	3.58 (0.90)	3.28 (1.07)	12.61***	-
Supporting schools / institutions in selecting, implementing and evaluating innovations	3.02 (1.03)	2.90 (1.17)	1.67	-
Contribute to the development of my own team	3.55 (0.93)	3.56 (1.05)	0.00	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for all items; hence, we report the robust Brown-Forsythe F-ratio ($df = (1, 299.58)$, $(1, 311.80)$, and $(1, 312.27)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 29. Differences between age groups (Organizer role)

Organizer	Aged below 40 years	Aged 40 years and older	F (1, 793)†	partial η^2
	M (SD)	M (SD)		
Contributing to the (care) policy of a school / institution	3.41 (0.94)	3.63 (0.96)	10.46**	.01
Supporting schools / institutions in selecting, implementing and evaluating innovations	2.88 (1.03)	3.14 (1.10)	11.54***	.01
Contribute to the development of my own team	3.45 (0.95)	3.71 (0.96)	14.13***	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Scale range: 1 (not at all competent) to 5 (very competent).

Table 30. Differences between work settings (Organizer role)

Organizer	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 635)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Contributing to the (care) policy of a school / institution	3.29 _a (0.90)	3.52 _{ac} (0.89)	4.14 _b (0.76)	3.67 _c (0.91)	19.92***	.09
Supporting schools / institutions in selecting, implementing and evaluating innovations	2.72 _a (0.95)	3.07 _b (1.00)	3.31 _b (1.15)	3.23 _b (1.20)	10.46***	-
Contribute to the development of my own team	3.48 _a (0.92)	3.48 _a (0.92)	3.61 _{ab} (0.92)	3.80 _b (0.95)	3.82**	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 2; hence, we report the robust Brown-Forsythe F-ratio for this variable ($df = (3, 341.63)$). Hochberg's GT2 post hoc test was used for all tasks except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 31. Differences between academic disciplines (Organizer role)

Organizer	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 742)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Contributing to the (care) policy of a school / institution	3.36 _a (0.97)	3.74 _b (0.88)	3.44 _{ab} (0.81)	14.55***	.04
Supporting schools / institutions in selecting, implementing and evaluating innovations	2.82 _a (1.02)	3.25 _b (1.09)	3.25 _{ab} (1.00)	15.15***	.04
Contribute to the development of my own team	3.51 (0.98)	3.62 (0.95)	3.94 (1.06)	2.41	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Hochberg's GT2 post hoc test was used (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 32. Differences between language communities (Collaborator role)

Collaborator	Flemish Community	French Community	F (1, 793)†	partial η^2
	M (SD)	M (SD)		
Involving students' environment	3.88 (0.86)	4.00 (0.91)	2.76	.00
Taking into account the cultural background/ parenting beliefs	3.50 (0.90)	3.73 (0.93)	9.58**	.01
Dealing constructively with differences within the own team	3.77 (0.86)	3.77 (0.88)	0.00	.00
Collaborate effectively with external psychologists/pedagogues	3.98 (0.84)	4.05 (0.87)	0.98	.00
Effective collaboration with other disciplines	3.84 (0.90)	4.01 (0.89)	5.95*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2, 4 and 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 365.72)$, $(1, 306.12)$, and $(1, 338.03)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷⁶

Table 33. Differences between areas of varying urbanisation (Collaborator role)

Collaborator	Large urban areas	Small urban/ rural areas	F (1, 785)†	partial η^2
	M (SD)	M (SD)		
Involving students' environment	3.86 (0.95)	3.95 (0.80)	2.01	-
Taking into account the cultural background/ educational beliefs	3.63 (0.95)	3.50 (0.87)	4.43*	.01
Dealing constructively with differences within the own team	3.91 (0.86)	3.65 (0.85)	18.86***	.02
Collaborate effectively with external psychologists/pedagogues	3.98 (0.90)	4.01 (0.79)	0.26	-
Effective collaboration with other disciplines	3.88 (0.96)	3.89 (0.84)	0.03	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 1 and Items 4-5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 704.04)$, $(1, 721.23)$ and $(1, 722.03)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

⁷⁶ The Kruskal-Wallis test indicated a significant difference between communities in their competency as a collaborator with regard to involving students' environment (Kruskal-Wallis H test (1) = 4.80, $p < .05$; with a mean rank for Flemish respondents of 388.47 and a mean rank for French respondents of 426.17), where the ANOVA did not.

Table 34. Differences between work settings (Collaborator role)

Collaborator	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 635)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Involving students' environment	4.15 _a (0.69)	3.94 _b (0.73)	3.90 _{ab} (0.74)	3.38 _c (1.13)	22.76***	-
Taking into account the cultural background/ educational beliefs	3.67 _a (0.83)	3.59 _{ab} (0.84)	3.66 _{ab} (0.91)	3.37 _b (0.98)	3.37*	.02
Dealing constructively with differences within the own team	3.74 _a (0.79)	3.57 _a (0.86)	3.82 _{ab} (0.87)	4.08 _b (0.86)	8.00***	.04
Collaborate effectively with external psychologists/ pedagogues	4.10 _a (0.68)	4.07 _a (0.82)	4.15 _a (0.87)	3.70 _b (1.16)	5.96***	-
Effective collaboration with other disciplines	4.04 _a (0.71)	3.98 _a (0.79)	3.99 _a (0.96)	3.46 _b (1.21)	10.66***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1, 4, and 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (3, 327.30)$, $(3, 327.12)$, and $(3, 312.14)$ respectively). Hochberg's GT2 post hoc test was used for all tasks except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 35. Differences between academic disciplines (Collaborator role)

Collaborator	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 742)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Involving students' environment	3.94 (0.82)	3.78 (0.98)	4.19 (0.75)	4.20*	-
Taking into account the cultural background/ educational beliefs	3.53 (0.88)	3.57 (0.96)	3.63 (1.09)	0.25	.00
Dealing constructively with differences within the own team	3.72 (0.88)	3.82 (0.87)	3.88 (0.72)	1.33	.00
Collaborate effectively with external psychologists/ pedagogues	4.02 (0.80)	3.95 (0.94)	4.38 (0.62)	2.69	-
Effective collaboration with other disciplines	3.94 _a (0.82)	3.76 _b (1.02)	4.13 _{ab} (0.96)	3.86*	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1, 4, and 5; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (2, 92.20)$, $(2, 130.98)$, and $(2, 59.46)$ respectively). Hochberg's GT2 post hoc test was used for all tasks except for the items for which the assumption was broken, for those we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷⁷

⁷⁷ The significant differences between academic disciplines in their competency as a collaborator were no longer significant at $p < .05$ when examined with the Kruskal-Wallis test (Kruskal-Wallis H test (2) = 5.14 and 4.83, $p < .10$).

Table 36. Differences between language communities (Communicator role)

Communicator	Flemish Community	French Community	F (1, 793)†	partial η^2
	M (SD)	M (SD)		
Communicate in an open and respectful way	4.52 (0.56)	4.53 (0.61)	0.07	.00
Oral and written reports adjusted to target audience	4.22 (0.68)	4.13 (0.87)	1.88	-
Communicate with foreign-language individuals in their language	2.55 (1.06)	1.89 (1.06)	57.55***	.07
Provide training and education	3.26 (1.18)	3.16 (1.43)	0.78	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2 and 4; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 286.51)$ and $(1, 298.20)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 37. Differences between areas of varying urbanization (Communicator role)

Communicator	Large urban areas	Small urban/ rural areas	F (1, 785)†	partial η^2
	M (SD)	M (SD)		
Communicate in an open and respectful way	4.53 (0.59)	4.52 (0.57)	0.02	.00
Oral and written reports adjusted to target audience	4.22 (0.76)	4.19 (0.69)	0.32	-
Communicate with foreign-language individuals in their language	2.49 (1.15)	2.29 (1.05)	6.12*	-
Provide training and education	3.34 (1.24)	3.12 (1.25)	6.26*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2 and 3; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 731.76)$ and $(1, 733.95)$ respectively; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 38. Differences between age groups (Communicator role)

Communicator	Aged below 40 years	Aged 40 years and older	F (1, 793)†	partial η^2
	M (SD)	M (SD)		
Communicate in an open and respectful way	4.50 (0.60)	4.56 (0.53)	2.58	-
Oral and written reports adjusted to target audience	4.17 (0.70)	4.23 (0.78)	1.30	.00
Communicate with foreign-language individuals in their language	2.43 (1.08)	2.31 (1.13)	2.46	.00
Provide training and education	3.03 (1.20)	3.53 (1.26)	31.28***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1 and 4; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 749.92)$ and $(1, 674.81)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 39. Differences between work settings (Communicator role)

Communicator	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 635)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Communicate in an open and respectful way	4.50 (0.56)	4.52 (0.58)	4.46 (0.58)	4.52 (0.60)	0.19	.00
Oral and written reports adjusted to target audience	4.15 (0.67)	4.25 (0.69)	4.31 (0.65)	4.23 (0.73)	1.61	.01
Communicate with foreign-language individuals in their language	2.43 (1.09)	2.41 (1.00)	2.44 (1.12)	2.37 (1.17)	0.12	.00
Provide training and education	2.62 _a (1.14)	3.24 _b (1.05)	3.66 _c (1.06)	4.02 _c (0.97)	60.63***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 4; hence, we report the robust Brown-Forsythe F-ratio for this variable ($df = (3, 400.18)$). Hochberg's GT2 post hoc test was used for all items except for the item for which the assumption was broken, for that item we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 40. Differences between academic disciplines (Communicator role)

Communicator	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 742)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Communicate in an open and respectful way	4.53 (0.58)	4.53 (0.55)	4.56 (0.63)	0.04	.00
Oral and written reports adjusted to target audience	4.15 (0.74)	4.27 (0.73)	4.44 (0.63)	3.36*	.01
Communicate with foreign-language individuals in their language	2.31 (1.07)	2.44 (1.09)	2.75 (1.39)	2.21	.01
Provide training and education	3.15 _a (1.28)	3.39 _b (1.19)	3.31 _{ab} (1.14)	3.14*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Hochberg's GT2 post hoc test was used (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).⁷⁸

⁷⁸ The significant difference between academic disciplines in their competency as a communicator with regard to providing training and education was no longer significant at $p < .05$ when examined with the Kruskal-Wallis test (Kruskal-Wallis H test (2) = 5.41, $p < .10$).

Table 41. Differences between language communities (Professional role)

Professional	Flemish Community	French Community	F (1, 786)†	partial η^2
	M (SD)	M (SD)		
Reflect on my own strengths and weaknesses	4.13 (0.65)	4.19 (0.71)	1.23	-
Realize your own professional growth	3.87 (0.77)	3.65 (0.95)	9.01**	-
Make well-considered decisions regarding moral / ethical dilemmas and justify them	3.68 (0.83)	3.84 (0.86)	5.82*	.01
Giving supervision to colleagues	3.05 (1.06)	3.27 (1.23)	5.09*	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1, 2 and 4; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 321.75)$, $(1, 294.04)$ and $(1, 308.07)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 42. Differences between areas of varying urbanization (Professional role)

Professional	Large urban areas community	Small urban/ rural areas	F (1, 778)†	partial η^2
	M (SD)	M (SD)		
Reflect on my own strengths and weaknesses	4.24 (0.63)	4.06 (0.69)	14.72***	.02
Realize your own professional growth	3.89 (0.79)	3.74 (0.84)	6.30*	-
Make well-considered decisions regarding moral / ethical dilemmas and justify them	3.78 (0.87)	3.66 (0.80)	4.37*	.01
Giving supervision to colleagues	3.18 (1.10)	3.04 (1.11)	2.97	.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 2; hence, we report the robust Brown-Forsythe F-ratio for this variable ($df = (1, 768.91)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 43. Differences between age groups (Professional role)

Professional	Aged below 40 years	Aged 40 years and older	F (1, 786)	partial η^2
	M (SD)	M (SD)		
Reflect on my own strengths and weaknesses	4.14 (0.65)	4.14 (0.69)	0.01	.00
Realize your own professional growth	3.78 (0.79)	3.86 (0.87)	1.91	.00
Make well-considered decisions regarding moral / ethical dilemmas and justify them	3.61 (0.81)	3.87 (0.85)	19.15***	.02
Giving supervision to colleagues	2.85 (1.06)	3.49 (1.07)	68.21***	.08

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Scale range: 1 (not at all competent) to 5 (very competent).

Table 44. Differences between work settings (Professional role)

Professional	CLB/CPMS/ Kaleido	Special schools	Regular schools	Higher education	F (3, 630)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Reflect on my own strengths and weaknesses	4.07 _a (0.69)	4.02 _a (0.65)	4.13 _{ab} (0.63)	4.32 _b (0.56)	5.24**	.02
Realize your own professional growth	3.65 _a (0.85)	3.68 _a (0.72)	3.92 _{ab} (0.79)	4.11 _b (0.69)	12.16***	-
Make well-considered decisions regarding moral/ethical dilemmas and justify them	3.64 _a (0.83)	3.50 _a (0.73)	3.96 _b (0.75)	3.92 _b (0.86)	8.76***	-
Giving supervision to colleagues	2.87 _a (1.09)	3.00 _a d (0.94)	3.41 _{bc} (1.01)	3.32 _{cd} (1.07)	9.05***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 2-4; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (3, 388.34)$, $(3, 402.75)$ and $(3, 397.16)$ respectively). Hochberg's GT2 post hoc test was only used for Item 1; the others, for which the assumption was broken, were examined with the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013).

Table 45. Differences between language communities (Scientist-Practitioner role)

Scientist-practitioner	Flemish Community	French Community	F (1, 786)†	partial η^2
	M (SD)	M (SD)		
Use a scientific, problem-solving cycle of hypothesis formation and testing	3.30 (1.03)	2.61 (1.19)	53.76***	-
Systematically monitor and evaluate the implementation of interventions	3.18 (0.97)	2.59 (1.15)	43.83***	-
Assess the quality of scientific research	2.88 (1.17)	2.54 (1.24)	11.19***	-
Critically assess psychometric qualities	2.72 (1.18)	2.51 (1.19)	4.64*	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1-3; hence, we report the robust Brown-Forsythe F-ratio for these variables ($df = (1, 309.48)$, $(1, 303.27)$ and $(1, 330.39)$; Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 46. Differences between areas of varying urbanization (Scientist-Practitioner role)

Scientist-practitioner	Large urban areas community	Small urban/rural areas	F (1, 778)	partial η^2
	M (SD)	M (SD)		
Use a scientific, problem-solving cycle of hypothesis formation and testing	3.13 (1.15)	3.12 (1.08)	0.01	.00
Systematically monitor and evaluate the implementation of interventions	3.02 (1.07)	3.05 (1.03)	0.15	.00
Assess the quality of scientific research	2.93 (1.24)	2.68 (1.13)	8.67**	.01
Critically assess psychometric qualities	2.74 (1.21)	2.60 (1.16)	2.82	.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Scale range: 1 (not at all competent) to 5 (very competent).

Table 47. Differences between work settings (Scientist-Practitioner role)

Scientist-practitioner	CLB/CPMS/Kaleido	Special schools	Regular schools	Higher education	F (3, 630)†	partial η^2
	M (SD)	M (SD)	M (SD)	M (SD)		
Use a scientific, problem-solving cycle of hypothesis formation and testing	3.24 (1.07)	3.10 (1.06)	2.97 (0.96)	3.04 (1.24)	1.91	-
Systematically monitor and evaluate the implementation of interventions	2.85 _a (0.98)	3.28 _b (1.01)	3.13 _{ab} (0.97)	3.16 _b (1.06)	6.80***	.03
Assess the quality of scientific research	2.53 _a (1.13)	2.66 _{ab} (1.08)	2.94 _{bc} (1.12)	3.29 _c (1.19)	13.75***	.06
Critically assess psychometric qualities	2.64 (1.13)	2.45 (1.20)	2.66 (1.07)	2.82 (1.25)	1.91	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Item 1; hence, we report the robust Brown-Forsythe F-ratio for this variable ($df = (3, 399.50)$). Hochberg's GT2 post hoc test was used for all items but Item 1, for which the assumption was broken; for Item 1, we used the robust Games-Howell post hoc test (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

Table 48. Differences between academic disciplines (Scientist-Practitioner role)

Scientist-practitioner	Ma psy	Ma educ sc	Ma psy + educ sc	F (2, 736)†	partial η^2
	M (SD)	M (SD)	M (SD)		
Use a scientific, problem-solving cycle of hypothesis formation and testing	3.17 (1.14)	3.11 (1.07)	3.06 (1.12)	0.31	.00
Systematically monitor and evaluate the implementation of interventions	3.00 (1.05)	3.14 (1.05)	2.88 (0.89)	1.88	.01
Assess the quality of scientific research	2.85 (1.20)	2.79 (1.16)	2.50 (1.21)	0.75	.00
Critically assess psychometric qualities	2.80 _a (1.20)	2.54 _b (1.14)	2.19 _{ab} (1.11)	5.91**	.02

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Hochberg's GT2 post hoc test was used (means with different subscripts differ significantly from each other) (Field, 2013). Scale range: 1 (not at all competent) to 5 (very competent).

5 Perceived challenges

Perceived challenges

We aimed to identify the perceived challenges in the work field of school and educational psychology. To this aim, we asked respondents how worried they were concerning several structural and societal challenges and concerning certain key themes. Respondents rated their concerns on a 4-point rating scale ranging from 1 (not at all concerned) to 4 (highly concerned).

As shown in Table 49, respondents were, on average, 'rather concerned' to 'highly concerned' (i.e., scale point reaching 3.5) about the complexity of problems and the work pressure they are confronted with.

They were on average 'rather concerned' (i.e., scale point close to 3.0) about wait lists, specific educational needs, financial means, situations with serious danger for students or their context (e.g., abuse or suicide risk), the use of (social) media, and the socio-economic position of the target population.

In addition, average scores were higher than 2.5 (indicating being 'more concerned than not') for the structural and societal challenges of migration, extremism and radicalization, diversity in families, confidentiality of data, and professional liability.

Respondents were 'rather not concerned' about the medicalization of the profession, the digitalization of care, the legal position of minors, and the policy regarding patient files.

Table 49. Descriptive statistics of perceived challenges

	n	M	SD
Structural and societal challenges			
Complexity of problems	752	3.49	0.70
Work pressure	740	3.41	0.72
Wait list	678	3.35	0.95
Specific educational needs	725	3.31	0.82
Financial means	728	3.18	0.89
Use of (social) media (and thus e.g., internet and game addiction, cyber bullying, ...)	740	3.02	0.84
Migration (and thus more foreign-speaking newcomers, influx of refugees, ...)	703	2.59	0.92
Extremism and radicalization	697	2.56	0.92
Diversity in families	723	2.55	0.94
Medicalization of the profession	640	2.29	0.97
Digitalization of care	651	2.14	0.93
Important themes			
Situations with serious danger for the student or context (e.g., abuse or suicide risk)	726	3.05	0.87
Socioeconomic position of clients (financial situation, refugee status)	726	2.97	0.80
Confidentiality of data (e.g., sharing information with other professionals/justice)	738	2.75	0.91
Professional liability	729	2.67	0.95
Legal position of minors	675	2.30	0.82
Policy regarding patient files	625	2.27	0.94

Note. Items are ranked by descending means. Scale range: 1 (not at all concerned) to 4 (highly concerned).

Differences in perceived challenges and concerns across language communities

We investigated differences between the language communities in perceived challenges and themes of concern. The independent variable (i.e., language community) was included in two MANOVAs to test for significant effects on each of the groups of dependent variables (challenges and themes). Only if the omnibus test (using Wilks' Lambda or Pillai's Trace⁷⁹) was significant, we further investigated significant univariate effects.⁸⁰

There was a statistically significant difference in challenges based on respondents' language community, Pillai's Trace $V = 0.25$, $F(11, 514) = 15.80$, $p < .001$, $n = 526$, partial $\eta^2 = .25$, and in themes based on respondents' language community, Pillai's Trace $V = 0.27$, $F(6, 581) = 35.61$, $p < .001$, $n = 588$, partial $\eta^2 = .27$. As illustrated in Tables 50 to 51, respondents working in the Flemish Community were more concerned about financial means and wait lists, but less concerned about medicalization of the profession, migration, extremism and radicalization, diversity in families, use of (social) media and specific educational needs than respondents working in the French Community. Respondents working in the Flemish Community were also less concerned about all important themes than respondents working in the French Community.

Table 50. Perceived challenges: differences between language communities

Challenges	Flemish	French	F-test	df	partial η^2
	Community	Community			
	M (SD)	M (SD)			
Work pressure	3.43 (0.73)	3.34 (0.70)	2.03	(1, 738)	.00
Complexity of problems	3.47 (0.71)	3.57 (0.67)	2.67	(1, 750)	.00
Financial means	3.26 (0.85)	2.91 (0.98)	20.76***	(1, 726)	.03
Wait list	3.52 (0.86)	2.74 (1.03)	69.98***	(1, 205.75)	-
Digitalization of care	2.10 (0.87)	2.29 (1.13)	3.17	(1, 168.02)	-
Medicalization of the profession	2.18 (0.90)	2.65 (1.09)	21.94***	(1, 204.91)	-
Migration	2.54 (0.91)	2.79 (0.93)	9.02**	(1, 701)	.01
Extremism and radicalization	2.50 (0.91)	2.78 (0.94)	11.50***	(1, 695)	.02
Diversity in families	2.42 (0.91)	2.98 (0.91)	48.02***	(1, 278.39)	-
Use of (social) media	2.92 (0.82)	3.33 (0.84)	33.32***	(1, 290.39)	-
Specific educational needs	3.26 (0.82)	3.47 (0.78)	8.64**	(1, 723)	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 4-6 and 9-10; hence, we report the robust Brown-Forsythe F-ratio and corresponding Ms and SDs for these variables; Field, 2013). Scale range: 1 (not at all concerned) to 4 (highly concerned).

79 If Box's M-test of the assumption of equality of covariance matrices was significant and the assumption was thus broken, we used the more robust Pillai's Trace statistic (Field, 2009).

80 Here, we reported results from separate ANOVAs instead of using the univariate results from the MANOVAs because of item-specific missingness (respondents could have item-specific missingness because, for each item, respondents were also able to answer with 'I don't know' or 'Not applicable'; these responses were re-coded as missing values). Also, given that assumptions were sometimes broken (non-normality, inequality of variances) and considering the ordinal nature of the dependent variable, we also performed Kruskal-Wallis tests. These analyses showed virtually identical results as the ANOVAs.

Table 51. Themes of concern: differences between language communities

Themes	Flemish Community	French Community	F-test†	df	partial η^2
	M (SD)	M (SD)			
Confidentiality of data	2.60 (0.89)	3.20 (0.85)	68.78***	(1,320.91)	-
Professional liability	2.40 (0.87)	3.48 (0.68)	295.82***	(1,402.54)	-
Situations with serious danger	2.95 (0.87)	3.36 (0.78)	31.23***	(1,724)	.04
Socioeconomic position of clients	2.84 (0.81)	3.25 (0.75)	26.95***	(1,724)	.04
Legal position of minors	2.23 (0.78)	2.51 (0.89)	12.66***	(1, 243.14)	-
Policy regarding patient files	2.13 (0.87)	2.67 (1.01)	37.89***	(1, 259.80)	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. †The assumption of homogeneity of variance was violated for Items 1, 2, 5, and 6; hence, we report the robust Brown-Forsythe F-ratio and corresponding Ms and SDs for these variables; Field, 2013). Scale range: 1 (not at all concerned) to 4 (highly concerned).

Concerns about (new) legislation

In addition, we asked respondents how worried they were concerning the (further) implementation or consequences of several recent laws and decrees. Respondents rated their concern on a 4-point rating scale ranging from 1 (not at all concerned) to 4 (highly concerned). Flemish legislation was only rated by respondents working in the Flemish Community; French Community legislation was only rated by respondents working in the French Community. Respondents working in both communities could rate both Flemish and French communities' legislation. In the Flemish Community, respondents were most concerned about the 'M-decreet' and the 'Ondersteuningsmodel in het basis-, secundair en hoger onderwijs' (Table 52). In the French Community, respondents were most concerned about 'Le pacte pour un enseignement d'excellence' and 'Le décret sur les élèves à besoins spécifiques du 7 décembre 2017'.

Table 52. Concerns about (new) legislation⁸¹

	n	M	SD
Flemish Community (N = 691)			
M-decreet	538	3.36	0.80
Ondersteuningsmodel in het basis-, secundair en hoger onderwijs	487	3.09	0.89
Decreet modernisering structuur en organisatie van het secundair onderwijs	456	2.76	0.91
Decreet Integrale Jeugdhulp	460	2.76	0.96
Decreet leerlingenbegeleiding in het basisonderwijs, secundair onderwijs en CLB	475	2.75	0.94
Europese privacywetgeving (GDPR/AGV)	515	2.38	0.93
Federale wet op de uitoefening van de geestelijke gezondheidszorg (WUG)	291	2.12	1.04
French Community (N = 248)			
Le pacte pour un enseignement d'excellence	173	3.57	0.72
Le décret sur les élèves à besoins spécifiques du 7 décembre 2017	170	3.36	0.83
Lois/décrets relatifs à l'aide à la jeunesse	159	2.84	0.88
La loi vie privée européenne (GDPR/RGPD)	169	2.64	1.01
La loi fédérale sur l'exercice des professions de santé mentale (LEPSS)	141	2.48	1.09

Note. Items are ranked by descending means. Scale range from 1 (not at all concerned) to 4 (highly concerned). The responses 'I don't know' and 'Not applicable' were re-coded as missing values.

81 Results concerning (new) German legislation are not reported because of the low response rate (n = 5)

Pressure at work and work-life balance

As expected, the examination of perceived challenges indicated that respondents were concerned about the high work pressure in the work field (Table 49). Therefore, two additional items were presented concerning the degree of work pressure and the work-life balance of the workforce.

First, we requested respondents to describe the pressure at work in general using a rating scale from 0 (no pressure at all) to 10 (very high pressure). Data were available for 768 respondents. Respondents experienced a rather high level of pressure at work ($M=7.90$, $SD = 1.78$, a mean score clearly above the scale midpoint '5'). Second, respondents rated their work-life balance on a rating scale from 0 (entirely in balance) to 10 (entirely out of balance). Respondents seemed to experience a moderate balance between work and private life ($M=4.78$, $SD = 2.46$, a mean score somewhat lower than the scale midpoint of '5').

Differences in work pressure

Using MANOVAs (including both items simultaneously), we observed no significant differences in the pressure at work nor in the work-life balance across language communities, areas of varying urbanisation or age groups. However, we did observe differences between work settings and employment types.

Differences between work settings

With regard to differences across work settings, Wilks' $\Lambda = 0.93$, $F(6, 1224) = 7.51$ $p < .001$, $n = 617$, partial $\eta^2 = .04$, there only was a significant difference in work pressure, $F(3, 613) = 9.98$ $p < .001$, partial $\eta^2 = .05$. Respondents working in the CLB/CPMS/Kaleido experienced significantly more work pressure ($M = 8.43$, $SD = 1.41$) than respondents employed at special schools ($M = 7.75$, $SD = 1.60$) or in higher education ($M = 7.67$, $SD = 1.68$). Respondents working in regular schools did not differ significantly from any of the other settings ($M = 7.93$, $SD = 1.82$) (using the Hochberg's GT2 post hoc test).

Differences between self-employed and salaried respondents

With regard to differences between employment types, Pillai's Trace $V = 0.05$, $F(4, 1460) = 10.08$, $p < .001$, $n = 733$, partial $\eta^2 = .03$, there only was a significant difference in work pressure, Brown-Forsythe $F(2, 58.07) = 12.30$ $p < .001$. Salaried respondents experienced significantly more work pressure ($M = 8.03$, $SD = 1.62$) than respondents with a main self-employed job ($M = 6.52$, $SD = 2.53$). Respondents with a main paid and self-employed job did not differ significantly from any of the other two ($M = 7.75$, $SD = 1.60$) (using the Games-Howell post hoc test).

6 Continuing professional development (CPD)

Self-education

Respondents were asked to indicate how often they used several sources to further educate themselves on a rating scale going from 1 (one or more times a week) to 5 (never)⁸². Results showed that, on average, informational websites (e.g., 'prodiagnostiek.be' or 'enseignement.be'; M = 2.09, SD = 1.09 ~ about one or more times a month) and books or other publications (M = 2.46, SD = 1.02 ~ between one or more times a month and one or more times per trimester) are consulted most frequently. Professional journals (M = 3.18, SD = 1.17) and scientific papers (M = 3.19, SD = 1.15) are consulted one or more times per trimester and scientific blogs about one or more times per year (M = 3.80, SD = 1.27).

Organized continuing professional development (CPD)

Time dedicated to CPD

Figure 13 provides an overview of the time dedicated to organized CPD activities. About one third of the sample (n = 761) took (or planned to take)⁸³ three to five days both in this and the past school year and about one fifth took (or planned to take) six to ten days or more than ten days. About 15-20% of the respondents took (or planned to take) less than three days.

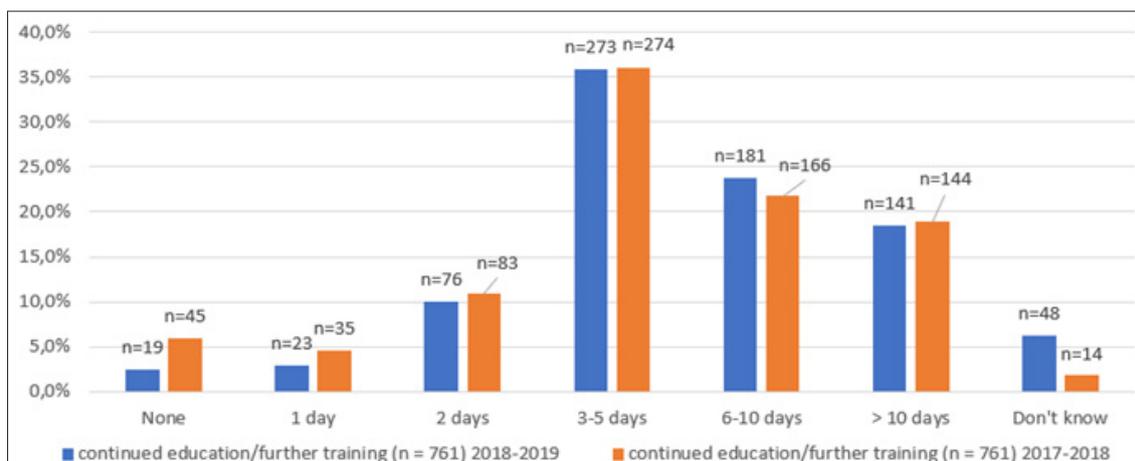


Figure 13. Time dedicated to CPD in the current and past school year.

82 19% missing data due to incomplete responses.

83 Because the school year 2018-2019 was still in progress when respondents completed this questionnaire, we asked how many days they took or planned to take.

Differences in time dedicated to CPD

Furthermore, we examined differences in time dedicated to CPD activities in the past school year across age, language community, areas of varying urbanization, academic discipline, work situations, or work settings. No differences were found in time dedicated to CPD based on degree of urbanization. Yet, there were significant relations between time dedicated to CDP and age, $\chi^2 (8) = 37.10$, $p < .001$, language community, $\chi^2 (2) = 9.80$, $p < .01$, academic discipline, $\chi^2 (2) = 7.18$, $p < .05$, type of employment, $\chi^2 (2) = 33.44$, $p < .001$, and type of work setting, $\chi^2 (6) = 22.18$, $p < .01$.⁸⁴

Differences between age groups

Figure 14 illustrates that respondents aged below 40 seemed more likely to take less than three days for CPD, but less likely to take more than three days than respondents aged 40 and older. Thus, on average, younger respondents spent less time on CPD.

Differences between communities

Figure 15 shows that respondents working in the Flemish Community were more likely to take less than three days for CPD, but also less likely to take 3 to 10 days or more than 10 days for CPD than respondents working in the French Community. Thus, on average, respondents in the French Community spent more time on CPD.

Differences between master disciplines

Also, respondents with a psychology master seemed especially more likely to take more than 10 days for CPD, and less likely to take less than three days for CPD than respondents with a master's in educational sciences (Figure 16).

Differences between salaried and self-employed respondents

Salaried respondents seemed more likely to take less than three days and between three and 10 days for CPD, but less likely to take more than 10 days for CPD than self-employed respondents (Figure 17).

Differences between work settings

Respondents working in multidisciplinary pupil guidance centers seemed more likely to take between three and 10 days for CPD, but less likely to take less than three days and more than 10 days for CPD than respondents working in any of the other settings (Figure 18).

84 Chi square results are only reported if significant and if no more than 20% of the cells had an expected count less than five (Stern, 2011).

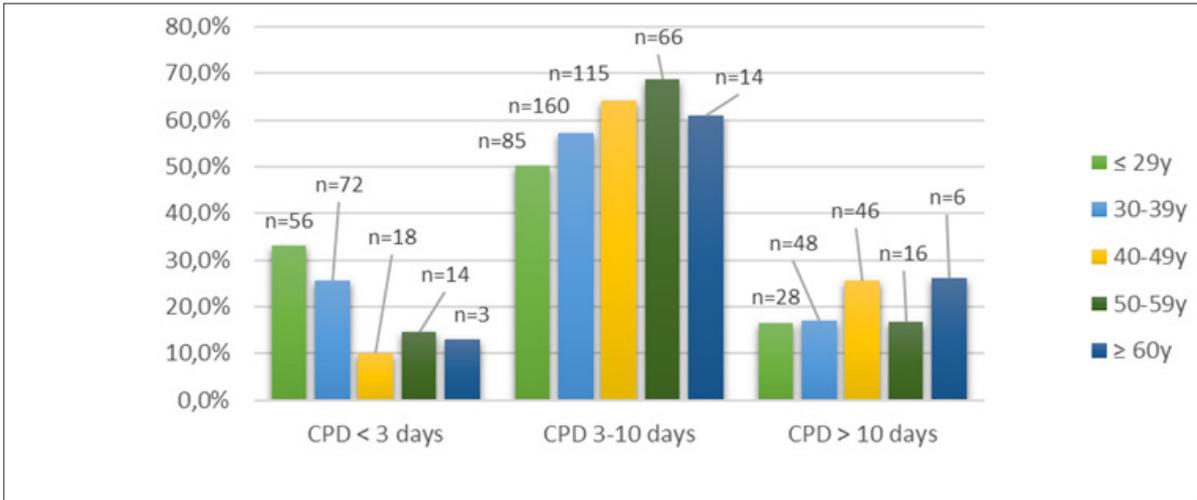


Figure 14. Differences in proportion of respondents in dedicating time to CPD in 2017-2018 across age cohorts. Note. CPD = continuing professional development, y = years.

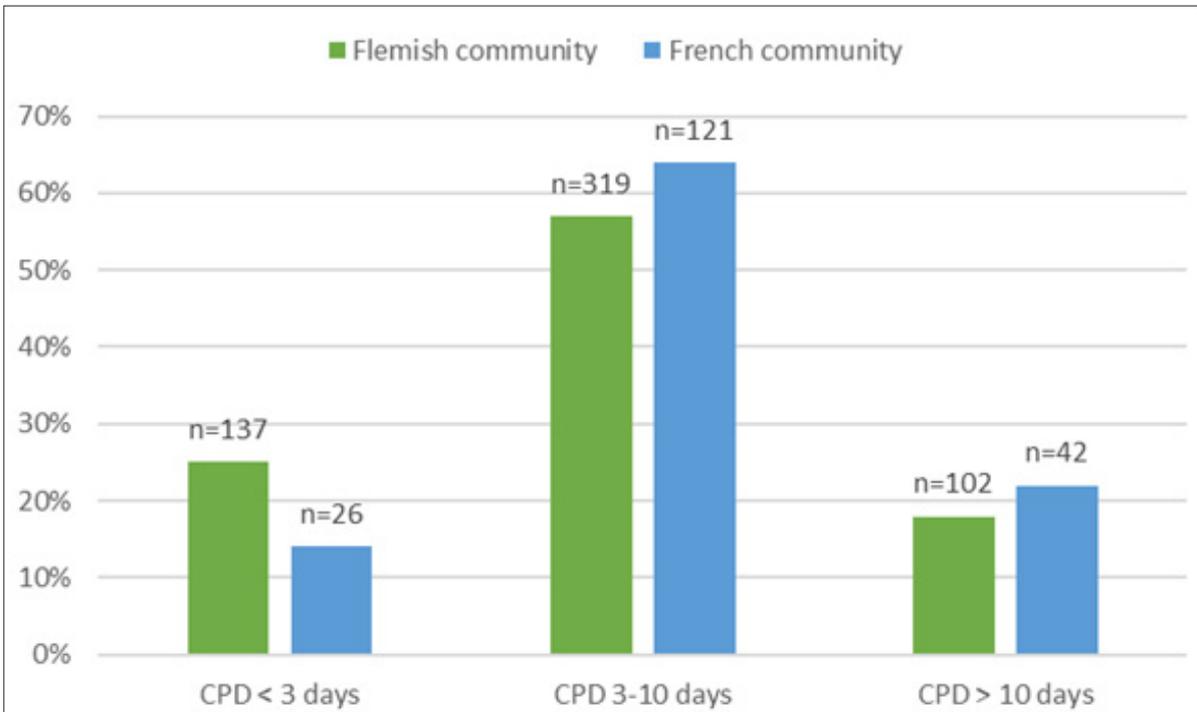


Figure 15. Differences in proportion of respondents in dedicating time to CPD in 2017-2018 across language communities.

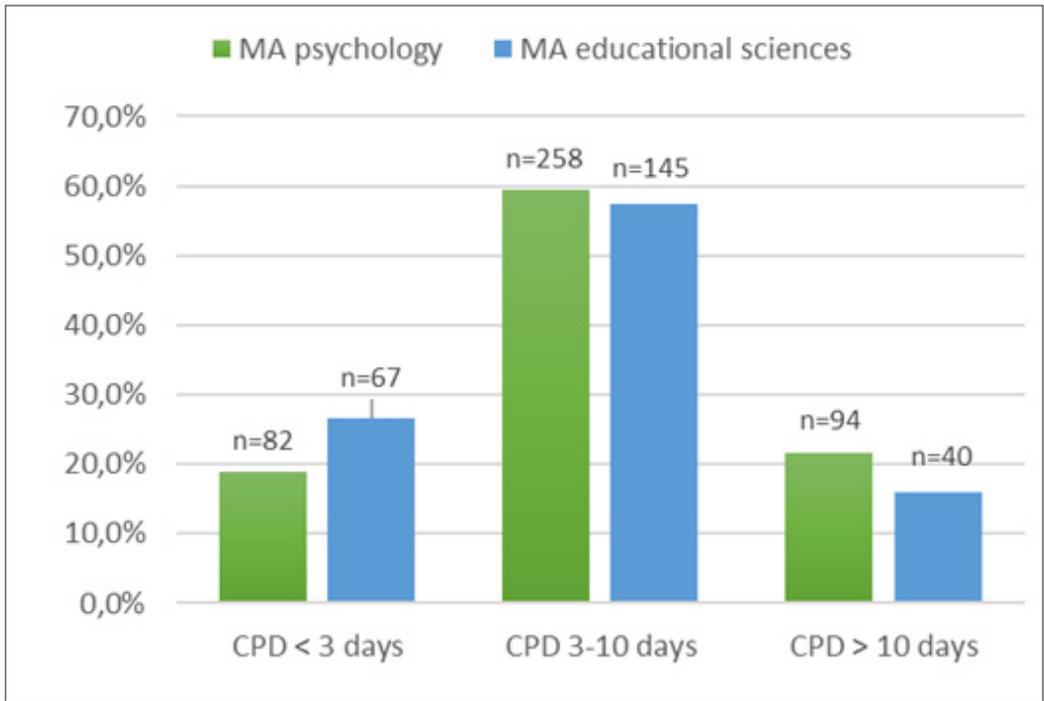


Figure 16. Differences in proportion of respondents in dedicating time to CPD in 2017-2018 across master's degree disciplines.

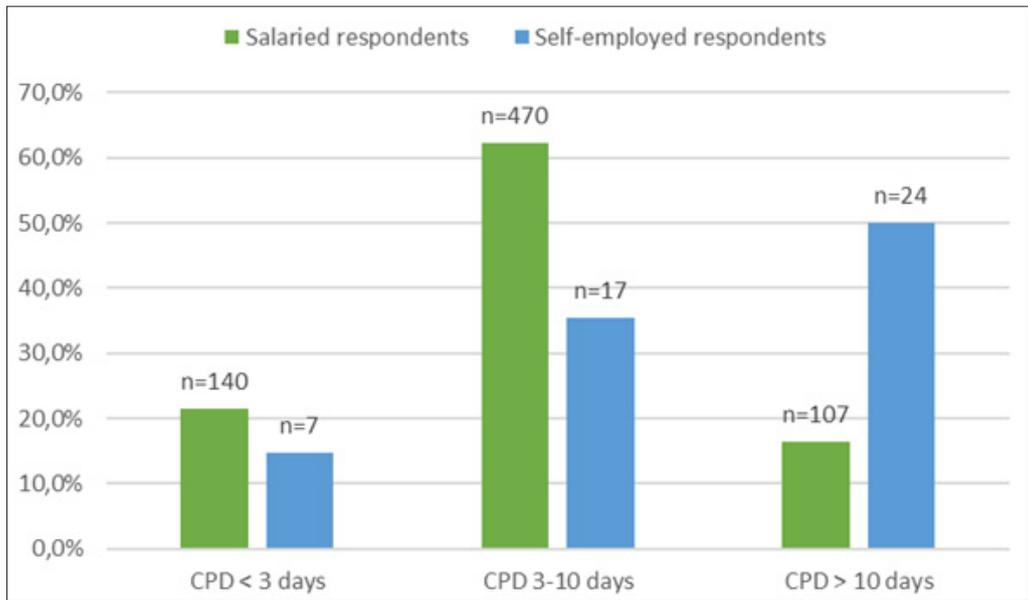


Figure 17. Differences between employment types in time dedicated to CPD in 2017-2018.

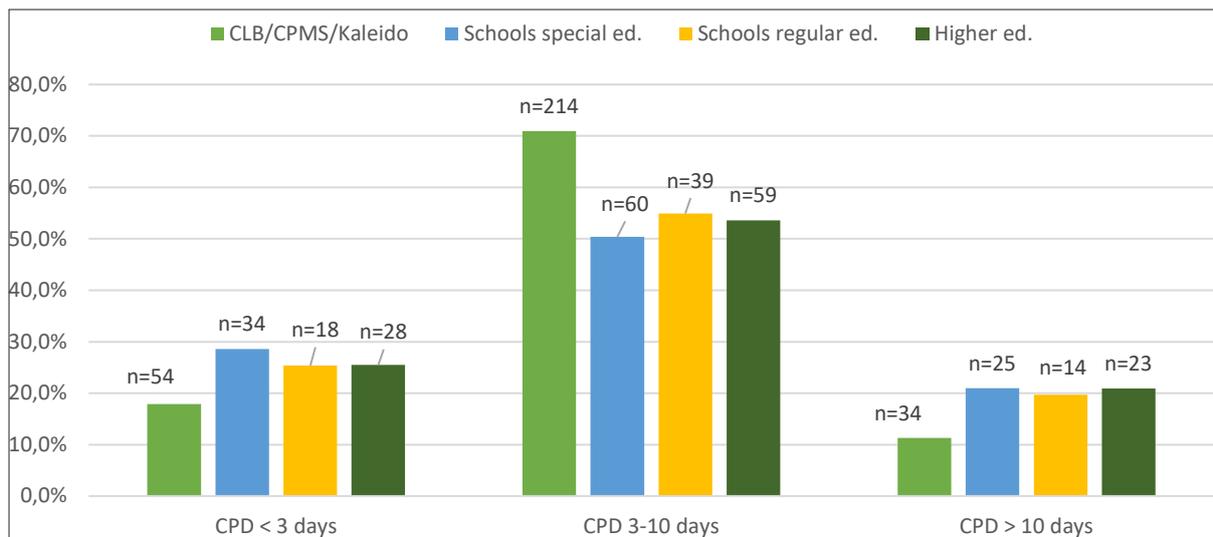


Figure 18. Differences in proportion of respondents in dedicating time to CPD in 2017-2018 across work settings.

Organization, employer support, and personal choice

The majority (79%) reported that their employer rather or absolutely encouraged them to take further training or continued education, but 16% said he/she rather or absolutely did not. For 5% of the respondents, the question did not apply as they were self-employed.

Additionally, Table 53 illustrates that many of the CPD activities were fully paid by the employer and about one third of the respondents reported attendance was free. Regarding the organizing body of these CPD activities, nearly half of the respondents stated these activities were organized by an agency or a department from within educational networks or multidisciplinary pupil guidance centers (e.g., CLB or CPMS), by their own employer, or by a private organization.

Additionally, 64.5% respondents indicated that they could choose the topics of these trainings themselves, 30.7% could partially choose themselves, and 4.7% could not choose themselves. Finally, we asked respondents to indicate which factors (maximum three) were important to them when choosing a CPD activity. Table 54 illustrates that nearly all respondents felt that job relevance was important and that many respondents also indicated personal interest to be important. Least important was the duration of the activity.

Content of CPD activities

We asked respondents to indicate the topics of their CPD activities and the professional (care) tasks that were targeted in their CPD activities. As shown in Figure 19⁸⁵, for a relatively large proportion the topic of the CPD pertained to psychosocial development, learning processes or cognitive development. Relatively few participants attended CPD activities focused on health care, digitalization, or ethics. Additionally, many CPD activities were focused on direct guidance or support for clients and their environment (Figure 20). Other professional tasks that were relatively frequently targeted in respondents' CPD activities were diagnostics, prevention, and training and education.

85 Multiple answers could be, so percentages do not add up to 100% in total. Percentages are based on how many individuals ticked that specific answer versus those who did not tick it (because that option did not apply to them). Percentages were based on available data (n = 711-716); 45 respondents did not receive these questions (as they did not apply to their situation; i.e., missing by design); the rest were missing due to incomplete responses.

Next, respondents were asked which topics and tasks⁸⁶ they would choose for CPD activities in the nearby future (Table 55). Many respondents stated they would choose CPD activities focusing on psychosocial development in the future. Other relatively popular topics were learning processes and cognitive development and dealing with alarming or crisis situations. The least popular topics were health care, digitalization, and ethics. With regard to the tasks they would like to train in future CPD activities, guidance of clients and their environment was most popular along with diagnostics, prevention, and training and education; least popular was scientific research.

Format of CPD activities

Figure 21 indicates that the format of the CPD activities of the respondents were diverse, with many respondents going to workshops or lectures. Considerable numbers of respondents also reported doing intervision with colleagues, going to one day conferences or self-studying. Relatively few respondents mentioned webinars, intensive at-work trainings, or individual coaching.

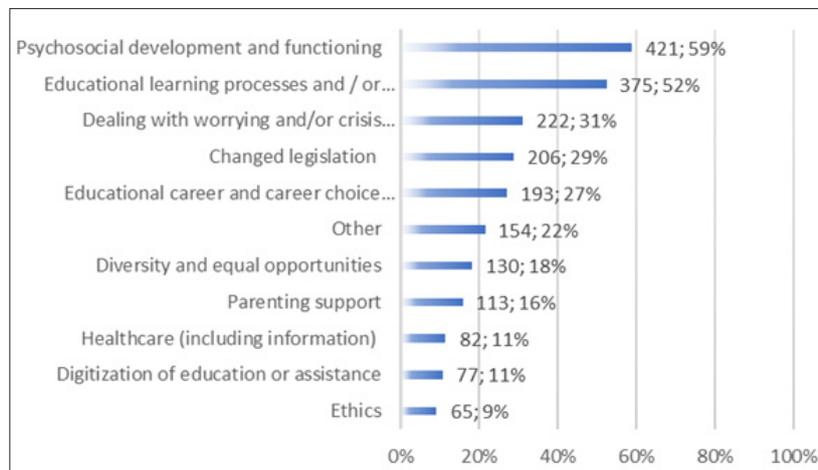


Figure 19. CPD topics in the past school year (2017-2018).

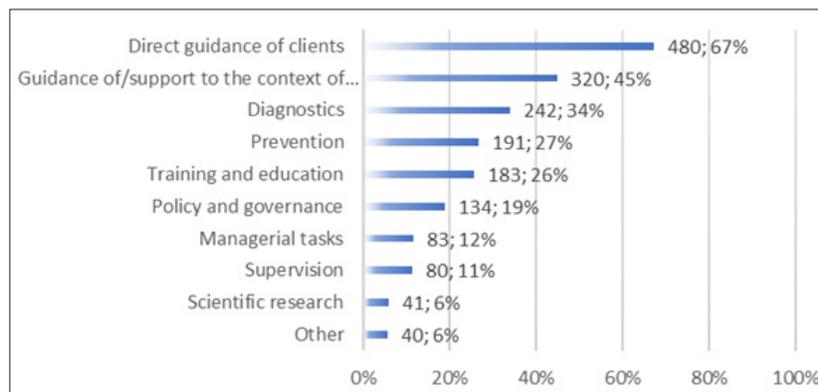


Figure 20. Professional tasks targeted in CPD activities in the past school year (2017-2018).

86 Each participant could indicate up to three topics and three tasks.

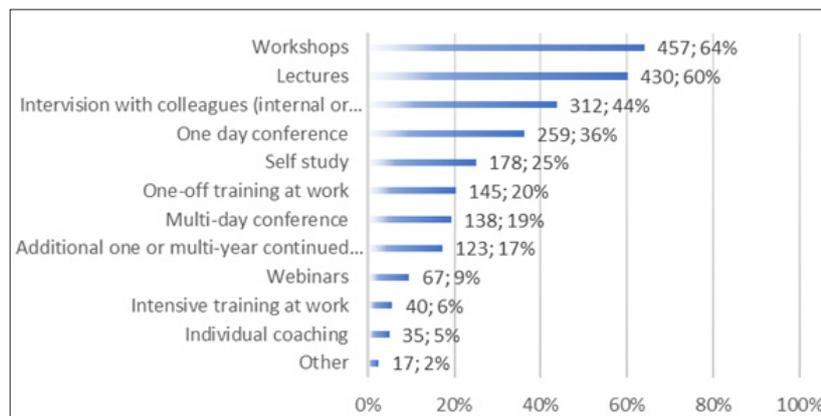


Figure 21. Format of CPD activities in the past school year (2017-2018).

Table 53. Organization and payment of CPD activities

	max n	n yes	% yes
Who paid for these CPD activities?			
Attendance was free	714	220	31%
Fully paid by employer	714	511	72%
Fully paid by employee	714	63	9%
Paid by employer and employee	714	98	14%
Self-employed	714	117	16%
Who organized these CPD activities?			
Own employer	711	311	44%
Agency/department from a college	711	157	22%
Agency/department from a university	711	191	27%
Agency/department from educational networks or guidance centers (e.g. CLB/CPMS)	711	341	48%
Professional association	711	104	15%
Private organization	711	291	41%
Other	711	62	9%

Table 54. Relevant factors in choosing CPD activities

	max n	n yes	% yes
Relevance to my job	756	722	96%
Personal interest	756	582	77%
Cost	756	227	30%
Location	756	221	29%
Reputation of organizer	756	160	21%
Period (in the school year)	756	117	15%
Duration	756	52	7%
Other	756	9	1%

Note. Factors ranked by decreasing percentages.

Table 55. Preferred topics and professional tasks for future CPD activities

	max n	n yes	% yes
Topics			
Psychosocial development and functioning	756	450	60%
Educational learning processes and/or cognitive development	756	333	44%
Dealing with alarming and/or crisis situations	756	294	39%
Parenting support	756	172	23%
Educational career and career choice processes	756	168	22%
Changed legislation	756	134	18%
Diversity and equal opportunities	756	118	16%
Health care (including information)	756	72	10%
Digitization of education or assistance	756	70	9%
Other	756	55	7%
Ethics	756	42	6%
None	756	9	1%
Tasks			
Direct guidance of clients	756	469	62%
Guidance of/support to the context of clients	756	389	51%
Diagnostics	756	251	33%
Prevention	756	184	24%
Training and education	756	172	23%
Policy and governance	756	134	18%
Supervision	756	113	15%
Managerial tasks	756	91	12%
Scientific research	756	51	7%
Other	756	17	2%
None	756	12	2%

Note. Topics and tasks ranked by decreasing percentages.

Membership in professional associations

We asked participants whether they were a member of a professional (therapy) association. In our sample, 774 respondents responded to this question (18% missing data): 255 (33%) respondents were member of a professional association, 519 (67%) were not.

There were no significant differences in membership between language communities. However, explorative analyses showed that there was a significant difference in membership between salaried and self-employed respondents, $\chi^2(2) = 82.23$, $p < .001$. Salaried respondents were significantly less likely to be a member of a professional association (27%) than self-employed respondents (78%). Respondents who combined salaried and self-employed jobs were most likely to be a member (100%).

With regard to the specific professional associations⁸⁷, 94 respondents (37%) were a member of the 'Vlaamse Vereniging van Klinisch Psychologen (VVKP)', 35 respondents (14%) were a member of

⁸⁷ Multiple associations could be ticked, so percentages do not add up to 100. Percentages are based on how many individuals ticked that specific association versus those who did not tick it (because that option did not apply to them). Percentages were based on available data ($n = 255$; i.e., those respondents stating they were a member of a professional association).

the 'Vlaamse Vereniging van Orthopedagogen (VVO)', 27 respondents (11%) were a member of the 'Vlaamse Vereniging voor Schoolpsychologen (VVSP)', 23 respondents (9%) were a member of the 'Union Professionnelle des Psychologues Cliniciens Francophones (UPPCF)'. Finally, 67 respondents (26%) were member of associations not mentioned in the list (of which 15 mentioned the Commission of Psychologists).⁸⁸

Respondents could provide reasons for not being a member of a professional association (optional open question). The reasons most frequently given were: (1) the advantages, usefulness or added value were unclear or considered too small and, as such, many respondents were not interested in joining, (2) being a member was not necessary for their sector, setting, job or they did not perform self-employed work or did not work as a therapist, (3) they did not know or have any information on possible associations, and (4) the cost was too high relative to the expected return.

7 Professional registration and ethics

Professional registration with the Commission of Psychologists

As mentioned previously, the title of psychologist is protected by law in Belgium. Hence, only psychologists who are registered at the Commission of Psychologists may use this title. We asked respondents with a master's in psychology ($n = 547$) whether they were registered. Questions about the registration were answered by 447 of them (82%).

Based on the available data, 243 master's in psychology (54%) were registered at the Commission of Psychologists and 204 (46%) were not. Furthermore, results yielded a significant difference between both language communities, $X^2(1) = 19.64$, $p < .001$. The proportion of psychology masters who were registered was significantly higher for respondents working in the French Community (69%) than for respondents working in the Flemish Community (47%).

Non-registered respondents

Additionally, we asked those who were not registered if they ever have been registered before. Of those not registered presently, 162 (79%) were never registered before and 42 (21%) were registered before, but not now.

We also asked those who were not (or no longer) registered about their reasons not to register⁸⁹. Most respondents ($n = 105$, 51%) reported that they were not (or no longer) registered because they did not use the title of psychologist. In addition, 62 respondents (30%) mentioned that registration is not compulsory, 28 (14%) mentioned they were not aware of the organization, 1 (0.5%) mentioned he/she was not active, and 46 (23%) mentioned another reason. Other reasons included: the added value or advantages are unclear, especially given their professional context (CLB, CPMS, or other work in education); it is not considered necessary, which may or may not be linked to their professional context (paid work in a CLB/CPMS/Kaleido or in education versus self-employed); and the financial costs.

⁸⁸ Only professional associations with more than 20 respondents being a member were mentioned.

⁸⁹ Multiple reasons could be ticked, so percentages do not add up to 100% in total. Percentages are based on how many individuals ticked that specific reason versus those who did not tick it (because that option did not apply to them). Percentages were based on available data ($n = 204$; i.e., those respondents stating they were not registered presently).

Compliance with the Code of Ethics for Psychologists

Acquaintance with the Code of Ethics for Psychologists

We asked respondents with a master's degree in psychology if they had read the Code of Ethics for Psychologists. Based on the available data (n=457), we report that 74 (16%) respondents mentioned that they had not read the Code, 305 (67%) mentioned they had read it once, and 78 (17%) mentioned they were (fairly) well acquainted with it. Furthermore, results yielded a significant difference between both language communities, $X^2(2) = 22.74, p < .001$. Respondents in the French Community seemed less likely to not have read the Code and were more often acquainted with the Code than respondents in the Flemish Community (Figure 22).

Consultation of the Code of Ethics for Psychologists

With regard to the frequency of consulting the Code (considering those respondents who had read the Code at least once; n = 383), findings indicated that most respondents (n = 243; 63.4%) hardly ever consulted the Code, 96 (25.1%) consulted it one or more times a year, 23 (6.0%) consulted it one or more times per trimester, 3 (0.8%) consulted it one or more times a month, 1 (0.3%) consulted it one or more times a week, and 17 (4.4%) reported that this question did not apply. Furthermore, results yielded a significant difference between both language communities, $X^2(5) = 12.85, p < .051$. Respondents working in the French Community seemed more likely to consult the code one or more times per trimester and one or more times year, but less likely to hardly ever consult it than respondents in the Flemish Community.

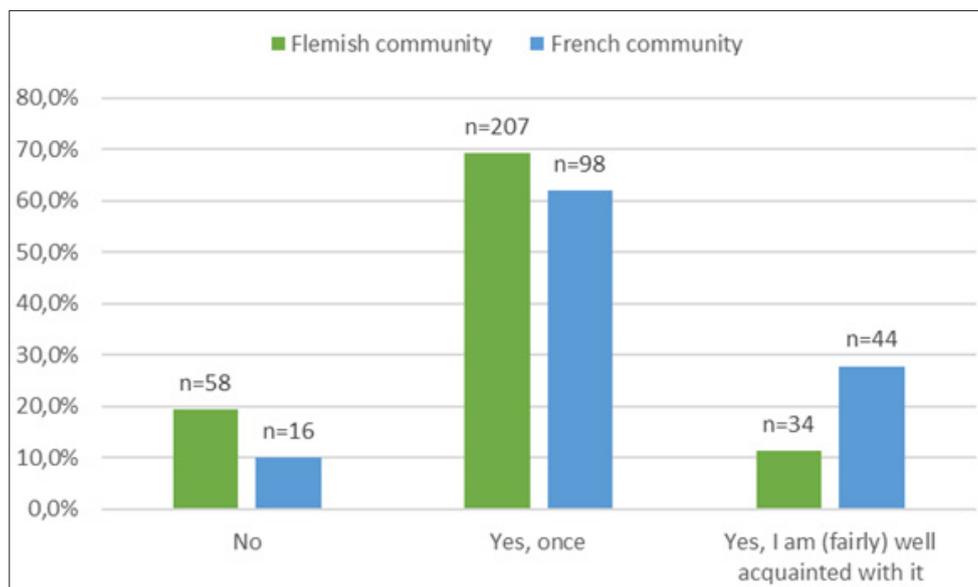


Figure 22. Respondents with a master's degree in psychology having read the Code of Ethics for Psychologists across language communities.

Adherence to the Code of Ethics for Psychologists

We further asked whether respondents believed they were obliged to adhere to the Code of Ethics for Psychologists. Based on the available data (n=457), 278 (60.8%) respondents believed they were definitely obliged to follow the Code, 108 (23.6%) believed they thought they were obliged, 30 (6.6%) believed they thought they were not obliged, 30 (6.6%) did not know, and 11 (2.4%) believed they were definitely not obliged. Furthermore, results yielded a significant difference between both language

communities, $X^2(4) = 25.83, p < .001$. Respondents working in the French Community seemed more likely to believe they are definitely obliged to adhere to the Code, seemed less likely to believe that they are not obliged to follow the Code and less likely to not know whether they are obliged to follow the Code than respondents working in the Flemish Community (Figure 23).

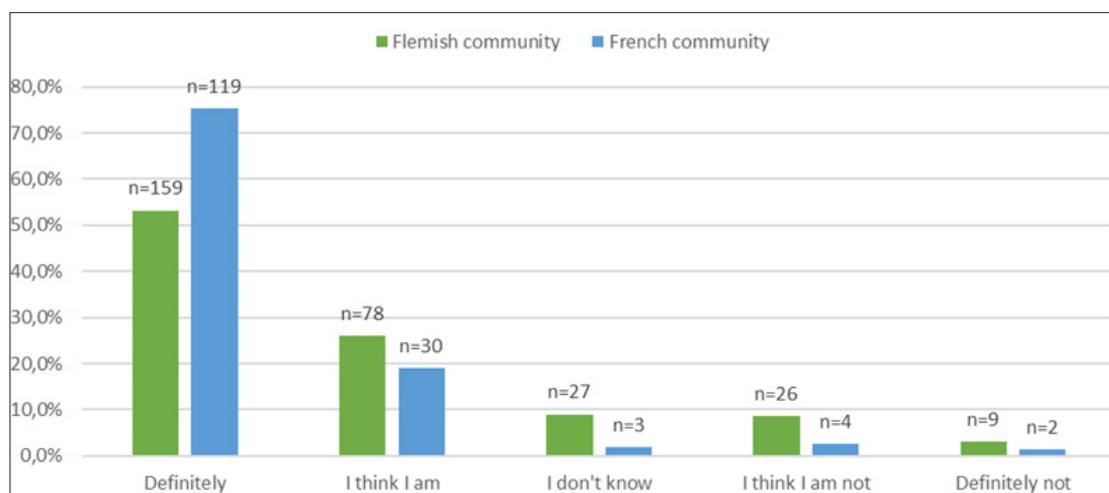


Figure 23. Adherence to the Code of Ethics for Psychologists for respondents with a psychology master across language communities

Reasons for adhering to the Code

Those who replied that they thought they were (definitely) obliged to follow the Code ($n = 385$; one missing case⁹⁰) were offered a follow-up question with multiple response options to examine their reasons for thinking they were obliged to follow the Code: (1) they were registered with the Commission ($n = 157, 41\%$), (2) they had a master's degree in psychology ($n = 253, 66\%$), (3) they worked in the healthcare sector ($n = 79, 21\%$), (4) they worked in the educational sector ($n = 102, 27\%$), (5) they worked with clients or patients ($n = 227, 59\%$), and/or (6) because of other reasons ($n = 15, 4\%$). Other reasons mentioned were, for example: because it is more ethical or because it is inherently connected to the profession as a good practice.

Reasons for not adhering to the Code

Those who replied they thought they were (definitely) not obliged to follow the Code or did not know whether they were obliged ($n = 70$; one case missing⁹¹), stated they thought so because: (1) they were not registered with the Commission ($n = 22, 31\%$), (2) they did not have a master's degree in psychology ($n = 1, 1\%$), (3) they did not work in the healthcare sector ($n = 10, 14\%$), (4) they did not work in the educational sector ($n = 1, 1\%$), (5) they did not work with clients or patients ($n = 13, 19\%$), and/or (6) because of other reasons ($n = 36, 51\%$). Other reasons mentioned were, for example: because their employer has his own ethical code, because they are bound to professional secrecy, because they do not work as a psychologist.

90 Multiple reasons could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific reason versus those who did not tick it (because that option did not apply to them).

91 Multiple reasons could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific reason versus those who did not tick it (because that option did not apply to them).

Adherence to other ethical codes

Finally, we also asked respondents with a psychology master if they (also) had to follow other ethical guidelines in (one of) their job(s). Based on the available data⁹², 184 respondents (40%) reported they did not have to follow any other ethical guidelines, 216 respondents (47%) mentioned they had to follow the ethical code of the pupil guidance centers (CLB/CPMS) or 'einen berufsethischen Kodex von Schülerbegleitung', 3 respondents (1%) stated they had to follow the ethical code of the professional associations for orthopedagogists (Vlaamse Vereniging van Orthopedagogen/Association Francophone des Orthopédagogues cliniciens) or 'einen berufsethischen Kodex von Heilpädagogik', and 59 (13%) mentioned they (also) had to follow other ethical guidelines (e.g., the ethical code within their own organization or within education – not specified).

92 Multiple reasons could be ticked, so percentages do not add up to 100%. Percentages are based on how many individuals ticked that specific option versus those who did not tick it (because that option did not apply to them). Percentages were based on available data (n = 455).

CHAPTER 4: DISCUSSION

1 Introduction

The present study is a synthesis of a national research into the work field of school and educational psychology in Belgium. Worldwide and also in Belgium there is an increased recognition of schools as contexts for the provision of mental health care (e.g., Kohn et al., 2016; Sheridan & Gutkin, 2000; Struyf et al., 2015; WHO, 2003). Provision of mental health care in school settings has the important advantage that it is easily accessible for children (and their parents) irrespective of cultural, economic or other risks characteristics. Psychologists employed in the educational sector are thus in a key position to strengthen first-line (preventive) care.

In further recognition of schools as key contexts for the delivery of (first line) psychosocial services, the current project was conceived to examine the work field of school and educational psychology. Although the broader work field was subject of research, special attention was devoted to the position of professionals with an academic master's in the psychology. Basic, but essential questions were asked: who is working in the field, what are they doing, how competent do they feel, which challenges do they face, and how are they engaged in continuing professional development? In addition, we also examined how many psychologists in the work field are registered by the Commission of Psychologists and are acquainted with the Code of Ethics for Psychologists.

The study was part of a larger project that investigated the provision of mental health care in Belgium⁹³. The larger project included an examination of the work of care providers with an academic degree in the domain of the psychology and educational sciences. A total of 5829 participants were included in the study of which 939 (16%) were identified as employed (fully or partially) in the work field of School and Educational Psychology. The current report thus describes the work field of School and Educational Psychology based on a subsample of 939 respondents.

In the current section, we will not reiterate all findings but synthesize findings to provide a description of strengths and weaknesses in the work field. In addition, we quote respondents and participants of the (Dutch) focus group to illustrate and deepen the understanding of the results. When interpreting the results, several limitations should be considered. First, for this study and the larger project, we actively recruited professionals with a master's degree in psychology and educational sciences. Both in Belgium and internationally, however, other professions are active in student counseling and guidance, such as social workers or nurses (e.g., Struyf et al., 2015). These other professions were not involved in this study; hence, we cannot provide data about the relative proportion of professionals with a master's degree in psychology (and in educational sciences) in the total workforce in student care nor about their relative and specific contribution in the total work load of student care in Belgium. Second, although our sample was quite large in absolute numbers, we do not know to which extent it is representative for the population of masters in psychology and educational sciences working in the field of education in Belgium, as we have no information about the size and characteristics of the population. Third, the collected data were self-reported data. Answers on the questions may not have been accurate in all cases (e.g., inconsistencies in answers were observed in rare cases). Also, professionals may have biased perceptions of, for example, their workload or competencies. Finally, the design of the study was cross-sectional. The study identified differences between work settings, jobs, language communities, academic disciplines, and small versus large urban areas, but does not explain these differences and no causal inferences can be made.

93 For an analysis of the representativeness of the sample of the complete study, we refer to the report of the larger project (Luyten & Jeannin, 2021)

2 Summary of results

Job characteristics, tasks, and focus

Overall, we identified a group of highly educated professionals from different academic disciplines who are predominantly born in Belgium and female. There were more respondents with a master in psychology than in educational sciences. Of the professionals with a master in psychology, most had majored in clinical psychology. Of the professionals with a master in educational sciences in the Flemish Community, most had majored in orthopedagogy.

A substantial proportion of the respondents had completed extensive (postmaster) training (with a minimum length of one year). These additional trainings included mostly teacher training and training in (psychological) intervention or treatment (e.g., psychotherapy was most often mentioned).

The professionals work primarily in multidisciplinary pupil guidance centers (CLB, CPMS, Kaleido), but are also employed in schools. About one fourth of the respondents were self-employed, most of them combined their self-employed activities with a paid job. Professionals in the field of school and educational psychology are focused on multiple domains of development including psychosocial development, learning and cognitive development, school and career choice processes, and also (but somewhat less) on health and sexual development of students⁹⁴.

The main tasks were supporting individuals and their environment, administration, and supporting organizations. Less frequently performed professional activities and tasks included management, supervision, policy and governance. Scientific research was conducted rarely. When we take a closer look at the main task of supporting individuals and their environment, we see that psychologists in educational settings are mostly engaged in the provision of counseling and guidance. They also spent considerable time on diagnostics/assessments and prevention. They provided treatment/therapy to a somewhat lesser extent. The performance of these tasks differed somewhat across settings, with employees in pupil guidance centers performing more assessments/diagnostics.

Consistent with ecological models of development, school psychologists provide their services both at the individual level (student) and at the systems levels (micro-systems: peers, parents, teachers; meso-, exo- and macro-systems: schools including school policy and connections to indirect environments, extended families and communities). The fact that psychological services in schools are not only addressed to students directly, but also - to a large extent - to their contexts supports the findings of a previous study among school psychologists graduated at KU Leuven (Colpin, Spilt, & Verschueren, 2015).

The core professional activities and tasks of psychologists in educational settings, as described above, largely match the definition of clinical psychologists of the Superior Health Council (Royal decree no. 9194, 2015) as professionals who are active “in the psychological screening, diagnosis and assessment of health problems, and in the prevention, the management and the treatment of these problems in people”, with the annotation that professionals in school and educational psychology perform those activities (primarily) in first-line care in educational contexts. However, the expertise of psychologists in educational settings is broader: Their psychological services are not only directed at (mental) health problems, but also at problems in learning, study careers, and psycho-social-behavioral development. Moreover, they are not only focused on the assessment and remediation of

⁹⁴ With students, we refer to (young) children, adolescents, and (young) adults enrolled in education or training.

problems but also on the sustainment and promotion of positive development and strengths.

Together, the pattern of results illustrates the role of school and educational psychologists as generalists with a primary focus on first-line care (prevention, assessment, counseling, and guidance) and a function as gatekeeper to second-line care (e.g., through diagnostics). Since a few decades, literature has emphasized the important role of school psychologists in (group-based) prevention and health promotion of children and adolescents (e.g., Sheridan & Gutkin, 2000) and numerous studies have demonstrated many (preventive) school-based programs to be effective, both internationally (e.g., Durlak et al., 2011) and in Belgium (e.g., Leflot, van Lier, Onghena, & Colpin, 2010; Raes, Griffith, Van der Gucht, & Williams, 2014; Vancraeyveldt et al., 2015), as well as cost-effective (Washington State Institute for Public Policy, 2018).

Perceived competency

In general, the results indicate that the professionals involved in this study feel moderately to highly competent in their different roles (Expert, Communicator, Collaborator, Organizer, Mental Health Advocate, Scientist-practitioner, and Professional), with older professionals reporting on average higher competency levels. Their competencies match the competencies of the school psychologist, as outlined in the competency profiles of for example the Flemish Association of School Psychologists (VVSP) and the International School Psychology Association (ISPA), as well as the new competency profile of qualified clinical psychologists as defined by the Superior Health Council (Royal decree no. 9194, 2015; Royal decree no. 9380, 2017). The respondents reported to feel most competent in communicating with students, parents, and teachers, in oral and written reporting, tailored to clients (Communicator role); in reflecting on their own strengths and weaknesses (Professional role); in having knowledge about the cognitive, social, and emotional development of students (Expert role); and in collaborating effectively with external caregivers (Collaborator).

The respondents felt moderately competent about their knowledge of biological processes that correlate with psychological functioning and in health education (Expert role). This may not be surprising because, although they provide services in the health care domain, it is not their primary care domain. The respondents also reported less competency in evaluating the quality of diagnostic instruments and scientific research (Scientist-practitioner role), in dealing with cultural diversity, and supporting schools in processes of innovation (Organizer role), and in communication with foreign-language clients in the client's own language (Communicator role).

Primary concerns

Results indicate that the professionals are consistent across provinces and communities in their primary concerns: the (increasing) complexity of care needs of students and the work pressure. This increase in complexity of problems of students is also signaled by the pupil guidance centers (e.g., Jaarcijfers CLB-sector 2016-2017). In addition, respondents are seriously concerned about the M-decree (in the Flemish Community) and Le pacte pour un enseignement d'excellence and Le décret sur les élèves à besoins spécifiques du 7 décembre 2017 (in the French Community).

Multiple respondents answered the open questions to explain their concerns. Their answers provide additional insights in the challenges that the workforce is facing. Many respondents referred to the challenges of the pupil guidance centers where work pressure is highest. In the perception of these respondents, the combination of the complexity of care needs, the wait-lists, and administrative tasks (cf. description of primary tasks) undermines both the quality of the delivered services and the work-life balance:

“Ik vind de toenemende eisen omtrent registreren en verslaggeving een grote bezorgdheid. We investeren zoveel tijd in registreren in een elektronisch cliëntendossier dat in orde moet zijn, in

verslaggeving binnen M-decreet, binnen IJH, in verslaggeving in het kader van doorverwijzing (telefonisch overleg is niet voldoende). Dit gaat voor een deel ten koste van de tijd die we aan hulpverlening kunnen spenderen én vooral geeft dit vele overuren waardoor de werk-privé-balans niet in evenwicht is.”

“Ik wil in dit vak graag meegeven dat deze enquête mij pijnlijk duidelijk maakt wat ik dagelijks ervaar: dat ik mijn job veel kwalitatiever zou kunnen uitoefenen als de werkdruk minder hoog was, als ik meer tijd zou hebben om taken grondiger uit te voeren. Ik voer taken haast nooit uit op de manier die ik geleerd heb tijdens mijn opleiding, omdat ik hier onvoldoende tijd voor kan maken.”

“La charge de travail en centre PMS est de l'ordre de la maltraitance du personnel et de la non prise en compte de la réalité de terrain.”

“In een CLB dienen ontzettend veel administratieve taken vervuld te worden (werken met HGD en ICF flowcharts, opmaken van (gemotiveerde) verslagen (verslagen maken van verslagen), opmaken van diagnostische verslagen, leerlingendossiers bijhouden, opmaak M/A documenten, aanvragen voor hulpverlening voor en na de toegangspoort, verslagen bijkomende kinderbijslag...).”

“Nous sommes confrontés de plus en plus à l'utilisation de l'ordinateur, du mailing, réseaux sociaux... à l'isolement et la violence. L'administratif prend une place disproportionnée dans la gestion de mon temps, par rapport à mon expérience passée. Mon ressourcement et celui de mon équipe (...) a toujours été une priorité, mais cela ne suffit plus. Il est indispensable d'avoir un ancrage grâce à une activité corporelle régulière, une hygiène alimentaire, un travail au niveau intercommunication et des échanges sur l'éthique et la sagesse.”

“Werkdruk komt vooral voort uit de complexiteit van problematieken, die vaak vooral komt door moeilijkheden in de context van de leerlingen. Trajecten die uitgezet worden, kunnen niet opgestart worden door heel, echt heel, lange wachtlijsten (+2 jaar bij het DAGG, 3 jaar bij LSA, ...) of gewoon aanmeldingsstops bij praktijken (bel over 2 jaar eens terug).”

“Croissance de la précarisation des situations et des personnes, précarisation multifactorielle, augmentation du délai de prise en charge et des listes d'attente, services surchargés, manque de moyens financiers et humains, manque de cohérence et morcellement trop important des prises en charge ,...”

“Les défis sociétaux sont de plus en plus nombreux et complexes. Actuellement, en centres PMS nous y sommes confrontés tous les jours. Nous manquons cruellement de temps pour y faire face de façon juste. Les besoins sur le terrain sont importants et le temps réservé à la réflexion, recherche, supervision, formation, est minoritaire. Pour un 4/5, je dois pouvoir me rendre disponible pour 1000 élèves dans 2 écoles. C'est extrêmement compliqué de faire face à ce défi. J'aimerais pouvoir dégager du temps pour la formation continue qui est essentielle dans notre domaine, dégager du temps pour accompagner au mieux les jeunes et les familles.”

“La situation des élèves allophones, issus des migrations, principalement au niveau de l'enseignement fondamental est vue de manière très étiquée par les politiques et le public général. Les difficultés scolaires présentées peuvent s'apparenter chez nous à celles d'élèves fréquentant l'enseignement spécialisé mais sans raisons médicales... Alors que chez nous, les élèves allophones sont pointés (sauf rares exceptions) comme les “mauvais élèves”, au Québec, une bonne partie de ceux-ci obtiennent pourtant de meilleurs scores que les élèves autochtones. Les méthodes pédagogiques et des pratiques davantage inclusives expliquent-ils cette différence?”

“Le projet de Pacte pour un enseignement d'Excellence risque comme les réformes précédentes de ne pas atteindre les objectifs mis en avant vu - le non écoute réelle des besoins des différents terrains

- le manque d'accompagnement effectif sur le terrain pour faire évoluer les manières de "lire" les enfants/jeunes et leurs familles et la manière de faire équipe avec une vision sur le développement - l'augmentation incessante des tâches administratives imposées aux écoles (cf. nombre de circulaires annuel) - perte continue de liberté créative pour l'action de terrain: ex concrets: un enfant qui a grand besoin de bouger, ne peut pas sortir de la classe sans être accompagné d'un adulte ..., le décret inscription (à Bruxelles surtout) impacte nombre d'enfants qui ne peuvent plus débiter l'école secondaire dans une école ok de répondre à leurs besoins mais aussi ceux dont les familles n'ont pas la capacité d'anticiper ce décret ... donc les plus fragiles."

"Wachlijsten bij diensten, te hoge kostprijzen voor privé-begeleiding van leerlingen... leerlingen die wij vroeger wel konden begeleiden maar dit nu niet meer kunnen omwille van complexer takenpakket."

"Niet alleen de wachlijsten, maar ook het afbakenen van alle eerstelijnsdiensten die veel zaken niet tot hun takenpakket vinden behoren, alles wat onduidelijk is wie deze taak moet opnemen, wordt naar het CLB geschoven, bv, organiseren van zorgoverleg, A-doc of M-doc opmaken,..."

The idea that individuals do not receive the necessary care in time due to the work pressure and waitlists, creates an opportunity for (expensive) private practices that may contribute to the gap between students of low and high socio-economic backgrounds:

"Enorme kans die je geeft aan privésector, meer betalen om direct geholpen te worden, niet meer investeringen vanuit ministerie; in CLB soms 5 maanden wachten voor diagnostiek, ik [zelfstandige respondent] kan dat vaker doen; privé overnemen tegen veel duurdere prijs; grotere kloof arm-rijk; American way ofwel rijk en geholpen worden ofwel arm en maanden wachten (...) zeer onethisch; dit komt eraan als men aan wachlijsten niets gaat doen."

"Externalisation vers les spécialistes (psychothérapeutes/médecins/logo/psychomot) trop rapide par les parents des difficultés de leurs enfants/ados => tendance à déposséder les parents de leurs ressources internes (coping des parents face à l'enfant/ado). Importance des équipes pluridisciplinaires dans la démarche d'appréhension globale des difficultés et encouragement à l'implication des parents dans la solution."

"Le manque de moyens pour un accompagnement de qualité. (...) Le manque de spécialistes et leur coût."

Respondents also emphasized the need of self-care and the need to make mental health care services in educational contexts a policy priority:

"Uitdaging is om van geestelijk gezondheid een prioriteit te maken in de regering en om preventiever te werken"

"Maatschappelijk gezien worden er heel wat verwachtingen gesteld aan kinderen en de onderwijsomgeving. Een psycholoog kan hiertoe sterk bijdragen; alleen is een masterdiploma binnen het basisonderwijs onvoldoende ingeburgerd! Een psycholoog moet naar de positieve erkenning (bedankt voor u hulp), ook financieel beloond worden (werk naar diploma)"

"La surcharge du secteur avec une déresponsabilisation politique nous pèsent sur les épaules. Les politiques économiques et sociales, d'immigration, etc. enfoncent la population dans des problématiques de santé mentale plus fortes... C'est par moment décourageant ! La formation, supervision et intervision sont des ressources précieuses. Le temps qu'on peut nous laisser pour bien faire notre job est crucial aussi."

"Tempo van de uitdagingen komt te snel om alles onder de knie te krijgen. Alles moet sneller en

voor minder centen. Werkdruk wordt heel hoog waardoor je verschillende collega's ziet uitvallen met burn-out. Vooral die collega's die het gevoel blijven hebben onvoldoende te doen voor anderen. Het is immers vanuit een gevoel om anderen te helpen dat velen voor dit beroep kiezen. Zelfzorg is een belangrijk aspect. Misschien moet dit ook meer in de opleiding aan bod komen."

"Les besoins spécifiques des élèves sont en augmentation (troubles d'apprentissages). La société se focalise énormément sur la part médicale mais ne tient pas compte du développement psycho-affectif!"»

"L'accompagnement dans les écoles devient de plus en plus lourd tant au niveau de la charge de travail que de la psychiatisation de plus en plus importante."

Continuing professional development (CPD)

The majority of the professionals meets the minimum requirement of hours of organized continuing professional development (CPD) per year as set by for example the CPMS or the US-National Association of School Psychologists (NASP; 2010a; but note that the EuroPsy requires a minimum of 40 hours). However, about one-fifth of the professionals spent two days or less on CPD, and younger professionals spent less time on CPD than older professionals. Some respondents suggest that there is a link between the work pressure and the time spent on CPD:

"Vorming is belangrijk, maar door werkdruk (en over-aanbod aan administratieve taken/afwerking) kan inhoud van vorming nog nauwelijks geïmplementeerd worden in eigen werking. Door het (moeten) afwerken van administratie, is er nauwelijks nog tijd over om literatuur ter hand te nemen. Frustrerend!"

"Wanneer ik afwezig ben, moeten mijn diensten overgenomen worden door collega's. Aangezien de werkdruk al hoog is, kies ik er bewust voor om geen vormingen te volgen..."

"Wat ik een schrikwekkende evolutie vindt, is dat wij merken op ons CLB dat omwille van hoge werkdruk medewerkers alsmäär minder vormingsdagen volgen, want dat is een investering op lange termijn natuurlijk, maar op korte termijn blijft je werk daardoor liggen; ik denk dat dat wel een bedreiging is voor onze sector."

"Ik zou gewoon ook tijd willen krijgen voor vorming. Elke halve dag vorming betekent een week inhaalwerk..."

"Nous sommes régulièrement informés de formations possibles mais il nous est impossible d'y participer faute de temps. C'est pourquoi j'ai décidé cette année de passer à un 4/5e pour m'inscrire à une formation de plus longue durée."

Finally, there is a striking difference in professional association membership between salaried and self-employed respondents: most self-employed professionals are member, but most salaried professionals are not. On average, a minority of the professionals in the field (about one third) is member of a professional association.

Title, registration, and code of ethics

Although most professionals in the field have a master's degree in psychology, about half of them is not using the title 'psychologist' and/or is not registered by the Belgian Commission of Psychologists. This is not surprising because in educational settings like the pupil guidance centers the common function titles of professionals with a master's degree in psychology are psycho-pedagogical consultant (psycho-pedagogisch consulent or conseiller psychopédagogique or psychologue). The

small proportion of self-employed professionals in the sample with a master's degree in psychology generally did use the title 'psychologist', often in combination with other titles (e.g., psychotherapist).

The large majority of the respondents with a master's degree in psychology believe that they are obliged to comply with the Code of Ethics for Psychologists and have read the Code at least once. However, one out of six believe that they are not obliged to comply with the Code and/or had not read the Code. A substantial number of professionals mentioned other ethical code's including codes of ethics of their employer organization (e.g., CLB).

3 Summary of main differences between language communities

In general, there were more similarities than differences between professionals in the Flemish and French language communities⁹⁵. However, some differences were observed that are worth mentioning.

Work settings

In both language communities, the majority of the professionals are employed in pupil guidance centers. However, professionals from the French Community were employed more often in CPMS compared to the number of Flemish professionals in CLB. Conversely, Flemish professionals were more often employed in schools.

Education and academic discipline

In the French Community, the large majority of the professionals had a master's degree in psychology. In the Flemish Community, only somewhat more than half of the professionals had a master's degree in psychology; the other 45% had a master's degree in educational sciences. This can be explained by the differences in content of the master programs in educational sciences between the communities: In the French Community, the master program is more focused on teachers and (adult) education, whereas the Flemish master program is broader and includes orthopedagogy as well. In the French Community, orthopedagogy is a specialization of psychology or is part of a combined master in psychology and educational sciences. Corresponding with the differences in content and focus, in the French Community, working in the CPMS is reserved for professionals with a master's degree in psychology only since 2002.

More professionals in the French Community had completed long-term (one or multi-year) postmaster training, whereas more professionals in the Flemish Community had completed a teacher training: this difference too may be explained by the fact that, in the French Community, there are less professionals with a master's degree in educational sciences and more professionals with a master's degree in psychology compared to the Flemish Community.

Professional tasks and focus

In both language communities, the three core tasks of the majority of the respondents were: supporting individuals and their environments, supporting organizations (incl. schools), and

95 No separate analyses for the German-speaking Community could be performed due to a low response rate. In the analyses, professionals in the German-speaking Community were added to the French Community.

administration. However, professionals in the Flemish Community were significantly more involved in management, policy, and governance, and spent somewhat less time on supporting students and their environments. This may be explained by the higher number of masters with a degree in educational sciences in the Flemish work field as masters in educational sciences perform more activities focused on policy, education, management, and research (cf. supra). Linked to the difference in master discipline, the fact that Flemish professionals are more often employed in schools compared to French professionals may also explain the differences in professional tasks.

With respect to the main care tasks, we found that more care tasks were performed related to prevention, diagnostics/assessment, and treatment/therapy in the French Community, and more counseling/guidance in the Flemish Community. But, in both communities, professionals were mostly involved in providing counseling/guidance. Those care services were more often focused on the psychosocial development of students in the Flemish Community, and more often focused on school/career choice processes and health, physical, and sexual development in the French Community. The difference between the communities in focus on psychosocial development was even more pronounced in private settings. In general, services in both communities were least focused on health, physical and sexual development.

Diversity of the targeted population

Respondents were asked whether they provided care to students of different diversity populations (low socioeconomic status, disability, immigration background, refugee status, homosexual or bisexual orientation, non-binary gender). Salaried professionals' care in the Flemish Community was substantially more focused on students with a disability and students with a migration background. Notably, in both communities, few professionals in private settings served any diversity group.

Self-reported competency levels

On average, French professionals reported higher self-perceived competency levels in core tasks like the provision of guidance, supporting individuals to take control over his/her own development (emancipation), and dealing with troubling or crisis situations (mental health advocate).

Within the Flemish Community, the perceived competency in inclusive education (expert role) is somewhat higher, which is consistent with observations in the French Community that the practice of inclusive education is considered theoretically important but is (not yet) embedded in daily practice. Also, Flemish professionals feel more competent in policy (organizer role) and communication with individuals in the language of the individual. Lastly, Flemish professionals feel more competent in their role of scientist-practitioner (i.e., use of the scientific problem solving cycle, systematic monitoring of interventions, evaluation of quality of research and psychometric properties of instruments and methods).

Perceived challenges

Within both communities, professionals were most concerned about work pressure and the complexity of the problems with which they are confronted. However, in general, professionals in the French Community were more concerned about societal issues and themes (medicalization of the profession, migration, extremism, diversity, use of social media, legal position of minors, and socioeconomic position of clients) and about issues in the practicing of the profession related to new laws and decrees (liability, confidentiality of data/GDPR, policy regarding patient files, LEPSS/WUG). In contrast, Flemish professionals were significantly more concerned about financial means and wait lists than French professionals.

Continuing professional development (CPD)

Professionals in the French Community participated in more extended CPD activities: they took less short CPD (< 3 days) and more long CPD (3-10 days and > 10 days). This may be explained by the finding that professionals in the French Community more often work in pupil guidance centers (CPMS) where CPD is obligatory. Also, there are relatively more psychologists than pedagogists employed in the French Community (cf. infra), while psychologists tend to participate more in extended CPD activities than pedagogists.

Registration and Code of Ethics

In addition, a larger proportion of masters in psychology in the French Community were registered with the Commission of Psychologists. They were on average also more acquainted with the Code of Ethics for Psychologists and were also strikingly more convinced that they had to comply with the Code. In this respect, it is important to note that the CLB have their own ethical code, whereas the CPMS have not⁹⁶. This probably explains why they report more competency in dealing effectively with ethical issues.

4 Summary of main differences between psychologists versus pedagogists

In general, there were more similarities than differences between professionals with a master's degree in psychology versus professionals with a master's degree in educational sciences ('pedagogists'). However, some differences were observed that are worth mentioning.

First, on average, more psychologists than pedagogists are active in the work field, although the proportion of pedagogists is considerably higher in the Flemish (45%) than in the French Community (15%) (for an explanation related to the content differences in the master program of educational sciences between the two communities, see supra). We also observed differences in the ratio of psychologists versus pedagogists between work settings: Relatively more psychologists were employed in pupil guidance centers (CLB/CPMS/Kaleido), whereas the ratio was more equal in school settings. Note that in the French Community, employment in pupil guidance centers is not allowed for professionals with a master's in educational sciences only (see supra).

For both disciplines, the main tasks were supporting individuals and their environment, and administration. However, pedagogists were less engaged in supporting individuals and organizations, but were more involved in management, supervision, policy and governance, training and education, and scientific research, and also usually felt more competent in these tasks than psychologists. These tasks are also conducted more often in schools and higher education settings. When we take a closer look at the main task of supporting individuals and their environment, we see that both disciplines are mostly engaged in the provision of counseling and guidance and least with the provision of treatment and therapy. Pedagogists were less engaged in diagnostics/assessment, provided less therapy and treatment, and were somewhat less engaged in prevention. In general, pedagogists feel

⁹⁶ CPMS do not have their own ethical code but have the Decree 2002 that refers to "duties" (such as Secret professionnel, Probité & conscience, respect principes démocratiques – cf. art.13 & 14, décret 2002 sur le statut des membres du personnel) and La Fédération des Centres PMS Libres (FCPL) has a Commission d'éthique to guide their members.

less competent in the role of mental health advocate and also feel less competent in knowledge of biological processes and health education than psychologists.

Overall, we found several differences in content and focus of professionals' tasks and related competencies that appear in line with the differences in expertise in the academic disciplines. The ratio of psychologists versus pedagogists across work settings highlights the multidisciplinary character of the work field (particularly in the Flemish Community). Psychologists and pedagogists in the work field fulfill rather similar job functions with slightly different focuses in their professional work. This multidisciplinary diversity of the workforce in the field is considered a strength and an asset.

5 Research highlights and recommendations

Together, the results indicate that school and educational psychologists are generalists with a primary focus on the delivery of (preventive) first-line care (e.g., through prevention, assessment, counseling, and guidance) and a function as gatekeeper to second-line care (e.g., through diagnostics). Psychologists in educational settings have developed a broad expertise by serving students in multiple areas of development, including learning and cognitive development, psychosocial and behavioral development, school career and career choice processes, and health, physical and sexual development. Their work is guided by principles from bioecological perspectives on development as they serve both students and their environment (e.g., parents, teachers, schools). In general, the workforce feels sufficiently competent in their job. However, when synthesizing the results, five focus areas for improvement were identified, including: cultural responsiveness, professional identity, scientist-practitioner skills, continuing professional development, and recognition of the position of psychologists in regular schools.

Develop strategies to promote cultural responsiveness and social equality

“Naast de medicalisering is diversiteit een zeer onderbelicht thema en dan voornamelijk etno-culturele diversiteit. (...) De taal die je gebruikt, de adviezen die je geeft, zijn doorspekt met ons idee van omgaan met iets dat door onze dominante cultuur als ‘afwijkend’ wordt beschouwd. Wij zijn hier niet neutraal in en die kritische blik, die afstand kunnen veel (ortho)pedagogen en psychologen nog niet voldoende maken.”

Psychological services should be available for everyone irrespective of socioeconomic, cultural or ethnic background. However, we observed several results suggesting that ethnic minority populations are underserved. First, the results suggest that the workforce is highly homogenous: the large majority of professionals are female and born in Belgium. The workforce is thus far from representative of the target population. This could limit the development of cultural competencies or raise barriers for minority populations to seek psychosocial care. It is therefore recommended to develop strategies to increase diversification of the workforce both in gender and cultural background. Second, although salaried professionals do serve various diversity groups, the majority of self-employed professionals in private settings does not. We found that almost two-third of the self-employed professionals did not serve any diversity group implying that extramural care services in education are not easily accessible for minority groups. Previous research in Belgium has indeed shown unequal use of non-subsidized, private services in education related to family SES and ethnic minority status (Bodvin et al., 2017). This contributes to unequal educational opportunities for disadvantaged students and

may further reinforce social inequality in society⁹⁷. There are multiple reasons for this inequality, but one reason mentioned is the lack of cultural sensitivity of school internal and external professionals (Bodvin et al., 2017). In the present study, professionals rated their competency in cultural-sensitive diagnostics, guidance and treatment lower than most other competencies. In addition, diversity and equal opportunities were topics less often chosen in CPD activities. Together, these findings indicate a need for the development of strategies to promote cultural competency and responsiveness in the work field.

Strengthen the professional identity of psychologists in the work field

“Psycholoog zijn is geen deel van mijn identiteit (zo denkt men), en dan ook geen goesting om van een vereniging lid te zijn van iets wat met die identiteit te maken heeft”

“Als [net] afgestudeerde [identificeerde ik mij] wel [met het beroep van psycholoog], maar daarna [bestond mijn] identiteit in andere stukken, meer verbonden met multidisciplinaire teams in 2 jobs.”

There were several indications that not all professionals with a master in psychology identify with the profession of psychologist. First, the title ‘psychologist’ is not often used. Most professionals with a master’s in psychology were employed at multidisciplinary centers for pupil guidance (CLB/CPMS/Kaleido) as psycho-pedagogisch consulent or conseiller psychopédagogique or psychologue. Professionals in pupil guidance centers typically do not use the title of psychologist and most of the salaried professionals are not member of a professional association. There is a small group of professionals with a master’s in psychology in private practice; these professionals more often use the title ‘psychologist’ in their self-employed activities, but also tend to use other titles in combination with the title of psychologist. Second, only a minority of the professionals is member of a professional association for psychologists (most of them are professionals with self-employed activities) and about half of the master’s in psychology is registered at the Commission of Psychologists (but this percentage is higher in the French than in the Flemish Community). Third, there were professionals who were not (well) acquainted with the Code of Ethics of Psychologists or believed that they were not obliged to comply with the Code.

Together, this illustrates that identification with the profession of psychologist, in general, is rather low: There seems to be a rather moderate sense of oneness as psychologists in the educational sector. Within multidisciplinary pupil guidance centers (CLB/CPMS/Kaleido), organizational identification may be stronger than professional identification. Also, in the focus group interview with professionals with a master’s in psychology this issue was raised (rather spontaneously) by the participants. If the profession of psychology is rather invisible in the field and master’s in psychology do not identify with the profession of psychology, profession-defined quality of psychological care may become compromised. It is recommended to further investigate professional and organizational identification in the work field, including the advantages and disadvantages of one type of identification prevailing over the other, and to develop strategies to promote identification with the profession of psychologist in order to preserve profession-defined quality of psychological care in the educational field.

Strengthen professionals in their role as scientist-practitioner to improve scientifically-informed practice

Scientifically-informed practice is considered a core competency of effective psychologists (Stollenberg & Pace, 2007). In Belgium, the understanding of psychologists as Scientist-practitioners

97 See the Education Policy Outlook Belgium of the OECD for a review of policies and practices in Belgium to reduce inequity in education: <http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Belgium.pdf>

is emphasized in the competency profiles of the Superior Health Council (2015) and also in the competency profiles of professional associations in the work field (e.g., VVSP⁹⁸). In addition, all academic master's programs in psychology emphasize scientist-practitioners' skills in their curricula. Yet, the results indicated that, on average, professionals felt less competent in scientist-practitioner competencies including less competency in the critical evaluation of psychometric properties of instruments and in judging the quality of scientific research and critically evaluate scientific findings. This was found for both younger and older professionals (but note that professionals in the Flemish Community rated their competencies in this role somewhat higher than professionals in the French Community). These two competencies were also rated as least important of all 34 competencies and were, on average, considered rather not important. Together this suggests that the importance of scientist-practitioner skills is insufficiently recognized in the field. Although the importance is recognized in the master's programs of the universities, the training in these skills is perhaps still insufficient to ensure a transfer to practice. It is therefore recommended to develop strategies to motivate and strengthen scientist-practitioner skills of the workforce both through initial training and continued professional development activities (Maddux & Riso, 2007).

Stimulate CPD focused on areas of low-competency and societal needs. Promote effective learning formats.

While professionals already felt highly competent in the knowledge of cognitive, social and emotional development of student, their CPD activities were mainly focused on these themes. Their CPD was surprisingly less focused on areas of low competency including cultural-sensitivity or scientist-practitioner skills. It is therefore worthwhile to develop strategies to match CPD initiatives with the broader needs of the workforce and the society. It is also recommended to critically evaluate CPD formats: most professionals attended workshops and lectures, whereas more effective formats like intensive training at work and individual coaching were hardly used.

When we look at self-education, there is to gain with online blogs that provide professionals the latest scientific insights in a format that is easy to digest. There are several initiatives of academic research groups that write blogs for professionals on a regular basis⁹⁹. A good example is the EarlyYearsBlog that is implemented in different countries¹⁰⁰. The blogs are written by researchers and by educators with a scientific orientation and target professionals in education (teachers). The blogs are timely, succinct, easy to read, and guide interested readers to further information.

Finally, barriers to spend time on CPD, including work(over)load, need to be removed (cf. supra). Time, both to participate in CPD and to reflect upon new insights after participation, is a basic condition for the effectiveness of CPD. Although psychologists have a professional responsibility for CPD¹⁰¹, good management and leadership is needed to provide the conditions that will facilitate CPD of the workforce.

Strengthen preventive or first-line psychological services by recognizing the key role that psychologists can play in regular schools

"Maatschappelijk gezien worden er heel wat verwachtingen gesteld aan kinderen en de onderwijsomgeving. Een psycholoog kan hiertoe sterk bijdragen; alleen is een masterdiploma binnen

98 <http://schoolpsychologie-vvsp.be/vvsp/wp-content/uploads/2018/01/Profiel-van-de-schoolpsycholoog.pdf>

99 Examples of blogs written by researchers in Dutch: <https://opgroeienblog.wordpress.com/> and www.mensenkennis.be/. Initiatives in the French Community are: www.psychopium.com/?page_id=3606 and www.editionsmardaga.com/categories/psychologie/grand-public/in-psycho-veritas/

100 Flanders: <https://kleutergewijs.wordpress.com/>; Europe: EarlyYearsBlog.eu; The Netherlands: EarlyYearsBlog.nl; Portugal: PrimeirosAnos.pt; Poland: Czym skorupka

101 www.compsy.be/assets/images/uploads/deontologische_code_nl_2018.pdf

het basisonderwijs onvoldoende ingeburgerd! Een psycholoog moet naar de positieve erkenning (bedankt voor u hulp), ook financieel beloond worden (werk naar diploma)”

“Bovendien wordt de expertise van de psycholoog in het onderwijs niet erkend, elke leerkracht heeft de beste remedie: extra straf, geen huiswerk, ... en als de zorgcoördinator vraagt om dan rond de tafel te gaan zitten en samen een plan op te stellen met input van alle partners (zo HGW mogelijk) dan gebeurt dat met veel zuchten en steunen, dus zal de zorgcoördinator dit steeds omslachtiger aanbrengen, om toch de medewerking van die oh zo belangrijke leraren op de klasvloer te behouden. [...] Zorg moet iets zijn van iedereen, maar liefst ook wel gedragen en vanuit eenzelfde visie. Dat blijkt zo moeilijk te realiseren, dat er niet alleen handelingsangst is bij de leerkracht, maar evenzeer bij de zorgcoördinator. De functies en vooral het mandaat zijn onduidelijk voor de zorgverleners in het onderwijs. Ondanks het nieuwe decreet.”

As explained in the introduction, schools are widely recognized as key contexts for the provision of first-line (preventive) psychological care that is easy accessible and non-stigmatizing. In addition, there is a wide range of preventive school-based programs that have been found (cost-)effective in the support of mental health (cf. supra). Yet only a minority of the professionals in the work field is employed as a care provider in a regular secondary school, and even less in a regular primary school. Moreover, it was only a handful of professionals that were employed in regular schools as a psychologist (see Appendix 1). School-internal care in regular school settings is thus typically not provided by school psychologists. Furthermore, comments of the respondents indicate that the role of care provider in schools is complex due to cultural barriers between professions. This complexity can be explained by a tendency to consider one's own professional theory and practice as superior (i.e., professional ethnocentricity: for a theory of change resistance, see Thornberg, 2014). Taken together, it is recommended to develop strategies that strengthen the profession of psychologist in regular schools in order to improve the provision of first-line mental health care in the natural environment of children and their families (Kohn et al., 2016; Sheridan & Gutkin, 2000; WHO, 2003).

ACKNOWLEDGEMENTS

We thank the professionals in the work field for their participation in the study. In addition, we would like to acknowledge the contributions of several experts:

- **all researchers involved in the project team (see Appendix 3)**
- **the Commission of Psychologists (funding agency)**, and in particular the members participating in the steering committee of the study and the members of the plenary session during the project. Special thanks also to Julie Laloo, director, and Jonathan Dujardin, communication, for their continuing support of the project.
- **the steering committee of this research project**

Patrick D'Oosterlinck

Mariane Frenay

Stephanie Frenkel

Benoit Galand

Veerle Germeijs

Pol Ghesquière

Gengoux Gomez

Marie-Claire Haelewyck

Marianne Kant-Schaps

Brigitte Lenzen

Valentine Malou

Lien Plasschaert

Karine Verschueren

- **the Interuniversity Consortium regarding the LHCP (WUG/LEPPS)**
 - KU Leuven, Faculteit Psychologie en Pedagogische Wetenschappen
(Dean: Bea Maes)
 - Universiteit Gent, Faculteit Psychologie en Pedagogische Wetenschappen
(Dean: Ann Buysse)
 - Vrije Universiteit Brussel, Faculteit Psychologie en Educatiewetenschappen
(Dean: Johan Vanderfaeillie)
 - Université de Liège, Faculté de Psychologie, Logopédie et Sciences de l'Education
(Dean: Etienne Quertemont)
 - Université catholique de Louvain, Faculté de Psychologie et des Sciences de l'Education
(Dean: Nathalie Nader-Grosbois followed by Mariane Frenay)
 - Université de Mons, Faculté de Psychologie et des Sciences de l'Education
(Dean: Laurent Lefebvre)
 - Université Libre de Bruxelles, Faculté des Sciences Psychologiques et de l'Education
(Dean: Arnaud Destrebecqz)

REFERENCES

- Jaarcijfers CLB-sector 2016-2017. Geraadpleegd via <http://www.vclb-koepel.be/over-ons/jaarcijfers-clb-sector>
- Stoltenberg, C. D., & Pace, T. M. (2007). The Scientist-practitioner model: Now more than ever. *Journal of Contemporary Psychotherapy*, 37(4), 195-203.
- Maddux, R. E., & Riso, L. P. (2007). Promoting the Scientist-practitioner–practitioner mindset in clinical training. *Journal of Contemporary Psychotherapy*, 37(4), 213-220.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Bodvin, K., Verschuere, K., De Haene, L., & Struyf, E. (2017). Social inequality in education and the use of extramural support services: access and parental experiences in disadvantaged families. *European Journal of Psychology of Education*, 33(2), 215-233.
- Colpin, H., Spilt, J. L., & Verschuere, K. (2015). *Tewerkstelling van schoolpsychologen. Bevraging alumni 2015 (intern rapport)*. KU Leuven: Schoolpsychologie en Ontwikkeling van Kind en Adolescent.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432.
- Gisle, L. (2014). Geestelijke gezondheid. In Van der Heyden J. & Charafeddine R. (Red.), *Gezondheidsenquête 2013. Rapport 1: Gezondheid en Welzijn*. WIV-ISP, Brussel. Geraadpleegd via https://his.wiv-isp.be/nl/gedeelde%20%20documenten/wb_nl_2013.pdf
- Gisle, L., Drieskens, S., Demarest, S., & Van der Heyden J. *Geestelijke gezondheid: gezondheidsenquête 2018*. Brussel, België : Sciensano ; Rapportnummer: D/2020/14.440/4. Beschikbaar op: www.gezondheidsenquête.be
- Deboosere, E., Steyaert, J., & Danckaerts, M. (2017). Het gebruik van antipsychotica bij kinderen en jongeren in België, 2005-2014. *Tijdschrift voor Psychiatrie*, 59, 329-38.
- Kirtley, O.N., Achterhof, R., Hiekkaranta, A.P., Hermans, K., Hagemann, N., & Myin-Germeys, I. (2019). *SIGMA 2019 Fase 1 rapport: Hoe word ik wie ik ben. De voorlopige resultaten van de SIGMA-studie: een langdurig onderzoek naar de geestelijke gezondheid van jongeren in Vlaanderen*. KU Leuven: Center for Contextual Psychiatry. <https://gbiomed.kuleuven.be/english/research/50000666/50000673/cpp/images/sigma-rapport-w1>
- Kohn L., Obyn C., Adriaenssens J., Christiaens, W., Van Cauter X., Eyssen M. *Model for the organization and reimbursement of psychological and orthopedagogical care in Belgium*. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2016. KCE Reports 265. D/2016/10.273/34. https://kce.fgov.be/sites/default/files/atoms/files/KCE_265_Psychotherapy_Report.pdf
- Leflot, G., van Lier, P.A.C., Onghena, P., & Colpin, H. (2010). The role of teacher behavior management in the development of disruptive behaviors: An intervention study with the Good Behavior Game. *Journal of Abnormal Child Psychology*, 38, 869–882.
- Luyten, P., & Jeannin, R. (2021). The profile of psychologists in Belgium. Leuven, Belgium
- NASP Model for Comprehensive and Integrated School Psychological Services* (NASP Practice Model; 2010). Peter Farrell and others have created ISPA's standards: <http://www.ispa2016.org/call-for-abstracts>
- Raes, F., Griffith, J.W., Van der Gucht, K., & Williams, J.M.G. (2014). School-based prevention and reduction of depression in adolescents: a cluster-randomized controlled trial of a mindfulness group program. *Mindfulness*, 5, 477-486.
- Savin-Baden, M. & Howell Major, C. (2013). Focus group interviews. In *Qualitative Research: The Essential Guide to Theory and Practice* (pp.374-390). Oxford: Routledge.

Sheridan, S.M., & Gutkin, T.B. (2000). The ecology of school psychology. Examining and changing our paradigm for the 21st century. *School Psychology Review*, 29, 485-502.

Smith, P. (Ed.) (2019). *Making an impact on school bullying. Interventions and recommendations*. New York-London: Routledge.

Struyf, E., Verschuere, K., Vervoort, E., & Nijs, S. (2015). *Leerlingenbegeleiding in een internationaal perspectief – een reviewstudie. Eindrapport*. Universiteit Antwerpen – KU Leuven.

Thornberg, R. (2014). Consultation barriers between teachers and external consultants: A grounded theory of change resistance in school consultation. *Journal of Educational and Psychological Consultation*, 24(3), 183-210.

Tynan C.A. & Drayton J. (1988) Conducting focus groups — a guide for first time users. *Marketing Intelligence and Planning*, 6, 5–9.

Vanraeyveldt, C., Verschuere, K., Wouters, S., Van Craeyveldt, S., Van den Noortgate, W., & Colpin H. (2015). Improving teacher–child relationship quality and teacher–rated behavioral adjustment amongst externalizing preschoolers: Effects of a two–component intervention. *Journal of Abnormal Child Psychology*, 43, 243–257.

Washington State Institute for Public Policy (2018). *Benefit-cost results*. <http://www.wsipp.wa.gov/BenefitCost/>, consulted November 2019.

World Health Organization. (2003). *Caring for children and adolescents with mental disorders: setting WHO directions*. Geraadpleegd via <http://apps.who.int/iris/bitstream/handle/10665/42679/9241590637.pdf?sequence=1&isAllowed=y>

APPENDICES

Appendix 1: Supplementary results

Appendix 2: Psychological wellbeing and needs of children and youth in the Flemish and French Communities

Appendix 3: Project team & research partners

Appendix 1: Supplementary results

1 Incomplete and complete cases: Progress in completing the online questionnaire.

	Progress				Total
	≤ 30%	31-70%	78-99%	100%	
n	53	21	109	756	939

2 Education and Specializations: On p. 25, it was mentioned that one third of the sample took one or more continuing course(s) with a duration of a minimum of one year (i.e., two third of the respondents took no continuing courses of at least one year) and about the same amount (36%) took a specific teacher training course (i.e., 64% did not have any specific teacher training). Some additional findings worth mentioning are:

- 3% obtained one or more advanced bachelor's degrees; the three most frequently mentioned were:
 - the 'Ba-na-Ba Zorg en Remediërend Leren'
 - the 'Ba-na-Ba Buitengewoon onderwijs' and
 - the 'Ba-na-Ba/Postgraduaat Autisme(spectrumstoornissen)'
- 0.5% obtained one or more advanced master's degrees; three respondents reported a master in 'Human Resources Management', the other two did not specify their advanced master further.
- in the category 'Other' (concerning respondents' educational degrees), respondents mentioned other extra education, including mostly shorter seminars or trainings in, for example, EMDR, coaching, hypnosis, or other types of therapy/counseling.

3 Work settings: On p. 29 (Chapter 3), we reported the distribution of respondents with a paid job across work settings, but here we report this separately for the different language communities.

Setting	Flemish	French	German
CLB - CPMS - Kaleido	253	123	1
Centraal ondersteunend - Organes de coordination - Dachorganisation	4	0	0
School BaO - Ecole fond. ord. - Allgemeine Primarschule	26	3	0
School SO - Ecole sec. ord. - Allgemeine Sekundarschule	50	11	1
School BuBaO - Ecole fond. spec. - Förderschule der Primarstufe	65	9	0
School BuSO - Ecole sec. spec. - Förderschule der Sekundarstufe	61	8	0
HBO - Associations en milieu ouvert - Zentrum für Förderpädagogik	6	0	0
Hogeschool - Haute école - Hochschule	61	16	0
Universiteit - Université - Universität	46	11	0
Vormingscentrum - Centre de formation - Aus- und Weiterbildungszentrum	5	6	1
CVO - EPFC - Zentrum für Erwachsenenbildung	8	2	0
Overheid - Autorités publiques - Staatliche Stellen	5	3	0
Other setting	0	0	0
Service de médiation scolaire	0	2	0
Service de planning familial	0	0	0
Working in more than one setting	37	9	1
Totals	627	203	4

4 Work functions: On p. 31 and 32 (Chapter 3), we reported the distribution of respondents across work functions for respondents performing their main paid job in one setting. Here we also report this separately for the different language communities.

	Flemish	French	German
CLB/CPMS/Kaleido			
Psycho-pedagogisch consultant/ Conseiller psycho-pédagogique/ Psychologue	186	83	1
Psycho-pedagogisch werker/ Auxiliaire psycho-pédagogique	37	8	0
Policy worker	2	0	0
Director	3	24	0
Other (ic. social worker)	1	1	0
More than one function	24	7	0
Regular schools			
Teacher	0	0	0
Psychologist	1	2	1
(Ortho)Pedagogue	0	0	0
Personnel with care tasks/Care coordinator (incl. student guidance)	33	4	0
Policy worker	2	1	0
Director	8	2	0
Other	2	0	0
More than one function	30	5	0
Special schools			
Teacher	3	5	0
Psychologist	28	6	0
(Ortho)Pedagogue	51	0	0
Paramedical personnel	1	2	0
Social worker	1	0	0
Personnel with care tasks/Care coordinator (incl. student guidance), other than those mentioned before	1	0	0
Policy worker	1	0	0
Director	0	0	0
Other	12	0	0
More than one function	28	4	0
Higher education			
Teacher	0	0	0
Scientific researcher	0	0	0
PhD student	0	0	0
Director/Head of department	2	1	0
Teaching assistant	0	0	0
Professor	0	0	0
Student guidance counsellors	31	5	0
Personnel with care tasks	0	0	0
Policy worker	4	1	0
Other	3	1	0
More than one function	67	19	0

Appendix 2: Psychological well-being and needs of children and youth in the Flemish and French Communities

In this appendix, we report some French and Flemish Community statistics regarding the mental wellbeing of children and youth and other relevant literature.

Données pour la Communauté française

- En 2014, 1 jeune sur 5 (21%) rapporte qu'il se sent «très heureux», 1 jeune sur 2 se sent «heureux» (55%), 1 jeune sur 5 (20%) ne se sent «pas très heureux» et une faible minorité (4%) ne se sent «pas heureux du tout». La proportion de jeunes qui se disent «très heureux» est deux fois plus élevée parmi les jeunes en 5e-6e primaire par rapport à ceux dans le secondaire (34% vs 17%). Les proportions de jeunes qui se sentent «heureux» ou «très heureux» en fin de primaire et en secondaire restent stables jusqu'en 2010 mais elles diminuent en 2014. Quatre jeunes sur dix (42%) rapportent des «symptômes psychosomatiques multiples fréquents». Cette proportion est plus élevée parmi les jeunes dans l'enseignement secondaire (44%) par rapport aux jeunes en 5e-6e primaire (31%). Depuis 1994, la proportion de jeunes rapportant fréquemment plusieurs symptômes reste stable en 5e-6e primaire alors que dans l'enseignement secondaire, cette proportion est plus élevée en 2014 par rapport aux enquêtes précédentes. Près de 4 jeunes sur 10 se sentent «assez» ou «beaucoup» stressés ou angoissés par le travail pour l'école. Cette proportion est plus élevée parmi les élèves dans le secondaire (39%) par rapport aux élèves en 5e-6e primaire (24%). Entre 2002 et 2010, les proportions de jeunes qui se disent «assez» ou «beaucoup» stressés par le travail pour l'école sont restées stables. En 2014, ces proportions augmentent en 5e-6e primaire et plus encore en secondaire. En 2014, près d'un jeune sur trois (31%) rapporte qu'il rencontre des difficultés pour dormir «plus d'une fois par semaine» au cours des 6 derniers mois. Cette proportion reste stable depuis 2006 parmi les élèves de 5e-6e primaire. Dans l'enseignement secondaire, la proportion observée en 2014 est stable par rapport à 2010 mais elle reste plus élevée par rapport aux enquêtes précédentes (HBSC, 2014).
- Dans la fédération Wallonie-Bruxelles, 33 à 71% des élèves se disent anxieux face à l'évaluation. Globalement, les filles sont plus anxieuses que les garçons (Le bien-être des élèves de 15 ans en Fédération Wallonie-Bruxelles - PISA 2015 ; Les indicateurs de l'enseignement 2018).
- Le nombre de jeunes pris en charge par l'Aide à la jeunesse était en légère augmentation en 2016 par rapport aux années précédentes. Dans l'Aide à la jeunesse deux jeunes sur cinq sont pris en charge en raison de difficultés personnelles (10.882 jeunes, soit 39,7% des jeunes en difficulté ou en danger pour lesquels un motif d'intervention était encodé). Parmi ces jeunes 43,4% (4.719 jeunes) présentent des difficultés psychologiques; 41,6 % (4.525 jeunes) ont des problèmes scolaires, essentiellement de l'absentéisme scolaire; 40,7% (4.425 jeunes) ont des problèmes de comportement (refus de l'autorité, intolérance à la frustration, violence physique...)(La fédération Wallonie-Bruxelles en chiffres 2018).
- Au cours de l'année scolaire 2017-2018, 1702 membres du personnel en équivalent temps-plein travaillaient dans des centres PMS. (Personnels de l'enseignement. Année scolaire 2017-2018).

Sources

La fédération Wallonie-Bruxelles en chiffres 2018. <https://bit.ly/wallon-brux-chiffres>

Les indicateurs de l'enseignement 2018. Fédération Wallonie-Bruxelles. <https://bit.ly/indicateurs-enseignement>

Service Communautaire de Promotion de la santé SIPES. Publications et communications sur les résultats de l'enquête HBSC 2014 en fédération Wallonie-Bruxelles. <http://sipes.ulb.ac.be>

Personnels de l'enseignement. Année scolaire 2017-2018. Fédération Wallonie-Bruxelles/Etnic. <https://bit.ly/detail-statistique>

Gegevens voor de Vlaamse gemeenschap

- In het SIGMA onderzoek naar het geestelijk welbevinden van Vlaamse adolescenten rapporteert ongeveer de helft van de adolescenten milde klachten en bijna 20% rapporteert matig ernstige tot ernstige klachten (Kirtley et al., 2019).
- De Gezondheidsenquête uit 2013 van het Wetenschappelijk Instituut voor Volksgezondheid (Gisle, 2014) signaleert een stijging van emotionele problemen (angststoornissen, depressieve gevoelens en slaapproblemen) bij jongeren van 15 tot 24 jaar.
- Uit een enquête van de Vlaamse jeugdraad in 2016 onder 1124 jongeren blijkt dat 38% kampt met psychische problemen, terwijl minder dan 1 op 3 hiervoor hulp zou krijgen.
- Voor 284 267 unieke leerlingen werd een zorgvraag gesteld aan het CLB. Dat is 23,83 % van de totale schoolpopulatie of bijna 1 leerling op 4. Zowel de leerling zelf, zijn/haar ouder(s) als de school kunnen deze vraag stellen aan het CLB. Ongeveer 9% van de leerlingenpopulatie zoekt hulp voor psychische klachten bij een Centrum voor Leerlingenbegeleiding (CLB) (Jaarcijfers CLB-sector 2016-2018).
- De CLB-sector signaleert ook een toename in de complexiteit van de hulpvragen en daarmee een stijging van het aantal interventies per leerling (Jaarcijfers CLB-sector 2017-2018).
- Ander recent onderzoek in de jeugdzorg rapporteert een verontrustende stijging in het aantal verstrekkingen van antipsychotica aan minderjarigen in België van maar liefst 75.5% in de periode 2005-2014 (Deboosere, Steyaert, & Danckaerts, 2017); een kwart van het totaal aantal verstrekkingen was aan kinderen tussen 6 en 11 jaar.
- Bekijken we gezondheid gerelateerde levenskwaliteit dan scoren 9,1% van de jongens en 14,9% van de meisjes in Vlaanderen een score lager dan 38 volgens de KIDSCREEN methode. Dit wijst op een lage levenstevredenheid. Het percentage stijgt met de leeftijd en is bovendien meer uitgesproken in het beroepsonderwijs dan in het algemeen onderwijs (HBSC, 2014).
- Op 17-18 jaar heeft reeds 11,9% van de jongens en 20,4% van de meisjes meerdere keren overwogen een einde te maken aan hun leven. Meer jongeren uit het beroepsonderwijs dan jongeren uit de andere richtingen denken aan zelfdoding (HBSC, 2014).
- In totaal heeft 16,8% van de jongeren in de laatste graad van het secundair onderwijs 1 of meerdere keren zichzelf opzettelijk lichamelijk beschadigd (overmatig pillen nemen, krassen in het lichaam met een mes, ...) (HBSC, 2014).

Evoluties qua leerlingenbegeleiding

- Volgens onderzoek van iVox in opdracht van Rode Neuzen Dag (2018) vindt 46% van de leerkrachten dat er meer tijd en middelen vrijgemaakt moeten worden voor zorg op school. Peter Adriaenssens, kinder- en jeugdpsychiater, stelt op de website van Rode Neuzen Dag (2018): “Als we ervoor kunnen zorgen dat er op school ook extra aandacht is voor psychische problemen en jongeren sneller kunnen geholpen worden, dan zetten we een enorme stap vooruit en kunnen we ernstigere aandoeningen vermijden.”
- Uit onderzoek (PWC, 2015) blijkt dat een kwaliteitsvolle leerlingenbegeleiding in grote mate afhankelijk is van de deskundigheid van individuele medewerkers.
- Het M-decreet leidt tot een toename van de administratieve planlast binnen het CLB: het aantal gemotiveerde verslagen (leidend tot ondersteuning op school) en verslagen voor het buitengewoon onderwijs steeg over een periode van 3 jaar tijd met respectievelijk 65 en 35%. Men verwacht dat deze stijging zich alleen nog zal verderzetten in de toekomst (Memorandum bij jaarverslag CLB-sector 2017-2018).
- Gedurende het schooljaar 2017-2018 waren er 2736 voltijdse personeelsleden (voltijdse equivalenten) aan het werk in een CLB, wat het laagste aantal is in meer dan 10 jaar tijd (Jaarcijfers CLB-sector 2017-2018).

Bronnen

Deboosere, E., Steyaert, J., & Danckaerts, M. (2017). Het gebruik van antipsychotica bij kinderen en jongeren in België, 2005-2014. *Tijdschrift voor Psychiatrie*, 59, 329-38.

Gisle, L. (2014). Geestelijke gezondheid. In Van der Heyden J. & Charafeddine R. (Red.), *Gezondheidsenquête 2013. Rapport 1: Gezondheid en Welzijn*. WIV-ISP, Brussel. Geraadpleegd via https://his.wiv-isp.be/nl/gedeelde%20%20documenten/wb_nl_2013.pdf

Health Behaviour in School-aged Children (2014). *Mentale gezondheid bij jongeren in Vlaanderen*. Geraadpleegd via <http://www.jongeren-en-gezondheid.ugent.be>

Jaarcijfers CLB-sector & Memorandum. Geraadpleegd via <http://www.vclb-koepel.be/over-ons/jaarcijfers-clb-sector>

Kirtley, O.N., Achterhof, R., Hiekkaranta, A.P., Hermans, K., Hagemann, N., & Myin-Germeys, I. (2019). *SIGMA 2019 Fase 1 rapport: Hoe word ik wie ik ben. De voorlopige resultaten van de SIGMA-studie: een langdurig onderzoek naar de geestelijke gezondheid van jongeren in Vlaanderen*. KU Leuven: Center for Contextual Psychiatry.
<https://gbiomed.kuleuven.be/english/research/50000666/50000673/cpp/images/sigma-rapport-w1>

PWC. (2015). *Audit naar de werking van Centra voor Leerlingenbegeleiding (CLB's)*. Geraadpleegd via <http://onderwijs.vlaanderen.be/sites/default/files/atoms/files/2015-11-12-audit-CLB.pdf>

Rode Neuzen Dag, op 30 november 2018, zet in op mentaal welzijn van jongeren op scholen. Geraadpleegd via <https://rodeneuzendag.be/de-derde-editie-van-rode-neuzen-dag-zet-op-mentaal-welzijn-van-jongeren-op-school>

Vlaamse Jeugdraad. (2016). *Dossier: 1124 jongeren over 'goed in je vel'*. Geraadpleegd via https://vlaamsejeugdraad.be/sites/default/files/wysiwyg/20160627_enquete_hoe_gaat_het_en_hoe_kan_het_beter_-_verslag.pdf

Appendix 3: Project team & research partners

Project team

Primary investigators

Patrick Luyten
Jantine Spilt

Co-supervisors

Hilde Colpin
Ilse Noens

Coordinators

Rozemarijn Jeannin
Greet Peters
Sofie Wouters

Assistant researchers

Joke Heylen
Loren Vandenbroucke

Research partners

Based on a shared commitment to recent developments in the work field, this research was supported by a partnership of all Belgian universities with a faculty of psychology and educational sciences:

- Universiteit Gent
- Vrije Universiteit Brussel
- Université Libre de Bruxelles
- KU Leuven
- Université catholique de Louvain
- Université de Mons
- Université de Liège

The research team was assisted by two steering groups. The steering groups represented researchers and practitioners (including professional associations of psychologists such as the Belgian Federation of Psychologists, independent practitioners and practitioners working in subsidized centres/ organisations) from different fields and (language) communities in Belgium. The research in the educational field was supported by representatives from different organizations in the work field, including the “Conseil Supérieur des Centres Psycho-Médico-Social” (CPMS), the “koepel van de Vrije Centra voor leerlingenbegeleiding” (VCLB), and the “Vlaamse Vereniging voor Schoolpsychologie” (VVSP).

The research was supported and funded by the Commission of Psychologists. The Commission of Psychologists is an independent federal government body with responsibility for all psychologists in Belgium.